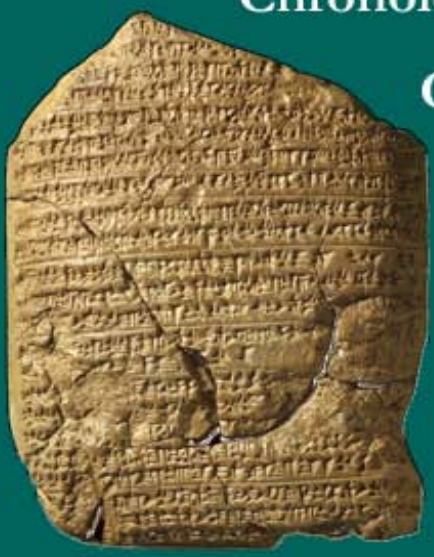
The Gentile Times Reconsidered

Chronology and Christ's Return

Carl Olof Jonson



The idea that the "Gentile Times" referred to at Luke 21:24 form a period of 2,520 years has led to speculation and disappointment among many who expected Christ's return during the past two centuries. How did this belief originate and develop? What do the historical and Biblical facts show?

FOURTH EDITION - REVISED AND EXPANDED

THE GENTILE TIMES RECONSIDERED

Carl Olof Jonsson

Fourth Edition
Revised and Expanded

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Because of its subject matter, in this book Bible texts are generally quoted from the *New World Translation* (represented by the abbreviation NW), published by the Watchtower Bible and Tract Society of New York, Inc. Abbreviations for other translations of Biblical quotations, listed in the text or in the footnotes, are:

ASV *American Standard Version*
KJV *King James Version*
LXX *Septuagint Version* (Greek)
MT *Masoretic text* (Hebrew)
NAB New *American Bible*
NASB New *American Standard Bible*
NEB *New English Bible*
NIV *New International Version*
NKJV *New King James Version*
NRSV *New Revised Standard Version*
RSV *Revised Standard Version*
RV *Revised Version*

THE GENTILE TIMES RECONSIDERED

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FOREWORD

THE SUBJECT of the "Gentile times" is a crucial one today for millions of persons. Christ employed that phrase on a single occasion, as part of his response to his disciples' question about his future coming and the end of the age. In the centuries that followed, numerous interpretations and time-applications of his expression have developed.

While this book provides a remarkably broad view of the subject it primarily focuses on one prominent interpretation, one that in a very real sense defines for millions of Jehovahs Witnesses the time in which they live, supplies what they consider a powerful criterion to judge what constitutes "the good news of the Kingdom" which Christ said would be preached, and acts for them as a touchstone for assessing the validity of any religious organization's claim to represent Christ and the interests of his Kingdom. An unusual fact is that the foundation of this interpretation is a "borrowed" one, since, as the author documents, it originated nearly a half century before their own religious organization began to appear on the world scene.

Rarely has a single date played such a pervasive and defining role in a religion's theology as has the date focused on by this interpretation: the date of 1914. But there is a date behind that date and without its support 1914 is divested of its assigned significance. That prior date is 607 B.C.E. and it is the Witness religion's linking of that date with a particular event—the overthrow of Jerusalem by Babylon—that lies at the crux of the problem.

Those of us who have shared in editing this present work and who were ourselves, twenty-seven years ago, part of the writing and editorial staff at the international headquarters of Jehovah's Witnesses in Brooklyn, New York, can remember the rather stunning effect the arrival of a treatise on the "Gentile times" from Carl Olof Jonsson it Sweden had on us in August of 1977. Not only the volume of the documentation, but even more so the weight of the evidence left us feeling somewhat disconcerted. We were, in effect, at a loss as to what to do with the material. That treatise later formed the basis for Carl Olof Jonsson's book *The*

Gentile Times Reconsidered, now in its fourth printing.

When we today read this book we become the beneficiaries of more than three decades of thorough and careful research. Not just the immense amount of time, but also the means of access to the sources of information that made possible so intensive a study, are something very few of us would have at our disposal. The author has not only made use of such facilities as the British Museum but also has had personal communication with, and assistance from, members of its staff, as also Assyriologists of various countries.

The research takes us back some two and a half millennia in the past. Many of us may think of those times as "primitive" and it thus may come as a surprise to realize how advanced certain ancient peoples were, their writings covering not merely historical events and monarchical dynasties, but also dealing with dated business documents such as ledgers, contracts, inventories, bills of sale, promissory notes, deeds, and similar matters. Their understanding of astronomy, of the progressive and cyclical movements of the lunar, planetary and stellar bodies, in an age unequipped with telescopes, is extraordinary. In the light of the Genesis statement that those celestial luminaries serve to "mark the fixed times, the days and the years," this takes on true significance, particularly in a study in which chronology plays a central role.[1] Nothing, except the modern atomic clocks, surpasses those heavenly bodies in precision in the measurement of time.

Of the quality of the research into the Neo-Babylonian period, Professor of Assyriology Luigi Cagni writes:

> Time and again during my reading [of Jonsson's book] I was overcome by feelings of admiration for, and deep satisfaction with, the way in which the author deals with arguments related to the field of Assyriology. This is especially true of his discussion of the astronomy of Babylonia (and Egypt) and of the chronological information found in cuneiform texts from the first millennium B.C.E., sources that hold a central position in Jonsson's argumentation.
>
> His seriousness and carefulness are evidenced in that he has frequently contacted Assyriologists with a special competence in the fields of astronomy and Babylonian chronology, such as Professors H. Hunger, A. J. Sachs, D. J. Wiseman, Mr. C. B. F. Walker at the British Museum and others.

1 Genesis 1:14, *NAB.*

> With respect to the subject field I am particularly familiar with, the economic-administrative texts from the Neo-Babylonian and Achaemenid periods, I can say that Jonsson has evaluated them quite correctly. I put him to the test during the reading of the book. When I finished the reading, I had to admit that he passed the test splendidly?[2]

Readers of the first or second edition of this book will find much that is new here. Entire sections, including some new chapters have been added. Contributing to the readability of the book is the inclusion of about thirty illustrations, including letters and other documents. Many of the illustrations are rare and will undoubtedly be new to most readers.

The original research behind the book inescapably brought the author on a collision course with the Watch Tower organization and—not unexpectedly—led to his excommunication as an "apostate" or heretic in July 1982. This dramatic story, not told in the first two editions, is now presented in the section of the Introduction titled "The expulsion."

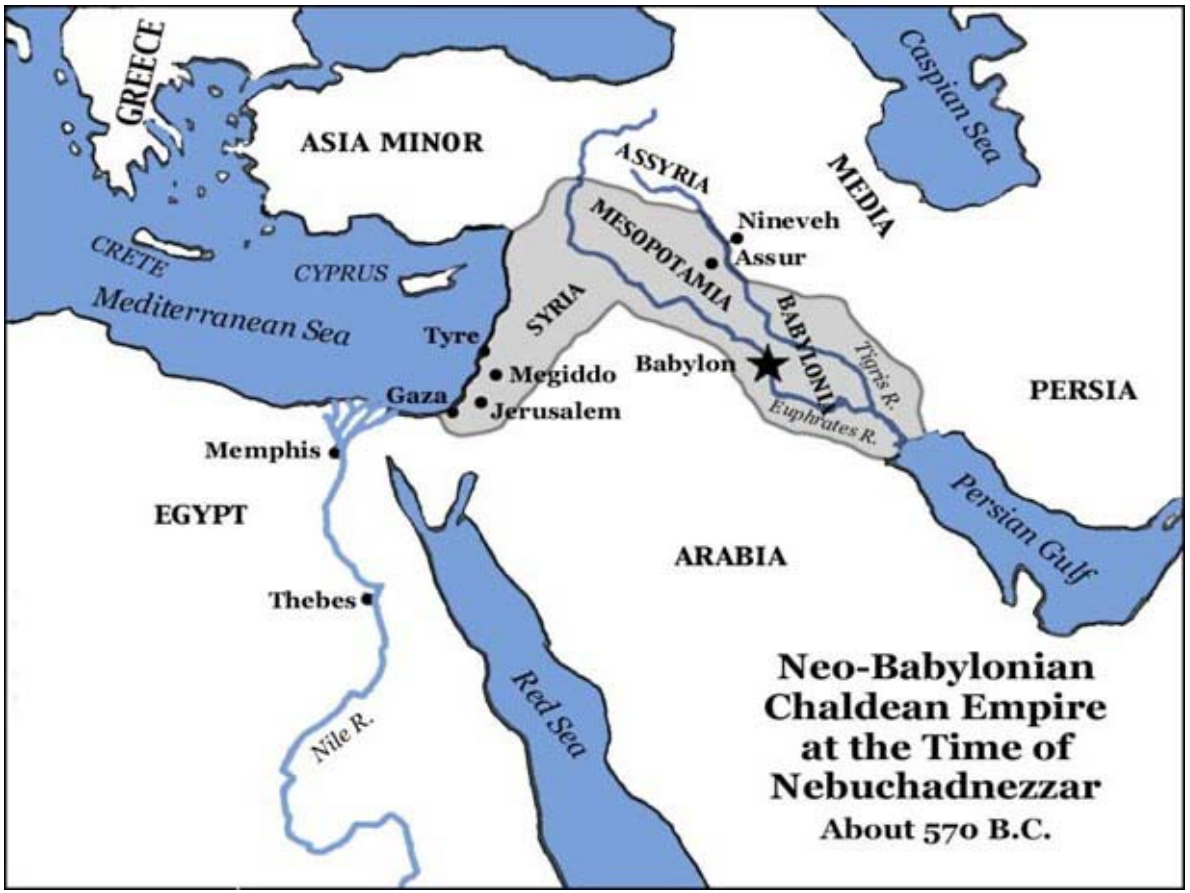
The discussion of the chronology of the Neo-Babylonian period has been greatly expanded. The seven lines of evidence against the 607 B.C.E. date presented in the first two editions have since been more than doubled. The evidence from astronomical texts forms a separate chapter. The burden of evidence presented in Chapters 3 and 4 is indeed enormous and reveals an insurmountable disharmony with, and refutation of, the chronology of the Watch Tower Society for this ancient period.

Despite the wealth of information from ancient secular sources, this book remains primarily Biblical. In the chapter 'Biblical and Secular Chronology" it clears up a common and serious misconception as to how we arrive at a 'Biblical chronology," as also the erroneous idea that a rejection of the Watch Tower's 607 B.C.E. date implies a placing of secular chronology as superior to such "Biblical chronology."

We are confident that the reading of this unique book will aid many to gain, not only a more accurate knowledge of the past, but also a more enlightened outlook regarding their own time, and increased appreciation of the trustworthiness and historicity of the Scriptures.

The Editors

2 From the preface to the Italian edition of *The Gentile Times Reconsidered* by Luigi Cagni, Professor of Assyriology at the University of Naples, Italy. Professor Cagni was, among other things, a leading expert on the Ebla tablets ,the about 16,000 cuneiform texts that have been excavated since 1975 in the roya1 palace of the ancient city of Ebla (present Arabic name: *Tell Mardikh)* in Syria. Luigi Cagni died in January, 1998.


GREECE
ASIA MINOR
ASSYRIA
MEDIA
Caspian Sea
Nineveh
Assur
MESOPOTAMIA
CRETE
CYPRUS
Mediterranean Sea
SYRIA
Tyre
BABYLONIA
Tigris R.
Babylon
Megiddo
Gaza
Jerusalem
Euphrates R.
PERSIA
Memphis
EGYPT
ARABIA
Persian Gulf
Thebes
Red Sea
Nile R.
Neo-Babylonian
Chaldean Empire
at the Time of
Nebuchadnezzar
About 570 B.C.

THE GENTILE TIMES RECONSIDERED

INTRODUCTION

THE DISILLUSIONING and sometimes dramatic process that ended up in the decision to publish this treatise could fill a whole book. Due to considerations of space, however, that background can be only touched upon briefly here. Jehovah's Witnesses are taught to put great trust in the Watch Tower Society and its leadership. Toward the end of my twenty-six years as an active Jehovah's Witness, however, the signs indicating that such trust was mistaken had mounted. To the very last I had hoped that the leaders of the organization would honestly face the facts respecting their chronology, even if those facts should prove fatal to some of the central doctrines and unique claims of their organization. But when at last I realized that the Society's leaders— apparently for reasons of organizational or "ecclesiastical" policy — were determined to perpetuate what, in the final analysis, amounts to a deception of millions of persons, doing this by suppressing information which they regarded and continue to regard as undesirable, no other course seemed open to me but to publish my findings, thus giving every individual who has a concern for truth an opportunity to examine the evidence and draw his or her own conclusions.

We are each responsible for what we know. If a person has information on hand that others need in order to get a correct understanding of their situation in life— *information that furthermore is withheld from them by their religious leaders—then* it would be morally wrong to remain silent. It becomes his or her duty to make that information available to all who want to know the truth, however this may appear. That is the reason why this book has been published.

The role of chronology in the teachings of the Watch Tower Society

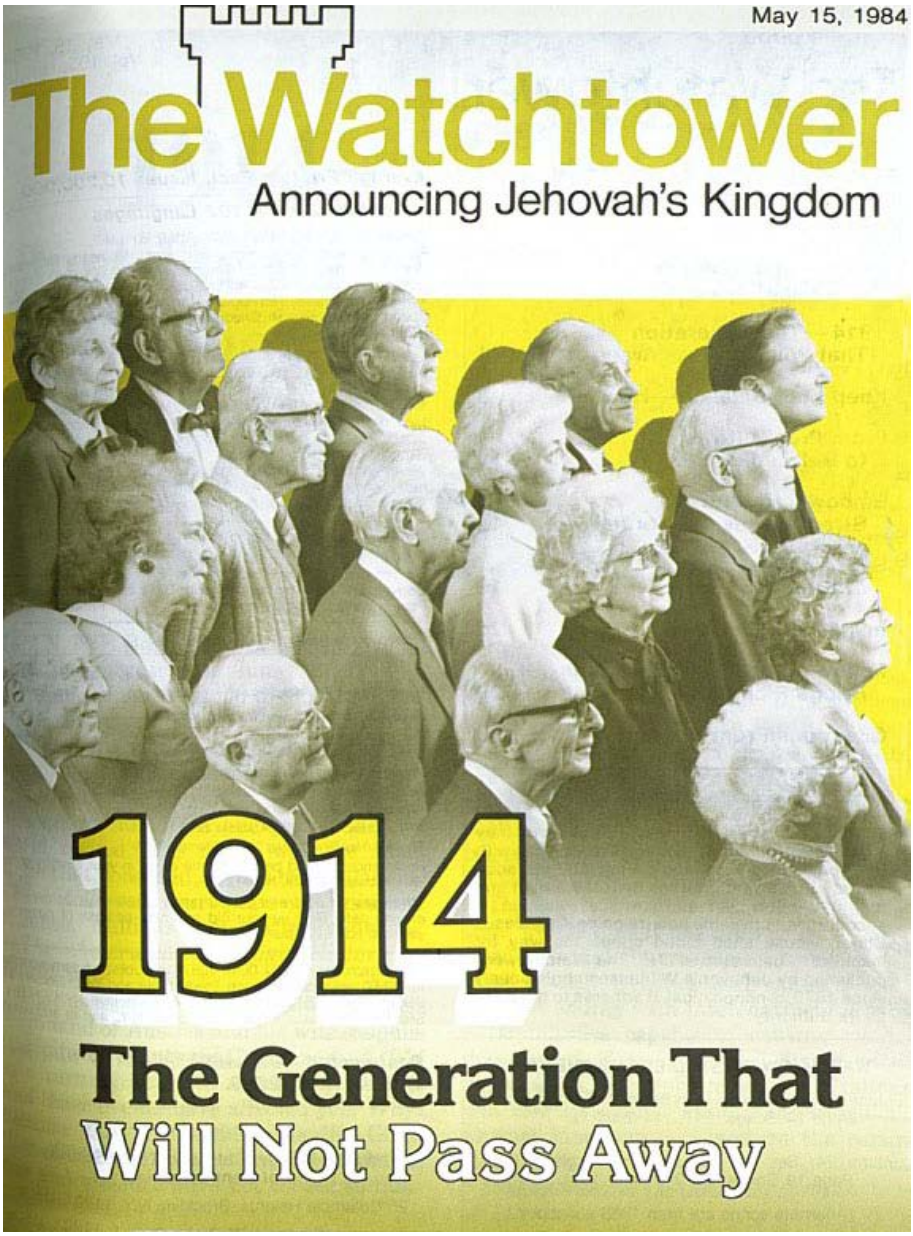
Few people are fully cognizant of the very central role played by chronology in the claims and teachings of the Watch Tower Society. Even many of Jehovah's Witnesses are not fully aware of the indissoluble connection between the Society's chronology and the message they preach from door to door. Confronted with the many evidences against their chronology, some Jehovah's Witnesses tend to downplay it as something they somehow can do without. "Chronology is not so important, after all," they say. Many Witnesses would prefer not to discuss the subject at all. Just how important, then, is the chronology for the Watch Tower organization?

An examination of the evidence demonstrates that *it constitutes the very foundation for the claims and message of this movement.*

The Watch Tower Society claims to be God's "sole channel" and "mouthpiece" on earth. Summing up its most distinctive teachings: it asserts that the kingdom of God was established in heaven in 1914, that the "last days" began that year, that Christ returned invisibly at that time to "inspect" the Christian denominations, and that he finally rejected all of them except the Watch Tower Society and its associates, which he appointed in 1919 as his sole "instrument" on earth.

For about seventy years, the Society employed Jesus' words at Matthew 24:34 about "this generation" to teach clearly and adamantly that the generation of 1914 would positively not pass away until the final end came at the "battle of Armageddon," when every human alive except active members of the Watch Tower organization would be destroyed forever. Thousands of Jehovah's Witnesses of the "1914 generation" fully expected to live to see and to survive that doomsday and then to live forever in paradise on earth.

As decades went by, leaving 1914 ever farther behind, this claim became increasingly difficult to defend. After *80 years* had passed, the claim became virtually preposterous. So, in the November 1, 1995, issue of the *Watchtower* (pages 10 through 21), a new definition of the phrase "this generation" was adopted, one that allowed the organization to "unlink" it from the date of 1914 *as a starting point.* Despite this monumental change, they still retained the 1914 date—in fact they *could not do otherwise* without dismantling their major teachings regarding Christ's "second presence," the start of the "time of the end," and the appointment of their



1914 — The Generation That Would not pass away!

organization as Christ's unique instrument and God's sole channel on earth. Though now recognizing "this generation" as defined by its *characteristics* rather than by a chronological period (with a particular starting point), they still found a way to include 1914 in their new definition. They accomplished this by including in the

definition an arbitrarily added factor, namely, that the "generation" is composed of "those persons who see the sign of Christ's presence but fail to mend their ways," resulting in their destruction. Since the official teaching continues to be that the "sign of Christ's presence" became visible *from and after 1914,* this allows for the date's continuing to form a key part of the definition of "this generation."

All these factors, then, bear testimony to the highly crucial role that 1914 plays in the teaching of the Watch Tower Society. Since the date itself obviously is not stated in Scripture, what is its source?

That date is a product of a chronological calculation, according to which the so-called "times of the Gentiles" referred to by Jesus at Luke 21:24 constitute a period of 2,520 years, beginning in 607 B.C.E. and ending in 1914 CE.[1] *This calculation is the real basis of the principal message of the movement.* Even the Christian gospel, the "good news" of the kingdom (Matthew 24:14), is claimed to be closely associated with this chronology. The gospel preached by other professed Christians, therefore, has never been the *true gospel.* Said *The Watchtower* of May 1, 1981, on page 17:

> Let the honest-hearted person compare the kind of preaching of the gospel of the Kingdom done by the religious systems of Christendom during all the centuries with that done by Jehovah's Witnesses since the end of World War I in 1918. They are not one and the same kind. That of Jehovah's Witnesses is really "gospel," or "good news," as *of God's heavenly kingdom that was established by the enthronement of his Son Jesus Christ at the end of the Gentile Times in 1914.* [Italics mine.]

In agreement with this, *The Watchtower* of May 1, 1982, stated that, "of all religions on earth, Jehovah's Witnesses are the only ones today that are telling the people of earth this 'good news'." (Page 10) A Jehovah's Witness who attempts to tone down the role of chronology in the Society's teaching simply does not realize that he or she thereby radically undermines the major message of the movement. Such a "toning down" is not sanctioned by the

1 The designations "B.C.E." (Before the Common Era) and "C.E." (Common Era) customarily used by Jehovah's Witnesses, correspond to "B.C" and "A.D." They are often used in scholarly literature, especially by Jewish authors, and have been adopted by the Watch Tower Society , as will be seen in the subsequent quotations from the Watch Tower publications . For the sake of consistency, these designations, B.C.E. and C.E., are regularly used in this work, the exception being where material is *quoted* in which the B.C. and A.D. designations are employed.

Watch Tower leadership. On the contrary, *The Watchtower* of January 1, 1983, page 12, emphasized that "the ending of the Gentile Times in the latter half of 1914 still stands on a historical basis as *one of the fundamental Kingdom truths to which we* ***must*** *hold today.*"[2]

The hard reality is that the Watch Tower Society views rejection of the chronology pointing to 1914 as a sin having fatal consequences. That God's kingdom was established at the end of the "Gentile times" in 1914 is stated to be "the most important event of our time," beside which "all other things pale into insignificance."[3] Those who reject the calculation are said to incur the wrath of God. Among them are "the clergy of Christendom" and its members, who, because they do not subscribe to that date, are said to have rejected the kingdom of God and therefore will be "destroyed in the 'great tribulation' just ahead."[4] Members of Jehovah's Witnesses who openly question or discard the calculation run the risk of very severe treatment. If they do not repent and change their minds, they will be disfellowshipped and classified as evil "apostates," who will "go, at death, . . . to Gehenna," with no hope of a future resurrection.[5] It makes no difference if they still believe in God, the Bible, and Jesus Christ. When one of the readers of *The Watchtower* wrote and asked, "Why have Jehovah's Witnesses disfellowshipped (excommunicated) for apostasy some

2 Italics and emphasis added. The Watch Tower Society's former president, Frederick W. Franz, in the morning Bible discussion for the headquarters family on November 17, 1979, stressed even more forcefully the importance of the 1914 date by saying: "The sole purpose of our existence as a Society is to announce the Kingdom established in 1914 and to sound the warning of the fall of Babylon the Great. We have a *special* message to deliver." (Raymond Franz, *In Search of Christian Freedom,* Atlanta: Commentary Press, 1991, pp. 32, 33).

3 *The Watchtower,* January 1, 1988, pp. 10, 11.

4 *The Watchtower,* September 1, 1985, pp. 24, 25.

5 *The Watchtower,* April 1, 1982, p. 27. In *The Watchtower* of July 15, 1992, page 12, such dissidents are described as "enemies of God" who are "intensely hating Jehovah." The Witnesses, therefore, are urged to "hate" them "with a complete hatred." This exhortation was repeated in *The Watchtower* of October 1, 1993, page 19, where the "apostates" are stated to be so "rooted in evil" that "wickedness has become an inseparable part of their nature." The Witnesses are even told to ask God to kill them, in imitation of the psalmist David, who prayed of his enemies: "O that you, O God, would slay the wicked one!" In this way the Witnesses "leave it to Jehovah to execute vengeance" Such rancorous attacks on former members of the organization reflect an attitude that is exactly the reverse of that recommended by Jesus in his Sermon on the Mount.—Matthew 5:43–48.

who still profess belief in God, the Bible, and Jesus Christ?" the Society answered, among other things:

> Approved association with Jehovah's Witnesses requires accepting the entire range of the true teachings of the Bible, including those Scriptural beliefs that are unique to Jehovah's Witnesses. What do such beliefs include? . . . *That 1914 marked the end of the Gentile times and the establishment of the Kingdom of God in the heavens, as well as the time for Christ's foretold presence.* [Italics mine][6]

No one, therefore, who repudiates the calculation that the "Gentile times" expired in 1914, is approved by the Society as one of Jehovah's Witnesses. In fact, even one who *secretly* abandons the Society's chronology and thus may still *formally* be regarded as one of Jehovah's Witnesses, has, in reality, rejected the essential message of the Watch Tower Society and, according to the organization's own criterion, is factually no longer a part of the movement.

How this research began

For one of Jehovah's Witnesses to question the validity of this basic prophetic calculation is, then, no easy matter. To many believers, especially in a closed religious system such as the Watch Tower organization, the doctrinal system functions as a sort of "fortress" inside which they may seek shelter, in the form of spiritual and emotional security. If some part of that doctrinal structure is questioned, such believers tend to react emotionally; they take a defensive attitude, sensing that their "fortress" is under attack and that their security is threatened. This defense mechanism makes it very difficult for them to listen to and examine the arguments on the matter *objectively*. Unwittingly, their need for emotional security has become more important to them than their respect for truth.

To reach behind this defensive attitude so common among Jehovah's Witnesses in order to find open, listening minds is extremely difficult—especially when so basic a tenet as the "Gentile times" chronology is being questioned. For such questioning rocks the very foundations of the Witness doctrinal system and therefore often causes Witnesses at all levels to become belligerently defensive. I have repeatedly experienced such reactions ever since 1977 when I first presented the material in this volume to the Governing Body of Jehovah's Witnesses.

6 The Watchtower, April 1, 1986, pp. 30,31.

It was in 1968 that the present study began. At the time, I was a "pioneer" or full-time evangelist for Jehovah's Witnesses. In the course of my ministry, a man with whom I was conducting a Bible study challenged me to prove the date the Watch Tower Society had chosen for the desolation of Jerusalem by the Babylonians, that is 607 B.C.E. He pointed out that all historians marked that event as having occurred about twenty years later, in either 587 or 586 B.C.E. I was well aware of this, but the man wanted to know the reasons why historians preferred the latter date. I indicated that their dating surely was nothing but a guess, based on defective ancient sources and records. Like other Witnesses, I assumed that the Society's dating of the desolation of Jerusalem to 607 B.C.E. was based on the Bible and therefore could not be upset by those secular sources. However, I promised the man I would look into the matter.

As a result, I undertook a research that turned out to be far more extensive and thoroughgoing than I had expected. It continued periodically for several years, from 1968 until the end of 1975. By then the growing burden of evidence against the 607 B.C.E. date forced me reluctantly to conclude that the Watch Tower Society was wrong.

Thereafter, for some time after 1975, the evidence was discussed with a few close, research-minded friends. Since none of them could refute the evidence demonstrated by the data I had collected, I decided to develop a systematically composed treatise on the whole question which I determined to send to the headquarters of the Watch Tower Society at Brooklyn, New York.

That treatise was prepared and sent to the Governing Body of Jehovah's Witnesses in 1977. The present work, which is based on that document, was revised and expanded during 1981 and then published in a first edition in 1983. During the years that have passed since 1983, many new finds and observations relevant to the subject have been made, and the most important of these have been incorporated in the last two editions. The seven lines of evidence against the 607 B.C.E. date presented in the first edition, for example, have now been more than doubled.

Correspondence with the Watch Tower headquarters

In 1977 I began to correspond with the Governing Body concerning my research. It soon became very evident that they were unable to refute the evidence produced. In fact, there was not even an attempt made to do so until February 28, 1980. In the

meantime, however, I was repeatedly cautioned not to reveal my findings to others. For example, in a letter from the Governing Body dated January 17, 1978, the following warning was given:

> However, no matter how strong the argumentation may be in support of those views, they must, for the present, be regarded as your personal viewpoint. It is not something that you should talk about or try to advance among other members of the congregation.[7]

And further, in a letter dated May 15, 1980, they stated:

> We are sure you appreciate that it would not be appropriate for you to begin to state your views and conclusions on chronology that are different than those published by the Society so as to raise serious questions and problems among the brothers.[8]

I accepted such advice, as I was given the impression that my spiritual brothers at the Watch Tower headquarters needed time to reexamine the whole subject thoroughly. In their first reply to my treatise, dated August 19, 1977, they had stated: "We are sorry that the press of work here has not allowed us to give it the attention we would like to up to the present time." And in the letter of January 17,1978, they wrote:

> We have not had the opportunity of examining this material as yet, as other urgent matters are occupying our attention. However, we will look into this material when we have the opportunity.... You can be assured that your views will be examined by responsible brothers.... In due course we hope to look into your treatise and evaluate what is contained therein.

Judging from these and similar statements, Watch Tower officials at the Brooklyn headquarters seemed prepared to examine the data presented to them honestly and objectively. In a very short time, however, the whole matter took quite a different course.

Interrogation and defamation

Early in August, 1978, Albert D. Schroeder, a member of the Governing Body, held a meeting in Europe with representatives

7 Names of the authors of letters from the Watch Tower Society are never given. Instead, internal symbols are used. The symbol "GEA" in the upper left corner of this letter shows that the author was Lloyd Barry, one of the members of the Governing Body.

8. The symbol "EF" shows the writer of this letter to have been Fred Rusk of the Writing Department.

TELEPHONE (212) 858-1840

WATCH TOWER
BIBLE AND TRACT SOCIETY
OF PENNSYLVANIA

CABLE WATCHTOWER

124 COLUMBIA HEIGHTS, BROOKLYN, NEW YORK 11201, U.S.A.

GEA:ESB January 17, 1978

Carl Olof Jonsson
Hjeltegatan 14
S-662 00 AMAL
Sweden

Dear Brother Jonsson:

To hand is your letter of December 12, 1977, and also the treatise that you have prepared entitled "The Gentile Times Reconsidered."

We have not had the opportunity of examining this material as yet, as other urgent matters are occupying our attention. However, we will look into this material when we have the opportunity.

We appreciate your sincerity in wanting to set forth your views. However, no matter how strong the argumentation may be in support of these views, they must, for the present, be regarded as your personal viewpoint. It is not something that you should talk about or try to advance among other members of the congregation. We mention this because you state in your letter that several brothers have examined your treatise and that "we are all eagerly looking forward to your comments."

As you can appreciate, what you state in your treatise amounts to a radical departure from the present understanding of chronology by Jehovah's Witnesses. We are sure that you can appreciate that if changes of importance are made they should be made in an orderly way, even as was the case in the first century, with central direction being given. (Acts 15:1, 2) We are also sure that you appreciate that for individuals to advance and advocate such changes would have, not a unifying effect, but a divisive one producing confusion. We mention this to you in view of the fact that the treatise you sent contains a statement on the front page describing it as "prepared by Jehovah's Witnesses, for Jehovah's Witnesses." To say that something is "prepared by Jehovah's Witnesses" implies that it has the sanction of Jehovah's Witnesses as a body, and we are sure you realize that this is not the case with the treatise at hand. This could give a false impression and we are confident that this is not your desire. You can be assured that your views will be examined by responsible brothers, and that if doctrinal change should be made at some time it will come through the proper channels. This is important in preserving the unity of Jehovah's organization.

It is hoped that you will observe the counsel supplied above. In due course we hope to look into your treatise and evaluate what is contained therein.

Please be assured of our warm love and best wishes.

Your brothers,

Watch Tower B. & T. Society
OF PENNSYLVANIA
For the Writing Committee
of the Governing Body

from European Watch Tower branch offices. At that meeting, he told the audience that there was a campaign going on both inside the movement and from outside to have the Society's 607 B.C.E.–1914 C.E. chronology overthrown.[9] *The Society, however, had no intention of abandoning it,* he stated.

Three weeks later, on September 2, I was summoned to a hearing before two representatives of the Watch Tower Society in Sweden, Rolf Svensson, one of the two district overseers in the country, and Hasse Hulth, a circuit overseer. I was told that they had been commissioned by the Society's branch office to hold such a hearing because "the brothers" at the Brooklyn headquarters were deeply concerned about my treatise. Once again I was cautioned not to spread the information I had gathered. Rolf Svensson also told me that the Society did not need or want individual Jehovah's Witnesses to become involved in research of this kind.

Partly as a result of this meeting, I resigned from my position as an elder in the local congregation of Jehovah's Witnesses and also from all my other tasks and assignments in the congregation and the circuit. I did this in the form of a lengthy letter, addressed to the local eldership and the circuit overseer, Hasse Hulth, in which I briefly explained the reasons for the position I had taken. Soon it became widely known among my Witness brothers in different parts of Sweden that I had rejected the chronology of the Society.

In the following months, I and others who had questioned the chronology began to be condemned privately as well as from the platforms of Kingdom Halls (congregational meeting places) and at Witness assemblies or conventions. We were publicly characterized in the most negative terms as "rebellious," "presumptuous", "false prophets," "small prophets who have worked out their own little chronology," and "heretics." We were called "dangerous elements in the congregations," "evil slaves," "blasphemers," as well as "immoral, lawless ones." Privately, some of our Witness brothers, including a number of the Watch Tower Society's traveling representatives, also intimated that we were "demon-possessed," that we had "flooded the Society with criticism" and that we "should have been disfellowshipped long ago" These are just a

9 Except for my treatise, which came from inside the movement, Schroeder could have had in mind two non-Witness publications which attack the Society's chronology: *The Jehovah's Witnesses and Prophetic Speculation,* by Edmund C. Gross (Nutley, N. J.: Presbyterian and Reformed Publishing Co., 1972), and *1914 and Christ's Second Coming* by William MacCarty (Washington, D. C.: Review and Herald Publishing Association, 1975).

few examples of the widespread defamation, one that has gone on ever since, although no names, for obvious legal reasons, have ever been mentioned publicly.

That such obvious slander was not just a local phenomenon, but had the sanction of the Governing Body of Jehovah's Witnesses, was evident from the fact that similar statements were printed in *The Watchtower* magazine.[10]

This description of the situation that developed has not been given in order to criticize Jehovah's Witnesses as individuals. These people are usually kind and sincere in their belief. The description has rather been given to illustrate how easily an individual may unwittingly fall prey to the irrational, psychological reactions described earlier in this introduction. In a letter to Albert Schroeder, dated December 6, 1978, I described the new turn of events, calling attention to the sad fact that although my treatise had been composed with the greatest thoughtfulness and sent to the Society in all sincerity, I had become the victim of backstabbing, vilification and character assassination:

> How tragic, then, to observe how a situation develops, where the attention is drawn away from the question raised— the validity of the 607 B .C.E. date—and directed to the person who raised it, and *he*—not the question — is regarded as the problem! How is it possible that a situation of this kind develops in our movement?

The answer to this question, one to which the Society never officially responded, is to be found in the psychological defense mechanism described by Dr. H. Dale Baumbach:

> Insecure individuals, when faced with a problem which highlights their insecurity, instinctively respond by attempting to

10 Abandoning the 607 B.C.E.–1914 C.E. calculation also implies abandoning those interpretations founded upon it such as the idea that God's kingdom was established in 1914 and that Christ's "invisible presence" began in that year. Of Jehovah's Witnesses who cannot embrace such views, *The Watchtower* of July 15, 1979, stated on page 13: "*Lawless persons* have even tried to penetrate the true Christian congregation, arguing that the 'promised presence' of our Lord is not in this day . . . Persons of this kind are included in Jesus' warning recorded at Matthew 7:15–23: 'Be on the watch for the *false prophets* that come to you in sheep's covering, but inside they are ravenous wolves. . . . In that day I will confess to them: I never knew you! Get away from me, you *workers of lawlessness.*" Further, *The Watchtower* of August 1,1980, page 19, said: "Peter was also speaking of the danger of being led away' by some within the Christian congregation who would become *'ridiculers,'* making light of the fulfillment of prophecies concerning Christ's 'presence' and adopting a *law-defying* attitude toward 'the faithful and discreet slave,' the Governing Body of the Christian congregation and the appointed elders" [Italics mine] See also paragraph 11 on the same page and paragraph 14 on page 20 of the same issue.

destroy that which addresses their insecurity or to banish it to the recesses of the mind.[11]

Awareness of this defense mechanism, it is hoped, will help those readers who are associated with Jehovah's Witnesses to examine the evidence presented in this work with due consideration and an open mind.

Eventually the Watch Tower Society did attempt to refute the evidence against the 607 B.C.E. date, but this was not done until a special representative of the Governing Body in Sweden had written to the Society asking them to provide an answer to *the content* of the treatise sent to them, telling them that the author was still waiting for a reply. This representative was the coordinator of the Society's work in Sweden, Bengt Hanson.

Hanson had paid me a visit on December 11, 1979, to discuss the situation that had developed. During our discussion, he was brought to realize that it was the *evidence* I had presented to the Society against the 607 B.C.E. date—not me, my motives or attitude—that was the real issue. If the evidence against the 607 B.C.E. date was *valid,* this was a problem that should be of equal concern to every Witness in the organization. Under such circumstances, my personal attitude and motives were as irrelevant as those of other Witnesses.

As a result of this, early in 1980, Hanson wrote a letter to the Governing Body explaining the situation, telling them that I was still waiting for a reply to the evidence I had brought against their chronology. And so, at long last, nearly three years after my sending them the research material, in a letter dated February 28, 1980, an attempt was made to tackle *the question* instead of *the questioner*.

The argumentation presented, however, turned out to be largely a repetition of earlier arguments found in various places in the Watch Tower Society's literature, *arguments which had already been demonstrated in the treatise to be unsatisfactory.* In a letter dated March 31, 1980, I answered their arguments and added two new lines of evidence against the 607 B.C.E. date. Thus the Society not only

11 *Spectrum,* Vol. 11, No.4, 1981, p.63. (This journal was published by the Associations of Adventist Forums, Box 4330, Takoma Park, Maryland, U.S.A.) The *Awake!* magazine of November 22, 1984, similarly explained that such behaviour is a sign of "a closed mind," saying: "For example, if we are unable to defend our religious views , we may find ourselves lashing out against those who challenge our beliefs, not with logical arguments, but with slurs and innuendos . This smacks of prejudice and of a closed mind." (Page 4; compare also the *Awake!* of May 22, 1990, page 12.)

failed to defend its position successfully, but the evidence against it also became considerably stronger.

No further attempt to deal with the whole matter was made by the Society until the summer of 1981, when a short discussion of it appeared as an "Appendix" to the book *"Let Your Kingdom Come"* (pages 186–189). This latest discussion added nothing new to the earlier arguments, and to anyone who has carefully studied the subject of ancient chronology, it appears to be no more than a feeble attempt to save an untenable position by concealing facts. This is clearly demonstrated in the last chapter of this present work, titled "Attempts to overcome the evidence." The contents of the Watch Tower Society's "Appendix," however, finally convinced me that *the leaders of this organization were clearly not prepared to let facts interfere with traditional fundamental doctrines.*

"Waiting upon Jehovah"

It may be noted that while the Society's officers feel perfectly free to publish any argument *in support of* their chronology, they have gone to great lengths to try to keep Jehovah's Witnesses at large in ignorance of the heavy burden of evidence *against it.* Thus they had not only repeatedly cautioned me not to share my evidence against the 607 B.C.E. date with others, but they have also supported the widespread defamation of any and all Jehovah's Witnesses who have questioned the organization's chronology. This mode of procedure is not only unfair towards those who have questioned it; it is also most unfair towards Jehovah's Witnesses in general. They have a right to hear *both* sides of the issue and learn *all* the facts. That is why I decided to publish *The Gentile Times Reconsidered.*

Interestingly, various arguments have been advanced by representatives of the Watch Tower Society to justify the position that facts and evidence which go contrary to its teachings should not be made known among Jehovah's Witnesses. One line of reasoning goes as follows: Jehovah reveals the truth *gradually* through his "faithful and 'discreet slave" class, whom Christ has appointed "over all his belongings." (Matthew 24:47, *NW)* This "slave" class expresses itself through those who oversee the publishing and writing of Watch Tower literature. We should, therefore, *wait upon Jehovah—wait,* in other words, until the organization publishes "new truths." Anyone who "runs ahead" of the organization is therefore *presumptuous,* for he thinks he knows better than "the faithful and discreet slave."

Such an argument, however, is invalid *if the Society's suppositions regarding Bible chronology are wrong.* How so? Because the very concept that it is possible today to identify a "faithful and discreet slave class," whom Christ, as the "master" in the parable at Matthew 24:45–47, has appointed "over all his belongings," rests unequivocally on the *chronological calculation* that the "master" arrived in 1914 and made such an appointment a few years later in 1919. If, as will be shown in this work, the Gentile times *did not* end in 1914, then the basis for claiming that Christ returned in that year disappears, and Watch Tower leaders cannot claim to have been appointed "over all his belongings" in 1919. If this is so, neither can they rightfully claim a divinely-assigned monopoly on publishing "the truth."

It should also be noted that it is the "master" of the parable who, on his arrival, decides who is "the faithful and discreet slave," *not the slaves themselves.* So, for a group of individuals to claim—in the "master's" absence—to be "the faithful and discreet slave," elevating themselves over all the master's "belongings," *is itself grossly presumptuous.* On the other hand, an individual who claims for himself no lofty position can hardly be regarded as presumptuous if he publishes information that contradicts some of the teachings of the Watch Tower Society.

To "wait upon Jehovah," of course, is the duty of every Christian. Unfortunately, the Watch Tower Bible and Tract Society, like many other apocalyptic movements, has time and again "announced" that the time has come for the fulfillment of God's prophecies, doing this in each case without regard to God's own "times and seasons" for their fulfillment. This has been the case ever since the very beginning in the 1870s.

When the leaders of the Watch Tower movement for about 55 years (1876–1931) persistently taught that Christ had arrived invisibly in 1874, were they setting an example of "waiting upon Jehovah"?

When they taught that the "remnant" of Christ's church would be changed (1 Thessalonians 4:17), first in 1878, then in 1881, then in 1914, then in 1915, then in 1918, and then again in 1925, did they "wait upon Jehovah"?[12]

12 *The Watch Tower,* February 1, 1916, p. 38; September 1, 1916, pp. 264, 265; July 1, 1920, p. 203.

When they taught that the end of the present system of things would come in 1914, then in 1918–20, then in 1925, then about 1941–42, and then again about 1975, were they "waiting upon Jehovah"?[13]

If 1914 is not the terminal point of the "Gentile times" as the Watch Tower Society continues to hold, then the numerous current "prophetic" applications stemming from it are additional proofs that the Society *still* is not prepared to "wait upon Jehovah." In that light and under such circumstances it seems a bit misplaced to advise others to "wait upon Jehovah." The one who *genuinely* wants to wait upon Jehovah cannot simply wait until the leaders of the Watch Tower Society are prepared to do that. If, upon careful consideration of the evidence he comes to the conclusion that the Watch Tower Society has produced, within the framework of its chronology, a clearly arbitrary "fulfillment" of Bible prophecy in our time, then he needs to dissociate himself from the persistent attempts made to *impose* that arbitrary position on others as required belief. Then he could rightly be said to be prepared to start "waiting upon Jehovah."

The expulsion

For over a century the Watch Tower publications have been filled with a massive and continuous criticism of the errors and evils of other Christian denominations. Even if this criticism often has been sweeping and superficial, it has not infrequently also hit the target. The Watch Tower literature often has denounced the intolerance shown in the past by various churches against dissident members. "Christendom has had it fanatics—from people who set themselves on fire in political protest to *individuals acting intolerantly toward those holding different religious views,"* noted *The Watchtower* of July 15, 1987, page 28. This kind of intolerance found a frightening expression in the Inquisition, which was established by the Roman Catholic Church in the 13th century and lasted for over six centuries. The word "Inquisition" is derived from the Latin word *inquisition,* meaning "examination." It is briefly described as "a court established by the Roman Catholic Church in order to

13 The Time Is At Hand (= Vol. 2 of the series Studies in the Scriptures, published in 1889), pp. 76-78; The Finished Mystery (= Vol. 7 of Studies in the Scriptures, published in 1917), pp. 129,178,258,404,542; Millions Now Living Will Never Die! (1920), p. 97; The Watchtower, Sept. 9, 1941,p. 288; Awake!, Oct. 8, 1966, pp. 19, 20; The Watchtower, May 1, 1968, pp. 271–272.

discover and punish heretics and apostates."[14] What was the situation of the people under this intolerant clergy rule? *The Watchtower* of September 1, 1989, explains on page 3:

> No one was free to worship as he pleased or to express opinions conflicting with those of the clergy. This clerical intolerance created a climate of fear throughout Europe. The church established the Inquisition to root out individuals who dared to hold different views.

Such statements might give the impression that the Watch Tower Society, in contrast to the Roman Catholic Church in the Middle Ages, acts with tolerance toward members who "hold different religious views" and defends their right to express opinions conflicting with the teachings of the organization. The truth is, however, that this organization takes exactly the same attitude to members holding different religious opinions as did the medieval Catholic Church. "Beware of those who try to put forward their own contrary opinions," cautioned *The Watchtower* of March 15, 1986, page 17. In answer to the question why Jehovah's Witnesses have "disfellowshipped (excommunicated) for apostasy some who still profess belief in God, the Bible, and Jesus Christ," the Watch Tower Society said:

> Those who voice such an objection point out that many religious organizations claiming to be Christian allow dissident views. . . . However, such examples provide no grounds for our doing the same. . . . Teaching dissident or divergent views is not compatible with true Christianity.[15]

The Watch Tower Society has even established examination courts similar to those organized by the Roman Catholic Church in the Middle Ages, the only essential difference being that the Society's "judicial committees" have no legal authority to torture their victims *physically*. I knew that the conclusions I had reached would eventually cause me to be tried and expelled by such a "court of inquisition," provided that I did not leave the organization of my own accord before that. But I knew, too, that the consequences in both cases would be the same.

After twenty-six years as an active Jehovah's Witness I was now, in 1982, prepared to leave the Watch Tower organization. It was quite clear to me that this would mean a complete break with the

14 The Swedish *encyclopaedia Nordisk Familjebok, Vo1.11* (Malmö: Förlagshuset Norden AB, 1953), p. 35.

15 *The Watchtower,* April 1, 1986, pp. 30, 31.

whole social world I had been a part of during all those years. The rules of the Watch Tower Society require Jehovah's Witnesses to cut off all contacts with those who break with the organization, whether this break occurs by excommunication or by a voluntary resignation. I knew that I would not only lose virtually all my friends, but also all my relatives within the organization (of which there were over seventy, including a brother and two sisters with their families, cousins and their families, and so on). I would be regarded and treated as "dead," even if my physical "execution" would have to be postponed until the imminent "battle of Armageddon," a battle in which the Witnesses expect Jehovah God to annihilate forever all who are not associated with their organization.[16]

For some time I had been trying to prepare myself emotionally for this break. My plan was to publish my treatise as a public farewell to the movement. However, I did not manage to get the material ready for publication before a letter arrived from the Watch Tower Society's branch office in Sweden, dated May 4, 1982. The letter was a summons to an examination before a "judicial committee" consisting of four representatives of the Society, who had been appointed, the letter said, to "find out about your attitude toward our belief and the organization."[17]

I realized that my days within the organization now were numbered, and that I might not be able to get my treatise ready in time for publication. In a letter to the branch office I tried to have the meeting with the judicial committee postponed. I pointed out that, as they very well knew, the grounds for my "attitude toward our belief and the organization" consisted of the evidence I had presented against the Society's chronology, and if they genuinely

16 The disfellowshipping (excommunication) rules are discussed, for instance, in *The Watchtower,* September 15, 1981, pages 16–31, and in *The Watchtower,* April 15,1988, pages 27, 28. With respect to the impending destruction of the present world system *The Watchtower* of September 1, 1989, states on page 19: "Only Jehovah's Witnesses, those of the anointed remnant and the 'great crowd', as a united organization under the protection of the Supreme Organizer, have an Scriptural hope of surviving the impending end of this doomed system dominated by Satan, the Devil." (Compare also *The Watchtower,* September 15, 1988, pages 14, 15)

17 The action was probably taken at the request of the headquarters in Brooklyn, New York. As Raymond Franz, who was a member of the Governing Body until Spring, 1980, wrote to me afterwards in a letter dated August '7, 1982: "I suppose it was somewhat of a foregone conclusion that the Society would take action toward you. In my own case, I feel that it had to be only a matter of time unti1 they did something about me, no matter how low a profile I kept. I would not doubt that in your case the Branch office contacted Brooklyn and was advised to take action."

wanted to change my attitude, they had to start with the burden of evidence that was the *basis* for it. I requested, therefore, that the members of the committee be allowed to make a thorough examination of my treatise. After that we might reasonably have a meaningful meeting.

But neither the branch office nor the four members of the judicial committee showed any interest in the kind of discussion I had proposed, and they did not even comment on the conditions I had stated for having a meaningful meeting with them. In a brief letter they just repeated the summons to the committee examination. It seemed obvious that I was already judged in advance, and that the trial I had been summoned to would only be a meaningless and macabre farce. I therefore chose to stay away from the examination and was consequently judged and disfellowshipped in my absence on June 9, 1982.

Attempting to gain time I appealed the decision. A so-called "appeal committee" of four new members was appointed, and once again I repeated in a letter the conditions I found reasonable for having a meaningful conversation with them. The letter was not even answered. On July 7, 1982, therefore, the new committee met for another sham trial in my absence, and as expected it just confirmed the decision of the first committee. In both instances the sole "judicial" issue considered obviously was, Did I or did I not agree totally with Watch Tower teaching? The question of whether the reasons for my position were *valid* was simply treated as irrelevant.

Are the conclusions destructive of faith?

As pointed out earlier, the conclusions arrived at in this work upset the central claims and apocalyptic interpretations of the Watch Tower Society. Such conclusions, therefore, could cause some unrest among Jehovah's Witnesses, and the leaders of the Society clearly feared that their dissemination would disrupt the unity of their flock. I was well aware that my efforts would be interpreted by Watch Tower officials as an attempt to destroy faith and to disrupt the unity of the "true Christian congregation." But faith should rightly be in harmony with truth, with fact, and this includes historical facts. Thus I felt confident that publishing the facts on the subject at hand would not disturb peace and unity among those who are truly Christians. True unity is founded upon *love* among them, for love is the "perfect bond of union."— Colossians 3:14.

On the other hand, there is also a false unity, founded, not upon love, but upon fear. Such "unity" is characteristic of authoritarian

organizations, political as well as religious. It is a *mechanistic* unity enforced by the leaders of such organizations who want to maintain their authority and keep control over individuals—a unity that does not depend on truth. In such organizations, individuals relinquish to central authorities their right and responsibility to think, speak, and act freely. Since the evidence and the conclusions that are presented in this work overthrow the authoritarian claims of the Watch Tower Society, the publication of this work may be a threat to the *enforced* unity within this organization. But the *true* unity founded upon love among Christian individuals, whose "fellowship is with the Father and with his Son, Jesus Christ," will surely not be affected by this.—John 17:21–23; 1 John 1:3, *NIV*.

Thus, even if the prophetic claims and interpretations of the Watch Tower Society are found to be groundless, nothing of *real* value will be lost when these things dissolve and disappear. A Christian still has God's Word, the real source of truth and hope. Christ is still his Lord, his only hope for future life. And he will still enjoy Christian peace and unity, with his Father, with Jesus Christ, and with those individuals on earth who turn out to be his true brothers and sisters. Even if he were to be expelled from an authoritarian religious system because he accepts what he clearly sees to be true, Christ will not forsake him, for he said: "Where two or three come together in my name, there I am with them." (John 9:30,34–39; Matthew 18:20, *NW)* The answer to the question, "Where shall we go without the organization?" is still the same as at the time of the apostles, when Peter said: "Lord, *whom* shall we go away to? *You* have sayings of everlasting life." (John 6:68) It is Christ, not an organization, who has "sayings of everlasting life."[18]

During the years that have passed since this research started, I have come to know, personally or by letter, a growing number of Jehovah's Witnesses at different levels of the Watch Tower organization who have examined thoroughly the question of chronology and independently arrived at the same conclusions that are presented in this volume. Some of these men tried very hard to defend the Society's chronology before they were forced by the biblical and historical evidence to abandon it. Among such were members of the Watch Tower research committee appointed to

18 In the Watch Tower Society's comments on this text, the "organization" has been substituted for Christ as the one to whom one should go to find "everlasting life." See for example *The Watchtower,* February 15, 1981, page 19, and December 1, 1981, page 31.

produce the Society's Bible dictionary, *Aid to Bible Understanding*. The section on chronology in this work on pages 322 through 348 is still the most able and thorough discussion of Watch Tower chronology ever published by that organization.[19] Yet the individual who wrote the article in question ultimately came to realize that the Society's 607 B.C.E. date for the fall of Jerusalem to the Babylonians could not be defended, and later he abandoned it altogether, with all the calculations and teachings founded upon it. In a letter to me, he stated:

> In developing the subject 'Chronology' for *Aid to Bible Understanding,* the Neo-Babylonian period, extending from the reign of Nebuchadnezzar's father Nabopolassar to the reign of Nabonidus and the fall of Babylon, presented a particular problem. As Jehovah's Witnesses, we were obviously interested in finding and presenting some evidence, however small, in support of the year 607 B.C.E. as the date of the destruction of Jerusalem in Nebuchadnezzar's eighteenth year. I was well aware of the fact that historians consistently point to a time some twenty years later and that they place the start of Nebuchadnezzar's reign in 605 B.C.E. (his accession year) rather than 625 B.C.E., the date used in Watch Tower publications. I knew that the 607 B.C.E. date was crucial to the Society's interpretation of the 'seven times' of Daniel chapter four as pointing to the year 1914 C.E.
>
> A large amount of research went into the effort. At that time (1968), Charles Ploeger, a member of the Watch Tower headquarters staff, was assigned as an assistant to me. He spent many weeks searching through the libraries of New York City for any sources of information that might give some validity to the date of 607 B.C.E. as the time of Jerusalem's destruction. We also went to Brown University to interview Dr. A. J. Sachs, a specialist in astronomical texts relating to the Neo-Babylonian and adjoining periods. None of these efforts produced any evidence in support of the 607 B.C.E. date.

19 *Aid to Bible Understanding* was published in its entirety in 1971. A slightly revised edition in two volumes was published in 1988. The most important new feature is the addition of visual aids (maps, pictures, photographs, etc.), all in full color. The name of the dictionary was changed, however, to *Insight on the Scriptures,* evidently because the three principal authors, Raymond Franz, Edward Dunlap, and Reinhard Lengtat, left the headquarters in 1980, and that two of them, Franz and Dunlap, were disfellowshipped because of their divergent views. In *Insight on the Scriptures,* more than half of the contents of the original article on "Chronology" has been cut off (see Vol. 1, pp. 447–467), the reason likely being the information on the subject presented in the treatise sent to the headquarters in 1977, along with a recognition of the tenuous nature of the organization's claims.

> In view of this, in writing the article on 'Chronology' I devoted a considerable portion of the material to efforts at showing the uncertainties existent in ancient historical sources, including not only Babylonian sources but also Egyptian, Assyrian and Medo-Persian. Though I still believe that a number of the points presented as to such uncertainties are valid, I know that the argumentation was born of a desire to uphold a date for which there was simply no historical evidence. If the historical evidence did, in fact, contradict some clear statement in Scripture I would not hesitate to hold to the Scriptural account as the more reliable. But I realize that the issue is not some contradiction of clear Scriptural statement but contradiction of an *interpretation* placed upon portions of Scripture, giving to them a meaning that is not stated in the Bible itself. The uncertainties that are to be found in such human interpretations are certainly equal to the uncertainties to be found in chronological accounts of ancient history.[20]

Acknowledgements

Before this introduction is concluded, I would like to thank the many knowledgeable persons all over the world, some of whom were still active Jehovah's Witnesses at the time the treatise was written, who, by their encouragement, suggestions, criticism and questions have greatly contributed to this treatise. First among these I should mention Rud Persson in Ljungbyhed, Sweden, who participated in the work from an early stage and who more than anyone else assisted in these respects. Other friends of the same background, especially James Penton and Raymond Franz, have been of great help in preparing the book for publication by polishing my English and grammar.

With respect to the ideo-historical section (chapter one), my contacts with Swedish scholar Dr. Ingemar Lindén stimulated my interest and initiated my research in this area. Alan Feuerbacher, Beaverton, Oregon (now in Fort Collins, Colorado) provided important documents for this section. For the chapters on Neo-Babylonian chronology (chapters three and four) the contacts with authorities on the Babylonian cuneiform texts have been of invaluable help. This applies particularly to Professor D. J. Wiseman in England, who is a leading expert on the Neo-Babylonian period; Mr. C. B. F. Walker, Deputy Keeper in the Department of the Ancient Near East in the British Museum,

20 Raymond Franz, former Governing Body member, wrote this letter, dated June 12, 1982.

London; Professor Abraham J. Sachs in the U.S.A; Professor Hermann Hunger in Austria, who since the death of Abraham Sachs in 1983 is the leading expert on Babylonian astronomical observational texts; Dr. John M. Steele in Toronto, Canada, and Dr. Beatrice André at the Louvre Museum in Paris. On the exegetical sections (chapters 5–7), finally, a number of capable linguists and Hebraists willingly shared their expertise, especially Dr. Seth Erlandsson in Västerås, Sweden; Dr. Tor Magnus Amble and Dr. Hans M. Barstad, both in Oslo, Norway, and Professor Ernst Jenni in Basel, Switzerland.

First of all, however, my thanks go to the God of the Bible, who in the Old Testament from the time of Moses onwards carries the personal name Yahweh or Jehovah, but whom we in the New Testament meet and can approach as our heavenly Father, as this research has been done under constant prayer for his help and understanding. All honor goes to Him, since it is his Word of truth that has been the basis of this study. Although certain religious theories and interpretations were found to be untenable and had to be rejected, his prophetic Word was confirmed, over and over again, during the biblical and historical research connected with the subject under discussion. This faith-strengthening experience has been a real and lasting blessing to me. My hope is that the reader will be blessed in a similar way.

Carl Olof Jonsson
Göteborg, Sweden, 1982
Revised in 1998 and 2004

1

THE HISTORY OF AN INTERPRETATION

ALL IDEAS have a beginning. People who believe in an idea, however, are often completely unaware of its background, origin and development. Ignorance of that history may strengthen the conviction that the idea is true, even when it is not. As happens in other cases, this ignorance may provide fertile soil for fanaticism.

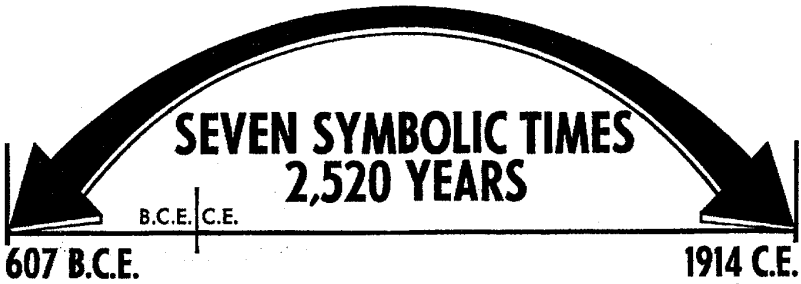
True, knowledge of the historical development of an idea does not necessarily disprove it, but such knowledge does enable us to improve our judgment of its validity. A clear example of an idea—in this case, an interpretation — that is obscured by ignorance is a widely-held concept concerning the "Gentile times" referred to by Christ at Luke 21:24:

> They will fall by the edge of the sword and be taken away as captives among all nations; and Jerusalem will be trampled on by the Gentiles, until the times of Gentiles are fulfilled.—NRSV.

Millions of persons internationally have come to accept the belief that this prophetic statement definitely points to and is linked with a specific date in the twentieth century and they even build their present plans and future hopes on that belief. What is its history?

The "year-day principle"

The length of the period called the "Gentile times" (translated "the appointed times of the nations" in the Watch Tower Society's *New World Translation)* has been calculated by some expositors, including the Watch Tower Society, to be 2,520 years. This calculation is founded upon the so-called "year-day principle." According to this principle, in biblical time-related prophecies *a day always stands for*



In 607 B.C.E. God's typical kingdom of Judah fell, and the Gentile kingdoms ruled the whole earth. In 1914 C.E. the "appointed times of the nations" ended, and "the kingdom of the world" was given to Christ

18 *AWAKE!—OCTOBER 8, 1973*

From the *Awake!* magazine of October 8, 1973, page 18.

The calculation of the "times of the Gentiles" as a period of 2,520 years, beginning in 607 B.C.E. and ending in 1914 C.E., is the chronological basis of the apocalyptic message preached worldwide by the Watch Tower Society.

a year, "just as on a map one inch may stand for one hundred miles."[1] In the Bible there are two passages where prophetic periods are explicitly counted that way: Numbers 14:34 and Ezekiel 4:6.

In the first text, as punishment for their errors, the Israelites were to wander in the desert for forty years, measured out by the number of days the spies had spied out the land, forty days, "a day for a year."

In the second text Ezekiel was told to lie on his left side for 390 days and on his right side for 40 days, prophetically carrying the errors of Israel and Judah committed during just as many years, "a day for a year."

It should be noted, however, that these specific interpretations are given to us by the Bible itself. "A day for a year" is *nowhere stated to be a general principle of interpretation* that applies also to other prophetic periods.

The development of the concept that the year-day principle can indeed apply to *any* time-related biblical prophecy has a long history. The shifting nature of its application during that history surely reveals something as to its reliability.

Its use by Jewish scholars

1 LeRoy Edwin Froom, *The Prophetic Faith of Our Fathers* (Washington, D.C.: Review and Herald Publishing Association, 1948), Vol. II, p. 124.

Jewish rabbis were the first to begin applying this way of counting prophetic time beyond the two references cited, and they did this with the "seventy weeks" of Daniel 9:24–27, the first verse of which states: "Seventy weeks are decreed for your people and your holy city to finish the transgression, to put an end to sin, and to atone for iniquity, to bring in everlasting righteousness, to seal both vision and prophet, and to anoint a most holy place."[2]

Despite this, the fact is that the "year-day" application was not stated as a general *principle* until the first century C.E., by the rabbi, *Akibah ben Joseph* (c. 50–132 C.E.).[3]

Hundreds of years passed and it was only at the beginning of the *ninth century* that a number of Jewish rabbis began to extend the year-day principle to other time periods in the book of Daniel. These included the 2,300 "evenings and mornings" of Daniel 8:14, and the 1,290 days and 1,335 days of Daniel 12:11, 12, all of which were viewed as having Messianic implication.

The first of these rabbis, *Nahawendi,* considered the 2,300 "evenings and mornings" of Daniel 8:14 as years, counting them from the destruction of Shiloh (which he dated to 942 B.C.E.) to the year 1358 C.E. In that year he expected the Messiah would come![4]

Nahawendi was soon followed by others, such as *Saadia ben Joseph* from the same century and *Solomon ben Jeroham* from the tenth century. The latter applied the year-day principle to the 1,335 days of Daniel 12:12. Counting them from the time of Alexander the Great, he arrived at the year 968 C.E. as the date for the redemption of Israel.

The famous rabbi, *Rashi* (1040–1105), ended the 2,300 year-days in 1352 C.E., when he thought the Messiah would come.

2 While this prophecy speaks of *weeks,* this of itself does not mean that it lends itself to an application of the "year-day principle." To a Jew the Hebrew word for "week," *shabû'a,* did not always signify a period of *seven days* as in English. *Shabû'a* literally means a "(period of) seven," or a "heptad." The Jews also had a "seven" *(shabû'a)* of *years*. (Leviticus 25:3, 4, 8, 9) True, when "weeks of *years"* were meant, the word for "years" was usually added. But in the later Hebrew this word was often left to be understood as implied. When "weeks of *days"* were meant, the word for "days" could sometimes be appended, as in the other passage in Daniel where *shabû'a* is found. (10:2, 3) Daniel 9:24, therefore, simply asserts that "seventy *sevens* are determined," and from the context (the allusion to the "seventy years" in verse 2) it may be concluded that "seventy sevens *of years"* are intended. It is because of this apparent textual connection—and not because of any "year-day principle"—that some translations *(Moffatt, Goodspeed, AT, RS)* read "seventy weeks of years" in Daniel 9:24.

3 Froom, Vol. II, pp. 195, 196.

4 *Ibid.,* p. 196. Nahawendi also counted the 1,290 days of Daniel 12:11 as a period of years, beginning with the destruction of the second temple [70 C.E.] and thereby arriving at the same date, 1358 C.E.

Abraham bar Hiyya Hanasi (c. 1065–1136) speculated that the 2,300-, the 1,290- and the 1,335-year periods would terminate on different dates in the fifteenth century. The end of the 2,300 year-days, for instance, was set at 1468 C.E .[5]

Even up into the nineteenth century, many other Jewish scholars were continuing to use the year-day principle to fix dates for the coming of the Messiah.

The methods the rabbinical scholars used in applying the year-day principle during those ten centuries were varied and the dates they arrived at differed. Whatever method employed, however, one thing was true: all the end-dates eventually proved empty of fulfillment.

Since the use of the year-day principle was relatively common among Jewish sources from early centuries, was this also the case among Christian Bible expositors?

Of greater interest, does the history of its use within the Christian community—and the *results* obtained—demonstrate a *contrast,* or does it follow a *similar pattern?* What has been its fruitage?

The "year-day principle" among Christian expositors

As we have seen, rabbi Akibah ben Joseph had presented the year-day method as a principle back in the first century C.E. We find no application of it—in that way, as a *principle*—among Christian scholars, however, for the following one thousand years.

True, several expositors from the fourth century onward suggested a *mystical* or *symbolic* meaning for the 1,260 days of Revelation, yet before the twelfth century they *never* applied the year-day rule to those days, nor to any other time period, with the sole exception of the 3 1/2 days of Revelation 11:9. That period was interpreted to be 3 1/2 *years* by a number of expositors, the first of whom was *Victorinus* in the fourth century.[6] This, of course, was far from holding to a year-day *rule* or *principle.*

Joachim of Floris (c. 1130–1202), abbot of the Cistercian monastery in Corace, Italy, was most probably the first *Christian* expositor to apply the year-day principle to the different time periods of Daniel and Revelation. This was pointed out during the 19th century by *Charles Maitland,* a leading opponent of the idea, in a number of works and articles. For example, in refuting those holding that

5 *Ibid.,* pp. 201, 210, 211.
6 E. B. Elliott, *Honae Apocalypticae,* 3rd ed. (London, 1847), Vol. III, pp. 233–240.

the 1,260 days of Revelation 11:3 were 1,260 *years,* Maitland concluded, after a thorough investigation, that the system of the 1260 years "was never heard of till dreamed into the world by a wild Abbot in 1190."[7]

Though many nineteenth-century adherents of the year-day principle tried to refute Maitland's statement concerning the novelty of the principle, all their attempts proved unsuccessful. After a very thorough examination of all available sources, even the most learned of his opponents, the Reverend *E. B. Elliott,* had to admit that "for the *first four centuries,* the days mentioned in Daniel's and Apocalyptic prophecies respecting Antichrist were interpreted literally as *days*, not as *years*, by the Fathers of the Christian Church."[8] He thus had to agree with Maitland that Joachim of Floris was the first Christian writer to apply the year-day principle to the 1,260 days of Revelation 11:3 stating:

> At the close of the 12th century Joachim Abbas, as we have just seen, made a first and rude attempt at it: and in the 14th, the Wycliffite *Walter Brute* followed.[9]

Joachim, who was probably influenced by Jewish rabbis, counted the 1,260 "year-days" from the time of Christ and believed that they would soon end in an "age of the Spirit." Although he did not fix a specific date for this, it seems that he looked forward to the year 1260 C.E. After his death, that year came "to be considered by Joachim's followers as the fatal date that would begin the new age, so much so that when it passed without any notable event some ceased to believe any of his teachings."[10]

Joachim's works initiated a new tradition of interpretation, a tradition in which the "year-day principle" was the very basis of

7 Charles Maitland, *The Apostles' School of Prophetic Interpretation* (London, 1849), pp. 37, 38

8 E. B. Elliott, *Horae Apocalypticae,* 3rd ed. (London, 1847), Vol. HI, p. 233.

9 *Ibid.,* p. 240. The late Dr. LeRoy Edwin Froom, who was a modern defender of the year-day theory, arrived at a similar conclusion in his massive four-volume work, *The Prophetic Faith of Our Fathers.* In Volume I (1950) on page 700, he states: "Heretofore, for thirteen centuries the seventy weeks had been recognized generally as weeks of years. But the first thousand years of the Christian Era did not produce any further applications of the principle, among Christian writers, save one or two glimpses of the 'ten days' of Revelation 2:10 as ten years of persecution, and the three and a half days of Revelation 11 as three and a half years. But now Joachim for the first time applied the year-day principle to the 1260-day prophecy.'

10 Froom, Vol. I, p. 716.

prophetic interpretations. During the following centuries innumerable dates were fixed for Christ's second advent, most of them built upon the year-day principle. At the time of the Reformation (in the sixteenth century), Martin Luther and most of the other reformers believed in that principle, and it was largely accepted among Protestant scholars far into the nineteenth century.

The principle applied to the Gentile times

As we have seen, Joachim of Floris applied the year-day principle to the 1,260 days of Revelation 11:3. The preceding verse converts this period into months, stating that "the nations . . . will trample the holy city underfoot for forty-two months." (Revelation 11:2, *NW)* Since this prediction about the "holy city" closely parallels Jesus' words at Luke 21:24 that "Jerusalem will be trampled under foot by the Gentiles, until the times of the Gentiles be fulfilled" *(NASB),* some of Joachim's followers soon began to associate the "times of the Gentiles" with this calculated period in which the 1,260 days became 1,260 years.

However, because they believed that Revelation 11:2, 3 and 12:6, 14 dealt with the Christian church, Jerusalem or the "holy city" usually was interpreted to mean the church of Rome.[11] The period of the "times of the Gentiles," therefore, was thought to be the period of the affliction of the church, the end of which affliction was originally expected in 1260 C.E.

Others, however, believed the "holy city" to be the literal city of Jerusalem. The well known scholastic physician, *Arnold of Villanova* (c. 1235–1313), identified the Gentile times with the 1,290 days of Daniel 12:11, converting them from 1290 days to 1290 years. Counting these from the taking away of the Jewish sacrifices after the destruction of Jerusalem by the Romans in 70 C.E., he expected the end of the Gentile times in the fourteenth century. The Crusades were still being waged in his day and Arnold linked them with the hoped-for expiration of the Gentile times in the near future, arguing that, unless the end of the times of the Gentiles was near, how could the "faithful people" regain the Holy Land from

11 *Ibid.,* pp. 717, 723, 726, 727. The information here is based on the work *De Seminibus Scripturarum,* fol. 13v, col. 2 (as discussed in Froom), which was written in 1205 A.D. The manuscript is known as Vat. Latin 3813.

the unbelievers?[12]

At the end of the fourteenth century, *Walter Brute,* one of John Wycliffe's followers in England offered yet another interpretation. According to him, the "times of the Gentiles" were the period when the Christian church was dominated by heathen rites and customs. This apostasy, he held, started after the death of the last apostle in about 100 C.E. and would continue for 1,260 years. This period, and also the 1,290 "year-days," which he reckoned from the destruction of Jerusalem 30 years earlier (in 70 C.E.), had already expired in his days. He wrote:

> Now if any man will behold the *Chronicles,* he shall find, that after the destruction of *Jerusalem* was accomplished, and after the strong hand of the holy people was fully dispersed, and after the placing of the abomination; that is to say, the Idol of Desolation of *Jerusalem,* within the Holy place, where the Temple of God was before, there had passed 1290 days, taking a day for a year, as commonly it is taken in the Prophets. And the times of the Heathen people are fulfilled, after whose Rites and Customs God suffered the holy City to be trampled under foot for forty and two months.[13]

Since the times of the Gentiles already had expired according to his calculations, Brute thought that the second coming of Christ must be *right at hand.*

Constantly changing dates

Time passed and left the many apocalyptic fixed dates behind, the predictions tied to them remaining unfulfilled. By now, counting the 1,260 or 1,290 years from the destruction of Jerusalem in 70 C.E., or from the death of the apostles could no longer produce meaningful results. So, the *starting point* had to be moved forward to a later date.

Groups persecuted and branded as heretics by the Roman church soon began to identify the 'trampling Gentiles' with the *papacy of Rome.* These persecuted groups commonly viewed themselves as "the true church"—pictured in Revelation 12 as a woman who had to flee into "the wilderness" for "a thousand two

12 Arnold of Villanova, *Tractatus de Tempore Adventus Antichristi* ("Treatise on the Time of the Coming of Antichrist"), part 2 (1300); reprinted in Heinrich Finke, Aus *den Tagen Bonifaz VIII* (Munster in W., 1902), pp. CXLVIII–CLI, CXLVII. (See also Froom, Vol. I, pp. 753–756.)

13 From *Registrum Johannis Trefnant, Episcopi Herefordensis* (containing the proceedings of the trial of Walter Brute for heresy), as translated in John Foxe, *Acts and Monuments,* 9th ed. (London, 1684), Vol. I, p. 547. (See also Froom, Vol. II, p. 80.)

hundred and sixty days," the period of trampling spiritual Jerusalem. (Revelation 12:6,14) This view now allowed them to advance the *starting-point* from the first century to a time somewhere in the *fourth century,* with its growth of authority on the part of the Roman church.

This "adjusted" view was very common among the Reformers. *John Napier (*1550–1617*),* the distinguished Scottish mathematician and student of prophecy, began the period about 300 or 316 C.E., and came up with the end of the Gentile times in the latter half of the sixteenth century.[14]

More time passed and the starting-point was once again moved forward, this time into the *sixth* or *seventh* centuries, the period when the popes had reached a real position of power. *George Bell,* for example, writing in the London *Evangelical Magazine* of 1796, counted the 1260 years from either 537 or 553 C.E., and predicted the fall of Antichrist (the Pope) in "1797, or 1813.[15] Of the 1,260 years Bell says:

> The holy city is to be trodden under foot by the Gentiles, or Papists, who, though they are Christians in name, are Gentiles in worship and practice; worshipping angels, saints, and images, and persecuting the followers of Christ. These Gentiles take away the daily sacrifice, and set up the abomination that maketh the visible church of Christ desolate for the space of 1260 years.[16]

This was written in 1795 in the midst of the French Revolution. Shortly afterward the Pope was taken captive by French troops and forced into exile (in February, 1798). Very interestingly, these startling events in France and Italy had to some extent been "predicted" nearly a century in advance by several expositors, the best known of whom was the Scottish pastor, *Robert Fleming, Jr.* (c. 1660–1716).[17] Surely, many felt, these major historical events had confirmed the rightness of their predictions! Because of this, the year 1798 was very soon quite commonly held among biblical commentators to be the terminal date for the 1,260 years.

This view—with some minor differences—was also adopted by Charles Taze Russell and his followers. And it is still prevalent among the Seventh-Day Adventists.

14 John Napier, *A Plaine Discovery of the Whole Revelation of Saint John* (Edinburgh, 1593), pp. 64, 65. (See Froom, Vol. II, p. 458.)

15 G. Bell, "Downfall of Antichrist," *Evangelical Magazine* (London), 1796, Vol. 4, p. 54. (See Froom, Vol. 2,p. 742.) Although published in 1796, the article was written July 24,1795.

16 G. Bell, *ibid.,* p. 57. (See Froom, Vol. II, p. 742.)

17 Robert Fleming, Jr., *The Rise and Fall of Papacy* (London, 1701),p. 68. (For additional notes on this prediction, see Chapter 6, section D: "1914 in perspective.")

Political and social upheaval fuels prophetic speculations

The French Revolution of 1789–1799 had extraordinary impact extending far beyond French borders. Following the violent removal of the French monarchy and the proclamation of the Republic in 1792, new extremist leaders not only brought about a period of terror and chaos in France itself, but they inaugurated an almost unbroken period of wars of conquest, which lasted until 1815, when Emperor Napoleon I was defeated at Waterloo. The Revolution's chaotic aftermath in Europe and other parts of the world excited intensified interest in prophetic study, especially as some of these upheavals had been partially predicted by expositors of the prophecies.

Historians recognize the French Revolution as marking a major turning-point in world history. It brought to an end a long era of relative stability in Europe, uprooting the established order and deeply changing political and religious thought.

Comparing the wars of the French Revolution and Napoleon Bonaparte with the earlier Thirty Years' War (1618–1648) and the later World War I (1914–1918), historian Robert Gilpin says of these three wars that "*each was a world war* involving almost all the states in the [international] system and, at least in retrospect, can be considered as having constituted *a major turning point in human history* ."[18]

Another well-known historian, R. R. Palmer, in discussing the momentous role of the French Revolution in modern history, says:

> Even today in the middle of the twentieth century, despite all that has happened in the lifetime of men not yet old, and even . . . in America or in any other part of a world in which the countries of Europe no longer enjoy their former commanding position, it is still possible to say that *the French Revolution at the end of the eighteenth century was the turning point of modern civilization.*[19]

The resultant uprooting of long-standing European political and social institutions caused many to believe that they were indeed living in *the last days.* Men of many backgrounds—ministers, politicians, lawyers, and laymen—became involved in prophetic

18 Professor Robert Gilpin, "The Theory of Hegemonic War," *The Journal of Interdisciplinary History,* (published in Cambridge, MA, and London, England), Vol. 18:4, Spring 1988, p. 606. (Emphasis added.)

19 R. R. Palmer in his foreword to Georges Lefebvre's *The Coming of the French Revolution* (New York: Vintage, 1947), p. v.

study. A voluminous body of literature on the prophecies was produced, numerous prophetic periodicals were started, and prophetic conferences were held on both sides of the Atlantic.

The apocalyptic revival commenced in England, but soon spread to the European Continent and the United States of America where, in the latter case, it culminated in the well-known Millerite movement. Based on interpretations of Daniel 8:14, the predictions now developed generally pointed to 1843, 1844, or 1847 as the time for Christ's second advent.

> It was in this feverish atmosphere that a new interpretation of the Gentile times was born, in which, for the first time, *the oft-used figure of 1,260 years was doubled to 2,520 years.*

The chart presented on the facing page shows the results that the "year-day" method of counting prophetic time-periods produced over a period of seven centuries. Though almost all of the thirty-six scholars and prophetic expositors listed were working from the same basic Scriptural text referring to 1,260 days, very rarely did they agree on the same starting and ending points for the period's fulfillment. The *ending* dates for the Gentile times set by them or their followers ran all the way from 1260 C.E. to 2016 C.E. Yet all of them advanced what to them were cogent reasons for arriving at their dates. What results now came from the doubling of this figure in connection with Jesus' statement about the "Gentile times"?

John Aquila Brown

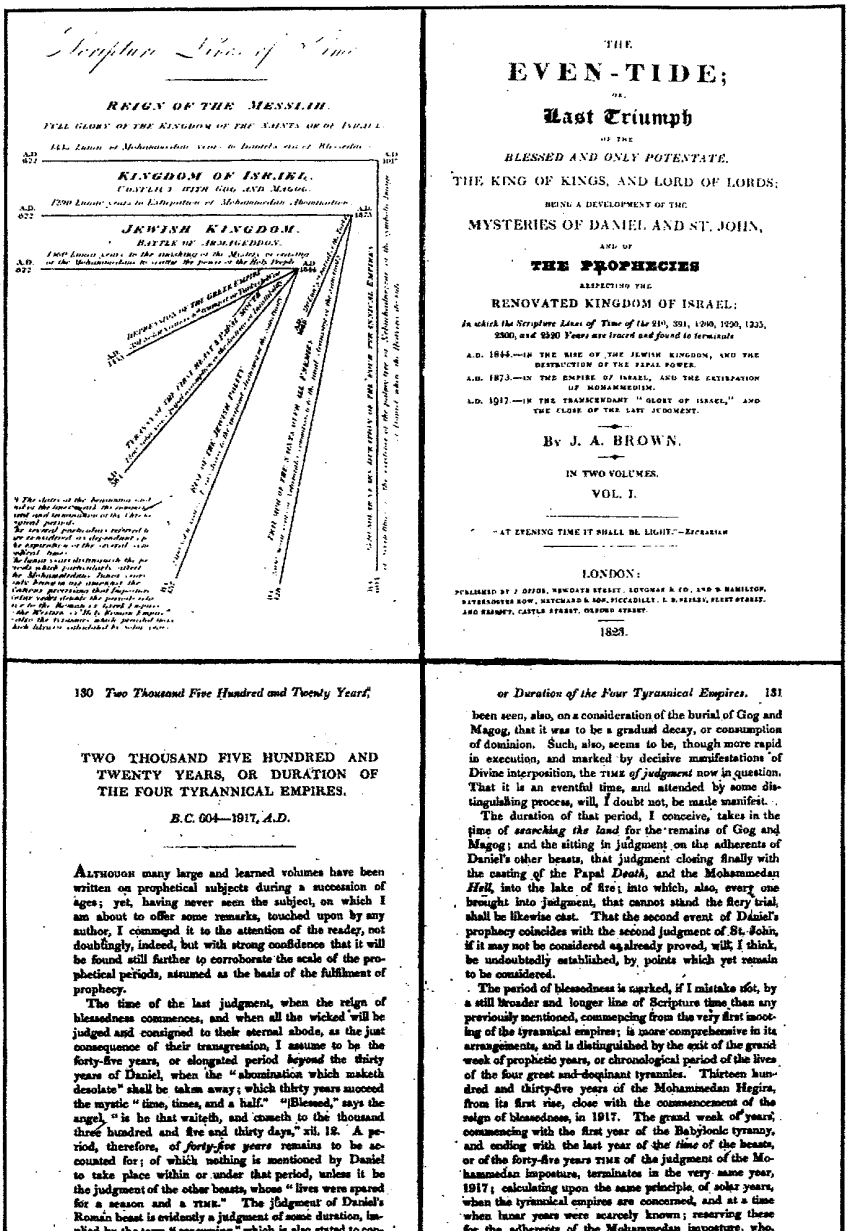
In the long history of prophetic speculation, *John Aquila Brown* in England plays a notable role. Although no biographical data on Brown has been found so far, he strongly influenced the apocalyptic thinking of his time. He was the first expositor who applied the supposed 2,300 year-days of Daniel 8:14 so that they ended in 1843 (later 1844).[20] This became a key date of the Second Advent movement.[21] He was also the first who arrived at a prophetic time period of 2,520 years. Brown's calculation of 2,520 years was based on his exposition of the "seven times" contained

20 Brown first published his chronology in an article in the London monthly *The Christian Observer* of November 1810. According to his understanding of the Gentile times, the "trampling Gentiles" were the Mohammedans (or Muslims), and he therefore regarded the 1,260 years so widely commented on as Mohammedan *lunar* years, corresponding to 1,222 *solar* years. He reckoned this period from 622 C.E. (the first year of the Mohammedan *Hegira* era) to 1844, when he expected the coming of Christ and the restoration of the Jewish nation in Palestine.—J. A. Brown, *The Even-Tide,* Vol. 1 (1823), pp. vii, xi, 1–60.

TABLE 1: THE MULTIPLE, SHIFTING APPLICATIONS OF THE 1,260 YEARS

Expositor	Publication date	Application (all dates C.E.)	Remarks
Joachim of Floris	1195	1–1260	
Arnold of Villanova	1300	c. 74–1364	Gentile Times=1290 years
Walter Brute	1393	134–1394	
Martin Luther	1530	38–1328	Gentile times =1290 years
A. Osiander	1545	412–1672	
J.Funck	1558	261–1521	
G. Nigrinus	1570	441–1701	
Aretius	1573	312–1572	
John Napier	1593	316–1576	
D. Pareus	1618	606–1866	
J. Tillinghast	1655	396–1656	
J. Artopaeus	1665	260–1520	
Cocceius	1669	292–1552	
T. Beverley	1684	437–1697	
P. Jurieu	1687	454–1714	
R. Fleming, Jr.	1701	552–1794	1260 years of 360 days
" "	1701	606–1848	= 1242 Julian years
William Whiston	1706	606–1866	
Daubuz	1720	476–1736	
J. Ph. Petri	1768	587–1847	
Lowman	1770	756–2016	
John Gill	1776	606–1866	
Hans Wood	1787	620–1880	
J. Bicheno	1793	593–1789	
A. Fraser	1795	756–1998	1242 Julian years
George Bell	1796	537–1797	
" "	1796	553–1813	
Edward King	1798	538–1798	
Galloway	1802	606–1849	1242 Julian years
W. Hales	1803	620–1880	
G. S. Faber	1806	606–1866	
W. Cuninghame	1813	533–1792	
J. H. Frere	1815	533–1792	
Lewis Way	1818	531–1791	
W. C. Davis	1818	588–1848	
J. Bayford	1820	529–1789	
John Fry	1822	537–1797	
John Aquila Brown	1823	622–1844	1260 lunar years

The table shows a sample of the many different applications of the 1,260 and 1,290 "year-days" from Joachim of Floris in 1195 to John Aquila Brown in 1823. It would have been easy to extend the table to include expositors after Brown. However, the table ends with him because at this time another interpretation of the Gentile times began to surface, in which the 1,260 years were doubled to 2,520 years.



Scripture Lines of Time

REIGN OF THE MESSIAH.

FULL GLORY OF THE KINGDOM OF THE SAINTS OF THE MOST HIGH.

KINGDOM OF ISRAEL.

JEWISH KINGDOM.

BATTLE OF ARMAGEDDON.

THE EVEN-TIDE;

OR,

Last Triumph

OF THE

BLESSED AND ONLY POTENTATE,

THE KING OF KINGS, AND LORD OF LORDS;

BEING A DEVELOPMENT OF THE

MYSTERIES OF DANIEL AND ST. JOHN,

AND OF

THE PROPHECIES

RESPECTING THE

RENOVATED KINGDOM OF ISRAEL:

In which the Scripture Lines of Time of the 210, 391, 1260, 1290, 1335, 2300, and 2520 Years are traced and found to terminate

A.D. 1844.—IN THE RISE OF THE JEWISH KINGDOM, AND THE DESTRUCTION OF THE PAPAL POWER.

A.D. 1873.—IN THE EMPIRE OF ISRAEL, AND THE EXTIRPATION OF MOHAMMEDISM.

A.D. 1917.—IN THE TRANSCENDANT "GLORY OF ISRAEL," AND THE CLOSE OF THE LAST JUDGMENT.

By J. A. BROWN.

IN TWO VOLUMES.

VOL. I.

"AT EVENING TIME IT SHALL BE LIGHT."—ZECHARIAH

LONDON:

PUBLISHED BY J. DIPPER, NEWGATE STREET; LONGMAN & CO., AND D. HAMILTON, PATERNOSTER ROW; HATCHARD & SON, PICCADILLY; E. D. PEISLEY, FLEET STREET, AND HERBERT, CASTLE STREET, OXFORD STREET.

1823.

180 *Two Thousand Five Hundred and Twenty Years,*

TWO THOUSAND FIVE HUNDRED AND TWENTY YEARS, OR DURATION OF THE FOUR TYRANNICAL EMPIRES.

B.C. 604—1917, *A.D.*

ALTHOUGH many large and learned volumes have been written on prophetical subjects during a succession of ages; yet, having never seen the subject, on which I am about to offer some remarks, touched upon by any author, I commend it to the attention of the reader, not doubtingly, indeed, but with strong confidence that it will be found still farther to corroborate the scale of the prophetical periods, assumed as the basis of the fulfilment of prophecy.

The time of the last judgment, when the reign of blessedness commences, and when all the wicked will be judged and consigned to their eternal abode, as the just consequence of their transgression, I assume to be the forty-five years, or elongated period *beyond* the thirty years of Daniel, when the "abomination which maketh desolate" shall be taken away; which thirty years succeed the mystic "time, times, and a half." "Blessed," says the angel, "is he that waiteth, and cometh to the thousand three hundred and five and thirty days," xii. 12. A period, therefore, of *forty-five years* remains to be accounted for; of which nothing is mentioned by Daniel to take place within or under that period, unless it be the judgment of the other beasts, whose "lives were spared for a season and a TIME." The judgment of Daniel's Roman beast is evidently a judgment of some duration, implied by the term "*consuming*," which is also stated to continue "*to the end*," or probably *time* of the end. It has

or Duration of the Four Tyrannical Empires. 181

been seen, also, on a consideration of the burial of Gog and Magog, that it was to be a gradual decay, or consumption of dominion. Such, also, seems to be, though more rapid in execution, and marked by decisive manifestations of Divine interposition, the TIME *of judgment* now in question. That it is an eventful time, and attended by some distinguishing process, will, I doubt not, be made manifest.

The duration of that period, I conceive, takes in the time of *searching the land* for the remains of Gog and Magog; and the sitting in judgment on the adherents of Daniel's other beasts, that judgment closing finally with the casting of the Papal *Death*, and the Mohammedan *Hell*, into the lake of fire; into which, also, every one brought into judgment, that cannot stand the fiery trial, shall be likewise cast. That the second event of Daniel's prophecy coincides with the second judgment of St. John, if it may not be considered as already proved, will, I think, be undoubtedly established, by points which yet remain to be considered.

The period of blessedness is marked, if I mistake not, by a still broader and longer line of Scripture time than any previously mentioned, commencing from the very first mooting of the tyrannical empires; is more comprehensive in its arrangements, and is distinguished by the exit of the grand week of prophetic years, or chronological period of the lives of the four great and dominant tyrannies. Thirteen hundred and thirty-five years of the Mohammedan Hegira, from its first rise, close with the commencement of the reign of blessedness, in 1917. The grand week of years, commencing with the first year of the Babylonic tyranny, and ending with the last year of the *time* of the beasts, or of the forty-five years TIME of the judgment of the Mohammedan imposture, terminates in the very same year, 1917; calculating upon the same principle, of solar years, when the tyrannical empires are concerned, and at a time when lunar years were scarcely known; reserving these for the adherents of the Mohammedan imposture, who, during their tyranny, only employed them.

John Aquila Brown's book *The Even-Tide* (London, 1823), in which the "seven times" of Daniel 4 for the first time were explained to mean 2,520 years.

in Nebuchadnezzar's dream of the chopped-down tree in Daniel, chapter 4. It was first published in 1823 in his two-volume work *The Even-Tide; or, Last Triumph of the Blessed and Only Potentate, the King of Kings, and Lord of Lords.* [22]
He specifically states that he was the first to write on the subject:

> Although many large and learned volumes have been written on prophetical subjects during a succession of ages; yet, *having never seen the subject,* on which I am about to offer some remarks, *touched upon by any author,* I commend it to the attention of the reader, not doubtingly, indeed, but with strong confidence that it will be found still further to corroborate the scale of the prophetical periods, assumed as the basis of the fulfillment of prophecy.[23]

In his interpretation, Brown differed from other later expositors in that he nowhere connects the "seven times" of Nebuchadnezzar's dream with the "seven times" of prophetic punishment directed against Israel at Leviticus 26:12–28. "Nebuchadnezzar was a type," Brown wrote, "of the three successive kingdoms which were to arise." Of the "seven times," or years, of Nebuchadnezzar's affliction, he said:

21 The second advent was expected to occur during the year 1843/44, counted from Spring to Spring as was done in the Jewish calendar. It has been maintained that expositors in the United States arrived at the 1843 date as the end of the 2,300 years independently of Brown. Although that *may* be true, it cannot be proved, and interestingly, the London, England, *Christian Observer,* a periodical founded in 1802 which frequently dealt with prophecy, also had an American edition published at Boston which ran article for article with the British edition. So Brown's article on the 2,300 years could have been read by many in the United States as early as 1810. Soon afterwards, the 1843 date began to appear in American prophetic expositions.

22 Published in London; the pertinent material is found in Vol. II, pp. 130–152.

23 Perhaps some may be inclined to object to this statement on account of the table on pages 404 and 405 of Froom's *The Prophetic Faith of Our Fathers,* Volume IV. It is true that this table *seems* to show *James Hatley Frere* as the first to write on the 2,520 years in 1813. But the part of the table farthest to the right on page 405 entitled, "Dating of other time periods," does not have any close connection with the "Publication date" column on page 404. It simply states the author's general position on other time periods. Besides, Frere never held the times of the Gentiles (or the "seven times") to be a period of 2,520 years. In his first book on prophecy, *A Combined View of the Prophecies of Daniel, Esdras, and St. John* (London, 1815), he does not comment on Daniel 4 or Luke 21:24. The "holy city" of Revelation 11:2 he explains to be "the visible church of Christ" and "during the period of 1260 years, the whole of this city is trodden under foot of the Gentiles, excepting the interior courts of its temple." (Page 87) Many years later Frere calculated the Gentile times to be a period of 2,450 years from 603 B .C.E. to 1847 C.E. See, for example, his book, *The Great Continental Revolution, Marking the Expiration of the Times of the Gentiles AD. 1847–8* (London, 1848). Note especially pages 66–78. John A. Brown, of course, was well acquainted with the many contemporary writings on prophecy, and Frere was one of the best known expositors in England. So there seems to be no reason to doubt Brown's own statement of priority with respect to the 2,520 years.

> [These] would, therefore, be considered as a grand week of years, forming a period of two thousand five hundred and twenty years, and embracing the duration of the four tyrannical monarchies; at the close of which they are to learn, like Nebuchadnezzar, by the "season and time" of the two judgements, that "*the Most High ruleth in the kingdom of men, and giveth it to whomsoever he will.*"

Brown calculated the 2,520 years as running from the first year of Nebuchadnezzar, 604 B.C.E., to the year 1917, when "the full glory of the kingdom of Israel shall be perfected."[24]

Brown did not himself associate this period with the Gentile times of Luke 21:24. Nonetheless his calculation for the 2,520 years, and his having based these on Daniel chapter 4, have since played a key role in certain modern interpretations of those Gentile times.

The 2,520 years linked with the Gentile times

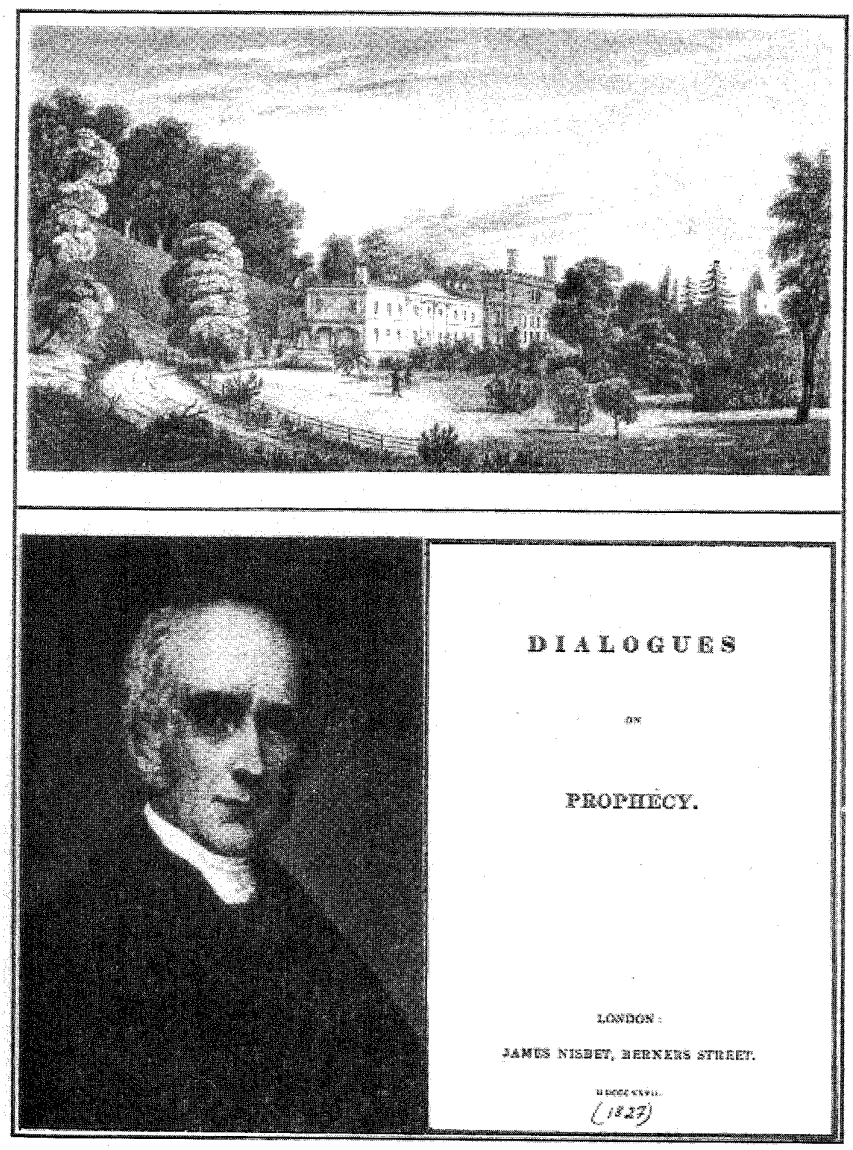
It was not long before other expositors began identifying the new calculation of 2,520 years with the "Gentile times" of Luke 21:24. But, even as with the 1,260 days, they came up with differing results.

At the *Albury Park Prophetic Conferences* (held annually at Albury near Guildford, south of London, England from 1826 to 1830), the "times of the Gentiles" was one of the topics considered. Right from the first discussions in 1826 they were connected with the 2,520 year period by *William Cuninghame.* He chose as his starting point the year when the ten tribes were carried into captivity by Shalmaneser (which he dated to 728 B.C.E.), thus arriving at 1792 C.E. as their last or termination date, a date that by then was already in the past?[25]

Many biblical commentators counted the "seven times of the Gentiles" from the captivity of Manasseh, which they dated to 677 B .C.E. This was obviously done so that the Gentile times would

24 *The Even-Tide,* Vol. II, pp. 134, 135; Vol. I, pp. XLIII, XLIV.

25 Henry Drummond, *Dialogues on Prophecy* (London, 1827), Vol. I, pp. 33, 34. In this report from the discussions at Albury, the participants are given fictitious names. Cuninghame ("Sophron") arrives at the 2,520 years by doubling the 1,260 years, not by referring to the "seven times" of Daniel 4 or Leviticus 26. In support of this he refers to the authority of *Joseph Mede,* an expositor living in the seventeenth century. Although Mede had suggested that the times of the Gentiles might refer to the four kingdoms beginning with Babylon, he never stated the period to be 2,520 years. (Mede, *The Works,* London, 1664, Book 4, pp. 908–910, 920.) In a later conversation "Anastasius" (Henry Drummond) connects the 2,520 years with the "seven times" of Leviticus 26 and, "correcting" the starting-point of Cuninghame from 728 to 722 B .C., he arrives at 1798 C.E. as the terminal date. *(Dialogues,* Vol. I, pp. 324, 325)



DIALOGUES

ON

PROPHECY.

LONDON:

JAMES NISBET, BERNERS STREET.

(1827)

Above: The Albury Park residence, near Guildford, south of London, the place of the *Albury Park Prophetic Conferences,* 1826–1830. At these conferences certain ideas were developed that 50 years later were to become central parts of the message of the Watch Tower Society, viz., *the Gentile times as a period of 2,520 years, and the idea of Christ's second coming as an invisible presence.*

Below: Henry Drummond, owner of Albury Park and host of the conferences, who also published annual reports on the discussions *(Dialogues on Prophecy).*

end at the same time already being assigned to the 2,300 day-years, that is, in 1843 or 1844.[26] In 1835, *William W. Pym* published his work, *A Word of Warning in the Last Days,* in which he ended the "seven times" in 1847. Interestingly, he builds his calculation of the 2,520 years of Gentile times on the "seven times" mentioned in Leviticus 26 as well as the "seven times" of Daniel 4:

> In other words, the judgements threatened by Moses, which should last during the seven times , or 2520 years; and the judgements revealed to Daniel, which should come to an end by the cleansing of the sanctuary after a portion of the greater number 2520.[27]

Others, however, were looking forward to the year 1836 C.E., a year fixed on entirely different grounds by the German theologian *J.* A. *Bengel* (1687–1752), and they tried to end the "seven times" in that same year.[28]

Illustrating the state of flux existing, *Edward Bickersteth* (1786-1850), evangelical rector of Watton, Hartfordshire, tried different starting-points for the "seven times of the Gentiles," coming up with three different ending dates:

> If we reckon the captivity of Israel as commencing in 727 before Christ, Israel's first captivity under Salmanezer, it would terminate in 1793, when the French revolution broke out: and if 677 before Christ, their captivity under Esarhaddon (the same period when Manasseh , king of Judah, was carried into captivity,) (2 Kings xvii. 23, 24.2 Chron. xxxiii. 11,) it would terminate in 1843: or, if reckoned from 602 before Christ, which was the final dethronement of Jehoiakim by Nebuchadnezzar, it would terminate in 1918. All these periods may have a reference to corresponding events at their termination, and are worthy of serious attention.[29]

One of the best known and most learned millenarians of the 19th century was *Edward Bishop Elliott* (1793–1875), incumbent of St. Mark's Church in Brighton, England. With him, the date of 1914 first receives mention. In his monumental treatise *Horae Apocalypticae* ("Hours with the Apocalypse") he first reckoned the 2,520 years from 727 B.C.E. to 1793 C.E., but added:

26 *John Fry* (1775–1849) was among those doing this, in his *Unfulfilled Prophecies of Scripture,* published in 1835.

27 Found on page 48 of his work. Quoted in Froom, Vol. Ill, p. 576.

28 So did W. *A. Holmes,* chancellor of Cashel, in his book *The Time of the End* which was published in 1833. He dated the captivity of Manasseh under Esarhaddon to 685 B CE., and counting the 2,520 years from that year, he ended the "seven times" in 1835–1836.

29 Edward Bickersteth, A *Scripture* Help, first edited in 1815. After 1832 Bickersteth began to preach on the prophecies , which also influenced later editions of *A Scripture Help.* The quotation is taken from the 20th edition (London, 1850), p. 235.

> Of course if calculated from Nebuchadnezzar's own accession and invasion of Judah, B.C. 606, the end is much later, being A.D. 1914; just one half century, or jubilean period, from our probable date of the opening of the Millennium [which he had fixed to "about A.D.1862"].[30]

One factor that should be noted here is that in Elliott's chronology 606 B.C.E. was the *accession-year* of Nebuchadnezzar, while in the later chronology of Nelson H. Barbour and Charles T. Russell 606 B.C.E. was the date assigned for Nebuchadnezzar's destruction of Jerusalem in his *18th year.*

The Millerite movement

The leading British works on prophecy were extensively reprinted in the United States and strongly influenced many American writers on the subject. These included the well-known Baptist preacher *William Miller* and his associates, who pointed forward to 1843 as the date of Christ's second coming. It is estimated that at least 50,000, and perhaps as many as 200,000 people eventually embraced Miller's views.[31]

Virtually every position they held on the different prophecies had been taught by other past or contemporary expositors. Miller was simply following others in ending the "Gentile times" in 1843. At the First General Conference held in Boston, Massachusetts, on October 14 and 15, 1840, one of Miller's addresses dealt with Biblical chronology. He placed the "seven times," or 2,520 years, as extending from 677 B.CE. to 1843 CE.[32] The second coming of Christ was expected no later than 1844.

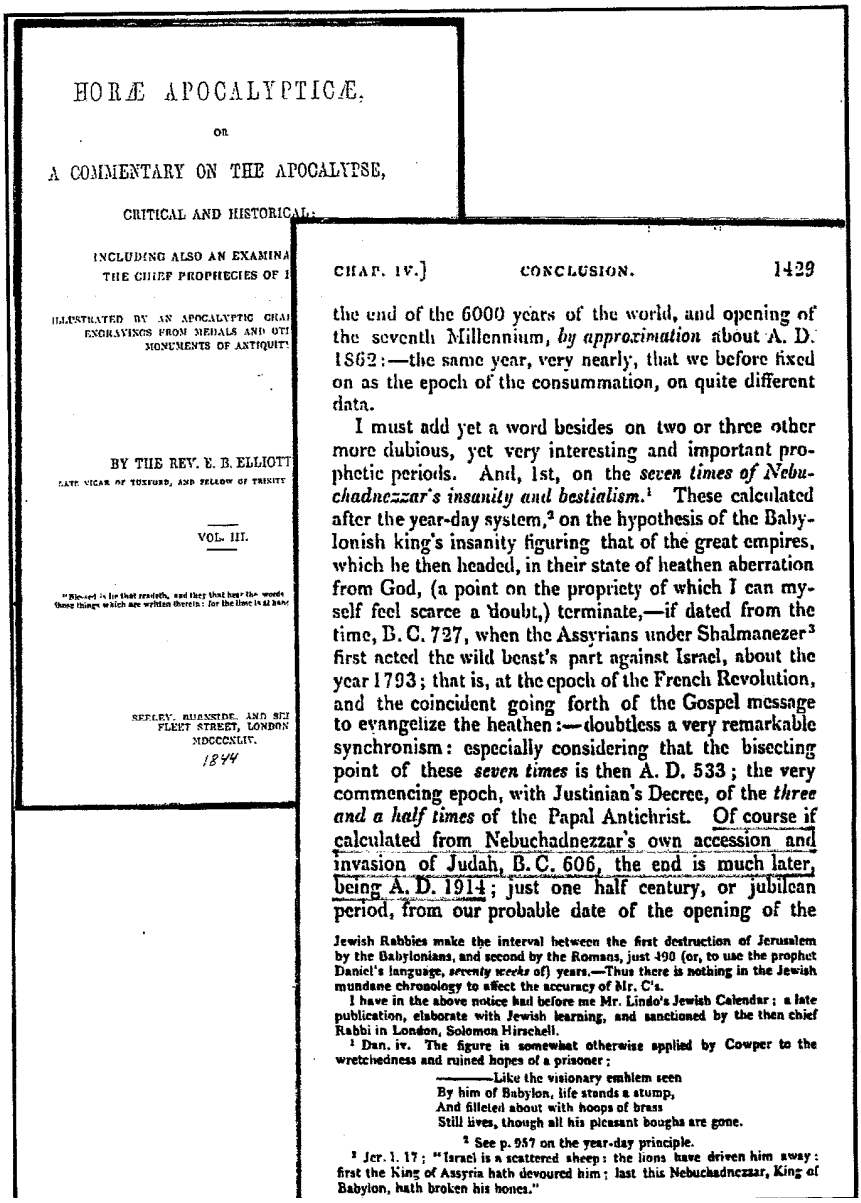
The date predicted for so long and by so many, with claimed Biblical backing, came and went, with nothing to fulfill the expectations based on it.

After the "Great Disappointment" of 1844, some, and among them Miller himself, openly confessed that the time was a mistake.[33] Others, however, insisted that the time itself was right,

30 *E.B. Elliott, Horae Apocalypticae,* lst ed. (London: Seeley, Bumside, and Seeley, 1844),Vol. III, pp. 1429–1431. Elliott's work ran through five editions (1844,1846, 1847,1851, and 1862).In the last two he did not directly mention the 1914 date, although he still suggested that the 2,520 years might be reckoned from the beginning of Nebuchadnezzar's reign.

31 David Tallmadge Arthur, "*Come out of Babylon": A Study of Millerite Separatism and Denominationalism, 1840–1865* (unpublished Ph.D. dissertation, University of Rochester, 1970), pp. 86–88.

32 William Miller, "A Dissertation on Prophetic Chronology" in *The First Report of the General Conference of Christians Expecting the Advent of the Lord Jesus Christ* (Boston, 1842), p. 5. Other Millerites who stressed the 2,520 years included Richard Hutchinson (editor of *The Voice of Elijah)* in an 1843 pamphlet, *The Throne of Judah Perpetuated in Christ,* and Philemon R. Russell (editor of the *Christian Herald and Journal)* in the March 19, 1840 issue of that periodical. The 2,520 years also appear on charts used by Millerite evangelists. (See Froom, Vol. IV, pp. 699–701, 726–737.)



HORÆ APOCALYPTICÆ,

on

A COMMENTARY ON THE APOCALYPSE,

CRITICAL AND HISTORICAL;

INCLUDING ALSO AN EXAMINA
THE CHIEF PROPHECIES OF I

ILLUSTRATED BY AN APOCALYPTIC GRAI
ENGRAVINGS FROM MEDALS AND OTI
MONUMENTS OF ANTIQUITY

BY THE REV. E. B. ELLIOTT
LATE VICAR OF TUXFORD, AND FELLOW OF TRINITY

VOL. III.

"Blessed is he that readeth, and they that hear the words
those things which are written therein: for the time is at hand."

SEELEY, BURNSIDE, AND SEI
FLEET STREET, LONDON
MDCCCXLIV.

1844

CHAP. IV.] CONCLUSION. 1429

the end of the 6000 years of the world, and opening of the seventh Millennium, *by approximation* about A. D. 1862:—the same year, very nearly, that we before fixed on as the epoch of the consummation, on quite different data.

I must add yet a word besides on two or three other more dubious, yet very interesting and important prophetic periods. And, 1st, on the *seven times of Nebuchadnezzar's insanity and bestialism.*[1] These calculated after the year-day system,[2] on the hypothesis of the Babylonish king's insanity figuring that of the great empires, which he then headed, in their state of heathen aberration from God, (a point on the propriety of which I can myself feel scarce a doubt,) terminate,—if dated from the time, B. C. 727, when the Assyrians under Shalmanezer[3] first acted the wild beast's part against Israel, about the year 1793; that is, at the epoch of the French Revolution, and the coincident going forth of the Gospel message to evangelize the heathen:—doubtless a very remarkable synchronism: especially considering that the bisecting point of these *seven times* is then A. D. 533; the very commencing epoch, with Justinian's Decree, of the *three and a half times* of the Papal Antichrist. Of course if calculated from Nebuchadnezzar's own accession and invasion of Judah, B. C. 606, the end is much later, being A. D. 1914; just one half century, or jubilean period, from our probable date of the opening of the

Jewish Rabbies make the interval between the first destruction of Jerusalem by the Babylonians, and second by the Romans, just 490 (or, to use the prophet Daniel's language, *seventy weeks* of) years.—Thus there is nothing in the Jewish mundane chronology to affect the accuracy of Mr. C's.

I have in the above notice had before me Mr. Lindo's Jewish Calendar; a late publication, elaborate with Jewish learning, and sanctioned by the then chief Rabbi in London, Solomon Hirschell.

[1] Dan. iv. The figure is somewhat otherwise applied by Cowper to the wretchedness and ruined hopes of a prisoner:

——Like the visionary emblem seen
By him of Babylon, life stands a stump,
And filleted about with hoops of brass
Still lives, though all his pleasant boughs are gone.

[2] See p. 957 on the year-day principle.

[3] Jer. l. 17; "Israel is a scattered sheep: the lions have driven him away: first the King of Assyria hath devoured him; last this Nebuchadnezzar, King of Babylon, hath broken his bones."

E. B. Elliott's *Horae Apocalypticae*, Vol. III (1844)

E. B. Elliott was most probably the first expositor to reckon the "times of the Gentiles" from 606 B.C.E. to 1914 CE. It should be noted, however, that in his chronology the starting-point, 606 B.C.E, was the *accession-year* of Nebuchadnezzar, while in the chronology of Barbour and Russell this was Nebuchadnezzar's *eighteenth year.* Their chronologies, therefore, were conflicting, although the dates accidentally happened to be the same.

The "1843" chart

used by *William Miller* (inset) and his associates in presenting the 1843 message. Miller presented fifteen separate "proofs" in support of his 1843 date, most of which were calculations based on the various year-day periods, including the 2300 and 2520 year-days.

but the event anticipated was wrong. Expressing what has become a familiar justification, they had expected "the wrong thing at the right time."

This position was taken by a group which later came to be known as the Seventh-Day Adventists. They declared that Jesus, instead of descending to earth in 1844, entered the most holy place of the heavenly sanctuary as mankind's great high priest to introduce the antitypical atonement day.[34] This group, which separated from the rest of the "Second Adventists" in the end of the 1840's, caused the first major division within the original movement.

Some leading Millerites who also held to the 1844 date—among them *Apollos Hale, Joseph Turner, Samuel Snow,* and *Barnett Matthias*—claimed that *Jesus had indeed come* as the Bridegroom in 1844, although spiritually and invisibly, "not in personally descending from heaven, but *taking the throne spiritually."* In 1844, they declared, the "kingdom of this world" had been given to Christ.[35]

Offshoots of the Millerite movement

Thus, following 1844, the Millerite "Second Advent" movement gradually broke into several Adventist groups.[36] A proliferation of new dates began to appear: 1845, 1846, 1847, 1850, 1851, 1852, 1853, 1854, 1866, 1867, 1868, 1870, 1873, 1875, and so on, and these dates, each having their promoters and adherents, contributed to even greater fragmentation. A leading Second Adventist, *Jonathan Cummings,* declared in 1852 that he had received

33 "That I have been mistaken in the time, I freely confess; and I have no desire to defend my course any further than I have been actuated by pure motives, and it has resulted in God's glory. My mistakes and errors God, I trust, will forgive . . . ." *(Wm. Miller's Apology and Defence,* Boston, 1845, pp. 33, 34.) *George Storrs,* who had been one of the leaders in the last stage of the Millerite movement, the so-called "seventh month movement," in which the advent had been finally fixed to October 22, 1844, was even more outspoken. Not only did he openly and repeatedly confess and regret his error, but he also declared that God had not been in the "definite time" movement, that they had been "mesmerized" by mere human influence, and that "the Bible did not teach definite time at all" (See D. T. Arthur, *op. cit.,* pp. 89–92.)

34 For a clarifying discussion of the development of this doctrine, see Dr. Ingemar Linden, *The Last Trump. A historico-genetical study of some important chapters in the making and development of the Seventh-Day Adventist Church* (Frankfurt am Main, Bern, Las Vegas: Peter Lang, 1978), pp. 129–133. Years later the doctrine was changed to mean that the so-called "investigative judgment" of the believers—dead and living—began on October 22, 1844.

35 Froom, Vol. IV, p. 888. A detailed discussion of these views is given by Dr. D. T. Arthur, *op. cit.,* pp. 97–115.

36 In 1855 a prominent Second Adventist, J. P. Cowles, estimated that there existed "some twenty-five divisions of what was once the one Advent body. (See D. T. Arthur, *op. cit.,* p. 319.)

a "new light" on the chronology, and that the second advent was to be expected in 1854. Many Millerites joined Cummings, and in January, 1854, they started a new periodical, the *World's Crisis,* in advocacy of the new date.[37]

Other factors besides dates began to play a role in the composition of the Second Advent movement. Right up to the present time they appear as distinctive features among a number of movements that developed from Second Adventism, including the Seventh-Day Adventist Church, Jehovah's Witnesses, and certain Church of God denominations. These factors included the doctrine of conditional—not inherent—immortality of the soul, with its corollary tenet that the ultimate destiny of those who are rejected by God is destruction or annihilation, not conscious torment. The trinitarian belief also became an issue among some sectors of the Second Adventists. (For further details on these developments and their effect in contributing to division among the offshoots of the Millerite movements, see the Appendix for Chapter One.)

Most of these developments had already taken place by the time that Charles Taze Russell, still in his teenage years, began the formation of a Bible study group in Allegheny, Pennsylvania. From the end of the 1860's onward, Russell increasingly got into touch with some of the Second Adventist groups which developed. He established close connections with certain of their ministers and read some of their papers, including George Storrs' *Bible Examiner.* Gradually, he and his associates took over many of their central teachings, including their conditionalist and anti-trinitarian positions and most of their "age to come" views. Finally, in 1876, Russell also adopted a revised version of their chronological system, which implied that the 2,520 years of Gentile times would expire in 1914. In all essential respects, therefore, Russell's Bible Student movement may be described as yet another offshoot of the Millerite movement.

What, then, was the most *direct* source of the chronological system that Russell, the founder of the Watch Tower movement, adopted, including not only the 2,520 year-period for the Gentile times, its ending in 1914, but also the year 1874 for the start of an invisible presence by Christ? That source was a man named Nelson H. Barbour.

Nelson H. Barbour

37 Isaac C. Wellcome, *History of the Second Advent Message* (Yarmouth, Maine, Boston, New York, London, 1874), pp. 594–597.

Nelson H. Barbour was born near Auburn, New York, in 1824. He joined the Millerite movement in 1843, at the age of 19. He "lost his religion" completely after the "Great Disappointment" in 1844 and went to Australia where he became a miner during the gold rush there.[38] Then, in 1859 he returned to America by way of London, England. In a retrospect Barbour tells how his interest in the prophetic time periods was again aroused during this voyage:

> The vessel left Australia with an advent brother [Barbour himself] on board, who had lost his religion, and been for many years in total darkness. To wile away the monotony of a long sea voyage, [an] English chaplain proposed a systematic reading of the prophecies; to which the brother readily assented; for having been a Millerite in former years, he knew right well there were arguments it would puzzle the chaplain to *answer,* even though the time had passed.[39]

During this reading Barbour thought he discovered the crucial error in Miller's reckoning. Why did Miller begin the 1,260 "year-days" of Revelation 11 in 538 C.E. and start the 1,290 and 1,335 year-days of Daniel 12 *thirty years earlier* in 508 C.E.? Should not all three periods start at the same date? Then the 1,290 years would end in 1828 and the 1,335 years in—not 1843 but—1873. "On arriving in London [in 1860], he went to the library of the British Museum, and among many other extensive works on the prophecies found Elliott's *Horae Apocalypticae"* in which Elliott reproduced a table, "The Scripture Chronology of the World," prepared by his friend, Reverend *Christopher Bowen.* The table showed that 5,979 years since man's creation ended in 1851.[40] Adding 21 years to the 5,979 years, Barbour discovered that *6,000 years* would end in 1873. This he saw as a remarkable and stirring confirmation of his own calculation of the 1,335-year period.

On returning to the United States, Barbour tried to interest other Second Adventists in his new date for the coming of the Lord. From 1868 onward he began to preach and publish his findings. A number of his articles on chronology were published in the *World's Crisis* and the *Advent Christian Times,* the two leading papers of the Advent Christian Association. In 1870 he also

38 Nelson H. Barbour, *Evidences for the Coming of the Lord in 1873; or the Midnight Cry,* 2nd ed. (Rochester., 1871), p. 32.

39 *Ibid.,* p. 32.

40 I*bid.,* p.33; E. B. Elliott, *Horae Apocalypticae,* 4th ed. (London: Seeleys,1851), Vol. IV; fly-leaf appended at p. 236. Elliott's work at that time, 1860, was a standard work advocating 1866 as the time of the coming of the Lord.

published the 100-page pamphlet *Evidences for the Coming of the Lord in 1873; or the Midnight Cry,* the second edition of which has been quoted above.[41] In 1873 he started a monthly of his own called *The Midnight Cry, and Herald of the Morning,* the circulation of which within three months ran up to 15,000 copies.[42] When the target year of 1873 had nearly passed, Barbour advanced the time of the second advent to the autumn of 1874.[43] But when that year, too, came and went, Barbour and his followers experienced great concern:

> When 1874 came and there was no outward sign of Jesus in the literal clouds and in a fleshly form, there was a general reexamination of all the arguments upon which the 'Midnight Cry' was made. And when no fault or flaw could be found, it led to the critical examination of the Scriptures which seem to bear on the manner of Christ's coming, and it was soon discovered that the expectation of Jesus in the flesh at the second coming was the mistake . . . .[44]

An "invisible presence"

One of the readers of the *Midnight Cry,* B. W. Keith (later one of the contributors to *Zion's Watch Tower),*

> . . . had been reading carefully Matt. xxiv chapter, using the 'Emphatic Diaglott' , a new and very exact word for word

41 Nelson H. Barbour (ed.), *Herald of the Morning* (Rochester, N.Y.), September 1879, p.36. Actually, Barbour's new date for the second advent was adopted by an increasing number of Second Adventists, especially within the Advent Christian Church, with which Barbour evidently associated for a number of years. One reason for this readiness to accept the 1873 date was that it was not new to them. As Barbour points out in his *Evidences . . .* (pp. 33, 34), Miller himself had mentioned 1873 after the 1843 failure. Prior to 1843, several expositors in England had ended the 1,335 years in 1873, for instance John Fry in 1835 and George Duffield in 1842. (Froom, Vol. III, pp. 496, 497; Vol. IV, p. 337) As early as 1853 the "age to come" Adventist Joseph Marsh in Rochester, N.Y., concluded, 1ike other expositors before him, that the "time of the end" was a period of 75 years that began in 1798 and would expire in 1873. (D. T. Arthur, *op. cit.,* p. 360) In 1870 the well-known Advent Christian preacher Jonas Wendell included Barbour's chronology in his pamphlet *The Present Truth; or, Meat in Due Season* (Edenboro, PA, 1870). The increasing interest in the date caused the Advent Christian Church to arrange a special conference, February 6 to 11, 1872, in Worcester, Mass., for the examination of the time of the Lord's return and especially the 1873 date. Many preachers, including Barbour, participated in the discussions. As reported in the *Advent Christian Times* of March 12, 1872, "The point on which there seemed to be any general unanimity was the ending of the thirteen hundred and thirty-five years in 1873." (p. 263)

42 Nelson H. Barbour (ed.), *The Midnight Cry, and Herald of the Morning* (Boston, Mass.) Vol. I:4, March, 1874,p. 50.

43 N. H. Barbour, "The 1873 Time," *The Advent Christian Times,* Nov. 11, 1873, p. 106.

44 *Zion's Watch Tower,* October and November 1881, p. 3 (= *Reprints,* p. 289).

> translation of the New Testament [translated and published by Benjamin Wilson in 1864]; when he came to the 37th and 39th verses he was much surprised to find that it read as follows, viz.: 'For as the days of Noah thus will be the *presence* of the son of man'.[45]

Keith thus found the Greek word *parousia,* usually translated "coming," here translated as "presence." A widely held idea among expositors at this time was that Christ's second coming would take place in *two stages,* the first of which would be invisible![46] Could it be that Jesus *had* come in the fall of 1874, though *invisible,* and been *invisibly present* since then?

To Barbour this explanation not only seemed attractive, but as he and his associates could find no faults with their calculations, they saw in it the solution to their problem. The date was right, although their expectations had been wrong.

Once again, it was seen as a case of having expected "the wrong thing at the right time":

> It was evident, then, that though the *manner* in which they had expected Jesus was in error, yet the time, as indicated by the 'Midnight Cry,' was correct, and that the Bridegroom *came* in the Autumn of 1874 . . . .[45]

Most readers of the *Midnight Cry, and Herald of the Morning* magazine, however, could not accept this explanation, and the 15,000 readers rapidly "dwindled to about 200." Barbour himself was convinced that the Millennial morning had already begun to dawn, and therefore he thought that the *Midnight Cry* no longer was a suitable name for his paper. He remarked: "Will some one inform me how a 'Midnight Cry' can be made in the *morning?*"[47] The paper, which had ceased publication in October 1874, was therefore

45 *Zion's Watch Tower* ,February 1881,p. 3, and October–November 1881, p. 3 *(=Reprints,* pp. 188 and 289).

46 This idea of Christ's return was originally presented in about 1828 by a banker and expositor of the prophecies in London, *Henry Drummond.* It soon became very popular among the expositors of the prophecies during the rest of the century, especially among the Darbyists, who did much to popularize the idea. It was much discussed in the leading millenarian periodicals, in England in the *Quarterly Journal of Prophecy* (1849–1873) and *The Rainbow* (1864–1887), and in the United States in the *Prophetic Times* (1863–1881). The chief editor of the last mentioned paper (which was widely read also in Adventist circles, including that of C. T. Russell and his associates) was the well-known Lutheran minister Joseph A. Seiss.—An examination of the origin and dispersion of the "invisible presence" idea is found in *The Christian Quest* magazine (Christian Renewal Ministries, San Jose, CA), Vol. 1:2, 1988, pp. 37–59, and Vol. 2:1, 1989, pp. 47–58.

47 *Ibid.,* April 1880, p. 7 (= *Reprints,* p. 88).

restarted in June 1875 as the *Herald of the Morning,* thereby dispensing with the first part of the earlier title.

In one of the very first issues (September, 1875), Barbour published his calculation of the Gentile times, making them terminate in 1914 C.E.[48] (See following page.)

Charles Taze Russell

In 1870, as an 18-year-old businessman in Allegheny, Pennsylvania, *Charles Taze Russell,* together with his father Joseph and some friends formed a class for Bible study.[49] The group was formed as an outgrowth of Russell's contacts with some of the former Millerites mentioned above, especially Jonas Wendell, George Storrs, and George Stetson.

Wendell, a preacher from the Advent Christian Church in Edenboro, Pennsylvania, had visited Allegheny in 1869, and by chance Russell went to one of his meetings and was strongly impressed by Wendell's criticism of the hellfire doctrine. Russell had been brought up a Calvinist, but had recently broken with this religious background because of his doubts in the predestination

48 Actually, Barbour hinted at the calculation already in the June, 1875 issue of *Herald of the Morning,* by stating that the Gentile times began with the end of reign of Zedekiah in 606 B.C., although he did not directly mention the terminal date (p. 15). In the July issue, he stated that the Gentile times would "continue yet *forty years."* Although this seems to point to 1915, it is clear from the subsequent issues that Barbour had the year 1914 in mind. The August issue contains an article on "Chronology" (pp. 38–42), but the Gentile times are not discussed. The 1914 date is directly mentioned for the first time in the September, 1875 issue, where the following statement is found on page 52: "I believe that though the gospel dispensation will end in 1878, the Jews will not be restored to Palestine, until 1881; and that the 'times of the Gentiles,' viz. their seven prophetic times, of 2520, or twice 1260 years, which began where God gave all, into the hands of Nebuchadnezzar, 606 B.C.; do not end until A.D. 1914; or 40 years from this." A lengthy discussion of the calculation was then published in the issue of October 1875, pp. 74–76.

49 Charles' parents, Joseph L. and Ann Eliza (Birney) Russell, were both of Scottish-Irish descent. They had left Ireland during the great Irish famine of 1845–1849, when one and a half million people starved to death and another million emigrated abroad. Joseph and Eliza settled in Allegheny in 1846, where Charles was born in 1852 as number two of three children. As Eliza died in about 1860, Joseph had to take care of the upbringing of the children. As a youngster, Charles spent most of his leisure time in his father's clothing store, and at an early age he became Joseph's business partner. Their successful company, "J. L. Russell & Son, Gents' Furnishing Goods," finally developed into a chain of five stores in Allegheny and Pittsburgh.—For additional biographical notes on Russell, see M. James Penton, *Apocalypse Delayed. The Story of Jehovah's Witnesses* (Toronto, Buffalo, London: University of Toronto Press, 1985, 1997), pp. 13–15.

Vol. 3. SEPTEMBER, 1875. No. 4.

HERALD OF THE MORNING.

The seed of the woman shall bruise the serpent's head.

Come thou and all thy house, into the ark.

Now the Lord had said to thy country; into a land that I will shew thee; and in thee shall all families of the earth be blessed.

Abram, get thee out of

And ye shall be unto Me a kingdom of priests.

"Take off the diadem: I will overturn, overturn it, and remove the crown: it shall be no more until He come whose right it is; and I will give it Him."

PATRIARCHAL AGE

KINGDOM OF ISRAEL

GENTILE TIMES

D. COGSWELL, Dansville, N. Y., Corresponding

J. H. PATON, Almont, Mich. Editors.

N. H. BARBOUR, Editor, ROCHESTER N. Y.

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Herald of the Morning of September 1875 in which N. H. Barbour first published the year 1914 as the end of the 2,520 years.

of the 2,520 years and hellfire doctrines. He was in a serious religious crisis at this time and even questioned if the Bible really was the word of God. His meeting with Wendell and his subsequent reading of Storrs' magazine, the *Bible Examiner,* restored his faith in the Bible. Articles published in this magazine seem to have been regularly discussed in Russell's study group.

Although Russell knew that some Adventists, including Jonas Wendell, expected Christ in 1873, he himself rejected the whole concept of time settings and fixing of dates. Then, in 1876, he began to alter his position:

> It was about January, 1876, that my attention was specially drawn to the subject of prophetic time, as it relates to these doctrines and hopes. It came about in this way: I received a paper called *The Herald of the Morning,* sent by its editor, Mr. N. H. Barbour?[50]

Russell states he was surprised to find that Barbour's group had come to the same conclusion as his own group about the *manner* of Christ's return—that it would be "thieflike, and not in flesh, but as a spirit-being, invisible to men.

Russell at once wrote to Barbour about the chronology, and later in 1876 he arranged to meet him in Philadelphia where Russell had business engagements that summer. Russell wanted Barbour to show him, "if he could, that the prophecies indicated 1874 as the date at which the Lord's presence and 'the harvest' began." "He came," says Russell, "and the evidence satisfied me."[51]

It is apparent that during these meetings Russell accepted not only the 1874 date but *all* of Barbour's time calculations, including his calculation of the Gentile times.[52] While still in Philadelphia, Russell wrote an article entitled "Gentile Times: When do They End?" which was published in George Storrs' periodical the *Bible Examiner* in the October 1876 issue. Referring to the "seven times" of Leviticus 26:28, 33 and Daniel 4 on page 27 of the *Examiner,* he determines the length of the Gentile times to be 2,520 years which

50 *Zion's Watch Tower,* July 15, 1906, pp. 230, 231 (= *Reprints,* p. 3822).

51 *Ibid.* In a two-page "Supplement to *Zion's Watch Tower,"* sent out "To the readers of 'Herald of the Morning" with the first issue of *Zion's Watch Tower and Herald of Christ's Presence* of July 1,1879, Russell gives an account of his meeting with Barbour and his associate John Paton in 1876 and their subsequent collaboration for the following three years in spreading the "Harvest message," and explains why he had to break with Barbour in 1879 and start his own paper.

52 This is also indicated by Russell himself who states: " . . . when we first met, he had much to learn from me on the fulness of *restitution* based upon the sufficiency of the ransom given for all, as I had much to learn from him concerning *time."* — *Zion's Watch Tower,* July 15, 1906, p. 231 (= *Reprints,* p. 3822).

began in 606 B .C.E. and would end in 1914 C.E.—precisely the same dates Barbour had arrived at and had begun publishing a year earlier, in 1875.

Looking forward to 1914

What, exactly, would the end of the "Gentile times" mean for mankind? Although monumental events relating to Christ's return were proclaimed to have taken place in 1874, these were all said to be invisible, occurring in the spirit realm unseen by human eyes. Would 1914 and the termination of the Gentile times be the same, or would it bring visible, tangible change for the earth and for human society on it?

In the book *The Time is at Hand,* published in 1889 (later referred to as Volume II of *Studies in the Scriptures),* Russell stated that there was "Bible evidence proving" that the 1914 date "will be the farthest limit of the rule of imperfect men." What would be the consequences of this? Russell enumerated his expectations for 1914 in seven points:

> Firstly, That at that date the Kingdom of God ... will have obtained full, universal control, and that it will then be 'set up,' or firmly established, in the earth.
>
> Secondly, It will prove that he whose right it is thus to take dominion will then be present as earth's new ruler ...
>
> Thirdly, It will prove that some time before the end of A. D. 1914 the last member of the divinely recognized Church of Christ, the 'royal priesthood,' 'the body of Christ,' will be glorified with the Head ...
>
> Fourthly, It will prove that from that time forward Jerusalem shall no longer be trodden down of the Gentiles, but shall arise from the dust of divine disfavor, to honor; because the 'Times of the Gentiles' will be fulfilled or completed.
>
> Fifthly, It will prove that by that date, or sooner, Israel's blindness will begin to be turned away; because their 'blindness in part' was to continue only *'until* the fulness of the Gentiles be come in' (Rom. 11:25) ...
>
> Sixthly, It will prove that the great 'time of trouble such as never was since there was a nation,' will reach its culmination in a worldwide reign of anarchy . . . and the 'new heavens and new earth' with their peaceful blessings will begin to be recognized by trouble-tossed humanity.
>
> Seventhly, It will prove that *before that date* God's Kingdom, organized in power, will be in the earth and then smite and crush the Gentile image (Dan. 2:34)—and fully consume the power of

these kings.[53]

These were indeed very daring predictions. Did Russell really believe that all these remarkable things would come true within the next twenty five years? Yes, he did; in fact, he believed his chronology to be *God's* chronology, not just his own. In 1894 he wrote of the 1914 date:

> We see no reason for changing the figures—nor could we change them if we would. *They are, we believe, God's dates, not ours.* But bear in mind that the end of 1914 is not the date for the *beginning,* but for the *end* of the time of trouble.[54]

Thus it was thought that the "time of trouble" was to commence some years *before* 1914, "not later than 1910," reaching its climax in 1914.[55]

In 1904, however, just ten years before 1914, Russell altered his view on this matter. In an article in the July 1, 1904 issue of *Zion's Watch Tower,* entitled "Universal anarchy—just before or after October, 1914 A.D.," he argued that the time of trouble, with its worldwide anarchy, would begin *after* October, 1914:

> We now expect that the anarchistic culmination of the great time of trouble which will precede the Millennial blessings will be after October, 1914 A.D.—very speedily thereafter, in our opinion— 'in an hour,' 'suddenly,' because 'our forty years' harvest, ending October, 1914 A.D., should not be expected to include the awful period of anarchy which the Scriptures point out to be the fate of Christendom.[56]

This change caused some readers to think that there might be other errors in the chronological system, too—one reader even suggesting that Bishop Ussher's chronology might be more correct when it dated the destruction of Jerusalem as having happened in 587 B.C.E. rather than in 606 B.C.E. This would end the 2,520 years in about 1934 instead of 1914. But Russell strongly reaffirmed his belief in the 1914 date, referring to other claimed "time parallels" pointing to it:

53 C. T. Russell, *The Time is at Hand (*= Vol. II of the *Millennial Dawn* series; later called *Studies in the Scriptures),* Pittsburgh: Watch Tower Bible and Tract Society, 1889, pp. *77, 78.* Some of the predictions were slightly changed in later editions.
54 *Zion's Watch Tower,* July 15, 1894 (= *Reprints,* p. 1677).
55 *Ibid.,* September 15, 1901 (= *Reprints,* p. 2876).
56 *Ibid.,* July 1, 1904, pp. 197,198 (= *Reprints,* p. 3389).

> We know of no reason for changing a figure: to do so would spoil the harmonies and parallels so conspicuous between the Jewish and Gospel ages.[57]

Answering another reader, he said:

> The harmony of the prophetic periods is one of the strongest proofs of the correctness of our Bible chronology. They fit together like the cogwheels of a perfect machine. *To change the chronology even one year would destroy all this harmony,*—so accurately are the various proofs drawn together in the *parallels* between the Jewish and Gospel ages.[58]

These arguments were further backed up by articles written by the Edgar brothers of Scotland.[59]

Growing doubts

So in 1904 Russell was still as convinced of his dates as he was in 1889, when he wrote that the understanding of these time features was the "*sealing of the foreheads"* mentioned at Revelation 7:3.[60]

As the 1914 date drew nearer, however, Russell became more and more cautious in his statements. Answering an inquiring Bible student in 1907, he said that "we have never claimed our calculations to be infallibly correct; we have never claimed that they were *knowledge,* nor based upon indisputable evidence, facts, knowledge; our claim has always been that they are based *on faith."*[61]

The dates no longer seemed to qualify as "God's dates," as he had stated thirteen years earlier; now they might be fallible. Russell even considered the possibility that 1914 (and 1915) could pass by with *none* of the expected events having occurred:

> But let us suppose a case far from our expectations: suppose that A.D. 1915 should pass with the world's affairs all serene and with evidence that the 'very elect' had not all been 'changed' and without the restoration of natural Israel to favor under the New Covenant. (Rom. 11:12, 15) What then? Would not that prove our chronology wrong? Yes, surely! And would not that prove a keen disappointment? Indeed it would! . . . What a blow that would be! One of the strings of our 'harp' would be quite broken! However,

57 *Ibid.,* October 1, 1904, pp. 296, 297 (= *Reprints,* pp. 3436, 3437).
58 *Ibid.,* August 15, 1904, pp. 250, 251 (= *Reprints,* p. 3415). Emphasis added.
59 *Ibid.,* November 15, 1904, pp. 342–344; June 15, 1905, pp. 179–186 (= *Reprints,* pp. 3459, 3460, 3574–3579).
60 C. T. Russell, *The Time is at Hand,* p. 169.
61 *Zion's Watch Tower,* October 1, 1907, pp. 294, 295 (= *Reprints,* p. 4067).

> dear friends, our harp would still have all the other strings in tune and that is what no other aggregation of God's people on earth could boast.[62]

Another point of uncertainty was whether a year 0 (between 1 B.C.E. and 1 C.E.) was to be included in the calculation or not. This matter had been brought up by Russell as early as 1904, but gained in importance as the year 1914 approached.

The 1914 date had been arrived at simply by subtracting 606 from 2,520, but gradually it was realized that no year 0 is allowed for in our present calendar of era reckoning. Consequently, from October 1, 606 B.C.E. to the beginning of January, 1 C.E. was only 605 years and 3 months, and from the beginning of January, 1 C.E. to October 1914 was only 1913 years and 9 months, making a total of 2,519 years, not 2,520. This would mean that the 2,520 years would end in October 1915, rather than October 1914.[63] But when the war broke out in Europe in August 1914, it apparently seemed ill-timed to correct this error. It was allowed to stand.

By 1913, with 1914 on the doorstep, the cautiousness regarding that year had increased. In the article "Let Your Moderation Be Known," which appeared in the June 1, 1913 issue of *The Watch Tower,* Russell warned his readers against spending "valuable time and energy in guessing what will take place this year, next year, etc." His confidence in his earlier published scheme of events was no longer evident: "This is the good tidings of God's grace in Christ—whether the completion of the church shall be accomplished before 1914 or not."[64] He expressed himself still more vaguely in the October 15 issue of the same year:

> We are waiting for the time to come when the government of the world will be turned over to Messiah. We cannot say that it may not be either October 1914, or October 1915. It is possible that *we*

62 *Ibid.*

63 *The Watch Tower,* December 1, 1912 (= *Reprints,* pp. 5141, 5142). As the First World War broke out in 1914 and that year was retained as *the end* of the Gentile times, the starting point of those times needed to be moved back one year from 606 to 607 B.C.E. in order to preserve a total of 2,520 years. Although some of the Society's adherents had pointed this fact out very early (see, for example, the footnote on page 32 of John and Morton Edgar's *Great Pyramid Passages, 2nd* ed., 1924) this necessary adjustment was not made by the Watch Tower Society until 1943, when it was presented in the book, *The Truth Shall Make You Free,* on page 239. See also the book, *The Kingdom is at Hand,* 1944, p. 184. For additional details, see next chapter, page 79.

64 *The Watch Tower,* June 1, 1913, pp. 166, 16 (= *Reprints,* p. 5249).

> *might be out of the correct reckoning on the subject a number of years.* We cannot say with certainty. We do not know. It is a matter of faith, and not of knowledge.[65]

Earlier, 1914 had been one of "God's dates," and "to change the chronology even one year would destroy all this harmony." But now they "might be out of the correct reckoning on the subject a number of years," and nothing on the matter could be said "with certainty" This was truly a *volte-face!* If it was indeed "a matter of faith," one can only wonder in *what* or in *whom* that faith was to be based.

Russell's own tottering faith in his chronology was further brought to light in *The Watch Tower* of January 1, 1914, in which he stated: "As already pointed out, we are by no means confident that this year, 1914, will witness as radical and swift changes of dispensation as we have expected, "[66] The article "The Days Are At Hand" in the same issue is especially revealing:

> If later it should be demonstrated that the church is not glorified by October, 1914, we shall try to feel content with whatever the Lord's will may be. . . . If 1915 should go by without the passage of the church, without the time of trouble, etc., it would seem to some to be a great calamity. It would not be so with ourselves. . . . If in the Lord's providence *the time should come twenty-five years later,* then that would be our will. . . . If October, 1915, should pass, and we should find ourselves still here and matters going on very much as they are at present, and the world apparently making progress in the way of settling disputes, and there were no time of trouble in sight, and the nominal church were not yet federated, etc., we would say that evidently we have been out somewhere in our reckoning. In that event we would look over the prophecies further, to see if we could find an error. And then we would think, *Have we been expecting the wrong thing in the right time?* The Lord's will might permit this.[67]

Again, in the May 1, 1914 issue—forgetting his earlier statements about "*God's* dates" and of "Bible evidence *proving"* that the predicted developments would occur in 1914—Russell told his readers that "in these columns and in the six volumes of STUDIES IN THE SCRIPTURES we have set forth everything appertaining to the times and seasons *in a tentative form;* that is to say, not with positiveness, not with the claim that we knew, but merely with the suggestion that 'thus and so' seems to be the teaching of the Bible."[68]

65 *Ibid.,* October 15, 1913, p. 307 (= *Reprints,* p. 5328). Emphasis added.
66 *Ibid.,* January 1, 1914, pp. 3,4 (= *Reprints,* p. 5373).
67 *Ibid.,* pp. 4,5 (= *Reprints,* p. 5374). Emphasis added.
68 *Ibid.,* May 1, 1914, pp. 134, 135 (= *Reprints,* p. 5450). Emphasis added.

Two months later Russell seemed to be on the point of rejecting his chronology altogether. Answering a colporteur, who wanted to know if the *Studies in the Scriptures* were to be circulated after October, 1914, "since you [Russell] have some doubts respecting the full accomplishment of all expected by or before October, 1914," Russell replied:

> It is our thought that these books will be on sale and read for years in the future, provided the Gospel age and its work continue. . . . We have not attempted to say that these views are infallible, but have stated the processes of reasoning and figuring, leaving to each reader the duty and privilege of reading, thinking and figuring for himself.
> *That will be an interesting matter a hundred years from now;* and if he can figure and reason better, he will still be interested in what we have presented.[69]

Thus, by July 1914, Russell now seemed ready to accept the thought that the 1914 date probably was a failure, and that his writings on the matter were going to be merely of historical interest to Bible students a hundred years later!

Reactions to the outbreak of the war

With the outbreak of the war in Europe in August 1914, Russell's wavering confidence in the chronology began to recover. Although the war itself did not exactly fit into the predicted pattern of events—that the "time of trouble" would be a class struggle between capital and labor, leading up to a period of worldwide anarchy —he saw in the war the prelude to that situation:

> Socialism is, we believe, the main factor in the war now raging and which will be earth's greatest and most terrible war—and probably the last.[70]

Later in 1914, he wrote:

> We think that the present distress amongst the nations is merely the beginning of this time of trouble. . . . The anarchy that will follow this war will be the real time of trouble. Our thought is that the war will so weaken the nations that following it there will be an attempt to bring in Socialistic ideas, and that this will be met by the governments — [etc., leading up to worldwide class struggle and anarchy].[71]

69 *Ibid.,* July 1, 1914, pp. 206, 207 (= *Reprints,* p. 5496). Emphasis added.
70 *Ibid.,* August 15, 1914, pp. 243,244 (= *Reprints,* p. 5516).
71 Ibid., November 1, 1914, pp. 327, 328 (= *Reprints,* p. 5567).

Like other millenarian authors, Russell believed that the expiration of the Gentile times would mean a restoration of the Jewish nation in Palestine. Toward the end of 1914, however, Palestine and Jerusalem were still occupied by Gentiles. It seemed obvious that the restoration would not begin to occur in 1914 as had been predicted. In the November 1 issue of *The Watch Tower,* therefore, Russell tried to reinterpret the end of the Gentile times to mean the end of the *persecution* of the Jews:

> The treading down of the Jews has stopped. All over the world the Jews are now free—even in Russia. On September 5, the Czar of Russia issued a proclamation to all the Jews of the Russian Empire; and this was before the times of the Gentiles had expired. It stated that the Jews might have access to the highest rank in the Russian army, and that the Jewish religion was to have the same freedom as any other religion in Russia. Where are the Jews being trodden down now? Where are they being subjected to scorn? At present they are receiving no persecution whatever. We believe that the treading down of Jerusalem has ceased, because the time for the Gentiles to tread down Israel has ended.[72]

However, the relief for the Jews in Russia and elsewhere referred to by Russell turned out to be only temporary. He could not, of course, foresee the coming fierce persecutions of the Jews in Germany, Poland, and other countries during the Second World War.

From the outbreak of the First World War and up to his death on October, 1916, Russell's restored confidence in his chronology remained unshaken, as demonstrated by the following extracts from various issues of *The Watch Tower* during the period:

> *January 1, 1915:* " . . . the war is the one predicted in the Scriptures as associated with the great day of Almighty God—'the day of vengeance of our God.'"[73]

> *September 15, 1915:* "Tracing the Scriptural chronology down to our day, we find that we are now living in the very dawn of the great seventh day of man's great week. This is abundantly corroborated by the events now taking place about us on every hand"[74]

72 *Ibid.,* pp. 329, 330 (= *Reprints,* p. 5568).
73 *Ibid.,* January 1, 1915, pp. 3, 4 (= *Reprints,* p. 5601).
74 *Ibid.,* September 15, 1915, pp. 281, 282 (= *Reprints,* p. 5769).

February 15, 1916: "In STUDIES IN THE SCRIPTURES, Vol. IV, we have clearly pointed out the things now transpiring, and the worse conditions yet to come."[75]

April 15, 1916: "We believe that the dates have proven to be quite right. We believe that Gentile Times have ended, and that God is now allowing the Gentile Governments to destroy themselves, in order to prepare the way for Messiah's kingdom."[76]

September 1, 1916: "It still seems clear to us that the prophetic period known to us as the Times of the Gentiles ended chronologically in October, 1914. The fact that the great day of wrath upon the nation began there marks a good fulfilment of our expectations."[77]

In November 1918, however, the First World War suddenly ended—without being followed by a worldwide Socialist revolution and anarchy, as had been predicted. The last member of the "divinely recognized Church of Christ" had not been glorified, the city of Jerusalem was still being controlled by the Gentiles, the kingdom of God had not crushed "the Gentile image," and the "new heavens and the new earth" could not be seen anywhere by trouble-tossed humanity. Not a single one of the seven predictions enumerated in the book *The Time is at Hand* had come true.[78] Pastor Russell's "Bible Students" were confused, to say the least.

Yet—though not among the predictions— something *had* happened: The World War. Could it be that the time was right, after all, even though the predictions had failed? The explanation resorted to by the Adventists after 1844 and by Barbour and his associates after 1874—that they had expected "the wrong thing at the right time"—now seemed even more appropriate.[79] But how could the time be right, when all predictions based on it had failed? For years many of Russell's followers experienced deep perplexity because of the non-arrival of the predicted events. After the lapse of some years, *J. F. Rutherford,* Russell's successor as president of

75 *Ibid.,* February 15, 1916, pp. 51, 52 (= *Reprints,* p. 5852).
76 *Ibid.,* April 15, 1916 (= *Reprints,* p. 5888).
77 *Ibid.,* September 1, 1916, pp. 263, 264 (= *Reprints,* p. 5950).
78 See above, pages 50, 51. For a long time after 1914 it was held that the "time of trouble" (Matt. 24:21, 22) really began in that year, but this view was finally abandoned by the Watch Tower Society in 1969. (See *The Watchtower,* January 15, 1970, pp. 49–56.)
79 A. H. Macmillan, *Faith on the March* (New York: Prentice Hall, Inc., 1957), p.48.

the Watch Tower Society, began to explain, step by step, what "really" had been fulfilled from 1914 onward.

In the address "The Kingdom of Heaven is at Hand" at the September 5–13, 1922, Cedar Point Convention, Rutherford told his audience that the Kingdom of God *really had been established in 1914,* not on earth but *in the invisible heavens!*[80] And three years later, in 1925, he applied Revelation 12 to this event, stating that God's Kingdom was *born in heaven in 1914* according to this prophecy.[81]

Previously the *Watch Tower's* predictions had all been of an obvious, clearly visible, takeover of earth's rulership by Christ. Now this was presented as something invisible, evident only to a select group.

Also at the Cedar Point Convention in 1922, Rutherford for the first time presented the view that "in 1918, or thereabouts, the Lord came to his (spiritual) temple."[82] Earlier, Russell and his associates had held the view that the heavenly resurrection took place in 1878. But in 1927 Rutherford transferred that event to 1918.[83] Likewise in the early 1930's, Rutherford changed the date for the beginning of *Christ's invisible presence* from 1874 to 1914.[84]

Thus Rutherford gradually replaced the unfulfilled predictions with *a series of invisible and spiritual events* associated with the years 1914 and 1918. Ninety years after 1914 Rutherford's "explanations" are still held by Jehovah's Witnesses.

80 *New Heavens and a New Earth* (Brooklyn, N.Y.: Watchtower Bible and Tract Society, 1953), p. 225. Until 1922, that is, for over forty years, the Bible Students had believed and taught that the kingdom of God had begun to be established in heaven in 1878. This event was now transferred to 1914. — See *The Time is at Hand (= Vol.* II of *Millennial Dawn),* 1889, p. 101.

81 See the article 'Birth of a Nation" in *The Watch Tower* of March 1, 1925.

82 *The Watch Tower,* October 1, 1922, p. 298; November 1, 1922, p. 334.

83 *From Paradise Lost to Paradise Regained* (Brooklyn, N.Y.: Watchtower Bible and Tract Society, 1958), p. 192.

84 As of 1929 the Watch Tower Society still taught that "the second presence of the Lord Jesus Christ began in 1874 AD." *(Prophecy,* Brooklyn, N.Y.: International Bible Students Association, 1929, p.65.) The exact date for the transference of the second coming from 1874 to 1914 is difficult to pinpoint. For some time confusing statements may be found in the publications. Perhaps the first indication of a change is the statement in *The Golden Age* of April 30, 1930, page 503, that "Jesus has been present *since the year 1914."* However, *The Watch Tower* of October 15, 1930, somewhat vaguely states on page 308 that "the second advent of the Lord Jesus Christ dates *from about 1875."* Then, in 1931, the booklet, *The Kingdom, the Hope of the World,* again indicates that the second coming occurred in 1914. And in 1932 the booklet *What is Truth* clearly states on page 48: "The prophecy of the Bible, fully supported by the physical facts in fulfilment thereof, shows that *the second coming of Christ dates from the fall of the year 1914."*

Summary

The interpretation of the "Gentile times" as having been of 2,520 years, beginning in 607 B.C.E. (earlier, 606 B.C.E.) and ending in 1914 C.E., was not some divine revelation made to Pastor Charles Taze Russell in the autumn of 1876. On the contrary, this idea has a long history of development, with its roots far back in the past.

It had its origin in the "year-day principle," first posited by Rabbi Akibah ben Joseph in the first century C.E. From the ninth century onward this principle was applied to the time periods of Daniel by several Jewish rabbis.

Among Christians, Joachim of Floris in the twelfth century probably was the first to pick up the idea, applying it to the 1,260 days of Revelation and the three and one-half times of Daniel. After Joachim's death, his followers soon identified the 1,260 year period with the Gentile times of Luke 21:24, and this interpretation was then common among groups, including the Reformers, branded as heretics by the church of Rome during the following centuries.

As time passed, and expectations failed when earlier explanations proved to be wrong, the starting-point of the 1,260 (or, 1290) years was progressively moved forward, in order to make them end in a then near future.

The first to arrive at a period of 2,520 years was apparently John Aquila Brown in 1823. Although his calculation was founded upon the "seven times" of Daniel 4, he did not equate those periods with the "Gentile times" of Luke 21:24. But this was very soon done by other expositors. Fixing the starting-point at 604 B.C.E., Brown reached the year 1917 as the seven times' termination date. By using different starting-points, other biblical commentators in the following decades arrived at a number of different terminal dates. Some writers, who experimented with biblical "Jubilee cycles," arrived at a period of 2,450 (or, 2,452) years (49x49+49), which they held to be the period of the Gentile times.

The accompanying table presents a *selection* of applications of the 2,520 (and 2,450) years made by different authors during the last century. The calculations were in fact so numerous, that it would probably be difficult to find a single year between the 1830's and 1930's that does not figure in some calculation as the terminal date of the Gentile times! That a number of expositors pointed to 1914 or other years near to that date, such as 1915, 1916, 1917, 1918, 1919, 1922 and 1923, is, therefore, not a cause for astonishment.

TABLE 2: APPLICATIONS OF THE 2,520 (OR 2,450) YEAR

Expositor	Date	Publication	Application BCE–CE	Comments
John Aquila Brown	1823	The Even-Tide . . .	604–1917	= "Seven times" of Daniel 4
William Cuninghame	1827	Dialogues on Prophecy, Vol.1	728–1792	Report of the prophetic conferences
Henry Drummond	1827	" " "	722–1798	at Albury Park
S. Faber	1828	The Sacred Calendar of Prophecy	657–1864	
Alfred Addis	1829	Heaven Opened	680–1840	
William Digby	1831	A Treatise on the 1260 Days	723–1793	
W. A, Holmes	1833	The Time of the End	685–1835	
Matthew Habershon	1834	A Dissertation . . .	677–1843	
John Fry	1835	Unfulfilled Prophecies . . .	677–1843	
William W. Pym	1835	A Word of Warning . . .	673–1847	
William Miller	1842	The First Report . . .	677–1843	
Th. R. Birks	1843	First Elements of Sacred Prophecy	606–1843	Gentile times = 2,450 years
Edward B. Elliott	1844	Horae Apocalypticae, Vol. 111	727–1793	
" " "	1844	" " "	606–1914	A second alternative
Matthew Habershon	1844	An Historical Exposition	676–1844	
" " "	1844	" " "	601–1919	A second alternative
William Cuninghame	1847	The Fulfilling . . .	606–1847	Gentile times = 2,452 years
James Halley Frere	1848	The Great Continental Revolution	603–1847	Gentile times = 2,450 years
Robert Seeley	1849	An Atlas of Prophecy	606–1914	Counted from "606 or 607"
" " "	1849	" " "	570–1950	A second alternative
" " "	1849	" " "	728–1792	A third alternative
Edward Bickersteth	1850	A Scripture Help	727–1793	Another of his calculations
" " "	1850	" " "	602–1918	was 677-1843

Anonymous	1856	The Watch Tower	727–1793	A pamphlet
Richard C. Shimeall	1859	Our Bible Chronology	652–1868	
J. S. Phillips	1865	The Rainbow, March 1,	652–1867	A London periodical edited
"J. M. N."	1865	" " April 1,	658/47–1862/73	by William Leask
Frederick W. Farrar	1865	" " November 1	654–1866	
Anonymous	1870	The Prophetic Times, December,	715–1805	A periodical edited by Joseph A.
"	1870	" " " "	698–822	Seiss *et al.* These are some
"	1870	" " " "	643–1877	examples; the writer gives twelve
"	1870	" " " "	606–1914	different alternatives!
"	1870	" " " "	598–1922	
Joseph Baylee	1871	The Times of the Gentiles	623–1896	
"P. H. G."		The Quarterley Journal of		A London periodical edited by Horatius
" " "	1871	Prophecy, April,	652/49–1868/71	Bonar
Edward White	1874	Our Hope, June,	626–1894	A London periodical edited by Wm. Maude
N. H. Barbour	**1875**	**Herald of the Morning,** Sept & Oct.,	606–1914	Periodical published by Nelson H. Barbour
C. T. Russell	**1876**	**The Bible Examiner,** October,	606–1914	Edited by George Storrs
E. H. Tuckett	1877	The Rainbow, August,	651/50–1869/70	
M. P. Baxter	1880	Forty Coming Wonders, 5th ed.	695–1825	
" " "	1880	" " " "	620–1900	A second alternative
Grattan Guinness	1886	Light for the Last Days	606–1915	These are only some of his many, diverse
" " "	1886	" " " "	604–1917	analyses
" " "	1886	" " " "	598–1923	
" " "	1886	" " " "	587–1934	
W. E. Blackstone	1916	The Weekly Evangel, May 13	606–1915	This article sums up his viewpoints as
" " "	1916	" " " "	595–1926	published many years earlier
" " "	1916	" " " "	587–1934	

The 1914 date would most probably have drowned in the sea of other failed dates and been forgotten by now had it not happened to be the year of the outbreak of the First World War.

When, back in 1844, E. B. Elliott suggested 1914 as a possible terminal date for the Gentile times, he reckoned the 2,520 years from Nebuchadnezzar's *accession-year,* which he dated to 606 B.C.E. N. H. Barbour, however, reckoned the 2,520 years from the desolation of Jerusalem in Nebuchadnezzar's *18th* regnal year. But as he dated this event to 606 B.C.E., he, too, in 1875, arrived at 1914 as the terminal date. Since their chronologies not only conflicted with each other, but also conflicted with the historically established chronology for Nebuchadnezzar's reign, their arriving at the same terminal year was simply a coincidence, demonstrating how arbitrary and gratuitous their calculations really were.

Barbour's calculation was accepted by C. T. Russell at their meeting in 1876. Barbour was then fifty-two years old while Russell was twenty-four— still very young. Although their ways parted again in the spring of 1879, Russell stuck to Barbour's time calculations, and since that time the 1914 date has been the pivotal point in prophetic explanations among Russell's followers.

Supplement to the third and later editions, chapter 1:

The information presented in this chapter has been available to the Jehovah's Witnesses since 1983, when the first edition of this book was published. In addition, the same information was summarized by Raymond Franz in chapter 7 of his widely known work, *Crisis of Conscience,* published in the same year. Thus—after 10 years—in 1993 the Watch Tower Society finally felt compelled to admit that neither the 2,520-year calculation nor the 1914 date originated with Charles Taze Russell as it had held until then. Further, the Society now also admits that the predictions Russell and his associates attached to 1914 failed.

These admissions are found on pages 134–137 of *Jehovah's Witnesses—Proclaimers of God's Kingdom,* a book on the history of the movement published by the Watch Tower Society in 1993. Prior to 1993 the impression given had been that Russell was the first to publish the 2,520-year calculation pointing to 1914, doing this for the first time in the October, 1876 issue of George Storrs' magazine the *Bible Examiner.* Also, that decades in advance Russell and his followers foretold the outbreak of World War I in 1914 and

other events associated with the war. Thus the earlier organizational history book *Jehovah's Witnesses in the Divine Purpose* quoted some very general statements made in the book *The Plan of the Ages* (published in 1886) about the "time of trouble" (originally believed to extend from 1874 to 1914) and claimed:

> Although this was still decades before the first world war, it is surprising *how accurately the events that finally took place were actually foreseen.* (Emphasis added.)[85]

Similarly, *The Watchtower* of August 1, 1971, made the following pretentious statements on page 468:

> From the Bible chronology, Jehovah's witnesses as far back as 1877 pointed to the year 1914 as one of great significance. . . .
>
> The momentous year of 1914 came, and with it World War I, the most widespread upheaval in history up to that time. It brought unprecedented slaughter, famine, pestilence and overthrow of governments. *The world did not expect such horrible events as took place. But Jehovah's witnesses did expect such things, and others acknowledged that they did... .*
>
> *How could Jehovah's witnesses have known so far in advance what world leaders themselves did not know? Only by God's holy spirit making such prophetic truths known to them.* True, some today claim that those events were not hard to predict, since mankind has long known various troubles. But if those events were not hard to predict, *then why were not all the politicians, religious leaders and economic experts doing so? Why were they telling the people the opposite?* (Emphasis added.)

Unfortunately for the Watch Tower Society, none of these claims are in accordance with the facts of history. Whether deliberate or the result of ignorance, each represents a serious distortion of reality.

Firstly, although there were a number of predictions in the Watch Tower publications as to what would take place in 1914, *none of them came close to a prediction of the outbreak of a world war in that year.*

Secondly, political and religious leaders, *contrary* to the statements in *The Watchtower* quoted above, *long before 1914* expected that a great war sooner or later *would* break out in Europe. As early as 1871 *Otto von Bismarck,* the first Lord High Chancellor of the German Empire, declared that the "Great War" would come one day. For decades before 1914, the daily papers and weeklies were constantly occupied with the theme. To cite just one example among many, the January 1892 issue of the highly respected English weekly *Black and White* explained in an editorial introduction to a fictional serial on the coming war:

85 *Jehovah's Witnesses in the Divine Purpose* (Brooklyn, New York: Watchtower Bible & Tract Society, 1959), p. 31.

> The air is full of rumours of War. The European nations stand fully armed and prepared for instant mobilization. *Authorities are agreed that a GREAT WAR must break out in the immediate future,* and that this War will be fought under novel and surprising conditions. All facts seem to indicate that the coming conflict will be the bloodiest in history, and must involve the momentous consequences to the whole world. At any time the incident may occur which will precipitate the disaster.[86]

I. F. Clarke, in his book *Voices Prophesying War 1763–1984,* explains to what an extent the First World War "was being prepared in fact and in fiction":

> From 1871 onwards the major European powers prepared for the great war that Bismarck had said would come one day. And for close on half a century, while the general staffs and the ministries argued about weapons, estimates, and tactics, the tale of the war-to-come was a dominant device in the field of purposive fiction.... The period from the eighteen-eighties to the long-expected outbreak of the next war in 1914 saw the emergence of the greatest number of these tales of coming conflicts ever to appear in European fiction.[87]

The people of that time, therefore, could not avoid being confronted with the constant predictions of a coming great war in Europe. The question was not *if* but *when* the Great War would break out. Here there was room for speculations, and many of the imaginative tales and novels suggested different dates. Specific dates were sometimes even pointed out in the very titles of the books, for example, *Europa in Flammen. Der deutsche Zukunftskrieg 1909* ("Europe in Flames. The Coming German War of 1909"), by Michael Wagebald, published in 1908, and *The Invasion of 1910,* by W. LeQueux, published in 1906.

Politicians and statesmen, too, sometimes tried to pinpoint the specific year for the outbreak of the expected great war. One of the more lucky was *M. Francis Delaisi,* a member of the French Chamber of Deputies. In his article "*La Guerre qui Vient"* ("The Coming War"), published in the parish periodical *La Guerre Sociale* in 1911, he discusses at great length the diplomatic situation, concluding that "a terrible war between England and Germany is preparing." As shown by the following extracts from his article, some of his political forecasts turned out to be remarkably accurate:

> A conflict is preparing itself compared with which the horrible slaughter of the Russo-Japanese war [in 1904–05] will be child's play. In 1914 the [naval] forces of England and Germany will be almost equal. A Prussian army corps will advance with forced marches to occupy Antwerp. We, the French, will have to do the fighting on the Belgian plains.

86 Quoted by I. F. Clarke in *Voices Prophesying War 1763–1984* (London: Oxford University Press, 1966), pp. 66, 67.
87 *Ibid.,* p. 59.

> All newspapers will print in headlines as large as your hand these prophetic words: THE BELGIUM NEUTRALITY HAS BEEN VIOLATED. THE PRUSSIAN ARMY IS MARCHING UPON LILLE.[88]

In the religious area, it was especially the "millennarians" that were then presenting predictions of the approaching end of the world. This movement included millions of Christians from different quarters, Baptists, Pentecostals, and so on. Pastor Russell and his followers, the "Bible Students," were just a small branch of this broad movement. Common to them all was their pessimistic view of the future. In his book *Armageddon Now!* Dwight Wilson describes their reaction to the outbreak of the Great War in 1914:

> The war itself came as no shock to these opponents of postmillennial optimism; they had not only looked toward the culmination of the age in Armageddon, but anticipated 'wars and rumors of wars' as signs of the approaching end.[89]

Wilson then goes on to quote one of them, R. A. Torrey, dean of the Bible Institute of Los Angeles, who, in 1913, one year before the outbreak of the war, wrote in his book, *The Return of the Lord Jesus: "*We talk of disarmament, but we all know it is not coming. All our present peace plans will end in the most awful wars and conflicts this old world ever saw!"[90]

As Theodore Graebner tells in his book *War in the Light of Prophecy,* the war of 1914 had scarcely begun before a great host of writers from different religious quarters arose, claiming that the war had been foretold:

> Soon the announcement was made by several investigators: IT HAS BEEN FORETOLD. Immediately thousands of Bible Christians became interested. Immediately, too, others set to work on Gog and Magog, Armageddon, the Seventy Weeks, 666, 1,260, etc., and soon religious periodicals, in this country and abroad, contained the message, announced with greater or less assurance, IT HAS BEEN FORETOLD. Pamphlets and tracts appeared promulgating the same message, and soon a number of books were on the market, running to 350 pages each, which not only contained most circumstantial 'proof' for this assertion, but announced likewise the exact time when the war would come to a close, who would be the victor, and the significance of the war for the Christian Church, now (it was said) about to enter into her millennial period.[91]

88 Quoted by Theodore Graebner in his book, *War in the Light of Prophecy. "Was it Foretold?" A Reply to Modern Chiliasm* (St. Louis, Mo.: Concordia Publishing House, 1941), pp. 14, 15.

89 Dwight Wilson, *Armageddon Now!* (Grand Rapids: Baker Book House, 1977), pp. 36, 37.

90 *Ibid.*. p. 37.

91 Graebner, *op. cit.,* p. 8, 9.

Graebner, who felt incited to examine a great number of these contentions, after a very thorough investigation concludes that:

> . . . the entire mass of millennial literature that flourished during the First World War—and a tremendous mass it was—was proved definitely, completely, absolutely, false *by the events*. In not a single point did the First World War develop as was to be expected after reading the chiliastic [millennialist] interpreters. Not a single [one] of them predicted the outcome of the war. Not a single [one] of them foretold the entrance of the United States. Not a single [one] of them foretold World War II.[92]

Pastor Russell's speculations about the coming great war in Europe did not differ appreciably from those of the contemporary novel-writers and millenarian expositors. In the *Zion's Watch Tower* of February, 1885, he wrote: "Storm clouds are gathering thick over the old world. It looks as though a great European war is one of the possibilities of the near future."[93]

Commenting on the prevailing world situation two years later he concluded, in the issue of February, 1887: "This all looks as though next Summer [1888] would see a war on foot which might engage every nation of Europe."[94] In the issue of January 15, 1892, he had postponed the war to "about 1905," at the same time *stressing that this generally expected Great War had nothing to do with 1914 and the expectations attached to that date.* In 1914 he expected—not a general European war—but the climax of the "battle of Armageddon" (which he thought had begun in 1874), when all the nations on earth would be crushed and be replaced by the kingdom of God. He wrote:

> The daily papers and the weeklies and the monthlies, religious and secular, are continually discussing the prospects of war in Europe. They note the grievances and ambitions of the various nations and predict that war is inevitable at no distant day, that it may begin at any moment between some of the great powers, and that the prospects are that it will eventually involve them all. . . .
>
> But, notwithstanding these predictions and the good reasons which many see for making them, we do not share them. That is, we do not think that the prospects of a general European war are so marked as is commonly supposed. . . . Even should a war or revolution break out in Europe sooner than 1905, we do not consider it any portion of the severe trouble predicted. . . . [The] ever-darkening war cloud will burst in all its destructive fury. This culmination we do not expect, however, before about 1905, as the events predicted will require about that time, notwithstanding the rapid progress in these directions now possible.[95]

92 *Ibid.,* pp. 9, 10.
93 *Reprints,* p. 720.
94 *Reprints,* p. 899.
95 *Reprints,* pp. 1354–1356.

The generally expected Great War finally came in 1914. But probably none, and in any case not Charles Taze Russell and his followers, had predicted that it would come that year. The very different events that he and his associated "Bible Students" had attached to that date did not occur. Like the predictions of the many other contemporary millennarian writers, their predictions, too, were proved "definitely, completely, absolutely, false *by the events.*"

To claim afterwards, as the Watch Tower Society repeatedly did up to 1993, that they and they alone "accurately," "by God's holy spirit," had predicted the outbreak of the war in 1914 and other events, and that "all the politicians, religious leaders, and economic experts" had been "telling the people the opposite," is demonstrably an outright lie.

As explained earlier, some of those pretentious claims were finally, in 1993, withdrawn in the new book *Jehovah's Witnesses—Proclaimers of God's Kingdom*. The book was introduced at the district assemblies of Jehovah's Witnesses that year as a "candid look" at the history of the movement. The admissions, however, usually are contextually surrounded by a minimum of background information which, moreover, is so apologetically slanted and warped that it often conceals more than it reveals.

True, the Society finally admits that Russell took over his calculation of the Gentile times from Nelson H. Barbour, who had published it one year before Russell "in the August, September, and October 1875 issues of the *Herald of the Morning.*"[96] In the preceding paragraph the book even seeks to enlist the 19th-century expositors of the 2,520-year calculation as supporting the 1914 date. This impression is further enhanced by the bold-typed statement to the left of the paragraph: "**They could see that 1914 was clearly marked by Bible prophecy.**" The presentation of the history, however, is narrowly limited to a few carefully selected expositors, the calculations of whom are partially obscured, adjusted and arranged so as to create the impression that the 2,520-year calculation *uniquely pointed forward to 1914. None of the many other terminal dates arrived at by expositors before Russell are mentioned.* Thus, although John A. Brown is stated to have arrived at the 2,520 years "as early as 1823," his particular application of the period is completely veiled and distorted in the subsequent sentences:

96 *Jehovah's Witnesses—Proclaimers of God's Kingdom* (Brooklyn, New York: Watchtower Bible & Tract Society, 1993), p. 134.

subtitle "Herald of Christ's Presence," which appeared on the cover of *Zion's Watch Tower*.

Recognition of Christ's presence as being invisible became an important foundation on which an understanding of many Bible prophecies would be built. Those early Bible Students realized that the presence of the Lord should be of primary concern to all true Christians. (Mark 13:33-37) They were keenly interested in the Master's return and were alert to the fact that they had a responsibility to publicize it, but they did not yet clearly discern all the details. Yet, what God's spirit did enable them to understand at a very early time was truly remarkable. One of these truths involved a highly significant date marked by Bible prophecy.

End of the Gentile Times

The matter of Bible chronology had long been of great interest to Bible students. Commentators had set out a variety of views on Jesus' prophecy about "the times of the Gentiles" and the prophet Daniel's record of Nebuchadnezzar's dream regarding the tree stump that was banded for "seven times."—Luke 21:24, *KJ*, Dan. 4:10-17.

They could see that 1914 was clearly marked by Bible prophecy

As early as 1823, John A. Brown, whose work was published in London, England, calculated *the seven times" of Daniel chapter 4 to be 2,520 years in length. But* he did *not* clearly discern the date with which the prophetic time period began or when it would end. He did, however, *connect these "seven times" with the Gentile Times of Luke 21:24.* In 1844, E. B. Elliott, a British clergyman, drew attention to *1914 as a possible date* for the end of the "seven times" of Daniel, but he also set out an alternate view that pointed to the time of the French Revolution. Robett Seeley, of London, in 1849, handled the matter in a similar manner. At least by 1870, a publication edited by Joseph Seiss and associates and printed in Philadelphia, Pennsylvania, was setting out calculations *that pointed to 1914 as a significant date,* even though the reasoning it contained was based on chronology that C. T. Russell later rejected.

Then, in the August, September, and October 1875 issues of *Herald of the Morning, N.* H. Barbour helped to harmonize details that had been pointed out by others. Using chronology compiled by Christopher Bowen, a clergyman in England, and published by E. B. Elliott, Barbour identified *the start of the Gentile Times with King Zedekiah's removal from kingship as foretold at Ezekiel 21:25, 26,* and he pointed to *1914 as marking the end of the Gentile Times.*

Early in 1876, C. T. Russell received a copy of *Herald of the Morning.* He promptly wrote to Barbour and then spent time with him in Philadelphia during the summer, discussing, among other things, prophetic time periods. Shortly thereafter, in an article entitled "Gentile Times: When Do

Page 134 of *Jehovah's Witnesses—Proclaimers of God's Kingdom* (1993), the Watch Tower Society's new book on the history of the movement.

> But he did not clearly discern the date with which the prophetic time period began or when it would end. He did, however, *connect these 'seven times' with the Gentile Times of Luke 21:24.*[97]

Quite to the contrary, as shown in the chapter above, Brown expressly stated as his *firm conviction* that the 2,520-year period began in 604 B.C.E. and would end *in 1917*. Further, despite the Society's italicized statement, Brown *did not* connect the 2,520 years with the Gentile times of Luke 21:24, because, as pointed out in the chapter above, he held the Gentile times referred to in this text to be 1,260 (lunar) years, not "seven times" of 2,520 years. (See footnote 20 above.) Both statements about Brown's calculation, then, are demonstrably false.

In addition to John A. Brown, the Society in the same paragraph refers to Edward B. Elliott and Robert Seeley, both of whom mentioned 1914 as one of the possible dates for the end of the "seven times." Both of them, however, actually *preferred* 1793 (later changed to 1791 by Elliott) as the terminal date.[98]

Finally, an unnamed publication edited by Joseph Seiss and others is stated to have set out calculations that pointed to 1914 as a significant date, "even though the reasoning it contained was based on chronology that C. T. Russell later rejected."[99]

The fact is, however, that this holds true of *all* four expositors mentioned by the Society. *All of them used a chronology that dated the desolation of Jerusalem to 588 or 587 B.C.E.* (not 606 B.C.E. as in Russell's writings). Brown arrived at 1917 as the terminal date only because he reckoned the 2,520 years from the *first year* of Nebuchadnezzar (604 B.C.E.) instead of his 18th year, as did Barbour and Russell. And the other three arrived at 1914 by counting from Nebuchadnezzar's *accession- year,* which they dated

97 *Ibid.,* p. 134.

98 The Watch Tower Society gives no specific references. E. B. Elliott first published his calculations in *Horae Apocalypticae,* 1st ed. (London: Seeley, Burnside, and Seeley, 1844), vol. III, pp. 1429–1431. Robert Seeley published his calculations in *An Atlas of Prophecy: Being the Prophecies of Daniel & St. John* (London: Seeley's, 1849), p. 9. See also footnote 30 of chapter I.

99 The unnamed publication is the *The Prophetic Times* magazine. The calculation was presented in the article "Prophetic Times. An Inquiry into the Dates and Periods of Sacred Prophecy," written by an anonymous contributor and published in the issue of December, 1870, pp. 177–184. The author, on pages 178 and 179, presents *12 different starting-points for the times of the Gentiles, extending from 728 to 598 B.C.E., thus arriving at 12 different terminal dates extending from 1792 to 1922 C.E.!* The year 1914 is the next to the last of these terminal dates. The calculation pointing to 1914 is counted from the *accession-year* of Nebuchadnezzar, which the author, like Elliott and Seeley, dates to 606 B.C.E. Thus he, too, followed a chronology that dates the destruction of Jerusalem to 588 or 587 B.C.E., not 606 B.C.E. as in Russell's writings or 607 B.C.E. as in later Watch Tower publications.

to 606 B.C.E. (instead of 605 B.C.E., the date established by modern historians).[100]

Although all of them based their calculations on chronologies that were rejected by Russell and his followers, the Society claims that these expositors "could see that 1914 was clearly marked by Bible prophecy." How they "could see" this "clearly" by using chronologies that the Society still holds to be false is certainly puzzling. Of course, for a reader to discover such inconsistent reasonings, he or she has to check the works of these expositors. The problem is that the Society's authors commonly avoid giving specific references. This practice makes it virtually impossible for the great majority of readers to discover the subtle methods used to support indefensible interpretations and cover over embarrassing evidence.

As just mentioned, the Society, contrary to earlier claims, concedes in the new book that the predictions attached to 1914 failed. As was shown in the chapter above, the very specific and distinct predictions about 1914 were summarized in seven points on pages 76–78 of Vol. II of *Millennial Dawn,* originally published in 1889. These predictions were there put forward in no uncertain terms. The discussion is teeming with words and phrases such as "facts," "proof," "Bible evidence," and "established truth." That 1914 would see "the disintegration of the rule of imperfect men," for instance, is stated to be "a fact firmly established by the Scriptures.[101]

What does the Society's new history book do with the pretentious claims and the very positive language that originally encapsulated these predictions? They are totally smoothed over or concealed. Referring to the above-mentioned discussion of the Gentiles times in Vol. II of *Millennial Dawn—but* without quoting any of the *actual statements* made—the Society asks: "But what

100 As shown in the chapter above, Barbour and Russell, too, started the Gentile times in 606 B.C.E., although this was held to be the date for the desolation of Jerusalem in the *eighteenth* year of Nebuchadnezzar. The 606 B.C.E. date is nowhere mentioned in the Society's new book, probably because the Society today uses 607 B.C.E. as the starting-point. Reminding the readers of the earlier date, therefore, might only seem confusing at least to those who have never heard of it. How the Society in 1944 (in the book *The Kingdom is at Hand,* p. 175) managed to change the starting-point from 606 to 607) B.C.E. and still retain 1914 as the terminal date has a strange history of its own, a history that has been recounted in the booklet *The Watchtower Society and Absolute Chronology* (Lethbridge, Alberta, Canada, 1981), authored by "Karl Burganger" (a pen name I used at that time). See also next chapter, pp. 77–84.

101 *The Time is at Hand (=Vol* .II of *Millennial Dawn,* later called *Studies in the Scriptures)* Pittsburgh: Watch Tower Bible & Tract Society, 1889, pp. 76–102.

would the end of the Gentile Times mean?" The surprising answer given is that the Bible Students "were not completely sure what would happen"!

Although some of the predictions are briefly mentioned, the Society carefully avoids terming them "predictions" or "prophecies." Russell and his associates never "predicted" or "foretold" anything, never claimed to present "proof" or "established truth." They just "thought," "suggested," "expected," and "earnestly hoped" that this or that "might" happen, but they "were not completely sure."[102] Thus the predictions are wrapped up in language that completely masks the true nature of the aggressive doomsday message proclaimed to the world by the International Bible Students for over a quarter of a century before 1914. Disguising the presumptuous predictions in such vague and unassuming words and phrases, of course, makes it easier to "humbly" concede that these failed.

102 *Jehovah's Witnesses—Proclaimers of God's Kingdom* (1993), page 135.

2

BIBLICAL AND SECULAR CHRONOLOGY

IN DEFENDING the date of 607 B .CE. as the time of the desolation of Jerusalem and the starting point for calculating the length of the Gentile times, representatives of the Watch Tower Society claim that they are relying on the Bible. Those who date the desolation to 587 or 586 B.C.E. are said to rely on secular sources rather than the Bible. The anonymous author of the "Appendix to chapter 14" of the book "*Let Your Kingdom Come,"* for instance, states:

> We are willing to be guided primarily by God's Word rather than by a chronology that is based principally on secular evidence or that disagrees with the Scriptures.[1]

Such statements obviously intend to create the impression that those who reject the 607 B.C.E. date for the desolation of Jerusalem have no real faith in the Bible. But do such statements give a fair description of the matter? Or are they just sanctimonious disparagement, aimed at defaming the Christian character of those who disagree, not with the Scriptures, but with the Watch Tower Society's datings? Or may it even be that the defenders of the Society's chronology have themselves not really understood the true nature of Biblical chronology?

The nature of the Biblical chronology

Today, people read or use the terms B.C. and A.D. (corresponding to B.C.E. and C.E.) and generally give no thought to the origin of these designations. Actually, the "Christian era," in which events

1 *"Let Your Kingdom Come"* (Brooklyn, New York: Watchtower Bible and Tract Society, 1981), p. 189.

are dated in relation to the year of the birth of Christ, is a rather late construction. As is well established, the system was not introduced until the sixth century C.E. by the Roman monk and scholar Dionysius Exiguus. Another 500 years would pass, however, before this new era had been generally accepted as a dating system in the Catholic world.

Since the Bible was written long before the time of Dionysius Exiguus, it does not, of course, give any dates according to our Christian era. Thus, although the Watch Tower Society dates the baptism of Jesus to 29 C.E., the 20th year of Artaxerxes I to 455 B.C.E., the fall of Babylon to 539 B.C.E., and the desolation of Jerusalem to 607 B.C.E., none of these dates are found in the Bible. The Bible gives *relative datings* only. What does that imply?

Consider this relevant example: In 2 Kings 25:2 the desolation of Jerusalem is dated to the "eleventh year of King Zedekiah," the last king of Judah. Verse 8 additionally tells us that this occurred in the "nineteenth year of King Nebuchadnezzar, king of Babylon."

But when was that? How far from our own time was it? How many years before the Christian era did it happen? The fact is that the Bible *gives no information whatsoever that, of itself, links up these datings with our Christian era.*

Similarly, the books of Kings and Chronicles tell about the kings who ruled in Israel and Judah from Saul, the first king, on to Zedekiah, the last one. We are told who succeeded whom, and for how many years each of them ruled. By summing up the lengths of reign from Saul to Zedekiah we can measure the approximate space of time (there are many uncertain points) between these two kings. In this way we find that the period of the Hebrew monarchies covered roughly 500 years. But still we have found no answer to the question: *At what point on the stream of time did this period start and at what point did it end?*

If the Bible had gone on to give a continuous and unbroken series of regnal years from Zedekiah all the way down to the beginning of the Christian era, the question would have been answered. But Zedekiah was the last of the Jewish line of kings and his reign ended centuries before Christ's coming. Nor does the Bible give any other information that directly identifies for us the length of the period from Zedekiah's "eleventh year" (when Jerusalem was desolated) to the beginning of the Christian era. Thus we have a period of roughly 500 years, the period of the Hebrew monarchies, but we are not told how far from our time this period was and how it can be fixed to our Christian era.

If the Bible had preserved dated and detailed descriptions of *astronomical* events, such as solar and lunar eclipses, or the positions of the planets in relation to different stars and constellations, this would have made our problem easier. Modern astronomers, with their knowledge of the regular movements of the moon and the planets, are able to calculate the positions these heavenly bodies held on the starry sky thousands of years ago. But the fact is that the Bible provides no information of this kind.

The Bible of itself, then, does not show how its chronological datings may be connected with our own era. A chronology that is in this sense "hanging in the air" is simply the type of chronology called a *relative chronology*. Only if the Biblical information supplied us with the exact distance from the time of Zedekiah up to our own era—either by the aid of a complete and coherent line of lengths of reign, or by detailed and dated astronomical observations—we would have had an *absolute chronology,* that is, a chronology that gives us the exact distance from the last year of Zedekiah to our own time.[2] It seems evident that the Bible writers themselves were not concerned about supplying this, their focus simply being on other matters. What source, then, can we look to to make the connection with our era reckoning?

Is there a "Bible chronology" without secular sources?

Despite the *relative* nature of the Biblical dates, it is nonetheless not impossible to date events mentioned in the Bible. If we were able to synchronize the chronology of the Bible with the chronology of another country, whose chronology in turn can be fixed to our Christian era, then it would be possible to convert the Bible's *relative* chronology into an *absolute* chronology. This means, however, that we would have to rely on *extra-Biblical,* that is, on *secular historical sources,* in order to date events in the Bible.

2 Dr. Michael C. Astour explains: "Absolute chronology means dating reigns, wars, treaties, destructions, rebuildings, and other events known from written and archaeological records, in terms of modem Western time reckoning, i.e., in years B.C." *(Hittite History and Absolute Chronology of the Bronze Age,* Partille, Sweden: Paul Åströms förlag, 1989, p. 1.) Such a chronology is usually best established by the aid of recorded ancient astronomical observations. As the renowned expert on ancient astronomy, Professor Otto Neugebauer, puts it, "an 'absolute chronology' [is] a chronology which is based on astronomically fixed dates in contrast to a 'relative chronology' which tells us only the length of certain intervals, e.g., the total of regnal years in a dynasty.' — *A History of Ancient Mathematical Astronomy,* Book VI (Berlin-Heidelberg-New York: Springer-Verlag, 1975), p. 1071.

And we have no other alternative. If we want to know when, in relation to our own time, an event mentioned in the Bible took place—be it the date for the fall of Babylon, the date for the desolation of Jerusalem by Nebuchadnezzar, the date for the rebuilding of the temple in the reign of Darius I, or any other date whatever—then *we are obliged to turn to the secular historical sources.* This is the sober fact every Bible believer has to accept, whether he or she likes it or not. The simple truth is that—as relates to connecting with our Christian era reckoning—without *secular sources there is no Bible chronology, no datings of Biblical events in terms of years "B.C.E." or "C.E."*

This also means, of course, that to speak of using the "chronology of the Bible" as a unilateral, independent time-measurer by which the correctness of a certain date can be established, is simply to ignore reality. When, for instance, some Witnesses point to the fact that modern historians date the fall of Babylon to 539 B.C.E. and then claim that "the chronology of the Bible is *in agreement* with this date," they show they have not really understood what the *relative* nature of the Biblical chronology actually implies .Where does the Bible assign a *date* for the fall of Babylon? A Witness might refer to Jeremiah's prophecy of the "seventy years" leading up to Babylon's fall. But on what *date* did those seventy years *begin,* so as to count forward to their end? There is none supplied. Since the Bible does not give any date at all, not even a specific *relative* date, for the fall of Babylon, the statement that the Bible "*agrees"* with the secular dating of this event to 539 B.C.E. is completely meaningless.[3] And it is equally

3 According to secular sources Babylon was captured by Persian king Cyrus' troops in the 17th year of Nabonidus, which was thus to become the "accession-year" of Cyrus. (For the Babylonian accession year system, see the Appendix for Chapter 2.) Although the fall of Babylon is referred to several times in the Bible, the event is not dated to any specific regnal year, neither that of Nabonidus (who is not even mentioned) nor of Cyrus. Isaiah (chapters 13, 14, 21, 45, 47, 48) and Jeremiah (chapters 25, 27, 50, 51) both predicted the fall of Babylon, but *neither of them gave any date for the event.* Daniel, in chapter 5, verses 26–28, predicted that the fall of Babylon was imminent. Then, in verses 30 and 31, he states that "in that very night" Belshazzar (the son of Nabonidus) was killed and was succeeded by "Darius the Mede." But who was "Darius the Mede"? The Watch Tower Society admits that the historical identification of this figure "is uncertain" The suggestion (of Professor D. J. Wiseman) that "Darius the Mede" is but another name for Cyrus himself is rejected. *(Insight on the Scriptures, Vol.* 1, Brooklyn, New York: Watchtower Bible and Tract Society, 1988, pp. 581–583.) Further, although Daniel 6:28 mentions "the reign of Darius" and "the reign of Cyrus the Persian," and although Daniel 9:1 mentions the "first year" of "Darius the Mede," the Bible neither gives the 1ength of the reign of "Darius the Mede" nor does it indicate if his reign should be inserted between the fall of Babylon and the first year of Cyrus or not. Thus, although the Bible (in 2 Chronicles 36:22, 23 and Ezra 1:1–4) states that the Jewish exiles were released "in the first year of Cyrus," it does not show *how long after the fall* of Babylon this occurred. The Bible, then, does not give even a relative date for the fall of Babylon.

meaningless and misleading to state that the secular date for the desolation of Jerusalem, 587 or 586 B.C.E., *disagrees* with the chronology of the Bible, since the absolute date for that event is not given in the Bible either.

What of the 70 years of Jeremiah 25:11, 12 and 29:10, on which Witnesses rely so heavily in their chronology? Witnesses quite naturally hold to the Watch Tower Society's claim that these 70 years refer to the period of Jerusalem's desolation, reckoned from the 18th year of Nebuchadnezzar to the return of the Jewish exiles in the 1st year of Cyrus (that is, his first full or *regnal* year, following his *accession* year, which began in 539 B.C.E.). As a result of this view, the time interval between the dates historians have established for these two events—587/86 and 538/37 B.C.E.—appears too short, by some 20 years. The Watch Tower Society, therefore, chooses to reject one of the two dates. They could reject the date for Nebuchadnezzar's 18th year (587/86 B.C.E.) or reject the date for Cyrus' first regnal year (538/37 B.C.E.). They reject the first date, 587/86 B.C.E. On what basis do they reject *that* date and not the *other?*

There is no *Biblical* reason for this choice. As pointed out earlier, the Bible itself neither agrees nor disagrees with either of these two dates, dates stated in terms of the Christian era reckoning. The Bible, therefore, simply does not provide the means for deciding which of the two dates is the better one, in terms of being firmly established. On what grounds, then, should the choice be made—provided that the Society's interpretation of the 70 years is correct?

The most logical, sound and scholarly method would be to accept the date that is most clearly established by the extra-Biblical historical sources. This is because these sources **do** supply the data needed to link up with our Christian era reckoning. And, as will be demonstrated in the next two chapters, these sources show very definitely that, of the two dates just considered, the chronology of Nebuchadnezzar's reign is much better established by astronomical and other documents than is the chronology of Cyrus' reign. If a choice were really necessary, and a Bible-believing Christian were faced with choosing, the natural choice, then, should be to retain the 587/86 B .C.E. date and reject the 538/37 B.C.E. date.

Yet the Watch Tower Society prefers the *opposite* choice. Since the reason for this is not because the Bible itself favors one of these dates over the other, and it is certainly not because the historical evidence does so, what is the *real* reason for their choice?

Loyalty to the Bible—or to a prophetic speculation?

If, according to their claims, the 70-year period of Jeremiah's prophecy really should be reckoned from the 18th year of Nebuchadnezzar to the 1st year of Cyrus , the Watch Tower Society should logically have started with 587/86 B.C.E. as historically *the more reliable* of the two dates. Counting 70 years forward from that date would point to 518/17 B.C.E. as the first year of Cyrus instead of 538/37. This would be*' as Biblical* and actually *more scholarly* than to retain 538/37 B.C.E. and reject 587/86 (the date having the stronger documentary and astronomical support).

Why, then, does the Watch Tower Society reject 587/86 B.C.E. instead of rejecting 538/37?

The answer is obvious. The 587/86 B.C.E. date is in direct conflict with the Watch Tower Society's chronology for the "times of the Gentiles." In that chronology, their 607 B.C.E. date for the desolation of Jerusalem is the indispensable starting-point. Without the date of 607 B.C.E. the Society could not arrive at 1914 C.E. as the ending point. And as this date is the very *cornerstone* of the prophetic claims and message of the Watch Tower organization, nothing is allowed to upset it, *neither the Bible nor historical facts.* At heart, therefore, it is neither a question of loyalty to the Bible nor loyalty to historical facts. The choice of date has quite another motive: *Loyalty to a chronological speculation that has become a vital condition for the divine claims of the Watch Tower organization.*

In the next two chapters it will be demonstrated that the whole Neo-Babylonian chronology is firmly established by at least *seventeen different lines of evidence.* Thus the 587/86 date for the 18th year of Nebuchadnezzar (and the desolation of Jerusalem) and the 538/ 37 date for the first year of Cyrus are *both* correct. That none of these dates are in conflict with the 70 years of Jeremiah (Jeremiah 25:11, 12 and 29:10) will be demonstrated in a subsequent chapter.

The collapse of the original starting-point

To repeat: *Without secular sources there is no absolute chronology for dating events in the Scriptures.* The Watch Tower Society has itself had to yield to this inevitable, though embarrassing, fact. The very first thing the Society has been forced to do, therefore, *in order to have any Bible chronology at all,* is to turn to the *secular* sources and select a date on which its chronology can be based. The date they have chosen is the date historians have established for the fall of

Babylon, *539 B.C.E.* This secular date, therefore, is the very foundation of what the Society presents as its "Bible chronology" Why did the Society choose this date as the basis for its chronology? And how did the historians arrive at this date?

When Charles Taze Russell first adopted Nelson H. Barbour's "Bible chronology," 536 B.C.E.—not 539 B .CE.—was the secular basis on which that chronology had been established. This date was believed to be, not that of Babylon's fall, but *the first year of Cyrus*. By adding the "seventy years" to 536 they got 606 B.C.E. as the date for the desolation of Jerusalem, and by subtracting 606 from 2,520 (the supposed number of years in the Gentile times) they arrived at 1914.

Originally Barbour claimed that the 536 B.C.E. date was derived from the ancient kinglist known as "Ptolemy's Canon.[4] In time, however, it was discovered that this was not the case. This kinglist not only points to *538 B.C.E.* as the first full year of Cyrus, but also *to 587 B.C.E. as the date for the 18th year of Nebuchadnezzar,* the year of Jerusalem's desolation. When these facts dawned upon Russell he rejected the kinglist and started to attack its supposed originator, Claudius Ptolemy. He still believed, however, that 536 B.C.E. was a generally accepted date for the first year of Cyrus, stating:

> *All students of chronology* may be said to be agreed that the first year of Cyrus was the year 536 before the beginning of *our Anno Domini* era.[5]

4 On page 194 of his book *Three Worlds, or Plan of Redemption* (Rochester, N.Y., 1877), for instance, Barbour asserted: "The fact that the first year of Cyrus was B.C. 536, is based upon Ptolemy's canon, supported by the eclipses by which the dates of the Grecian and Persian era have been regulated. And the accuracy of Ptolemy's canon is now accepted by all the scientific and literary world."

5 *Zion's Watch Tower,* May 15, 1896, pp. 104, 105, 113 (= *Reprints,* pp. 1975, 1980. Emphasis added). — It is true that many earlier Christian chronologers, including archbishop James Ussher and Sir Isaac Newton, dated the first year of Cyrus to 536 instead of 538 B.C.E. The reason for this was their application of the "seventy years" of Jeremiah 25:11,12 and Daniel 9:2 to the period from the first year of Nebuchadnezzar to the capture of Babylon by Cyrus. This seemed to conflict with "Ptolemy's Canon," which gives only 66 years to this period (604–538 B.C.E.). To arrive at 70 years, Nebuchadnezzar's first year was often moved back from 604 to 606 B.C.E., while the first year of Cyrus was moved forward to 536 B.C.E. The two years from 538 to 536 B.C.E. were allotted to "Darius the Mede." The discovery of the thousands of cuneiform tablets from the Neo-Babylonian era in the 1870's completely overthrew these theories, as was pointed out already as far back as 1876 by Mr. George Smith. (See S. M. Evers, "George Smith and the Egibi Tablets," *1raq,* Vol. LV 1993, p. 113.)

As time went by, some Bible Students discovered that this statement was not true, either. In a private letter to Russell dated June 7, 1914, one of his closest associates, Paul S. L. Johnson, pointed out to him that nearly all historians held 538 B.C.E. to be the first year of Cyrus. "I have consulted a dozen encyclopedias," he wrote, "and all except three give 538 B.C. as the date."[6] Russell, however, ignored this information, and so did Joseph F. Rutherford, his successor as president of the Watch Tower Society.

Not until 1944, in the book "*The Kingdom Is at Hand,"* did the Watch Tower Society finally abandon the 536 B.C.E. date. By steps, Cyrus' first year was moved backwards, first to 537 B.CE. and then, five years later, to 538 B.C.E., the date pointed to by "Ptolemy's Canon."[7]

To retain 1914 as the termination date of the Gentile times, other "adjustments" had to be made. To begin with, even though the first year of Cyrus started in the spring of 538 B.C.E., the *Watchtower* argued that his edict permitting the Jews to return home from the exile (Ezra 1:1–4) was issued *towards the end* of his first regnal year, that is, early in 537 B.C.E. In that case the Jews departing from Babylon could not have reached Jerusalem until the autumn of that year. By adding 70 years to 537 the desolation of Jerusalem was then fixed to 607 B.C.E. instead of 606. Next, the fact that no "zero year" is included at the beginning of our Christian era was finally acknowledged.[8] So from the autumn of 607 B.C.E. to the beginning of our era was only 606 years and three months; and if this period is subtracted from the 2,520 years, 1914 is still arrived at as the termination date. Hence, three separate "errors" were made to cancel each other out, and the upshot was the same! Each adjustment was made with the retention of 1914 as its goal.

Yet, to have the secular basis of the Watch Tower Society's "Bible chronology" moved around in this arbitrary way was hardly confidence-inspiring. For the future, therefore, Cyrus' first regnal year (538 B.C.E.) was not stressed as the "firmly established" starting-point. Instead, the stress was transferred to the date historians had established for the fall of Babylon, 539 B.C.E. This

6 This letter was published as an Appendix to Paul S. L. Johnson's reprint of the second volume of *Studies in the Scriptures* (Philadelphia, PA., U.S.A., 1937), pp. 367–382. See especially p. 369.

7 *"The Kingdom Is at Hand"* (Brooklyn, New York: Watchtower Bible and Tract Society, 1944), p. 175; *The Watchtower,* Nov. 1, 1949, p. 326.

8 This problem had been noted as early as in 1904, but the error had never been corrected. See *The Watch Tower of* December 1, 1912, p.377 (=*Reprints, pp.5141,* 5142). See also above, page 53.

date was soon to be termed an "absolute date" in the Watch Tower publications. But *why* was this particular date viewed as an "absolute date"?

539 B.C.E.—the "Absolute date for the Hebrew Scriptures"?

At first, beginning in 1952, the Watch Tower Society explained that the date 539 B.C.E. for the fall of Babylon had been "firmly established" by the cuneiform tablet known as the *Nabonidus Chronicle.*[9] Evidently for this reason it was felt that this date could be used as the new basis for the Society's B.C.E. chronology. In the next two decades, therefore, the year 539 B.C.E. was not only described as an "absolute date," but as "*the outstanding Absolute date for the B.C. period of the Hebrew Scriptures."*[10] What is the reality in this regard? Does the historical evidence justify this impressive language and what does it show as to the Watch Tower writers' understanding of secular chronology?

The Nabonidus Chronicle: This cuneiform document dates the fall of Babylon to the "16th day" of "the month of Tashritu," evidently in the 17th year of Nabonidus. Unfortunately, the text is damaged, and the words for "17th year" are illegible. But even if these words had been preserved, the chronicle would not have told us anything more than that Babylon was captured on the 16th day of Tishri (Babylonian *Tashritu)* in Nabonidus' 17th year. *This information in itself cannot be translated to 539 B.C.E.* It requires *additional* secular evidence to place Nabonidus' 17th year within our era reckoning and allow for our assigning it a date within that reckoning.

In spite of this, Watch Tower publications continued to give the impression that the Nabonidus Chronicle of itself fixed the *absolute* date for the fall of Babylon.[11] Not until 1971, in an article entitled "Testimony of the Nabonidus Chronicle," was it finally conceded that this tablet did not fix the year for the fall of Babylon. Quoting

9 See *The Watchtower* of May 1, 1952, p. 271. "This date," said *The Watchtower* of February 1, 1955, on page 94, "is made Absolute by reason of the archaeological discovery and deciphering of the famous *Nabunaid Chronicle,* which itself gives a date for the fall of Babylon and which figure specialists have determined equals October 13, 539 B.C., according to the Julian calendar of the Romans."

10 *The Watchtower,* February 1, 1955, p. 94. (Emphasis added.) The book "*All Scripture Is Inspired by God and Beneficial"* (Brooklyn, N.Y.: Watchtower Bible and Tract Society of New York, Inc., 1963) similarly designated 539 B.C.E. as the "Absolute Date for the Hebrew Scriptures." (p. 282)

11 *The Watchtower* of August 15, 1968, p. 490, for instance, stated: "The fixing of 539 B.C.E. *as the year* when this historical event occurred is based on a stone document known as the Nabonidus (Nabunaid) Chronicle." (Emphasis added.) Compare also *The Watchtower* of May 1, 1968,p. 268.

the date given in the chronicle (the 16th day of Tashritu), the writer of the article frankly states: "But does the Nabonidus Chronicle of itself provide the basis for establishing *the year* for this event? No."[12]

Although the principal witness in support of the "absolute date for the Hebrew Scriptures" was thus retracted, the Society was not prepared to make yet another change in the secular basis of its "Bible chronology." Other witnesses, therefore, had to be searched out and summoned to the stand. In the very same *Watchtower* article quoted above, a reference was made to two new sources which in the future would "sustain" the absolute date 539 B.C.E.:

> Also other sources, including Ptolemy's Canon, point to the year 539 B.C.E. as the date for Babylon's fall. For example, *ancient historians such as Diodorus, Africanus and Eusebius* show that Cyrus' first year as king of Persia corresponded to *Olympiad 55, year 1* (560/59 B.C.E.), while Cyrus' last year is placed at *Olympiad 62, year* 2 (531/30 B.C.E.). . . . Cuneiform tablets give Cyrus a rule of nine years over Babylon. This would harmonize with the accepted date for the start of his rule over Babylon in 539 B.C.E.[13]

Thus the new validating sources consisted of (1) *Ptolemy's Canon,* and (2) *dates from the Greek Olympiad Era quoted by ancient historians.* Can any of these sources establish 539 B.C.E. as an "absolute date" to which the Biblical chronology may be firmly fixed?

Ptolemy's Canon: As was shown earlier, Russell at first buttressed his chronology by reference to Ptolemy's Canon. But when he discovered that the 536 B.C.E. date for Cyrus' first year was not supported by it, he rejected the Canon. And although the Watch Tower finally pushed back Cyrus' 1st year to 538 B.C.E. in agreement with Ptolemy's Canon, the Society's chronology is still in conflict with the Canon at other points.

The sum total of the lengths of reign given by the Canon for the Neo-Babylonian kings prior to Cyrus, for example, point to 587

12 *The Watchtower,* May 15, 1971,p. 316 (emphasis added). When it was discovered that the Nabonidus Chronicle did not establish 539 B.C.E. as an "absolute date," this term was dropped in the Watch Tower publications. In *Aid to Bible Understanding,* 539 is called "a pivotal point" (p. 333), a term also used in the 1988 revised edition. *(Insight on the Scriptures,* Vol. 1, p. 458) At other times it is just stated that "historians calculate" or "hold" that Babylon fell in 539 B.C.E.—See *"Let Your Kingdom Come"* (Brooklyn, N.Y.: Watchtower Bible and Tract Society, 1981), pp. 136, 186.

13 *The Watchtower, May* 15, 1971, p. 316. (Emphasis added.) This statement was also included in the Watch Tower Society's Bible dictionary, *Aid to Bible Understanding* (1971), p. 328. It is still retained in the revised 1988 edition *(Insight on the Scriptures,* Vol. 1, p. 454).

B.C.E., not 607 B.C.E., as the date for the desolation of Jerusalem in Nebuchadnezzar's 18th regnal year. Further, the Watch Tower Society also rejects the figures given by Ptolemy's Canon for the reigns of Xerxes and Artaxerxes I.[14] To use the Canon in support of the 539 B.C.E. date while at the same time *rejecting* its chronology for periods falling *prior to* and *after* this date would be totally inconsistent.

Evidently realizing this, the Watch Tower Society in the very next year once again rejected Ptolemy's Canon, declaring that "the very purpose of the Canon makes absolute dating by means of it impossible."[15] If this were true, the Society could not, of course, use the Canon in support of the 539 B.C.E. date.

With Ptolemy's Canon thus removed, the secular basis of the Society's "Bible chronology" now wholly depended on the trustworthiness of the second witness, *the Greek Olympiad Reckoning.* How about this era reckoning? In what way does it fix Babylon's fall to 539 B.C.E., and to what an extent can Olympic dates quoted by ancient historians be relied upon?

The Olympiad Era: The first year assigned to this era is 776 B.C.E. This year, therefore, is designated as "O1. I,1 ," that is, the first year of the first Olympiad. Now this does not mean that the first Olympic *games* took place in 776 B.C.E. Ancient sources indicate that these games began to be held much earlier. Nor does it mean that already back in 776 B.C.E. the Greeks had started an era founded upon the Olympic games. *As a matter of fact no reference to the Olympiad era may be found in all ancient literature until the third century B.C.E.!* As Professor Elias J. Bickerman points out, "the

14 According to Ptolemy's Canon, Xerxes ruled for 21 years (485–464 B.C.E.) and Artaxerxes I for 41 years (464–423 B.C.E.). In order to have the 20th year of Artaxerxes I fixed to 455 instead of 445 B.C.E., the Society sets the beginning of his reign 10 years earlier, thus making it 51 years instead of 41. As this would displace *all dates prior to Artaxerxes I by 10 years,* including the date for the fall of Babylon, the Society has *subtracted 10 years from Xerxes' sole reign, making it 11 years instead of 21!* The only reason for these changes is that they are necessitated by the Society's particular application of the "seventy weeks" of Daniel 9:24–27. This application was originally suggested by the Jesuit theologian Dionysius Petavius *in De Doctrina Tempo rum,* a work published in 1627. Many others picked up the idea, including the Anglican archbishop James Ussher in the same century. In 1832 the German theologian E. W. Hengstenberg included a lengthy defense of it in his well-known work *Christologie des Alten Testaments.* Since then, however, the idea has been completely demolished by archaeological findings. This has been demonstrated in a separate study published on the web:
http://user.tninet.se/~oof408u/fkf/english/artaxerxes.htm
For the readers convenience, this study has been added at the end of the present book.

15 *Awake!,* May 8, 1972, p. 26.

numbering of Olympiads was introduced by Timaeus or by Eratosthenes"[16] And Dr. Alan E. Samuel specifies: "The Olympiad reckoning system, originated by Philistus, was subsequently used in an historical context by Timaeus, and from then on we find historical chronologies based on Olympiads."[17] Timaeus Sicilus wrote a history of Sicily, his native country, in 264 B.C.E., and Eratosthenes, a librarian at the famous library in Alexandria in Egypt, published his *Chronographiae* some decades later.

The Olympiad reckoning, then, like the Christian era, was introduced *more than 500 years* after the year that was chosen as the starting-point for that era! How did the Greek historians manage to fix the date for the first Olympiad as well as other dates (for example, the first year of Cyrus) hundreds of years later? What kind of sources were at their disposal?

They studied *lists of victors* in the quadrennial games kept at Olympia. But unfortunately such lists had not been kept continuously all the way from the beginning. As Dr. Samuel points out, the first list was "drawn up by Hippias at the end of the fifth century B.C.," that is, around 400 B.C.E.[18] "By Hellenistic times the list of victors was complete and reasonably consistent and the framework for chronology was established and accepted."[19] But was the list reliable? Samuel continues: "Whether all this was right, or whether events were assigned to years correctly, is another matter." Pointing out that "the shrewd Plutarch [c. 46–c. 120 C.E.] had his doubts," he goes on to caution that "we too should be very dubious about chronographic evidence from Olympiads much before the middle or beginning of the fifth century [i.e., before 450 or 500 B.C.E.]"[20]

The Watch Tower Society's confidence in the Olympiad reckoning is even more illusory, however. This is because, while they accept the Olympiad dates given by ancient historians for the reign of Cyrus, they reject the Olympiad dates given by these historians for the reign of Artaxerxes I, despite the fact his reign fell *much closer* to our time. Thus, when Julius Africanus, in his *Chronography* (published c. 221/22 C.E.), dates the 20th year of

16 Elias J. Bickerman, *Chronology of the Ancient World,* revised edition (London: Thames and Hudson, 1980), p. *75.*

17 Alan E. Samuel, *Greek and Roman Chronology* (München: C. H. Beck'sche Verlagsbuchhandlung, 1972), p. 189.

18 A. E. Samuel, *op. cit.,* p. 189.

19 *1bid.,* p. 190.

20 *Ibid.,* p. 190. Bickerman *(op. cit.,* p. 75) agrees: "The trustworthiness of the earlier part of the list of Olympic victors, which begins in 776 BC, is doubtful."

Artaxerxes to the "4th year of the 83rd Olympiad," corresponding to 445 B.C.E., this date is rejected by the Watch Tower Society in preference of 455 B.C.E., as was noted earlier (footnote 14).[21] As in the case of Ptolemy's Canon, then, the Society again uses a witness that at other times is completely rejected, and this for the sole reason that in those areas the evidence is unfavorable to its teachings.

Aside from the Watch Tower Society's inconsistency, the Olympiad datings preserved by Diodorus, Africanus and Eusebius indicating 539 B.C.E. to be the date for the fall of Babylon, cannot alone be used to establish that date as an absolute date on which the chronology of the Hebrew Scriptures can be based. This is due to the simple fact, already presented, that the Olympiad reckoning system was not actually instituted until the third century B.C.E.—or three centuries *after* the fall of Babylon.

Astronomy and the year 539 B.C.E.

The preceding discussion of the Society's fruitless attempts to establish a secular basis for its particular "Bible chronology" epitomizes the content of a booklet published in 1981, *The Watch Tower Society and Absolute Chronology.*[22] Perhaps it was this exposure that—directly or indirectly-incited the Society's writers to make another attempt to establish the 539 B.C.E. date. At any rate, a new discussion of the date was published in 1988 in the Society's revised Bible dictionary, *Insight on the Scriptures,* in which the authors now try to fix the date *astronomically.*

As explained earlier (in footnote 2), an absolute chronology is usually best established with the assistance of astronomically-fixed dates. In the 1870s and 1880s, excavations in Babylonia unearthed a great number of cuneiform texts containing descriptions of astronomical events dating from the Babylonian, Persian and Greek eras. These texts provide numerous absolute dates from these periods.

The most important astronomical text from the Neo-Babylonian era is a so-called astronomical "diary," a record of about *thirty* astronomical observations dated to the 37th year of Nebuchadnezzar. This tablet, which is kept in the Berlin Museum (where it is designated *VAT 4956),* establishes 568/67 B.C.E. as

21 *The Ante-Nicene Fathers,* ed. A. Roberts and J. Donaldson, Vol. VI (Grand Rapids, Michigan: Wm. B. Eerdmans Publishing Co., reprint of 1978), p. 135.

22 Karl Burganger, *The Watch Tower Society and Absolute Chronology* (Lethbridge, Canada: Christian Koinonia International, 1981), pp. 7–20. See above, p.70, note 100.

the absolute date for the 37th year of Nebuchadnezzar. This date obviously implies that his *18th year,* during which he desolated Jerusalem, corresponds to 587/86 B.C.E. That is 20 years later than the 607 B.C.E. date assigned to that event by the Watch Tower Society. A detailed discussion of this and other astronomical texts is given in chapter four.

The Watch Tower Society's concern, then, is somehow to bypass the use of any such unfavorable ancient text and find a way to establish the date of 539 B.C.E. *independently* of it, thereby avoiding conflict with the corollary evidence the text supplies that undermines a 607 B.C.E. date for Jerusalem's fall. To what astronomical evidence do they resort?

Strm. Kambys. 400: The astronomical text, designated *Strm. Kambys. 400,* is the text now used by the Watch Tower Society to establish the 539 B.C.E. date. It is a tablet dated to the seventh year of Cambyses, the son of Cyrus.[23] Referring to two lunar eclipses mentioned in the text—eclipses which modern scholars have "identified with the lunar eclipses that were visible at Babylon on July 16, 523 B.C.E., and on January 10, 522 B.C.E.,"—the Society concludes:

> Thus, this tablet establishes the seventh year of Cambyses II as beginning in the spring of 523 B.C.E. This is an astronomically confirmed date?[24]

To what does this lead? If 523/22 B .C.E. was the seventh year of Cambyses, his *first year* must have been 529/28 B.C.E. and the preceding year, 530/29 B.C.E., must have been the *last year* of his predecessor, Cyrus. To arrive at the date for the fall of Babylon, however, we also need to know the length of Cyrus' reign. For this, the Society is forced to accept the information found in another type of cuneiform texts, the *contract tablets,* that is, dated business and administrative documents. Of these they state:

> The latest tablet dated in the reign of Cyrus II is from the 5th month, 23rd day of his 9th year.... As the ninth year of Cyrus II as king of Babylon was 530 B.C.E., his first year according to that reckoning was 538 B.C.E. and his accession year was 539 B.C.E.[25]

23 This text, which is designated *Strm. Kambys. 400,* is not exactly a "diary" in the strict sense, although it is closely related to this group of texts.

24 *Insight on the Scriptures,* Vol. 1 (Brooklyn, New York: Watchtower Bible and Tract Society of New York, Inc., 1988), p. 453.

25 *Ibid.,* p. 453.

To establish the date 539 B.C.E., then, the Society unreservedly accepts several ancient secular sources: (1) a Babylonian astronomical tablet, and (2) Babylonian contract tablets dated to the reign of Cyrus. Yet, on the following pages of the same article (pages 454–456) other documents *of the very same type-astronomical* texts and contract tablets-are *rejected because of their support for the date 587 B.C.E. for the destruction of Jerusalem!*

If the Society's criticism of these astronomical diaries (mainly their being later copies of an original) were valid, that criticism would apply with equal force to their favored *Strm. Kambys. 400.* Like *VAT 4956, Strm. Kambys. 400* is a copy of an earlier original. In fact, it may hardly even be termed a copy. The eminent expert on astronomical texts, F. X. Kugler, pointed out as early as 1903 that this tablet is only partly a copy. The copyist was evidently working from a very defective text, and therefore tried to fill in the *lacunae* or gaps in the text by his own calculations. Thus only a portion of *Strm. Kambys. 400* at best contains observations. The rest are additions by a rather unskilled copyist from a much later period. Kugler commented that "*not one of the astronomical texts I know of offers so many contradictions and unsolved riddles as Strm. Kambys. 400.*"[26]

By contrast, *VAT 4956* is one of the best preserved diaries. Although it is also a later copy, experts agree that it is a faithful reproduction of the original.

There is some evidence that the lunar eclipses shown on *Strm. Kambys. 400,* referred to in the book *Insight on the Scriptures* were calculated rather than observed.[27] The point here made, though, is not the validity or lack of validity of those particular observations, but that, while applying certain criteria as a basis for *rejecting* the

26 Franz Xaver Kugler, "Eine rätselvolle astronomische Keilinschrift (Strm. Kambys. 400)," *Zeitschrift für Assyriologie,* Vol. 17 (Strassburg: Verlag von Karl J. Trübner, 1903), p. 203. For a transcription and translation of the text, see F. X. Kugler, *Sternkunde* und Stemdienstin Babel, Buch I (Münsterin Westfalen: Aschendorffsche Verlagsbuchhandlung, 1907), pp. 61–75.

27 Dr. John M. Steele summarizes the present scholarly view of *Strm. Kambys. 400* in the following words: "It is also unwise to base any conclusions concerning the Babylonian records on this tablet alone, since it does not fall into any of the common categories of text. In particular, it is not certain whether this text contains observations or calculations of the phenomena it records.... There is also debate concerning whether the two lunar eclipses were observed or calculated."—John M. Steele, *Observations and Predictions of Eclipse Times by Early Astronomers (= Archimedes,* Vol. 4. Dordrecht/Boston/ London: Kluwer Academic Publishers, 2000), p. 98.

evidence of *VAT 4956,* the Watch Tower Society does not let *the same criteria* affect its *acceptance* of *Strm. Kambys. 400* because it views this document as giving apparent support to its claims. This repeated inconsistency results from the same "hidden agenda" of seeking to protect a historically unsupported date.

Actually, to fix the date for the fall of Babylon, it is much safer to start with the reign of Nebuchadnezzar and count *forward,* instead of beginning with the reign of Cambyses and counting *backward.* The date 539 B.C.E. for the fall of Babylon was, in fact, first determined this way, as pointed out by Dr. R. Campbell Thompson in *The Cambridge Ancient History:*

> The date 539 for the Fall of Babylon has been reckoned from the latest dates on the contracts of each king in this period, counting from the end of Nabopolassar's reign in 605 B.C., *viz.,* Nebuchadrezzar, 43: Amel-Marduk, 2: Nergal-shar-usur, 4: Labashi-Marduk (accession only): Nabonidus, 17 = 66.[28]

The Watch Tower Society, however, accepts only *the end product* of this reckoning (539 B.C.E.), but rejects the reckoning itself and its starting point, because these contradict the date 607 B.C.E. The Society rejects the astronomical texts in general and *VAT 4956* in particular; on the other hand, it is forced to accept the most problematic one—*Strm. Kambys. 400.* Surely, it would be difficult to find a more striking example of inconsistent, misleading scholarship.

As has been demonstrated above, 539 B.C.E. is not a logical starting-point for establishing the date for the desolation of Jerusalem. The most reliable dates in this period (in the 6th century B.C.E.) that may be established as absolute fall much earlier, within the reign of Nebuchadnezzar, a reign that is directly fixed to our era by *VAT 4956* and other astronomical texts.

Further, the Bible provides a *direct synchronism* between the reign of Nebuchadnezzar and the desolation of Jerusalem. As pointed out earlier, 2 Kings 25:8 explicitly states that this desolation occurred in the "nineteenth year of King Nebuchadnezzar."[29] By

28 R. Campbell Thompson, "The New Babylonian Empire," *The Cambridge Ancient History,* ed. J.B. Bury, S. A. Cook, F. E. Adcock, Vol. III (Cambridge: Cambridge University Press, 1925), p. 224, ftn. 1.

29 The "19th" year here evidently corresponds to the "18th" year according to the Babylonian system of reckoning the regnal years of kings. In Assyria and Babylonia, the year in which a king came to power was reckoned as his "accession-year," while his first year always started on Nisan 1, the first day of the next year. As will be discussed later, Judah at this time did not apply the "accession-year system," but counted the accession-year as the first year. See the Appendix for Chapter 2.

contrast, no such direct synchronism is given in the Bible for the fall of Babylon.[30]

But this is not all. The lengths of reigns of the Neo-Babylonian kings (as quoted from the contract tablets by Dr. R. Thompson above) from the first king, Nabopolassar, to the last one, Nabonidus, may be firmly established in a number of different ways. In fact, the chronology of this period may be established by at least *seventeen* different lines of evidence! This evidence will be presented in the next two chapters.

30 See earlier footnote 3.

3

THE LENGTH OF REIGNS OF THE NEO-BABYLONIAN KINGS

PEOPLE MAY believe the most peculiar ideas, not because there is any evidence to show that they are *true,* but because there is little or no evidence to show that they are *false.* For many centuries people believed that the earth was flat, simply because this view could not easily be tested and disproven. Many ideas that have been tied to prophecies in the Bible also definitely belong to this category. These clearly include some appended to Jesus' statement about the "times of the Gentiles" at Luke 21:24.

For example, the Bible nowhere explicitly states:

1) that Jesus, in speaking of these "Gentile times," had in mind the "seven times" of Nebuchadnezzar's madness mentioned in the book of Daniel, chapter 4;
2) that these "seven times" were seven *years;*
3) that these "years" were not ordinary Babylonian calendar years, but "prophetic years" of 360 days each, and therefore should be summed up as 2,520 days;
4) that these 2,520 days not only applied to the period of Nebuchadnezzar's madness, but also would have a *greater* fulfillment;
5) that in this greater fulfillment *days* should be counted as *years,* so that we get a period of 2,520 years; and
6) that this 2,520-year period started when Nebuchadnezzar, in his 18th regnal year, desolated the city of Jerusalem.

None of these six assumptions can be verified by clear Biblical statements. They are, in fact, nothing but a *chain of haphazard guesses.* Yet, since the Bible does not discuss or even mention any of these ideas, it nowhere explicitly says they are false either.

However, when it is further claimed (7) that Nebuchadnezzar's desolation of Jerusalem took place in 607 B.C.E., we have reached a point in the train of thought that *can* be tested and disproven.

This is because the chronology of the Neo-Babylonian period does not fall within the area of unverifiable assumptions.

As will be demonstrated in this and the subsequent chapter, the length of the Neo-Babylonian period has been firmly established today by at least seventeen different lines of evidence, *fourteen* of which will be discussed in some detail in these two chapters.

In the previous chapter it was shown that the validity of the Watch Tower Society's prophetic interpretation of the 1914 date is intimately connected with the length of the Neo-Babylonian period.[1] That period ended when Babylon was captured by the armies of the Persian king Cyrus in 539 B.C.E., an acknowledged, reliable date.

In the first year of his reign over Babylon, Cyrus issued an edict which permitted the Jews to return to Jerusalem. (2 Chronicles 36:22, 23; Ezra 1:1–4) According to the Watch Tower Society this ended the seventy-year period mentioned at Jeremiah 25:11, 12; 29:10; Daniel 9:2, and 2 Chronicles 36:21.

If, as the Society maintains, the Jewish remnant returned to Jerusalem in 537 B.C.E., the period of Babylonian domination would have begun seventy years earlier, or in 607 B.C.E.[2] And

1 The term "*Neo-Babylonian*" usually refers to the period that began with the reign of Nabopolassar (dated to 625–605 B.C.E.) and ended with Nabonidus (555–539 B.C.E.). It should be noticed, however, that many scholars use the term "Neo-Babylonian" of a more extended period. *The Assyrian Dictionary* (eds. I. J. Gelb et al., Chicago: Oriental Institute, 1956—), for example, starts the period in 1150 B.C.E. and ends it somewhere in the fourth century B.C.E. In the present work the term is confined to the Babylonian dynasty that began with Nabopolassar and ended with Nabonidus.

2 The first year of Cyrus extended from the spring (Nisan 1) of 538 to the spring of 537 B.C.E. If Ezra followed the Jewish method of counting the accession-year as the first year, he may have reckoned 539/38 as the first year of Cyrus. However that may be, the evidence is that Cyrus issued his edict not long after the fal1 of Babylon. The so-called *Cyrus Cylinder* shows that Cyrus, soon after the conquest of Babylon, issued a decree that allowed the different peoples that had been deported to Babylonia to return to their respective home countries. (James B. Pritchard [ed.], *Ancient Near Eastern Texts Relating to the Old Testament* [ANET], Princeton, New Jersey: Princeton University Press, 1950,p. 316.) Most likely the edict permitting the Jews to return to Jerusalem was a part of this general release of exiled peoples. As shown by the book of Ezra, the Jews who responded to the edict immediately began to organize themselves for the homeward journey (Ezra 1:5–2:70), and in "the seventh month" (Tishri, corresponding to parts of September and October) they had settled in their home cities. (Ezra 3:1) The context seems to imply that this was still in the "first year of Cyrus" (Ezra 1:1–3:1). Most authorities, therefore, conclude that this was in the autumn of 538 B.C.E. and *not* in 537 as the Watch Tower Society insists. (See for example Dr. T. C. Mitchell's discussion in *The Cambridge Ancient History,* 2nd ed., Vol. III:2, Cambridge: Cambridge University Press, 1991, pp. 430–432; also the thorough discussion of the historicity of Cyrus' edict by Elias Bickerman in *Studies in Jewish and Christian History,* Leiden: E. J. Brill, 1976, pp. 72–108.) The Watch Tower Society, however, cannot accept the 538 B.C.E. date for the return, as that would move the beginning of their seventy-year period back to 608 B.C.E. This, of course, would destroy their Gentile times calculation.

since the Watch Tower Society holds this seventy-year period to be a period of *complete desolation* of Judah and Jerusalem, we are told that it was in the year 607 B.C.E. that Nebuchadnezzar destroyed Jerusalem, in his eighteenth regnal year. (2 Kings 25:8; Jeremiah 52:12, 29) This event, it is assumed, started the 2,520 years, called the Gentile times, beginning in the year 607 B.C.E.

This starting-point, however, is incompatible with a number of historical facts.*

A. ANCIENT HISTORIANS

Up to the latter part of the nineteenth century the only way to determine the length of the Neo-Babylonian period was by consulting ancient Greek and Roman historians. Those historians lived hundreds of years after the Neo-Babylonian period, and unfortunately their statements are often contradictory.[3]

Those held to be the most reliable are 1) *Berossus* and 2) the compiler(s) of the kinglist commonly known as *Ptolemy's Canon,* sometimes also, and more correctly, referred to as the *Royal Canon.*

It seems appropriate to begin our discussion with a brief presentation of these two historical sources since, although neither of them *by themselves* provides conclusive evidence for the length of the Neo-Babylonian period, their ancient testimony certainly merits consideration.

3 These ancient historians include *Megasthenes* (3rd century B.C.E.), *Berossus* (c. 250 B.C.E.), *Alexander Polyhistor (1st* century B.C.E.), *Eusebius Pamphilus* (c. 260–340 C.E.), and *Georgius Syncellus* (last part of the 8th century C.E.). For a convenient overview of the figures given by these ancient historians, see Raymond Philip Dougherty, *Nabonidus and Belshazzar* (New Haven: Yale University Press, 1929), pp. 8–10; cf. also Ronald H. Sack, *Images of Nebuchadnezzar* (Selinsgrove: Susquehanna University Press; London and Toronto: Associated University Press, 1991), pp. 31–44.

* What follows in this and the subsequent chapter, in many cases involves information of a technical nature, accompanied by detailed documentation. While this contributes to the firm foundation of the dates established, it is also made necessary by attempts on the part of some sources to counteract the historical evidence, offering information that has an appearance of validity, even of scholarliness, but which, on examination, proves invalid and often superficial. Some readers may find the technica1 data difficult to follow. Those who do not feel they need all the details may turn directly to the summaries at the end of each of these two chapters. These summaries give a general idea of the discussion, the evidence presented, and the conclusions drawn from it.

A-1: Berossus

Berossus was a Babylonian priest who lived in the third century B.C.E.

In about 281 B.C.E. he wrote a history of Babylonia in Greek known as *Babyloniaca* or *Chaldaica* which he dedicated to the Seleucid king Antiochus I (281–260 B.C.E.), whose vast empire included Babylonia. Later Berossus abandoned Babylon and settled on the Ptolemaic island of Cos.[4]

His writings, unfortunately, have been lost, and all that is known about them comes from the twenty-two quotations or paraphrases of his work by other ancient writers and from eleven statements about Berossus made by classical, Jewish, and Christian writers.[5]

The longest quotations deal with the reigns of the Neo-Babylonian kings and are found in Flavius Josephus' *Against Apion* and in his *Antiquities of the Jews,* both written in the latter part of the first century C.E.; in Eusebius' *Chronicle* and in his *Preparation for the Gospel,* both from the early fourth century C.E., and in other late works.[6] It is known that Eusebius quoted Berossus indirectly via the Greco-Roman scholar Cornelius Alexander Polyhistor (first century B.C.E.).

Although some scholars have assumed that Josephus, too, knew Berossus only via Polyhistor, the evidence for this is lacking. Other scholars have concluded that Josephus had a copy of Berossus' work at hand, and recently Dr. Gregory E. Sterling has strongly argued that Josephus quoted directly from Berossus' work.[7] Scholars agree that the most reliable of the preserved quotations

4 Erich Ebeling and Bruno Meissner (eds.), *Reallexikon der Assyriologie,* Vol. II (Berlin and Leipzig: Walter de Gruyter & Co., 1938), pp. 2, 3.

5 A translation with an extensive discussion of these fragments was published by Pau1 Schnabel in *Berossos und die Babylonisch-Hellenistische Literatur* (Leipzig and Berlin: B. G. Teubner, 1923). The first complete English translation of the surviving fragments of Berossus' work has been published by Stanley Mayer Burstein in *The Babyloniaca of Berossus. Sources from the Ancient Near East,* Vol. 1, fascicle 5 (Malibu, Calif.: Undena Publications, 1978).

6 See Flavius Josephus, *Against Apion,* Book L19–21; *Antiquities of the Jews,* Book X:XI, 1. The *Chronicle* of Eusebius is preserved only in an Armenian version, except for the excerpts preserved in the *Chronographia* of the Byzantine chronicler Georgius Syncellus (late eighth and early ninth centuries C.E.).

7 Gregory E. Sterling, *Historiography and Self-Definition* (Leiden, New York, Köln: E. J. Brill, 1992), pp. 106, 260, 261.

from Berossus' work are those of Flavius Josephus.[8]

Where did Berossus get his information on the Neo-Babylonian kings?

According to his own words he "translated many books which had been preserved with great care at Babylon and which dealt with a period of more than 150,000 years."[9] These "books" included accounts of legendary kings "before the Flood" with very exaggerated lengths of reign.

His history of the dynasties after the Flood down to the reign of the Babylonian king Nabonassar (747–734 B.C.E.) is also far from reliable and evidently contained much legendary material and exaggerated lengths of reign.

Berossus himself indicates that it was impossible to give a trustworthy history of Babylonia *before Nabonassar,* as that king "collected and destroyed the records of the kings before him in order that the list of Chaldaean kings might begin with him."[10]

Despite these problems, however, for later periods, *and especially for the critical Neo-Babylonian period,* it has been established that Berossus used the generally very reliable Babylonian chronicles, or sources similar to these documents, and that he carefully reported

8 Burstein, for example, says: "The earliest are those made by Josephus in the first century A.D. from the sections concerning the second and particularly the third book of the *Babyloniaca,* the latter indeed *providing our best evidence for Berossus' treatment of the Neo-Babylonian period." (Op. cit.,* pp. 10, 11; emphasis added.) Josephus' lengthy quotation on the Neo-Babylonian era in *Against Apion* is best preserved in Eusebius' *Preparation for the Gospel,* Book IX, chapter XL. (See the discussion by H. St. J. Thackeray in *Josephus,* Vol. I [Loeb Classical Library, Vol. 38:I], London: William Heinemann, and New York: G. P. Putnam's Sons, 1926, pp. xviii, xix.) The deficient textual transmission of Eusebius' *Chronicle,* therefore, is of no consequence for our study. The Watch Tower Society, in its Bible dictionary *Insight on the Scriptures* (Vol. I, p. 453), devotes only one paragraph to Berossus. Almost the whole paragraph consists of a quotation from A. T. Olmstead's *Assyrian Historiography* in which he deplores the tortuous survival history of Berossus' fragments via Eusebius' *Chronicle* (cf. note 6 above). Although this is true, it is, as noted, essentially irrelevant for our discussion.

9 Burstein, *op. cit.,*p. 13. The Armenian version of Eusebius' *Chronicle* gives "2,150,000 years" instead of "150,000," the figure preserved by Syncellus. None of them is believed to be the original figure given by Berossus. (Burstein, p. 13, note 3.)

10 Burstein, *op. cit.,* p. 22.

their contents in Greek.[11] The figures he gives for the reigns of the Neo-Babylonian kings substantially agree with the figures given by those ancient cuneiform documents.

A-2: The Royal Canon

Ptolemy's Canon or, more correctly, the *Royal Canon* is a list of kings and their lengths of reign beginning with the reign of Nabonassar in Babylon (747–734 B.C.E.), through the Babylonian, Persian, Greek, Roman, and Byzantine rulers.

The kinglist had been included in the *Handy Tables* prepared by the famous astronomer and geographer *Claudius Ptolemy* (70–165 C.E.), who ended the list with the contemporary Roman ruler Antoninus Pius (C.E. 138–161).[12] That is why it has become known as *Ptolemy's Canon.* (See the facing page.) There is, however, evidence that kinglists of this type must have been in use long before the time of Claudius Ptolemy.

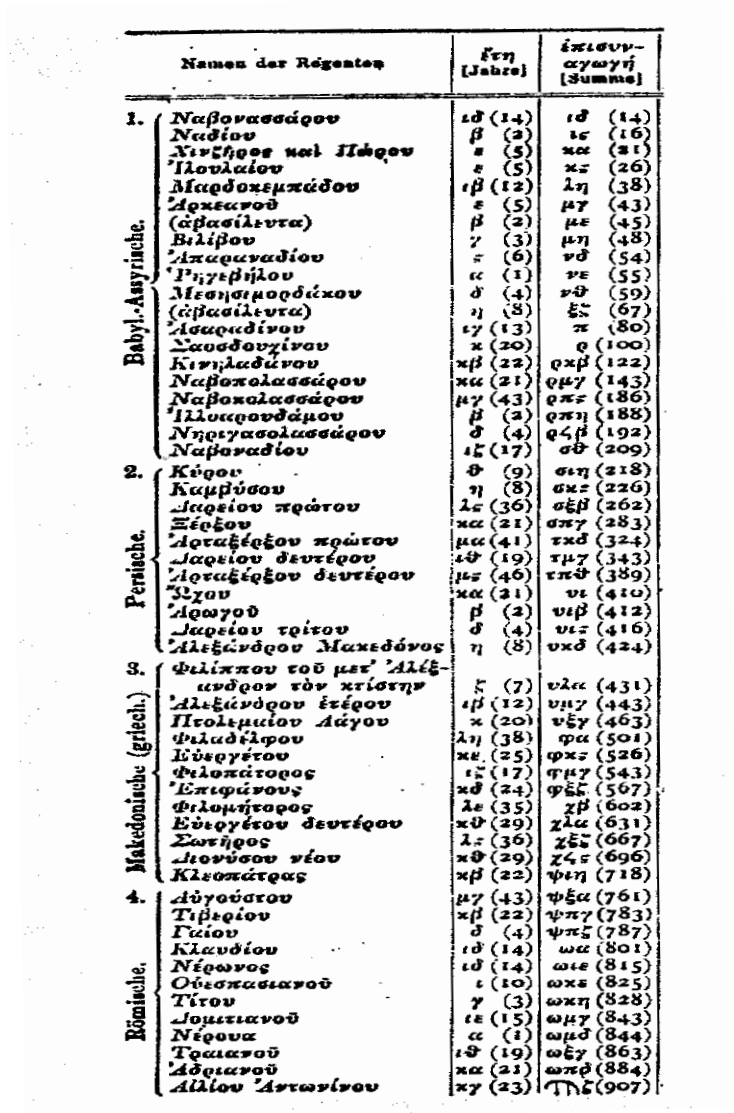
The reason why the kinglist could not have originated with Claudius Ptolemy is that a table of this kind was a prerequisite for the research and calculations performed by the Babylonian and Greek astronomers. Without it they would have had no means for dating the astronomical events their calculations showed as occurring in the distant past.

Ancient fragments of such kinglists written on papyrus have been found.[13] The renowned expert on Babylonian astronomy, F.

11 Burstein points out that, although Berossus made a number of surprising errors and exercised little criticism on his sources, "the fragments make it clear that *he did choose good sources, most likely from a library at Babylon, and that he reliably reported their contents in Greek"* (Burstein, *op. cit.,* p. 8. Emphasis added.) Robert Drews, in his article "The Babylonian Chronicles and Berossus," published in *Iraq,* Vol. XXXVII, part 1 (Spring 1975), arrives at the same conclusion: "That the chronicles were among these records cannot be doubted." (p. 54) This has been demonstrated by a careful comparison of Berossus' statements with the Babylonian chronicles. Paul Schnabel, too, concludes: "That he everywhere has used cuneiform records, above all the chronicles, is manifest at every step." — Schnabel, *op. cit.* (see note 5 above), p. 184.

12 The three oldest manuscripts of Ptolemy's *Handy Tables* containing the kinglist date from the eighth to tenth centuries. See Leo Depuydt, ―More Valuable than all Gold': Ptolemy's Royal Canon and Babylonian Chronology," in *Journal of Cuneiform Studies,* Vol. 47 (1995), pp. 101–106. The list of kings was continued by astronomers after Ptolemy well into the Byzantine period.

13 G. J. Toomer, *Ptolemy's Almagest* (London: Gerald Duckworth & Co., 1984), p. 10, ftn. 12. The fragments, however, are later than Ptolemy.



	Namen der Regenten	Ετη [Jahre]	ἐπισυναγωγή [Summe]
1. Babyl.-Assyrische.	Ναβονασσάρου	ιδ (14)	ιδ (14)
	Ναδίου	β (2)	ις (16)
	Χινζήρου καὶ Πώρου	ε (5)	κα (21)
	Ἰλουλαίου	ε (5)	κς (26)
	Μαρδοκεμπάδου	ιβ (12)	λη (38)
	Ἀρκεανοῦ	ε (5)	μγ (43)
	(ἀβασίλευτα)	β (2)	με (45)
	Βιλίβου	γ (3)	μη (48)
	Ἰμαρουδαμίου	ς (6)	νδ (54)
	Ῥηγεβήλου	α (1)	νε (55)
	Μεσησιμορδάκου	δ (4)	νθ (59)
	(ἀβασίλευτα)	η (8)	ξς (67)
	Ἀσαραδίνου	ιγ (13)	π (80)
	Σαοσδουχίνου	κ (20)	ϱ (100)
	Κινηλαδάνου	κβ (22)	ϱκβ (122)
	Ναβοπολασσάρου	κα (21)	ϱμγ (143)
	Ναβοπολασσάρου	μγ (43)	ϱπς (186)
	Ἰλλουαρουδάμου	β (2)	ϱπη (188)
	Νηριγασολασσάρου	δ (4)	ϱϙβ (192)
	Ναβοναδίου	ιζ (17)	σϑ (209)
2. Persische.	Κύρου	ϑ (9)	σιη (218)
	Καμβύσου	η (8)	σκς (226)
	Δαρείου πρώτου	λς (36)	σξβ (262)
	Ξέρξου	κα (21)	σπγ (283)
	Ἀρταξέρξου πρώτου	μα (41)	τκδ (324)
	Δαρείου δευτέρου	ιϑ (19)	τμζ (343)
	Ἀρταξέρξου δευτέρου	μς (46)	τπϑ (389)
	Ὤχου	κα (21)	νι (410)
	Ἀρωγοῦ	β (2)	νιβ (412)
	Δαρείου τρίτου	δ (4)	νις (416)
	Ἀλεξάνδρου Μακεδόνος	η (8)	υκδ (424)
3. Makedonische (griech.)	Φιλίππου τοῦ μετ' Ἀλέξανδρον τὸν κτίσαντα	ξ (7)	υλα (431)
	Ἀλεξάνδρου ἑτέρου	ιβ (12)	υμγ (443)
	Πτολεμαίου Λάγου	κ (20)	υξγ (463)
	Φιλαδέλφου	λη (38)	φα (501)
	Εὐεργέτου	κε (25)	φκς (526)
	Φιλοπάτορος	ιζ (17)	φμγ (543)
	Ἐπιφάνους	κδ (24)	φξζ (567)
	Φιλομήτορος	λε (35)	χβ (602)
	Εὐεργέτου δευτέρου	κϑ (29)	χλα (631)
	Σωτῆρος	λς (36)	χξζ (667)
	Διονύσου νέου	κϑ (29)	χϙς (696)
	Κλεοπάτρας	κβ (22)	ψιη (718)
4. Römische.	Δὶ γούστου	μγ (43)	ψξα (761)
	Τιβερίου	κβ (22)	ψπγ (783)
	Γαΐου	δ (4)	ψπζ (787)
	Κλαυδίου	ιδ (14)	ωα (801)
	Νέωνος	ιδ (14)	ωιε (815)
	Οὐεσπασιανοῦ	ι (10)	ωκς (825)
	Τίτου	γ (3)	ωκη (828)
	Δομετιανοῦ	ιε (15)	ωμγ (843)
	Νέρουα	α (1)	ωμδ (844)
	Τραιανοῦ	ιϑ (19)	ωξγ (863)
	Ἀδριανοῦ	κα (21)	ωπδ (884)
	Αἰλίου Ἀντωνίνου	κγ (23)	ΓΘζ (907)

The Royal Canon ("Ptolemy's Canon")

The kinglist begins with the reign of Nabonassar in Babylon (747–734 BCE) and ends with the Roman emperor Antoninus Pius (138-161 CE). From F. K. Ginzel, *Handbuch der matematischen und technischen Chronologie,* Vol. I :Leipzig 1906), p. 139.

X. Kugler, concluded that the so-called Ptolemy's Canon "had evidently been worked out by one or more experts on the Babylonian astronomy and chronology, and through the use in the Alexandrian school successfully had passed scrupulous indirect tests."[14] Dr. Eduard Meyer wrote in a similar vein about the canon in 1899, pointing out that, "as it belonged to the traditional material of knowledge of the astronomers, it was inherited from scholar to scholar; *not even Hipparchus* [2nd century B.C.E.] *could have gone without the Babylonian list.*"[15]

This is the reason why Professor Otto Neugebauer termed the expression "Ptolemy's Canon" a *misnomer:*

> It is a misnomer to call such chronological tables 'Ptolemaic canon.' Ptolemy's 'Almagest' never contained such a canon (in spite of assertions to the contrary often made in modern literature), but we know that a βασιλεων χρουογραφια [chronicle of kings] had been included in his 'Handy Tables' . . . . On the other hand, there is no reason whatsoever to think that royal canons for astronomical purposes did not exist long before Ptolemy.[16]

The canon, or kinglist, was therefore in use centuries before Claudius Ptolemy. It was inherited and brought up-to-date from one generation of scholars to the next.

It should be observed that the canon not only presents a running list of kings and their reigns; in a separate column there is a *running summary* of the individual reigns all the way from the first king, Nabonassar, to the end of the list. This system provides a double check of the individual figures, ensuring that they have been correctly copied from one scholar to the next. (See "The Royal Canon" on the preceding page.)

From what source did the compiler(s) of the Royal Canon get the kinglist? It was evidently compiled from sources similar to those used by Berossus. Friedrich Schmidtke explains:

14 Franz Xaver Kugler, *Sternkunde and Sterndienst in Babel,* II. Buch, II. Teil, Heft 2 (Munster in Westfalen: Aschendorffsche Verlagsbuchhandlung, 1924), p. 390. Translated from the German.

15 Eduard Meyer, *Forschungen zur alten Geschichte,* Zweiter Band (Halle a. S.: Max Niemeyer, 1899), pp. 453–454. Translated from the German. Emphasis added.

16 Otto Neugebauer, "'Years' in Royal Canons," *A Locust's Leg. Studies in honour of S. H. Taqizadeh,* ed. W. B. Henning and E. Yarshater (London: Percy Lund, Humphries & Co., 1962), pp. 209, 210. Compare also J. A. Brinkman in *A Political History of Post-Kassite Babylonia, 1158–722 B.C.* (Rome: Pontificium Institutum Biblicum, 1968),p. 22.

> With respect to the dependence of the sources, the Canon of Ptol[emy] has certainly to a great extent taken its stuff from the Bab[ylonian] Chron[icles]. This is clear from the characteristic *αβαοτλεντα ετη* [years of interregnum] 688–681, which is also found in the Chronicle (III, 28), while the King List A at this place introduces Sennacherib instead, as well as for the two *αβαοτλεντα ετη* 704–703. The Canon of Ptol. like the Chronicle reproduces here the Babylonian tradition, which did not recognize Sennacherib as the legitimate king, as he had sacked and destroyed Babylon.[17]

There is also some evidence that the Royal Canon reflects not only Babylonian chronicles, but also ancient Babylonian kinglists compiled by Babylonian scribes. Thus scholars have concluded that it was based upon Babylonian chronicles and kinglists, probably through intermediary sources, *but evidently independent of Berossus.*[18] This is a very important conclusion, as the figures given in the canon for the Neo-Babylonian kings are in substantial agreement with Berossus' earlier figures.

Thus we have two independent witnesses reflecting the length of the Neo-Babylonian era set out in the ancient chronicles, and even if those chronicles are only partially preserved on cuneiform tablets, their figures for the lengths of reign of the Neo-Babylonian kings have to all appearances been correctly transmitted to us via Berossus and the Royal Canon.[19]

17 Friedrich Schmidtke, *Der Aufbau der Babylonischen Chronologie* (Munster, Westf.: Aschendorffsche Verlagsbuchhandlung, 1952), p.41. Translated from the German.

18 Burstein, for example, points out that the canon "represents a Babylonian tradition about the first millennium B.C. that is independent of Berossus as can be seen from the order and forms of the names of the kings." *(Op. cit.,* p.38) On the same page Burstein gives a translation of the canon which, unfortunately, contains a couple of errors. The regnal years shown for Nebuchadnezzar, " 23", is a misprint for "43"; and the name "Illoaroudamos" in the canon corresponds to "Awel-Marduk", not "Labasi-Marduk". For a reliable publication of the canon, see, for example, E. J. Bickerman, *Chronology of the Ancient World,* revised edition (London: Thames and Hudson, 1980), pp. 109–111.

19 Of the two sources, the Royal Canon is clearly the better witness. As Professor J. A. Brinkman points out, the canon "is of known and praiseworthy accuracy." *(Op. cit.* [note 16 above], p. 35) Modern discoveries of Babylonian chronicles, kinglists, astronomical texts, etc., written in cuneiform may be shown to be in complete agreement with the canon all the way from the eighth century to the first century B.C.E. The evidence of this is briefly discussed in C. O. Jonsson, "The Foundations of the Assyro-Babylonian Chronology," *Chronology & Catastrophism Review,* Vol. IX (Harpenden, England: Society for Interdisciplinary Studies, 1987), pp. 14–23.

TABLE 1: THE REIGNS OF THE NEO-BABYLONIAN KINGS ACCORDING TO BEROSSUS AND THE ROYAL CANON

NAME	BEROSSUS	ROYAL CANON	B.C.E.
Nabopolassar	21 years	21 years	625–605
Nebuchadnezzar	43 years	43 years	604–562
Awel-Marduk*	2 years	2 years	561–560
Neriglissar	4 years	4 years	559–556
Labashi-Marduk	9 months	—	556
Nabonidus	17 years	17 years	555–539

*Called Evil-Merodach at 2 Kings 25:27 and Jeremiah 52:31.

The Royal Canon omits Labashi-Marduk, as it always reckons *whole* years only. Labashi-Marduk's short reign of only a few months fell in Neriglissar's last year (which was also the accession-year of Nabonidus).[20] The Royal Canon, therefore, could leave him out.

If these lists are correct, the first year of Nebuchadnezzar would be 604/ 603 B.C.E. and his eighteenth year, when he desolated Jerusalem, would be 587/86 B.C.E., not 607 B.C.E. as in Watch Tower chronology.

But even if these lists give a true representation of the lengths of reign given in the original Neo-Babylonian chronicles, how do we know that the chronological information originally contained in these chronicles is reliable? How can the lengths of reign of the kings be turned into an "absolute chronology"??[21]

20 As shown by contemporary cuneiform documents, Neriglissar died in the first month of his fourth regnal year (in late April or early May). His son and successor, Labashi-Marduk, was killed in a rebellion after a reign of about two months. The figure given by Berossus via Josephus, "9" months, is commonly regarded as a transmission error for an original "2" months, the Greek signs (=letters) for "9" (θ) and "2" (β) being quite similar. (R. A. Parker and W. H. Dubberstein, *Babylonian Chronology 626 B.C.–A.D.* 75, Providence: Brown University Press, 1956, p. 13.) The *Uruk King List* (discussed below) indicates a rule of three months for Labashi-Marduk, which undoubtedly refers to the city of Uruk, where he was recognized as king for parts of three months (Nisanu, Ayyaru, and Simanu) according to the contract tablets.—Paul-Alain Beaulieu, *The Reign of Nabonidus, King of Babylon, 556–539 B.C.* (New Haven and London: Yale University Press, 1989), pp. 86–90.

21 As pointed out in the previous chapter, an absolute chronology is best established by the aid of astronomically fixed dates. Claudius Ptolemy, in his famous work *Almagest,* records a large number of ancient astronomical observations, many of which are detailed descriptions of lunar eclipses. One of these is dated to the fifth year of Nabopolassar and has been identified with one that took place in 621 B.C.E. If this was the fifth year of Nabopolassar, his 21 years of reign would be fixed to 625–605 B.C.E. The first year

*B. THE CUNEIFORM DOCUMENTS**

Today, historians do not need either Berossus or the Royal Canon in order to fix the length of the Neo-Babylonian period. Its length may be firmly established in many other ways, thanks to the numerous cuneiform documents discovered from this period.

It is a remarkable fact that more cuneiform documents have been excavated from the Neo-Babylonian period than from any other pre-Christian era. Literally *tens of thousands* of texts have been found, primarily consisting of business, administrative, and legal documents, but there are also historical documents such as chronicles and royal inscriptions.

Most important are the discovery of *astronomical* cuneiform texts recording dated observations of the moon and the planets from the period. Most of this material is written in the Akkadian language and has been unearthed in Mesopotamia since the middle of the nineteenth century.

The first group of documents of interest to us fall within the category shown on the following page, with others on subsequent pages.

of his son and successor, Nebuchadnezzar, would then have begun in 604 B .C.E. and his 18th year (when he desolated Jerusalem) in 587. Some scholars, however, have questioned the reliability of the astronomical observations recorded by Ptolemy. In his sensational book, *The Crime of Claudius Ptolemy* (Baltimore and London: The Johns Hopkins University Press, 1977), Dr. Robert R. Newton claimed that Ptolemy fudged, not only a large body of the observations he says he made himself, but also a number of the observations he records from earlier periods. (The evidence is, though, that all observations from earlier periods recorded by Ptolemy were taken over from the Greek mathematician Hipparchus [second century B.C.E.], who in turn got them directly from Babylonian astronomers. See G. J. Toomer's article, "Hipparchus and Babylonian Astronomy," in *A Scientific Humanist. Studies in Memory of Abraham Sachs,* eds. E. Leichty, M. del·. Ellis, & P. Gerardi, Philadelphia, 1988, pp. 353–362.) On the assumption that Ptolemy was the originator of "Ptolemy's Canon," Newton also felt that Ptolemy's supposed forgery may have extended to *inventing* the lengths of reign in this kinglist. But as the kinglist was not a creation of Ptolemy, Newton was mistaken in this. In earlier editions of the present work Newton's claims and the ensuing debate they have caused in scholarly journals were discussed at some length. This digression from the main subject has been left out in this edition not only for reasons of space, but also because the observations recorded by Ptolemy really are of little importance for our discussion. It should be noted, however, that "very few historians of astronomy have accepted Newton's conclusions in their entirety."— Dr. James Evans in the *Journal for the History of Astronomy,* Vol. 24 Parts 1/2,1993, pp. 145, 146. (Dr. Newton died in 1991.) An article on R. R. Newton and the Royal Canon is published on the web: http://user.tninet.se/~oof408u/fkf/english/newtpol.htm For the readers convenience, this article has been added to the material at the end of the present book.

* "Cuneiform" refers to the "wedge-shaped" script used on these ancient clay tablets. The signs were impressed on the damp clay with a pointed stick or reed (stylus).

B-1: Chronicles, kinglists, and royal inscriptions

a) Neo-Babylonian Chronicles

A chronicle is a form of historical narrative covering a sequence of events.

Several cuneiform chronicles covering parts of Neo-Babylonian history have been discovered, all of which are kept in the British Museum, London. Most of them are probably copies of (or extracts from) original documents written contemporary with the events.[22]

The most recent translation of them has been published by A. K. Grayson in *Assyrian and Babylonian Chronicles.*[23] Grayson subdivides the Babylonian chronicles into two parts, the first of which is called the Neo-Babylonian Chronicle Series *(Chronicles 1–7). Chronicle 1 (*= B.M. 92502) begins with the reign of Nabonassar (747–734 B.C.E.) and ends with the accession-year of Shamash-shuma-ukin (668 B.C.E.). *Chronicles 2–7* begin with the accession-year of Nabopolassar (626 B.C.E.) and continue into the beginning of the reign of Cyrus (538 B.C.E.).

What do these "chronicles" consist of? With respect to the contents of the chronicles, Grayson explains:

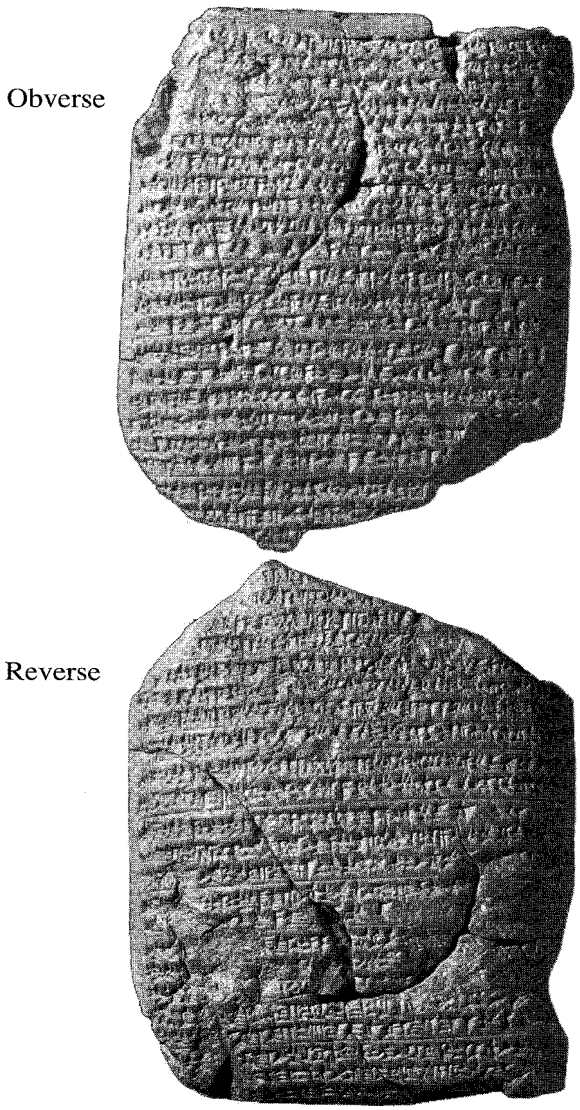
> The narrative is divided into paragraphs with each paragraph normally devoted to one regnal year. The text is concerned only with matters related to Babylonia and, in particular, her king, and the events, which are almost exclusively political and military in character, are narrated in an objective and laconically dry manner.[24]

22 Professor D. J. Wiseman says: "The Neo-Babylonian Chronicle texts are written in a small script of a type which does not of itself allow any precise dating but which can mean that they were written from any time almost contemporary with the events themselves to the end of the Achaemenid rule [331 B.C.E.]." *(Chronicles of Chaldean Kings* [London: The Trustees of the British Museum, 1961], p. 4) Professor J. A. Brinkman is a little more specific, stating that the extant copies of the Neo-Babylonian chronicles are "slightly antedating the *Historiai* of Herodotus," which was written c. 430 B.C.E. (J. A. Brinkman, "The Babylonian Chronicle Revisited," in *Lingering Over Words. Studies in Ancient Near Eastern Literature in Honor of William L. Moran,* ed. T. Abusch, J. Huehnergard, and P. Steinkeller [Atlanta: Scholars Press, 1990], pp. 73, 85.) Dr. E. N. Voigtlander says that the copies of the Neo-Babylonian chronicles seem to come from the reign of Darius I (Voigtlander, A *Survey of Neo-Babylonian History* [unpublished doctoral thesis, University of Michigan, 1963], p. 204, note 45.) Chronicle 1A has a colophon* in which it is explicitly stated that the text was copied (from an earlier original) in the 22nd year of Darius I (500/499 B.C.E.).

23 A. K. Grayson, *Assyrian and Babylonian Chronicles* (Locust Valley, New York: J.J. Augustin Publisher, 1975). The work will hereafter be referred to as *ABC.*

24 A. K. Grayson in *Reallexikon der Assyriologie and vorderasiatischen Archäologie* (henceforth abbreviated *RLA),* ed. D. O. Edzard, Vol. VI (Berlin and New York: Walter de Gruyter, 1980), p. 86.

* The term colophon derives from a tablet inscription appended by a scribe to the end of an ancient Near East (*e.g.*, Early/Middle/Late Babylonian, Assyrian, Canaanite) text such as a chapter, book, manuscript, or record. In the ancient Near East, scribes typically



The Babylonian Chronicle BM 21946

This chronicle covers the period from Nabopolassar's 21st year (605/04 B.C.E.) to Nebuchadnezzar's 10th year (595/94 B.C.E.). Photo used courtesy of D. J. Wiseman (shown in his *Nebuchadrezzar and Babylon,* Plate VI).

recorded information on clay tablets. The colophon usually contained facts relative to the text such as associated person(s) (*e.g.*, the scribe, owner, or commissioner of the tablet), literary contents (*e.g.*, a title, "catch" phrase, number of lines), and occasion or purpose of writing. Colophons and "catch phrases" (repeated phrases) helped the reader organize and identify various tablets, and keep related tablets together.

Most of these chronicles are incomplete. The extant (actually existing) parts of Chronicles 2-7 cover the following regnal years:

TABLE 2: EXTANT PARTS OF THE NEO-BABYLONIAN CHRONICLES 2–7

CHRONICLE NO.	RULER	REGNAL YEARS COVERED
No.2 = B.M. 25127	Nabopolassar	acc.-year – 3
3 = B.M. 21901	Nabopolassar	10 – 17
4 = B.M. 22047	Nabopolassar	18 – 20
5 = B.M. 21946	Nabopolassar	21
" " "	Nebuchadnezzar	acc.-year – 10
6 = B.M. 25124	Neriglissar	3
7 = B.M. 35382	Nabonidus	1 – 11
" " "	Nabonidus	17

In all, the Neo-Babylonian period (625–539 B.C.E.) includes a total of eighty-seven regnal years. As is seen in the preceding table, less than half of these years are covered by the preserved parts of the chronicles. Yet some important information may be gathered from them.

Chronicle 5 (B.M. 21946) shows that Nabopolassar ruled Babylon for twenty-one years, and that he was succeeded by his son Nebuchadnezzar. That part of the text says:

> For twenty-one years Nabopolassar ruled Babylon. On the eighth day of the month Ab he died. In the month of Elul Nebuchadnezzar (II) returned to Babylon and on the first day of the month he ascended the royal throne in Babylon.[25]

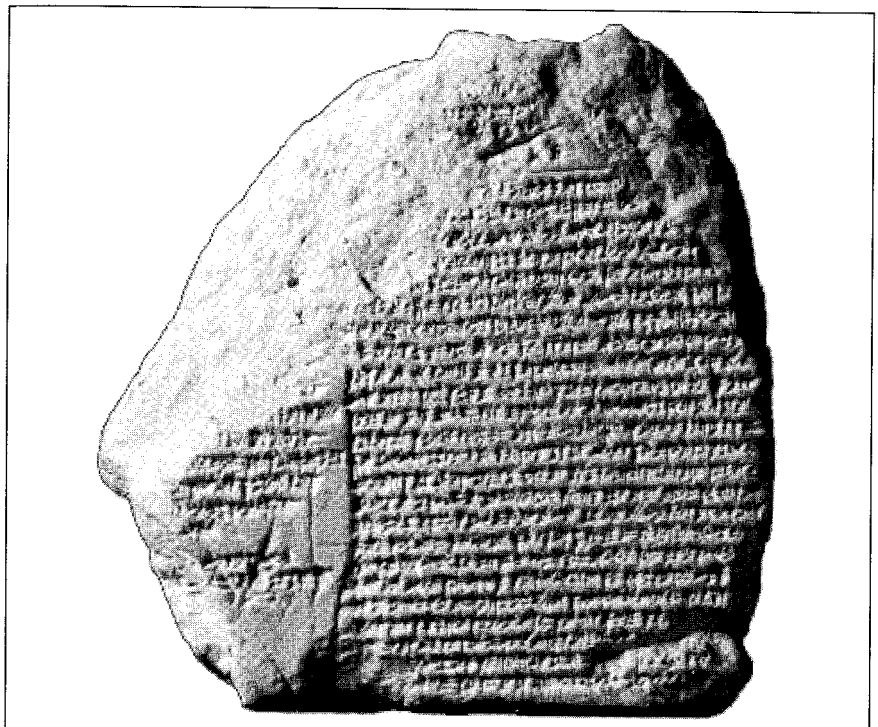
The last chronicle (B .M. 35382), the *famous Nabonidus Chronicle,* covers the reign of Nabonidus, who was the father of Belshazzar. This chronicle unfortunately is damaged. The portion covering Nabonidus' twelfth year to his sixteenth year of rule is lacking, and the portion where the words for "seventeenth year" no doubt originally could be read, is damaged.[26]

Notably, however, for the sixth year it is stated that Cyrus, king of Anshan, defeated the Median king Astyages and captured Ecbatana, the capital of Media.[27] If Nabonidus ruled for seventeen

25 Grayson, *ABC (1975),* pp. 99, 100.

26 *Ibid.* p. 109.

27 *Ibid.,* pp. 106, 107. "The sixth year," too, is missing, but as the record for each year is separated from the next year by a horizontal line, and as the account of Astyages' defeat immediately preceeds the record for the seventh year, it is quite evident that it refers to the sixth year. – *Anshan* was a city and also an archaic name of the province in which it was situated, Parsa (Persis), which lay at the Persian Gulf southeast of Babylonia. At the time of Cyrus' rise to power, Anshan (Parsa) was a Median tributary kingdom.



The Nabonidus Chronicle,
containing the account of the fall of Babylon.
Photo used courtesy of the Trustees of the British Museum

years and if he was dethroned by Cyrus in 539 B.C.E., his first year must have been 555/54 B .C.E. and his sixth year, when Cyrus conquered Media, must have been 550/49 B.C.E.

The Watch Tower Society, in fact, agrees with these datings. The reason is that the secular basis of its chronology, 539 B.C.E. as the date for the fall of Babylon, is directly connected with the reign of Cyrus. The Greek historian Herodotus, in the fifth century B.C.E., says that Cyrus' total rule was twenty-nine years.[28] As Cyrus died in 530 B.C.E., in the ninth year of his rule over Babylonia, his first year as king of Anshan must have begun in c. 559 B.C.E., or about three years before Nabonidus acceded to the throne of Babylon.

Suppose now that twenty years have to be added to the Neo-Babylonian era, which is required if the destruction of Jerusalem is

28 Herodotus' *Historiai* I:210–216. Other ancient historians such as Ktesias, Dinon, Diodorus, Africanus, and Eusebius roughly agree with this length of reign for Cyrus. — See *Insight on the Scriptures* (1988), Vol. 1, p. 454.

set at 607 rather than 587 B.C.E., and that we add these twenty years to the reign of Nabonidus, making it thirty-seven years instead of seventeen. Then his first year must have been 575/74 B.C.E. instead of 555/54. Nabonidus' sixth year, when Astyages was defeated by Cyrus, would then be moved back from 550/49 to 570/69 B.C.E.

Those dates, however, are impossible, as Cyrus did not come to power until c. 559 B.C.E., as was shown above. He clearly could not have defeated Astyages ten years before he came to power! This is why the Society correctly dates this battle in 550 B.C.E., thereby indicating Nabonidus' reign of seventeen years to be correct, as is held by all authorities and classical authors.[29]

Though the chronicles available do not furnish a complete chronology for the Neo-Babylonian period, the information which they do preserve supports the dates for the lengths of the reigns of the Neo-Babylonian kings given by Berossus and the Royal Canon.

As the earlier-presented evidence strongly indicates that *both* of these sources derived their information from the Babylonian chronicles *independent* of each other, and as their figures for the Neo-Babylonian reigns *agree,* it is logical to conclude that the chronological information originally given in the Neo-Babylonian chronicles has been preserved unaltered by Berossus and the Royal Canon.

Even if this is agreed upon, however, can the information given by these Babylonian chronicles be trusted?

It is often pointed out that the Assyrian scribes distorted history in order to glorify their kings and gods. "It is a well known fact that in Assyrian royal inscriptions a serious military set-back is never openly admitted."[30] Sometimes scribes garbled the narration by

29 *Insight on the Scriptures* (1988), Vol. 1, pp. 454, 566; Vol. 2, p. 612. That Astyages was defeated in 550 B.C.E. may also be argued on other grounds. If, as stated by Herodotus *(Historiai* I:130), Astyages ruled Media for thirty-five years, his reign would have begun in 585 B.C.E. (550+35=585). He was the successor of his father Cyaxares, who had died shortly after a battle with Alyattes of Lydia, which according to Herodotus *(Historiai* I:73, 74) was interrupted by a solar eclipse. Actually, a total solar eclipse visible in that area took place on May 28, 585 B.C.E., which is commonly identified with the one mentioned by Herodotus.—I. M. Diakonoff, *The Cambridge History of Iran,* Vol. 2 (Cambridge: Cambridge University Press, 1985), pp. 112, 126; cf. M. Miller, "The earlier Persian dates in Herodotus," *Klio,* Vol. 37 (Berlin: Akademie-Verlag, 1959), p. 48.

30 A. K. Grayson, "Assyria and Babylonia," *Orientalia, Vol.49, Fasc.* 2,1980, p. 171. See also Antti Laato in *Vetus Testamentum,* Vol. XLV:2, April 1995, pp. 198–226.

changing the date of a defeat and weaving it into an account of a later battle.[31] Do the Neo-Babylonian chronicles treat history in this way, too?

Dr. A. K. Grayson, a well-known authority on the Assyrian and Babylonian chronicles, concludes:

> Unlike the Assyrian scribes the Babylonians neither fail to mention Babylonian defeats nor do they attempt to change them into victories. The chronicles contain a reasonably reliable and representative record of important events in the period with which they are concerned.[32]

We have reason for assurance, then, that the figures for the reigns of the Neo-Babylonian kings given by these chronicles and preserved to our time—thanks to Berossus and the Royal Canon—represent the actual reigns of these kings. This conclusion will be confirmed, over and over again, in the further discussion.

b) Babylonian king lists

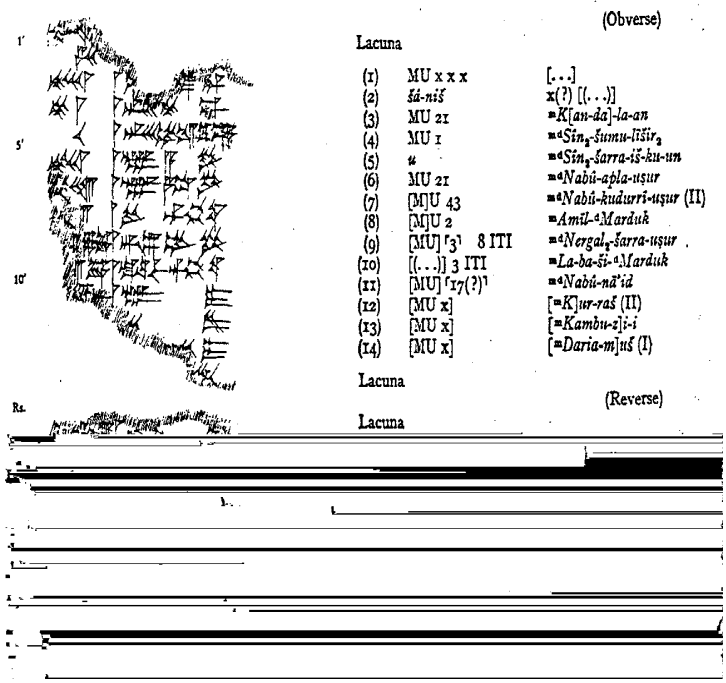
A cuneiform *king list* differs from a chronicle in that it is usually a list of royal names with the addition of regnal years, similar to the later Royal Canon.

Although a number of king lists both from Assyria and Babylonia have been unearthed, only one of them covers the Neo-Babylonian era: the *Uruk King List,* shown on the following page. Unfortunately, as can be seen, it is badly preserved, and some portions of it are missing. Nonetheless, as will be demonstrated, it has definite historical value.

The preserved portions cover the periods from Kandalanu to Darius I (647–486 B.C.E.) and, on the reverse side, from Darius III to Seleucus II (335-226 B.C.E.). It was evidently composed from older sources sometime after the reign of Seleucus II.

31 Grayson, *ibid.*(1980),p. 171.

32 *Ibid.,* p. 175. This does not mean that the chronicles are infallible records. As Dr. J. A. Brinkman points out, "lack of nationalistic prejudice does not insure factual reliability; and the Babylonian chronicles have their share of proven errors." Still, he agrees that the chronicles contain an essentially reliable record of events and dates for the period between the eighth and sixth centuries B.C.E.: "For the period from 745 to 668, these documents list rulers and exact dates of reign in Babylonia, Assyria, and Elam. Coverage thereafter is spotty, in part because of lacunae in the record; but these texts still furnish most of the precise chronological background for present knowledge of the downfall of the Late Assyrian Empire, the rise of the Neo-Babylonian Empire, the reign of Nabonidus, and the transition to Persian rule."—Brinkman in *Lingering Over Words* (see note 22 above), pp. 74 and 100, note 148. For additional comments on the reliability of the Neo-Babylonian chronicles, see Chapter 7: "Attempts to overcome the evidence."



(Obverse)

Lacuna

(1)	MU x x x	[. . .]
(2)	*šá-niš*	x(?) [(. . .)]
(3)	MU 21	m*K[an-da]-la-an*
(4)	MU 1	m^{d}*Sin$_{2}$-šumu-līšir$_{2}$*
(5)	*u*	m^{d}*Sin$_{2}$-šarra-iš-ku-un*
(6)	MU 21	m^{d}*Nabû-apla-uṣur*
(7)	[M]U 43	m^{d}*Nabû-kudurri-uṣur* (II)
(8)	[M]U 2	m*Amīl-^{d}Marduk*
(9)	[MU] ⌜3⌝ 8 ITI	m^{d}*Nergal$_{4}$-šarra-uṣur*
(10)	[(. . .)] 3 ITI	m*La-ba-ši-^{d}Marduk*
(11)	[MU] ⌜17(?)⌝	m^{d}*Nabû-nā'id*
(12)	[MU x]	[m*K*]*ur-raš* (II)
(13)	[MU x]	[m*Kambu-z*]*i-i*
(14)	[MU x]	[m*Daria-m*]*uš* (I)

Lacuna

(Reverse)

Lacuna

The Uruk King List (W 20030, 105)

As reproduced by J. van Dijk in *UVB* 18 (Berlin 1962), tablet 28a. The transcription to the right is that of A. K. Grayson in *RLA* VI (1980), page 97.

The Uruk King List was discovered during the excavations at Uruk (modern Warka in southern Iraq) in 1959–60 together with about 1,000 other cuneiform texts (mostly economic texts) from different periods.[33]

The preserved portion of the obverse (front or principal side), which includes the Neo-Babylonian period, gives the following chronological information (damaged or missing portions are indicated by quotation marks or parentheses):[34]

33 The first transcription and translation of the text, which included an extensive discussion by Dr. J. van Dijk, was published in 1962.—J. van Dijk, *UVB (= Vorläufiger Bericht über die von dem Deutschen Archäologischen Institut unter der Deutschen Orient-Gesellschaft aus Mitteln der Deutschen Forschungsgemeinschaft unternommenen Ausgrabungen in Uruk-Warka),* Vol. 18, Berlin, 1962, pp. 53–60. An English version of van Dijk's translation (of the kinglist) is published by J. B. Pritchard, *The Ancient Near East* (Princeton, New Jersey: Princeton University Press, 1969), p. 566. Another, more recent transcription by A. K. Grayson was published in 1980.—A. K. Grayson, *RLA* (see note 24 and the picture above), Vol. VI (1980), pp. 97, 98.

34 Based upon Grayson's transcription in *RLA* VI (1980), p. 97.

the new stele containing the chronological information were *not* damaged. The first of these sections reads as follows:

> From the 20th year of Ashurbanipal, king of Assyria, when I was born, until the 42nd year of Ashurbanipal, the 3rd year of his son Ashur-etil-ili, the 21st year of Nabopolassar, the 43rd year of Nebuchadnezzar, the 2nd year of Awel-Merodach, the 4th year of Neriglissar, during (all) these 95 years in which I visited the temple of the great godhead Sin, king of all the gods in heaven and in the nether world, he looked with favor upon my pious good works and listened to my prayers, accepted my vows.[53]

It should be observed that the first two kings, Ashurbanipal and his son Ashur-etil-ili, were *Assyrian* kings, while the following kings were *Neo-Babylonian* kings. This indicates that Adad-guppi' first lived under Assyrian rule but then, in connection with Nabopolassar's revolt and liberation of Babylonia from the Assyrian yoke, was brought under Babylonian rule.[54] Nabonidus' mother lived to be a centenarian, and further on in the text a complete summary of her long life is given:

> He [the moon god Sin] added (to my life) many days (and) years of happiness and kept me alive from the time of Ashurbanipal, *king of Assyria,* to the 9th year of Nabonidus, *king of Babylon,* the son

53 C. J. Gadd, *op. cit.,* pp. 46–56. Gadd translated the inscription in 1958 and titled the new stele *Nabon. H 1, B,* as distinguished from Pognon's stele which he titled *Nabon. H 1,* A. The quotation here is from the translation of A. Leo Oppenheim in James B . Pritchard (ed.), *The Ancient Near East. A New Anthology of Texts and Pictures,* Vol. II (Princeton and London: Princeton University Press, 1975), pp. 105, 106, col. I:29–33. As this passage is used as the basis for the calculation of Adad-guppi's age in col. II:26–29, the number of kings and their reigns are evidently meant to be complete. In a second portion the chronological information is repeated (col. II:40–46), but the reign of Awel-Marduk is left out, evidently because the purpose of this section is different, viz., to explain which of the Neo-Babylonian kings Adad-guppi' had *served* as an obedient subject. This is clearly indicated in the beginning of the section, which says: "I have obeyed with all my heart and have done my duty (as a subject) during ... ," etc. As suggested by Gadd "she was banished, or absented herself," from the court of Awel-Marduk, "no doubt for reasons, whatever they were, which earned that king an evil repute in the official tradition." (Gadd, *op. cit.,* p. 70)

54 Nabonidus and his mother descended from the *northern* branch of the Aramaeans, who earlier had been so thoroughly assimilated into the Assyrian society that even their moon-god Sin "came to be honored among the Assyrians on an equal plane with their native god Assur." (M. A. Dandamaev, *Slavery in Babylonia,* DeKalb, Illinois: Northern Illinois University Press, 1984, pp. 36–39.) In one of his inscriptions (Nabon. No. 9 in Tadmor' s arrangement), Nabonidus explicitly speaks of the Assyrian kings as "my royal ancestors." — H. Lewy, *op. cit.* (cf. note 42 above), pp. 35, 36.

> whom I bore, (i.e.) one hundred and four happy years (spent) in that piety which Sin, the king of all gods, has planted in my heart'.[55]

This queen died in the ninth year of Nabonidus, and the mourning for the deceased mother is described in the last column of the inscription. Interestingly, the same information is also given in the *Nabonidus Chronicle* (B.M. 35382):

> The ninth year: . . . On the fifth day of the month Nisan the queen mother died in Dur-karashu which (is on) the bank of the Euphrates upstream from Sippar.[56]

All the reigns of the Neo-Babylonian kings are given in this royal inscription, from Nabopolassar and on to the ninth year of Nabonidus, and the lengths of reign are *in complete accordance with the Royal Canon—a* very significant fact, because the corroboration comes from a witness *contemporary with all these Neo-Babylonian kings* and intimately connected with all of them![57] More so than the individual testimony of any one source, it is the harmony of all these sources which is most telling.

55 Oppenheim in Pritchard, *op. cit.* (1975), p. 107, col. II:26–29. For additional comments on the Adad-guppi' inscription, see the Appendix for Chapter 3.

56 Grayson, *ABC,* p. 107. Until the last column (III 5ff.), the Adad-guppi' stele is written in the first person. But it is evident that the inscription was chiselled out after her death, undoubtedly by order of Nabonidus. That is why Dr. T. Longman III would like to classify it as a "fictional autobiography" (a 1iterary method known also from other Akkadian texts), although he adds: "This, however, does not mean that the events and even the opinions associated with Adad-guppi' are unauthentic." (Tremper Longman III, *Fictional Akkadian Autobiography,* Winona Lake, Indiana: Eisenbrauns, 1991, pp. 41, 101, 102, 209, 210; cf. Beaulieu, *op. cit., p.* 209.) But it is questionable if the Adad-guppi' inscription, even in this sense, can be classified as a "fictional autobiography" In his review of Longman's work Dr. W. Schramm points out that the text "essentially is a genuine autobiography. The fact that there is an addition in col. III 5ff. composed by Nabonidus (so already Gadd, AnSt 8, 55, on III 5), does not give anyone the right to regard the whole text as fictional. The inscription, of course, was chiselled out after the death of Adad-guppi'. But it cannot be doubted that an authentic *Vorlage* on the story of Adad-guppi's life was *used "—Bibliotheca Orientalis,* Vol. LII, No. 1/2 (Leiden, 1995), p.94.

57 The *Royal Canon,* of course, does not give the reigns of the Assyrian kings Ashurbanipal and Ashur-etil-ili. For the earliest period (747–539 B.C.E.) the Canon gives a kinglist *for Babylon,* not for contemporary Assyria. The reigns of Assyrian kings are given only in so far as they also ruled directly over Babylon, which was true, for example, of Sennacherib, who ruled over Babylon twice (in 704/03–703/02 and 688/87–681/80 B.C.E.), and of Esarhaddon, who ruled over Babylon for thirteen years (680/79–668/ 67 B.C.E.). For the period of Ashurbanipal's reign in Assyria, the Canon gives the reigns of the contemporary vassal kings in Babylon, Shamash-shum-ukin (20 years) and Kandalanu (22 years).—Compare Gadd, *op. cit.,* pp. 70, 71.

The results from our discussion of the Neo-Babylonian historical records are summarized in the following table.

TABLE 3: THE REIGNS OF THE NEO-BABYLONIAN KINGS ACCORDING TO THE NEO-BABYLONIAN HISTORICAL RECORDS

ROYAL NAME	THE NEO-BAB. CHRONICLES	THE URUK KING LIST	THE ROYAL INSCRIPTIONS	B.C.E. DATES
Nabopolassar	21 years	21 years	21 years	625–605
Nebuchadnezzar	43 years*	43 (ye)ars	43 years	604–562
Awel-Marduk	2 years*	2 (ye)ars	2 years	561–560
Neriglissar	4 years*	'3' (y's)+8 m's	4 years	559–556
Labashi-Marduk	some months*	3 months	—	556
Nabonidus	'17 years'	'17?' (years)	17 years	555–539

* These figures in the chronicles are preserved only via Berossus and/or the Royal Canon. See discussion.

As may be seen from the table, the Neo-Babylonian chronology adopted by secular historians is very strongly supported by the ancient cuneiform sources, some of which were produced during the Neo-Babylonian era itself. Three different lines of evidence in support of this chronology are provided by these sources:

(1) Although important parts of the *Neo-Babylonian Chronicles* are missing and some figures in the *Uruk kinglist* are partially damaged, the *combined* witness of these documents strongly supports the Neo-Babylonian chronologies of *Berossus* and the *Royal Canon,* both of which were actually— independently of each other—derived from Neo-Babylonian chronicles and kinglists.

(2) The royal inscription *Nabon. No. 18* and the *Royal Chronicle* fix the second year of Nabonidus astronomically to 554/53 B.C.E. The whole length of the Neo-Babylonian period prior to Nabonidus is given by *Nabon. No. 8,* which gives the elapsed time from the sixteenth year of Nabopolassar up to the accession-year of Nabonidus as fifty-four years. The stele thus fixes the sixteenth year of Nabopolassar to 610/09 and his first year to 625/24 B.C.E. These two inscriptions, therefore, establish the length of the whole Neo-Babylonian era.

(3) The *Adad-guppi' inscription* gives the reigns of all the Neo-Babylonian kings (except for Labashi-Marduk's brief, months-long reign, which may be disregarded) from Nabopolassar up to the ninth year of Nabonidus. As the Watch Tower Society indirectly accepts a seventeen-year rule for Nabonidus, this stele of itself overthrows their 607 B.C.E. date for the desolation of Jerusalem.

Thus the Babylonian chronicles, the Uruk kinglist, and the royal inscriptions firmly establish the length of the Neo-Babylonian era. *And yet this is just a beginning.* We must still wait to be introduced to the strongest lines of evidence in support of the chronology presented in the table above. Their added testimony should establish beyond any reasonable question the historical facts of the matter.

B-2: Economic-administrative and legal documents

Literally hundreds of thousands of cuneiform texts have been excavated in Mesopotamia since the middle of the nineteenth century.

The overwhelming majority of them concern economic-administrative and private legal items such as promissory notes, contracts (for the sale, lease, or gift of land, houses, and other property, or for the hiring of slaves and livestock), and records of law suits.

These texts are to a great extent *dated* just as are commercial letters, contracts, receipts and other vouchers today. The dating is done by giving the *year of the reigning king,* the *month,* and the *day of the month.* A text concerning ceremonial salt from the archives of the temple Eanna in Uruk, dated in the first year of Awel-Marduk (the Evil-merodach of 2 Kings 25:27–30, written Amel-Marduk in Akkadian but postvocalic m was pronounced w), is given here as an example:

> Ina-sillâ has brought one and one-half talents of salt, the regular *sattukku* offering of the month of Siman for the god Usur-amassu.
> Month of Simanu, sixth day, first year of Amel-Marduk, the king of Babylon.[58]

Tens of thousands of such dated texts have been unearthed from the Neo-Babylonian period. According to the well-known Russian Assyriologist M. A. Dandamaev, over *ten thousand* of these texts had been published prior to 1991.[59] Many others have been published since, but the majority of them are still unpublished. Professor D. J. Wiseman, another leading Assyriologist, estimates

58 Ronald H. Sack, *Amel-Marduk 562–560 B.C.* (Neukirchen-Vluyn: Neukirchener Verlag, 1972), p. 79.

59 Dr. M. A. Dandamaev states: "The period of less than ninety years between the reign of Nabopolassar and the occupation of Mesopotamia by the Persians is documented by tens of thousands of texts concerning household and administrative economy and private law, over ten thousand of which have been published so far."— *The Cambridge Ancient History,* 2nd ed., Vol. III:2 (Cambridge: Cambridge University Press, 1991), p. 252.

that "there are probably some 50,000 texts published and unpublished for the period 627–539" B.C.E.[60]

Thus there exist large numbers of dated tablets *from every year during the whole Neo-Babylonian era.* Dr. Wiseman's estimate would give an average of nearly 600 dated texts from each of the eighty-seven years from Nabopolassar to Nabonidus, inclusive.

It is true that among these texts there are many that are damaged or fragmentary, and that dates are often illegible or missing. Further, the texts are not evenly distributed throughout the period, as the number gradually increases and culminates in the reign of Nabonidus.

Nonetheless, *every single year throughout the whole period* is covered by numerous, often *hundreds* of tablets that are datable.

Because of this abundance of dated texts modern scholars are able to determine not only the length of reign of each king, but also the *time of the year when each change of reign occurred,* sometimes almost to the day!

The last known texts from the reign of Neriglissar, for example, are dated I/2/4 and I?/6/4 (that is, month I, day 2 and day 6, year 4, corresponding to April 12 and 16, 556 B.C.E., Julian calendar), and the earliest one from the reign of his son and successor, Labashi-Marduk, is dated I/23/acc. (May 3, 556).[61] The last text from the reign of Nabonidus is dated VII/17/17 (October 13, 539), or one day after the fall of Babylon (given as VII/16/17 in

60 Private letter Wiseman-Jonsson, dated August 28, 1987. This is probably a very conservative estimate. The most extensive collection of Neo-Babylonian texts is held in the British Museum, which includes some 25,000 texts dated to the period 626–539 B .C.E. Most of these belong to the "Sippar collection," which contains tablets excavated by Hormuzd Rassam at the site of ancient Sippar (present Abu Habbah) in the years 1881 and 1882. This collection has recently been catalogued. (E. Leichty et al, *Catalogue of the Babylonian Tablets in the British Museum, Vols.* VI–VIII, London: British Museum Publications Ltd, 1986–1988. These catalogues will hereafter be referred to as *CET.)* Substantial collections are also in Istanbul and Baghdad. Many other collections of Neo-Babylonian documents are held in museums and at universities in the U.S.A., Canada, England, France, Germany, Italy, and other parts of the world. It is true that many of the tablets are damaged and the dates are often illegible. Yet, there are still *tens of thousands* of Neo-Babylonian tablets with legible dates extant today. As a result of the continuous archaeological excavations that are being carried out in the Mesopotamian area, "the body of written sources expands significantly every year. For example, in the space of a single season of excavations in Uruk, about six thousand documents from the Neo-Babylonian and Achaemenid periods were discovered."—M. A. Dandamaev, *Slavery in Babylonia* (DeKalb, Illinois: Northern Illinois University Press, 1984), pp. 1, 2.

61 R. A. Parker and W. H. Dubberstein, *Babylonian Chronology: 626 B.C.–A.D.* 75 (Providence: Brown University Press, 1956), pp. 12, 13.

the *Nabonidus Chronicle).* The reason for the overlap of one day beyond Babylon's fall is easily explained:

> Interestingly enough, the last tablet dated to Nabunaid from Uruk is dated the day after Babylon fell to Cyrus. News of its capture had not yet reached the southern city some 125 miles distant.[62]

In view of this immense amount of documentary evidence, the question must be asked: If twenty years have to be added to the Neo-Babylonian era in order to place the destruction of Jerusalem in 607 B.C.E., *where are the business and administrative texts dated in those missing years?*

Quantities of dated documents exist for **each** of Nebuchadnezzar's forty-three years, for **each** of Awel-Marduch's (Evil-Merodach) two years, for **each** of Neriglissar's four years, and for **each** of Nabonidus' seventeen regnal years. In addition, there are many dated texts from Labashi-Marduk's reign of only about two months.

If any of these kings' reigns had been longer than those just mentioned, large numbers of dated documents would certainly exist for *each* of those extra years. Where are they? Twenty years are about one fifth of the whole Neo-Babylonian period. Among the tens of thousands of dated tablets from this period, many *thousands* ought to have been found from those missing twenty years.

If one casts one die (of a pair of dice) tens of thousands of times without ever getting a 7, he must logically conclude: "There is no number 7 on this die." The same is true of the Watch Tower's twenty missing "ghost years" for which one must look in vain during the Neo-Babylonian period.

But suppose that a number of missing years really existed, and that, by some incredible chance, the many thousands of dated tablets that ought to be there have not been found. Why is it, then, that the lengths of reign according to the dated tablets *which have been unearthed* happen to agree with the figures of Berossus, those of the Royal Canon, of the Uruk King List, of the contemporary royal

62 *Ibid.,* p. 13. One text from the reign of Nabonidus, published by G. Continua in *Textes Cuneiformes, Tome XII, Contrats Néo-Babyloniens,* I (Paris: Librarie Orientaliste, 1927), Pl. LVIII, No. 121, apparently gives him a reign of *eighteen* years. Line 1 gives the date as "VI/6/17," but when it is repeated in line 19 in the 1ext it is given as "VI/6/ 18" Parker and Dubberstein (p. 13) assumed "either a scriba1 error or an error by Contenau." The matter was settled by Dr. Beatrice André', who at my request collated the original at the Louvre Museum in Paris in 1990: "The last line has, 1ike the first, the year 17, and the error comes from Contenau."—Letter André-Jonsson, March 20, 1990.

inscriptions, as well as the figures of all the other evidence that is yet to be presented below? Why should it be that, *whatever type of historical source is considered,* the supposedly "missing" years consistently amount to exactly twenty years? Why not a period of, in one case, seventeen years, in another case thirteen, in yet another seven years, or perhaps different isolated years distributed throughout the Neo-Babylonian period?

Each year new quantities of dated tablets are unearthed, and catalogues, transliterations, and translations of such texts are frequently published, but the twenty missing years never turn up. Even improbability has a limit[63]

The importance of the economic-administrative and legal texts for the chronology of the Neo-Babylonian period can hardly be overestimated. The evidence provided by these dated texts is simply overwhelming. The reigns of all the Neo-Babylonian kings are copiously attested by tens of thousands of such documents, all of which were written during this era. As shown by the table below, these reigns are in full agreement with the Royal Canon and the other documents discussed earlier.

TABLE 4: THE NEO-BABYLONIAN CHRONOLOGY ACCORDING TO THE ECONOMIC-ADMINISTRATIVE AND LEGAL DOCUMENTS

Nabopolassar	21 years	(625 – 605 BCE)
Nebuchadnezzar	43 years	(604 – 562 BCE)
Awel-Marduk	2 years	(561 – 560 BCE)
Neriglissar	4 years	(559 – 556 BCE)
Labashi-Marduk	2–3 months	(556 BCE)
Nabonidus	17 years	(555 – 539 BCE)

B-3: Prosopographical evidence

Prosopography (from the Greek word *prósopon,* meaning "face, person") may be defined as "the study of careers, especially of individuals linked by family, economic, social, or political relationships."[64]

63 As a matter of course, defenders of the Watch Tower Society's chronology have made great efforts to discredit the evidence provided by these enormous quantities of dated cuneiform tablets. On perusing modern catalogues of documents dated to the Neo-Babylonian era, they have found a few documents that seemingly give longer reigns to some Babylonian kings than are shown by the Royal Canon and other sources. A fresh check of the original tablets, however, has shown that most of these odd dates simply are modern copying, transcription, or printing errors. Some other odd dates are demonstrably scribal errors. For a detailed discussion of these texts, see Appendix for chapter 3: "Some comments on copying, reading, and scribal errors"

64 *Webster's New World Dictionary,* 3rd college edition, eds. V. Neufeldt & D. B. Guralnik (New York: Webster's New World Dictionaries, 1988), p. 1080.

As the names of many individuals often recur in the business and administrative documents—sometimes hundreds of times during the entire Neo-Babylonian period—scholars usually apply the *prosopographical* method in their analysis of these texts. Such an approach not only contributes to the understanding of the structure and social life of the Neo-Babylonian society, but it also provides additional, internal evidence in support of the established chronology of the period.

Of the tens of thousands of documents from the Neo-Babylonian era, more than half are the results of temple activities and have been found in *temple archives,* particularly in the archives of the Eanna temple in Uruk (the temple of the goddess *Ishtar)* and the Ebabbar temple in Sippar (the temple of *Shamash,* the sun god). But many thousands of texts also come from *private archives and libraries.*

The richest private archives are those of the *Egibi* and *Nur-Sîn* houses, centered in the Babylon area. Other private archives have been found, for example, in Uruk (the sons of Bel-ushallim, Nabû-ushallim, and Bel-supê-muhur), in Borsippa (the Ea-ilûta-bâni family), in Larsa (Itti-Shamash-balatu and his son Arad-Shamash), and in Ur (the Sîn-uballit family).

No *state archives* have been found from the Neo-Babylonian period, the reason being that at this time such documents are known to have been written (in Aramaic) on leather and papyrus, materials that were easily destroyed by the climatic conditions in Mesopotamia.[65]

Consider now how a study of certain of the available archives can yield valuable information of a chronological nature.

a) The Egibi business house

By far the largest private archive of the Neo-Babylonian period is that of the Egibi business house. Of this enterprise Bruno Meissner says:

> From the firm *the Sons of Egibi* we possess such an abundance of documents that we are able to follow nearly all business transactions and personal experiences of its heads from the time of Nebuchadnezzar up to the time of Darius I.[66]

65 For a survey of the Neo-Babylonian archives, see M. A. Dandamaev's article in *Cuneiform Archives and Libraries,* ed. K. R. Veenhof (Leiden: Nederlands Historisch-Archaeologisch Instituut te Istanbul, 1986), pp. 273–277.

66 Bruno Meissner, *Babylonien und Assyrien,* Vol. II (Heidelberg, 1925), p. 331. The quotation is translated from the German.

The business documents from the Egibi house were discovered by Arabs during the wet season of the year 1875–76 in a mound in the neighbourhood of Hillah, a town about four miles southeast of the ruins of Babylon. Some *three or four thousand tablets* were discovered enclosed in a number of earthen jars, resembling common water jars, covered over at the top with a tile, and cemented with bitumen.

The discoverers brought the tablets to Baghdad and sold them to a dealer there. In that same year George Smith visited Baghdad and acquired about 2,500 of these important documents for the British Museum.

The tablets were examined during the following months by W. St. Chad Boscawen, and his report appeared in 1878 in the *Transactions of the Society of Biblical Archaeology.*[67] Boscawen states that the tablets "relate to the various monetary transactions of a Babylonian banking and financial agency, trading under the name of Egibi and Sons" The tablets "relate to every possible commercial transaction; from the loan of a few shekels of silver, to the sale or mortgage of whole estates whose value is thousands of *mans* of silver?"[68]

Boscawen soon realized the importance of following the *sequence* of the heads of the Egibi firm, and after a more careful analysis he ascertained the main lines of the succession to be as follows:

From the third year of Nebuchadnezzar a person named Shula acted as head of the Egibi firm, and continued in that capacity for a period of twenty years, up to the twenty-third year of Nebuchadnezzar when he died and was succeeded by his son, Nabû-ahhe-iddina.[69]

The son, Nabû-ahhe-iddina, continued as the head of affairs for a period of thirty-eight years, that is, from the twenty-third year of Nebuchadnezzar to the twelfth year of Nabonidus when he was succeeded by his son Itti-Marduk-balatu.[70]

67 W. St. Chad Boscawen, "Babylonian Dated Tablets, and the Canon of Ptolemy," in *Transactions of the Society of Biblical Archaeology,* Vol. VI (London, January 1878), pp. 1–78. As Boscawen points out *(ibid.,* pp. 5, 6), George Smith himself, during his stay at Baghdad in 1876, had begun a systematic and careful examination of the tablets, a study that was interrupted by his untimely death in Aleppo in August that year. Boscawen's study was evidently based on Smith's notebooks.—Sheila M. Evers, "George Smith and the Egibi Tablets," *Iraq,* Vol. LV, 1993, pp. 107–117.

68 *1bid.,* p. 6. A "mana" (mina) weighed about 0.5 kg.

69 *Ibid.,* pp. 9, 10. Shula died between the dates VII/21/23 (month/day/year) and IV/15/24 of Nebuchadnezzar's reign (between October, 582 and July, 581 B.C.E.). —G. van Driel, "The Rise of the House of Egibi," *Jaarbericht van het Vooraziatisch-Egyptisch Genootschap,* No. 29 (Leiden, 1987), p. 51.

70 Nabû-ahhê-iddina evidently died in the thirteenth year of Nabonidus, the year after his son had taken over the affairs. See Arthur Ungnad, "Das Haus Egibi," *Archiv für Orientforschung,* Band XIV (Berlin, 1941), p. 60, and van Driel, *op. cit.,* pp. 66, 67.

Itti-Marduk-balatu in his turn remained head of the firm until the first year of Darius I (521/20 B.C.E.), which was the twenty-third year of his headship of the firm.

Boscawen epitomizes these findings as follows:

> Now, summing up these periods, we get the result that from the 3rd year of Nebuchadnezzar II to the 1st year of Darius Hystaspis was a period of eighty-one years:
>
> | | |
> |---|---|
> | Sula at the head of the firm | 20 years |
> | Nabu-ahi-idina | 38 years |
> | Itti-Marduk-balatu | 23 years |
> | | 81 years |
>
> This would give an interval of eighty-three years from the 1st year of Nebuchadnezzar to the 1st year of Darius Hystaspis.[71]

The significant fact is that this agrees exactly with Berossus, the Royal Canon, and the Neo-Babylonian historical records. Counting backwards eighty-three years from the first year of Darius I (521/20 B.C.E.) brings us to 604 B.C.E. as the first year of Nebuchadnezzar, which agrees completely with the other lines of evidence presented above.

The archive of the Egibi-house alone would suffice to establish the length of the Neo-Babylonian period. With this extensive set of dated commercial tablets from the archive of one of the "Rothschilds" of Babylon "there ought to be but little difficulty in establishing once and for ever the chronology of this important period of ancient history," wrote Boscawen already back in 1878.[72]

The evidence of these documents leaves no room for a gap in Neo-Babylonian history from Nebuchadnezzar onward, certainly not one of twenty years! The archive, containing tablets dated up to the forty-third year of Nebuchadnezzar, the second year of Awel-Marduk, the fourth year of Neriglissar and the seventeenth year of Nabonidus, gives a complete confirmation of the chronology of Berossus and the Royal Canon.

Since the last century still other collections of tablets belonging to the Egibi family have been discovered.[73] A number of studies on

71 Boscawen, *op. cit.,* pp. 10, 24. This conclusion had also been arrived at previously by George Smith in his study of the tablets.—S. M. Evers, *op. cit.* (note 67 above), pp. 112–117.

72 Boscawen, *op. cit.,* p. 11.

73 During excavations at Uruk in 1959–60, for example, an archive belonging to members of the Egibi family was unearthed, containing 205 tablets dating from the sixth year of Nabonidus to the thirty-third year of Darius I. Most of the tablets were dated as from the reign of Darius. See J. van Dijk, *UVB* 18 (cf. note 33 above), pp. 39–41. The earliest known text of the Egibi family is dated to 715 B.C.E. *Business documents of the family then appear regularly between 690 and 480 B.C.E.—M.* A. Dandamaev, *op. cit.* (1984; see note 60 above), p.61.

the Egibi family have been produced, all of which confirm the general conclusions drawn by Boscawen.[74] Thanks to the enormous amount of texts from this family, scholars have been able to trace the history, not only of the heads of the firm, but also of many other members of the Egibi house, and even family trees have been worked out that extend through the whole Neo-Babylonian period and into the Persian era![75]

The pattern of intertwined family relations that has been established in this way for several generations would be grossly distorted if another twenty years were inserted into the Neo-Babylonian period.

b) Life expectancy in the Neo-Babylonian period

(1) Adad-guppi':

As was shown above in the discussion of the Harran stele *(Nabon. H 1, B),* Adad-guppi', the mother of Nabonidus, was born in the 20th year of powerful Assyrian king Ashurbanipal, 649/648 B.C.E. She died in the ninth year of Nabonidus, in 547/546 B.C.E. at an age of 101 or 102 years, a remarkable life span.[76]

What would happen to her age if we were to add twenty years to the Neo-Babylonian era? This would necessarily increase the age of

74 Some of the most important works are: Saul Weingort, *Das Haus Egibi in neubabylonischen Rechtsurkunden* (Berlin: Buchdruckerei Viktoria, 1939), 64 pages; Arthur Ungnad, "Das Haus Egibi," *Archiv fur Orientforschung,* Band XIV, Heft 1/2 (Berlin, 1941), pp. 57–64; Joachim Krecher, *Das Geschäftshaus Egibi in Babylon in neubabylonischer und achämenidischer Zeit* (unpublished "Habilitationsschrift," Universitätsbibliothek, Munster in Westfalen, 1970), ix + 349 pages.; and Martha T. Roth, "The Dowries of the Women of the Itti-Marduk-balatu Family," *Journal of the American Oriental Society,* Vol. 111:1,1991, pp. 19–37.

75 See, for example, J. Kohler & F. E. Peiser, *Aus dem Babylonischen Rechtsleben, IV* (Leipzig: Verlag von Eduard Pfeiffer, 1898), p. 22, and M. T. Roth, *op. cit.,* pp. 20, 21, 36. Another private enterprise, the *Nur-Sîn family,* which through intermarriage became annexed to the Egibi family, has been thoroughly studied by Laurence Brian Shiff in *The Nur-Sîn Archive: Private Entrepreneurship in Babylon (603–507 B.C.)* (Ph. D. dissertation; University of Pennsylvania, 1987), 667 pages.

76 The Adad-guppi' inscription itself stresses that her age was extreme: "I saw my [great] great-grandchildren, up to the fourth generation, in good health, and (thus) had my fill of *extreme old age* " — A. Malamat, "Longevity: Biblical Concepts and Some Ancient Near Eastern Parallels," Archiv fur *Orientforschung, Beiheft* 19: *Vorträge gehalten auf der 28. Rencontre Assyriologique Internationale in Wien, 6.–10. Juli 1981* (Horn, Austria: Verlag Ferdinand Berger & Söhne Gesellschaft M.B.H., 1982), p. 217. Dr. Malamat also refers to a tablet found at Sultantepe which "categorizes the stages of life from age 40 through age 90 [as follows]: 40 — *lalûtu* (`prime of life'); 50 — *umu kurûtu* (`short life'); *60—metlutu* (`maturity'); 70—*umuarkûtu* (long life'); [80]—*shibutu* Cold age'); 90 — *littutu* (`extreme old age')."—A. Malamat, *ibid.,* p. 215.

Adad-guppi' to *121 or 122 years*. The only way to avoid this consequence would be to add the twenty extra years to the reign of her surviving son Nabonidus *after her death,* making his reign thirty-seven instead of seventeen years, something the contemporary documents simply do not allow us to do.

This is not the only problem of this kind that confronts those who would defend the Watch Tower Society's chronology. Many people, whose names appear in the business and administrative texts from the Neo-Babylonian period, can be traced from text to text almost during the entire period, sometimes even into the Persian era. We find that some of these people-businessmen, slaves, scribes—must have been eighty or ninety years old or more at the end of their careers. But if we were to add twenty years to the Neo-Babylonian era, we would also be forced to add twenty years to the lives of these people, making them 100 to 110 years old—and still active in their occupations. A few examples will follow.

(2) Apla, son of Bel-iddina:

A scribe named *Apla, son of Bel-iddina,* who belonged to the trading house of Egibi, appears for the first time as a scribe in a text dated to the twenty-eighth year of Nebuchadnezzar (577 B.C.E.). Thereafter, his name recurs in many texts dated in the reigns of Nebuchadnezzar, Awel-Marduk, Neriglissar, Nabonidus, Cyrus, Cambyses, and Darius I.

He appears for the last time as a witness in a document, a promissory note, dated to the thirteenth year of Darius, 509 B.C.E. That means the career of this scribe may be followed for a period of sixty-eight years, from 577 to 509 B.C.E. The Russian Assyriologist M. A. Dandamaev comments:

> He should have been, at least, twenty years old when he became a scribe. Even if we assume that Apla died even in the same year when he was referred to for the last time or soon after, he must have lived about 90 years.[77]

But if we allow twenty years to be added to the Neo-Babylonian era, we would not only increase Apla's age to 110 years or more—we would also be forced to conclude that at this old age he was still active as a scribe.

77 Muhammad A. Dandamaev, "About Life Expectancy in Babylonia in the first Millennium B.C.," in *Death in Mesopotamia (= Mesopotamia. Copenhagen Studies in Assyriology, Vol. 8),* ed. Bendt Alster (Copenhagen: Akademisk Forlag, 1980), p. 184.

(3) Iddina-Marduk and his wife Ina-Esagila-ramât

Two other examples are the businessman *Iddin-Marduk, son of Iqisha, of the family of Nur-Sin, and his wife Ina-Esagila-ramât.* Iddin-Marduk appears as director of his business activities for the first time in a text that earlier had been dated to the *eighth* year of Nebuchadnezzar (597 B.C.E.). But a recent collation of the original tablet revealed that the year number is damaged and probably should be read as the 28th year (577 B.C.E.). Iddin-Marduk then appears in hundreds of dated documents, the last of which is from the third year of Cambyses, 527 B.C.E. Other documents indicate that he died shortly before the fifth year of Darius I (517 B.C.E.). If we assume that he was only twenty years old when he first appears as director, he must have been about eighty years old at the time of his death.

Iddin-Marduk's wife, Ina-Esagila-ramât, survived her husband. She, too, was involved in business activities. Documents show that she got married to Iddin-Marduk no later than the 33rd year of Nebuchadnezzar (572 B.C.E.). We must assume, therefore, that she was at least twenty years old when she first appears as a contracting party in a text dated to Nebuchadnezzar's 34th year (571 B.C.E.). She appears for the last time in a text dated to the 15th year of Darius I (507 B.C.E.), at which time she must has been at least 84 years old.[78]

Again, if we were to add twenty years to the Neo-Babylonian era, we would increase the age of Iddina-Marduk to about 100 years, and the age of Ina-Esagila-ramât to at least 104 years. We would also be forced to hold that she, at this age, was still actively involved in the businesses.

(4) Daniel the prophet:

The Bible also provides some examples of its own. In the accession year of Nebuchadnezzar (605 B.C.E.), *Daniel,* then a youth of perhaps 15–20 years, was brought to Babylon (Daniel 1:1, 4, 6). He served at the Babylonian court until after the end of the Neo-Babylonian period, being still alive in the third year of Cyrus, in 536/ 35 B.C.E. (Daniel 1:21; 10:1). At that time he must have been close to ninety years old. If another twenty years were added to this period, Daniel would have been nearly 110 years old.

Is it really likely that people during the Neo-Babylonian period frequently reached ages of 100, 110, or even 120 years? True, we

78 Cornelia Wunsch, *Die Urkunden des babylonischen Geschäftsmannes Iddin-Marduk, 1* (Groningen: STYX Publications, 1993), pp. 19,10 ftn. 43, 12, 66.

sometimes have heard of people in southern Russia or northern India who are said to be 150 years old or more. But on close examination, all such statements have been proved to be false?[79] The oldest known individual in modern times has been a French woman, Jeanne Calment, who was born on February 21, 1875, and died on August 4, 1997, at an age of 122 years?[80] This Frenchwoman's record would have been equalled by Adadguppi' , had that Babylonian woman been 122 years old when she died, instead of about 102, as the ancient records indicate.

Considering these cases of exceptionally long age already presented, we rightly ask if we have any reason to believe that the life span of people at that time surpassed that of people of today?

The Russian Assyriologist M. A. Dandamaev has examined the life span of people in Babylonia from the seventh through to the fourth century B.C.E., using tens of thousands of business and administrative texts as the basis for his research. His conclusion is that the life span of people at that time was not different from what it is now. In his discussion, Dandamaev refers to Psalms 90:10: "As for the days of our life, they contain seventy years. Or if due to strength, eighty years" *(NASB)*. These words were as true in the Neo-Babylonian era as they are today.[81]

Consequently, the extremely old ages which would be created by dating the destruction of Jerusalem to 607 instead of 587 B.C.E. provides one more argument weighing against the Watch Tower Society's chronology.

As has been shown in this section, a *prosopographical* examination of the cuneiform texts strongly supports the chronology established for the Neo-Babylonian period. The careers of business men, scribes, temple administrators, slaves, and others may be followed for decades, in some cases through almost the whole Neo-Babylonian period and on into the Persian era. Thousands of dated documents give a profound insight into their everyday activities. Notably, however, the lives and activities of these people never contain reference to any year lying outside the recognized time frame of the Neo-Babylonian period, never overlap or extend beyond this at any time so as to point to a single year of the twenty-year period required by the Watch Tower Society's chronology.

79 S. Jay Olshansky et al, "In Search of Methuselah: Estimating the Upper Limits of Human Longevity," *Science,* Vol. 250, 2 November 1990. p. 635.

80 *The Guinness Book of Records 2004*. According to some media reports, this record may have been beaten by a woman on Dominica, W. I., Elizabeth Israel, who is said to have been born on January 27, 1875, and died on October 14, 2003, at an age of 128 years.

81 M. A. Dandamaev, *op. cit.* (1980), p. 183.

B-4: Chronological interlocking joints

There are only two possible ways of extending the Neo-Babylonian period to include the twenty extra years required by the Watch Tower chronology:

Either the *known Neo-Babylonian kings had longer reigns* than indicated by all the documents discussed above, or there were other, *unknown kings* who belonged to the Neo-Babylonian era in addition to those known to us from these documents.

Both of these possibilities, however, are completely excluded, not only by the several lines of evidence presented so far and the astronomical evidence that will be discussed in the next chapter, but also by a series of texts that *inseparably interlock* each reign with the next throughout the whole Neo-Babylonian period. Eleven such chronological interlocking joints wil1 be discussed below.

a) Nabopolassar to Nebuchadnezzar

(1) In the earlier discussion of the *Neo-Babylonian chronicles,* one of them *(Chronicle 5)* was quoted as saying that Nabopolassar, the first Neo-Babylonian king, ruled "for *twenty-one years,"* that he died "on the *eighth day of the month Ab* [the fifth month] ," and that on the *first day of the next month* (Elul) his son Nebuchadnezzar "ascended the royal throne in Babylon."

At this point, then, there is no room for a longer reign of Nabopolassar beyond the recognized span of twenty-one years, nor for an "extra king" between him and Nebuchadnezzar.

b) Nebuchadnezzar to Awel-Marduk

(2) That Nebuchadnezzar was succeeded by his son Awel-Marduk (the Biblical Evil-Merodach) in the forty-third year of Nebuchadnezzar's reign is confirmed by a business document, *B.M. 30254,* published by Ronald H. Sack in 1972.

This document mentions both the forty-third year of Nebuchadnezzar and the accession year of Awel-Marduk. A girl, Lit-ka-idi, the slave of Gugua, "was placed at the disposal of Nabû-ahhe-iddina, the son of Shulâ, the descendent of Egibi *in the month of Ajaru* [the second month], *forty-third year of Nebuchadnezzar,* king of Babylon, and (for whom) twelve shekels of silver served as security." Later in the same year, "*in the month of Kislimu* [the ninth month], *accession year of [Amel]-Marduk,* king of Babylon, . . . Gugua

of her own will sold Lit-ka-idi to Nabû-ahhe-iddina for the full price of nineteen and one-half shekels of silver."[82]

This document gives no room for a longer reign of Nebuchadnezzar, or for an "extra king" between him and Awel-Marduk.

(3) In the Neo-Babylonian period the yield of a field or garden was often estimated before harvest time. After the harvest the workers of the field were to turn over the estimated amount to the owners or buyers. Quite a number of documents recording such procedures have been found.

One of them, designated *AO 8561,* not only includes estimated yields of numerous fields for three successive years, the forty-second and forty-third years of Nebuchadnezzar and the first year of Awel-Marduk, but "is also a record of what portions of that yield were received by and distributed to various persons . . . in the month of Kislimu [the ninth month], accession year of Neriglissar."[83]

This document, then, provides another joint or dovetail between the forty-third year of Nebuchadnezzar and the reign of Awel-Marduk.

(4) Another, similar text, *YBC 4038,* dated to the "month of Addaru [the twelfth month], 15th day, accession year of Amel-Marduk," describes the monthly portioning out of "500 bushels of barley" at the Eanna temple in Uruk from "the 43rd year of Nabû-kudurri-usur [Nebuchadnezzar]" to the "1st year of Amel-Marduk."[84] Again, this text ties together the reigns of Nebuchadnezzar and his successor Awel-Marduk in a way that gives no room for any additional years between the two.

The Bible itself confirms that Awel-Marduk's accession year fell in the forty-third year of his father Nebuchadnezzar. This may be inferred from the datings given in 2 Kings 24:12; 2 Chronicles

82 Ronald Herbert Sack, *Amel-Marduk 562–560 B.C.* (Neukirchen-Vluyn: Verlag Butzon & Bercker Kevelaer, 1972), pp. 62, 63.

83 *Ibid.,* pp. 41, 116–118. The time interval from a harvest to the distribution of the yield was normally brief, a few years at the most. In the present case the yields of the three years' harvests were distributed in the accession year of Neriglissar, that is, three years after the harvests of the first year. The insertion of twenty extra years somewhere between Nebuchadnezzar and Neriglissar would increase this time interval to *twenty-three years—an* extremely long wait for the yields, to say the least.

84 Ronald H. Sack, "The Scribe Nabû-bani-ahi, son of Ibnâ, and the Hierarchy of Eanna as seen in the Erech Contracts," *Zeitschrift für Assyriologie,* Band 67 (Berlin, New York: Walter de Gruyter, 1977), pp. 43–45.

36:10, and Jeremiah 52:28, 31. A brief discussion of this evidence is included in the "Appendix for Chapter 3" (page 325).

c) Nebuchadnezzar to Awel-Marduk to Neriglissar

(5)In the Neo-Babylonian period, bookkeeping was already an ancient, highly complex and formalized business.[85] An interesting example of this is a tablet known as *NBC 4897*. The document is, actually, a *ledger,* tabulating the annual growth of a herd of sheep and goats belonging to the Eanna temple at Uruk *for ten consecutive years, from the thirty-seventh year of Nebuchadnezzar to the first year of Neriglissar.*

In the entries for each year the number of lambs and kids born during the year is added, and the number of animals killed (documented by their hides) or paid to the herdsmen as wages, are subtracted. The grand totals are then given in the column farthest to the right. Thus it is possible to follow the numerical increase of the herd year by year. The text shows that the herdsman responsible for the herd, Nabû-ahhe-shullim, during the ten years succeeded in enlarging the herd from 137 sheep and goats to 922 animals.[86]

True, the Babylonian scribe made a few miscalculations and mathematical mistakes which partially hampers the interpretation of the document.[87] There is no doubt, however, that it is an *annual* record, as year numbers are given for each successive year. In the entry for the first year of Neriglissar, for example, the grand total column contains the following information:

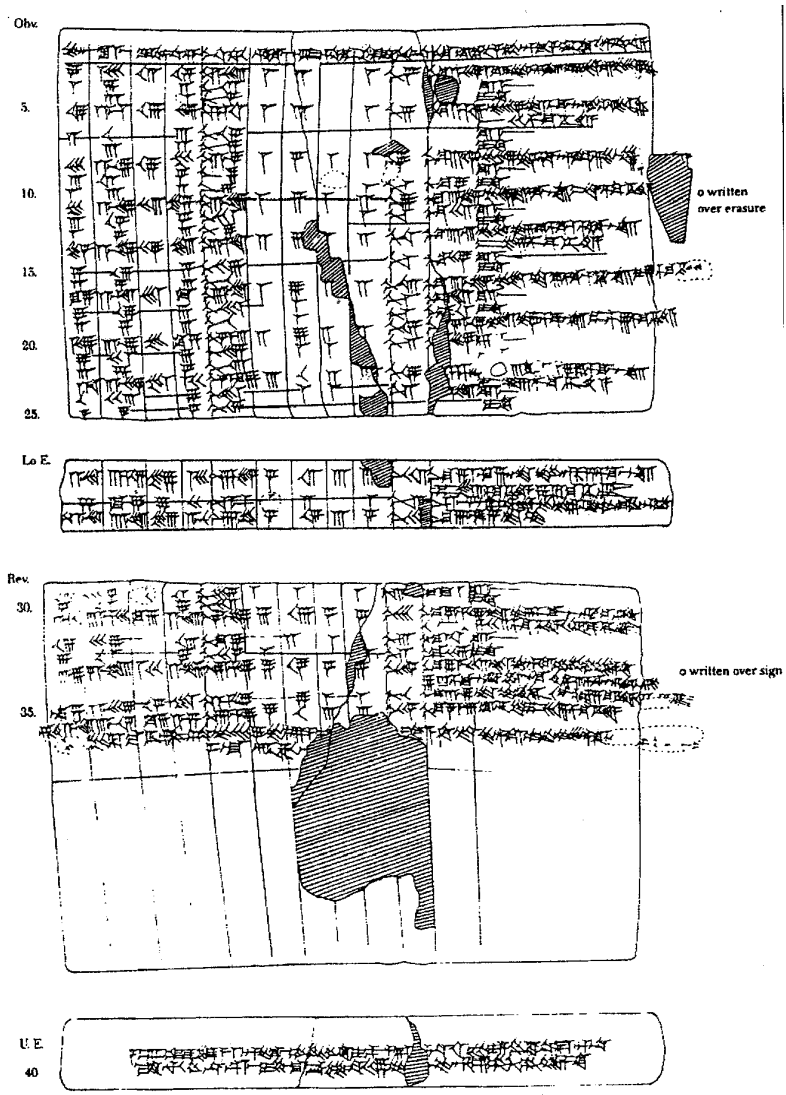
> Grand total: 922, 1st year of Nergal-sharra-usur, king of Babylon, 9 lambs in Uruk were received (and) 3 lambs for shearing.

Similar information is given for each year from the thirty-seventh year of Nebuchadnezzar to his forty-third year, for the first

85 Bookkeeping is as old as the art of writing. In fact, the oldest known script, the *proto-cuneiform script,* which emerged at Uruk (and usually is dated to about 3200 B.C.E.), "was almost exclusively restricted to bookkeeping; it was an 'accountant's script'." —H. J. Nissen, P. Damerow, & R. K. Englund, *Archaic Bookkeeping* (Chicago and London: The University of Chicago Press, 1993), p. 30.

86 G. van Driel & K. R. Nemet-Nejat, "Bookkeeping practices for an institutional herd at Eanna," *Journal of Cuneiform Studies,* Vol. 46:4, 1994, p.47. The form of record-keeping used in the text "involves accumulating data with cross-footing the accounts in order to prove that all entries are accounted therein."—Ibid.,p. 47, note 1.

87 The errors occur in the totals, probably because the scribes had difficulties in reading the numbers in their ledgers.—*Ibid.,* pp. 56, 57.



The "ledger" NBC 4897

The document tabulates the annual growth of a herd of sheep and goats belonging to the Eanna temple at Uruk for ten successive years, from the 37th year of Nebuchadnezzar to the 1st year of Neriglissar (568-559 B.C.E.). — From G. van Driel & K. R. Nemet-Nejat, "Bookkeeping practices for an institutional herd at Eanna." *Journal of Cuneiform Studies,* Vol. 46:4, 1994, pp. 48, 49.

and second years of Awel-Marduk, and, as cited, for the first year of Neriglissar.[88]

This document, then, not only provides an additional confirmation of the lengths of reigns of Nebuchadnezzar and Awel-Marduk, but it also demonstrates that *no extra kings or extra years* can be inserted between Nebuchadnezzar and Awel-Marduk, or between Awel-Marduk and Neriglissar.

d) Neriglissar to Labashi-Marduk

(6) A cuneiform tablet in the Yale Babylonian collection, *YBC 4012,* not only shows that Labashi-Marduk succeeded Neriglissar as king, but also that he did this *early in the fourth year* of his father's short reign.

The document records that "in the month of Addaru [the twelfth month], 3rd year of Nergal-[sharra-usur], king of Babylon" (March–April, 556 B.C.E.), Mushezib-Marduk, the overseer of the Eanna temple in Uruk, carried a considerable amount of money to Babylon, partly as payment for work and material for the Eanna temple. This document was drawn up about two months later, evidently at Babylon before Mushezib-Marduk's return to Uruk, and is dated to the "month of Ajaru [the second month of the next year], 22nd day, accession year of Labashi-Marduk, king of Babylon" (May 2, 556 B.C.E.).[89]

According to this document, Labashi-Marduk succeeded to the throne sometime in the first or second month of Neriglissar's fourth year of reign. This is in good agreement with the evidence given by the contract tablets, which show that the demise of the crown occurred in the first month of Neriglissar's fourth year. (See "Appendix for Chapter 3", pages 326, 327.)

88 For Nebuchadnezzar, only the year numbers are given. The royal names only appear with the first year of each king. There are two entries each for the thirty-seventh, thirty-eighth, and forty-first years (of Nebuchadnezzar), and no entries for his thirty-ninth and fortieth years. As pointed out by van Driel and Nemet-Nejat, "these errors can be easily explained: the outcome of the count for the previous year is the starting point for the inventory of the next year. That is, if the 'accountant' had a complete file, he would find the same data in tablets dealing with consecutive years: once at the end of one text and again at the beginning of the succeeding text." *(Op. cit.,* p.54.) From the forty-first year of Nebuchadnezzar until the first year of Neriglissar, though, the dates follow a regular pattern.

89 Ronald H. Sack, "Some Remarks on Sin-Iddina and Zerija, *qipu* and *shatammu* of Eanna in Erech . . . 562–56 B.C.," *Zeitschrift fur Assyriologie,* Band 66 (Berlin, New York: Walter de Gruyter, 1976), pp. 287, 288. As mentioned earlier, in the Babylonian system the accession year of a king was the same as the last year of his predecessor. According to our text the accession year of Labashi-Marduk *followed upon* the third year of Neriglissar. Labashi-Marduk's accession year, therefore, was also the fourth and last year of Neriglissar.

e) Neriglissar to Labashi-Marduk to Nabonidus

(7) That Neriglissar was succeeded by his son Labashi-Marduk is plainly stated by Nabonidus in one of the royal inscriptions discussed earlier, *Nabon. No. 8* (the *Hillah stele).* In column iv of this stele, Nabonidus relates that the cult of the goddess Anunitum in Sippar had been renewed by Neriglissar. Then he goes on saying:

> After (his) days had become full and he had started out on the journey of (human) destiny *his son Labashi-Marduk,* a minor (who) had not (yet) learned how to behave, *sat down on the royal throne* against the intentions of the gods and [three lines missing here].[90]

After the three missing lines Nabonidus, in the next column, goes on to speak of his own enthronement, evidently as the immediate successor of Labashi-Marduk. In doing so, he also names the last four of his royal predecessors: Nebuchadnezzar and Neriglissar (whom he regarded as legitimate rulers), and their sons Awel-Marduk and Labashi-Marduk (whom he regarded as illegitimate usurpers). He states:

> They carried me into the palace and all prostrated themselves to my feet, they kissed my feet greeting me again and again as king. (Thus) I was elevated to rule the country by the order of my lord Marduk and (therefore) I shall obtain whatever I desire—there shall be no rival of mine!
>
> I am the real executor of the wills of Nebuchadnezzar and Neriglissar, my royal predecessors! Their armies are entrusted to me, I shall not treat carelessly their orders and I am (anxious) to please them [i.e. to execute their plans].
>
> Awel-Marduk, son of Nebuchadnezzar, and Labashi-Marduk, son of Neriglissar [called up] their [troo]ps and ... their ... they dispersed. Their orders (7–8 lines missing).[91]

90 James B. Pritchard, *Ancient Near Eastern Texts* (Princeton, New Jersey: Princeton University Press, 1950), p. 309.

91 *Ibid.,* p. 309. Berossus, whose Neo-Babylonian history was shown to be based on the Babylonian chronicles, gives a similar account of these events: "After Eveil-maradouchos had been killed, Neriglisaros, the man who had plotted against him, succeeded to the throne and was king for four years. Laborosoarchodos [Labashi-Marduk], the son of Neriglisaros, who was only a child, was master of the kingdom for nine [probably an error for "2"; see note 20 above] months. Because his wickedness became apparent in many ways he was plotted against and brutally killed by his friends. After he had been killed, the plotters met and jointly conferred the kingdom on Nabonnedus, a Babylonian and a member of the conspiracy." — Stanley Mayer Burstein, *The Babyloniaca of Berossus. Sources from the Ancient Near East,* Vol.1, fascicle 5 (Malibu, Calif.: Undena Publications, 1978), p. 28.

This inscription, then, interlinks the reigns of Neriglissar and Labashi-Marduk, and evidently also those of Labashi-Marduk and Nabonidus. The possibility of inserting an "extra king" somewhere between these three kings is ruled out by this text.

(8) Some *legal* documents, too, contain information that spans the reigns of two or more kings. One example is *Nabon. No. 13,* which is dated to "the 12th day of (the month) Shabatu [the eleventh month], the accession year of Nabonidus, king of Babylon [February 2, 555 B.C.E.]. " The inscription tells about a woman, Belilitu, who brought up the following case before the royal court:

> Belilitu daughter of Bel-ushezib descendant of the messenger declared the following to the judges of Nabonidus, king of Babylon: 'In the month of Abu, *the first year of Nergal-shar-usur* [Neriglissar], *king of Babylon* [August–September, 559 B.C.E.], I sold my slave Bazuzu to Nabu-ahhe-iddin son of Shula descendent of Egibi for one-half mina five shekels of silver, but he did not pay cash and drew up a promissory note.' The royal judges listened (to her) and commanded that Nabu-ahhe-iddin be brought before them. Nabu-ahhe-iddin brought the contract that he had concluded with Belilitu and showed the judges (the document which indicated that) he had paid the silver for Bazuzu.[92]

Reference is thus made to the reigns of Neriglissar and that of Nabonidus. The generally accepted chronology would indicate that about *three and a half years* had passed since Belilitu had sold her slave in the first year of Neriglissar until she, in the accession year of Nabonidus, made a fraudulent but futile attempt to receive double payment for the slave. But if twenty years were to be added somewhere between the reigns of Neriglissar and Nabonidus, then Belilitu waited for *twenty-three and a half years* before she brought her case before the court, something that appears extremely unlikely.

f) Nabonidus to Cyrus

That Nabonidus was the king of Babylon when Cyrus conquered Babylonia in 539 B.C.E. is clearly shown by the *Nabonidus Chronicle* (B.M. 35382)[93] The chronicle evidently dated this event

92 M. A. Dandamaev, *Slavery in Babylonia* (DeKalb, Illinois: Northern Illinois University Press, 1984), pp. 189, 190.

93 As early as 1877, W. St. Chad Boscawen found a document among the Egibi tablets dated to the reign of Cyrus, "which stated that money was paid in the reign of 'Nabu-nahid *the former king' ." — Transactions of the Society of Biblical Archaeology,* Vol. VI (London, 1878), p. 29.

to the "seventeenth year" of Nabonidus, but as was pointed out earlier, this portion of the chronicle is damaged and the year number is illegible. Nonetheless, a whole group of economic texts has been found that provides chronological interlocking connections between Nabonidus' seventeenth year and the reign of Cyrus . These include the tablets with the catalogue numbers *CT 56:219, CT 57:52.3,* and *CT 57:56.*[94]

(9) The first of the three documents (CT 56:219) is dated to the *accession year* of Cyrus, and the next two (CT 57:52.3 and CT 57:56) are dated to his *first year.* But all three tablets also refer to the preceding king's "year 17," and since it is accepted as fact that Nabonidus was the final king of the Neo-Babylonian line, preceding Cyrus the Persian's rule, this confirms that Nabonidus' reign lasted 17 years [95]

(10) One of the more graphic examples of a chronological linkage between two reigns is a cuneiform tablet in the archaeological museum at Florence known as *SAKF 165.* As Professor J. A. Brinkman points out, this document "presents a unique year-by-year inventory of wool stuffs made into garments for the cult statues of the deities in Uruk. . . . Furthermore, it covers the vital years before and after the Persian conquest of Babylonia."[96]

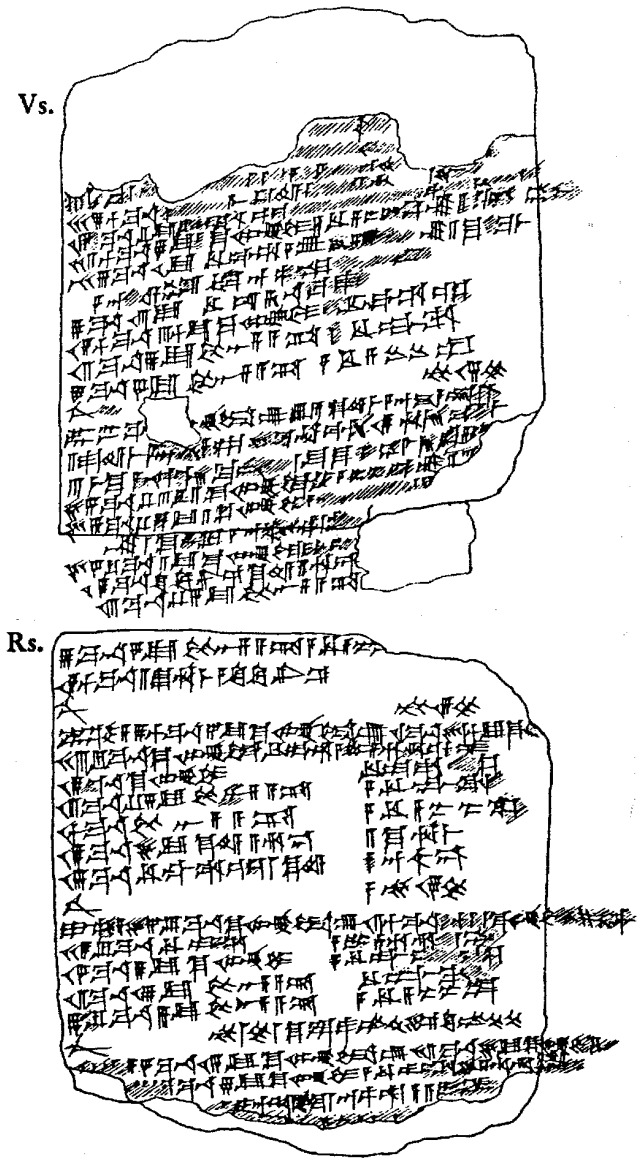
The inventory is arranged chronologically, and the preserved portion of the text covers five successive years, from the fifteenth year of Nabonidus to the second year of Cyrus, with year numbers given at the end of the inventory for each year:

Lines 3 – 13:	year 15 [of Nabonidus]
14 – 25:	year 16 [of Nabonidus]
26 – 33:	year 17 [of Nabonidus]
34 – 39:	year 1 of Cyrus
40 – :	[year 2 of Cyrus]

94 "CT 55–57" refers to the catalogues *Cuneiform Texts from Babylonian Tablets in the British Museum,* Parts 55–57, containing economic texts copied by T. G. Pinches during the years 1892 to 1894 and published by British Museum Publications Limited in 1982.

95 Stefan Zawadzki, "Gubaru: A Governor or a Vassal King of Babylonia?," *Eos,* Vol. LXXV (Wroclaw, Warszawa, Krakow, Gdansk, Lódz, 1987), pp. 71, 81; M. A. Dandamayev, *Iranians in Achaemenid Babylonia* (Costa Mesa, California and New York: Mazda Publishers, 1992), p. 91; Jerome Peat, "Cyrus 'king of lands,' Cambyses 'king of Babylon': the disputed co-regency," *Journal of Cuneiform Studies,* Vol. 41/2, Autumn 1989, p. 209. It should be noted that one of the three tablets, CT 57:56, is dated to Cambyses as *co-regent* with Cyrus in his first year.

96 *J.* A. Brinkman, "Neo-Babylonian Texts in the Archaeological Museum at Florence," *Journal of Near Eastern Studies, Vol.* XXV, Jan.–Oct. 1966, p. 209.



The inventory tablet SAKF 165

The text presents an inventory of wool stuff for five successive years, from Nabonidus' 15th year to Cyrus' 2nd year (541–537 B.C.E.). From Karl Oberhuber, *Sumerische und akkadische Keilschriftsdenkmäler des Archäologischen Museums zu Florenz* (Innsbruck, 1960). Obverse (above) and reverse (below).

The royal name was evidently given only for the first year of each ruler. But as the immediate predecessor of Cyrus was Nabonidus, "year 15", "year 16", and "year 17" clearly refer to his reign. The inventory of the year following upon "year 17" ends with the words, "year 1, Cyrus, King of Babylon, King of the Lands" (line 39). The last lines of the entry for the fifth year of inventory are damaged, and "year 2" (of Cyrus) can only be understood as implied.[97]

11) In ancient Mesopotamia, in the various temples the presence of the deities was represented by their statues. In times of war, when a city was taken, the temples were usually looted and the divine statues were carried away as "captives" to the land of the conquerors.

As such captures were seen by the citizens as an omen that the gods had abandoned the city and called for its destruction, they often tried to protect the statues by moving them to a safer place at the approach of a military force.

This is what happened shortly before the Persian invasion of northern Babylonia in 539 B.C.E., when according to the *Nabonidus Chronicle* Nabonidus ordered a gathering of the gods of several cities into Babylon. The same chronicle also tells that Cyrus, after the fall of Babylon, returned the statues to their respective cities.[98]

As discussed by Dr. Paul-Alain Beaulieu, there are several documents from the archive of the Eanna temple of Uruk which confirm that, in the *seventeenth* year of Nabonidus, the statue of Ishtar (referred to in the documents as "Lady-of-Uruk" or "Lady of the Eanna") was brought upstream by boat on the river Euphrates to Babylon. Further, these documents also show that the regular offerings to this statue of Ishtar were not interrupted during her temporary stay at Babylon. Cargoes of barley and other kinds of foodstuff for her cult were sent from Uruk to Babylon.

One example of this is given by a tablet in the Yale Babylonian Collection, *YOS XIX:94,* which is dated to the seventeenth year of Nabonidus and records a deposition before the assembly of the noblemen of Uruk:

> (These are) the *mar banî* [noblemen] in whose presence Zeriya, son of Ardiya, has thus spoken: Bazuzu, son of Ibni-Ishtar,

97 *Ibid.,* p. 209. A transliteration of the tablet is given by Karl Oberhuber in his *Sumerische and akkadische Keilschriftdenkmäler des Archäologischen Museums zu Florenz (= Innsbruck Beiträge zur Kulturwissenschaft,* Sonderheft 8, Innsbruck, 1960), pp. 111–113.

98 A. K. Grayson, *ABC* (1975), pp. 109, 110.

descendant of Gimil-Nanaya, has brought a boat from Babylon to lease it fo[r the sum of. . . . .], and he said thus: "I will take the barley for the regular offerings of the Lady-of-Uruk to Babylon." . . . . . .

City of the quay of Nanaya, domain of the Lady of Uruk: *Month Abu [the fifth month] - Day 5 - Seventeenth year of Nabonidus, king of Babylon* [= August 4, 539 B.C.E., Julian calendar].[99]

These documents clearly demonstrate that Cyrus' conquest of Babylon occurred in the ***seventeenth*** year of Nabonidus, which thus once again is proved to have been the last year of his reign.

The many examples cited above demonstrate that the activity recorded in a text at times spans over and ties together two successive reigns. They also demonstrate that it is possible to establish the length of the entire Neo-Babylonian era by the aid of such "chronological joints" alone. In fact, the lengths of reign of some kings (Nebuchadnezzar, Nabonidus) are established by more than one text of this kind.

C. SYNCHRONIC LINKS TO THE CHRONOLOGY OF EGYPT

An excellent proof of the correctness of a chronology is when it is in agreement with the chronologies of ***other*** contemporary nations, provided that these other chronologies are independently established and there are ***synchronisms,*** that is, dated connecting links that serve to join the two or more chronologies together at one or more points.

The reason why it is important that they be independently established is to rule out any attempt to discredit their worth by claiming that the chronology of a certain period in one nation has been established simply by the aid of the chronology of the contemporary period in another nation.

During the Neo-Babylonian period there are at least ***four*** such synchronisms between Egypt and the kingdoms of Judah and Babylon. Three of these are given in the Bible, in 2 Kings 23:29 (where Egyptian pharaoh Necho and Judean king Josiah appear), Jeremiah 46:2 (Necho, Nebuchadnezzar and Jehoiakim all appearing), and Jeremiah 44:30 (pharaoh Hophra, kings Zedekiah and Nebuchadnezzar listed).

99 Paul-Alain Beaulieu, "An Episode in the Fall of Babylon to the Persians," *Journal of Near Eastern Studies,* Vol. 52:4, October 1993, pp. 244, 245; cf. also Beaulieu, *The Reign of Nabonidus, King of Babylon, 556–539 B.C.* (New Haven and London: Yale University Press, 1989), pp. 221, 222.

The fourth is given in a cuneiform text, *B.M. 33041,* which refers to a campaign against Amasis, king of Egypt, in Nebuchadnezzar's thirty-seventh regnal year.[100] The meaning of these synchronisms will be unravelled further on.

C-1: The chronology of the Saite period

The kings reigning in Egypt during the Neo-Babylonian period belonged to the *Twenty-Sixth Dynasty* (664–525 B.C.E.). The period of this dynasty is also referred to as the *Saite period,* as the pharaohs of this dynasty took the city of Sais in the Delta as their capital.

If the four synchronisms mentioned above are to be of any definitive help to our study, it first needs to be shown that the chronology of that twenty-sixth dynasty of Egypt is fixed independently from the *contemporary* Neo-Babylonian chronology, and can thus stand on its own, as it were.

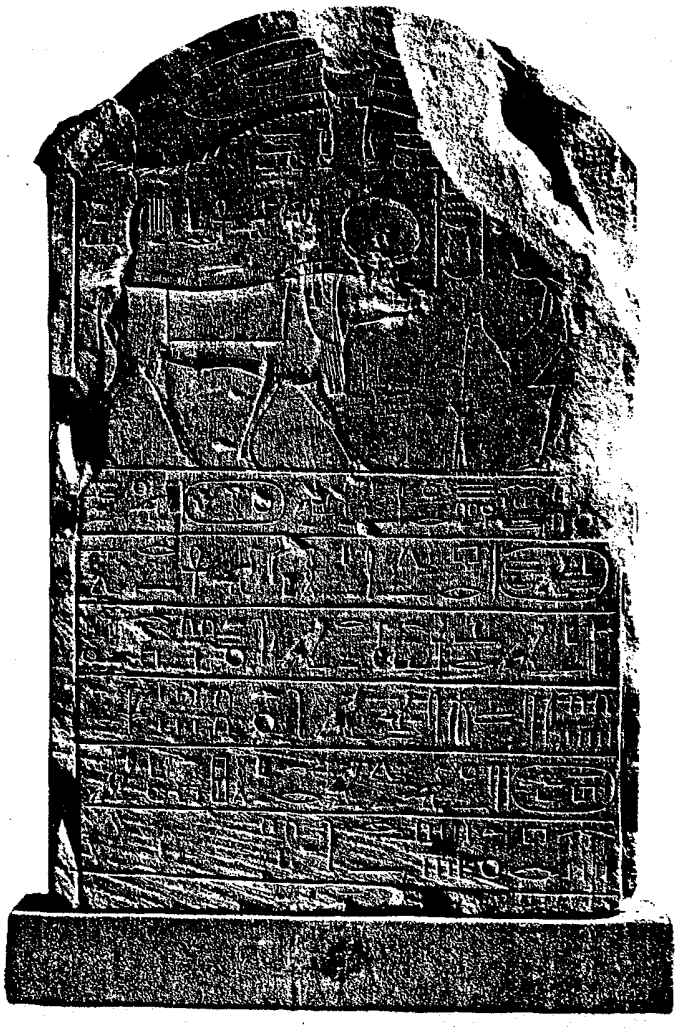
This can be determined in a quite unusual way, of which Dr. F. K. Kienitz writes:

> The chronology of the kings of the 26th dynasty, from Psammetichus I onwards, is completely established through a series of death stelae and stelae of holy Apis bulls, which list the birth date in 'Day x, Month y, Year z, of King A' and the death date in 'Day x, Month y, Year z, of King B' , and also the length of life of the [bull or person] in question in years, months, and days?[101]

This means that, if a death stele says that a sacred Apis bull or a person was born in the *tenth year* of King A and died at the age of twenty-five in the *twentieth* year of King B, we know that King A ruled for *fifteen years.*

100 B.M. 33041 was first published by T. G. Pinches in *Transactions of the Society of Biblical Archaeology,* Vol. VII (London, 1882), pp. 210–225.

101 Friedrich Karl Kienitz, *Die politische Geschichte Ägyptens vom 7. bis zum 4. Jahrhundert vor der Zeitwende* (Berlin: Akademie-Verlag, 1953), pp. 154, 155. (Translated from the German.) The Apis cult was practiced already in the First Dynasty of Egypt. At death the Apis bulls were mummified and buried in a coffin or (from the reign of Amasis onwards) in a sarcophagus made of granite. The burial place from the reign of Ramesses II onwards–a vast catacomb known as the "Serapeum" in Saqqara, the necropolis of Memphis–was excavated by A. Mariette in 1851. From the beginning of the Twenty-Sixth Dynasty and on the burials were marked by grave stelae with biographical data on the Apis bulls such as dates of installation and death and the age at death. — László Kákosy, "From the fertility to cosmic symbolism. Outlines of the history of the cult of Apis," *Acta Classica Universitatis Scientiarum Debrecenienses, Tomus* XXVI 1990 (Debrecini, 1991), pp. 3–7.



Grave stele of the 1st Apis of the 26th dynasty

The inscription shows that the first Apis of the 26th dynasty was born in the 26th year of Taharqah and died in the 20th year of Psammetichus I at an age of 21 years, which shows that Taharqah ruled for 26 years. This is also confirmed by other inscriptions. — From Aug. Mariette, *Le Sérapeum de Memphis* (Paris: Gide, Libraire-Éditeur, 1857)

This is the kind of contemporary evidence to which Dr. Kienitz refers. A translation of Kienitz' survey of this material is given here.[102]

1. GRAVE STELE OF THE 3RD APIS OF THE 26TH DYNASTY

Date of Birth:	Year 53 of Psammetichus I, Month 6, Day 19
Installation:	Year 54 of Psammetichus I, Month 3, Day 12
Date of Death:	Year 16 of Necho II, Month 2, Day 6
Date of Burial:	Year 16 of Necho II, Month 4, Day 16
Length of Life:	16 years, 7 months, 17 days

Result: Length of reign of Psammetichus = 54 years.

2. GRAVE STELE OF THE 4TH APIS OF THE 26TH DYNASTY

Date of Birth:	Year 16 of Necho II, Month 2, Day 7
Installation:	Year 1 of Psammetichus II, Month 11, Day 9
Date of Death:	Year 12 of Apries, Month 8, Day 12
Date of Burial:	Year 1.2 of Apries, Month 10, Day 21
Length of Life:	17 years, 6 months, 5 days

Result: As the date of Psammetichus II's death is elsewhere attested as Year 7, Month 1, Day 23,[103] the length of Necho's reign amounts to 15 years, that of Psammetichus II to 6 years.

3. TWO GRAVE STELAE OF A PRIEST NAMED PSAMMETICHUS

Date of Birth:	Year 1 of Necho II, Month 11, Day 1
Date of Death:	Year 27 of Amasis, Month 8, Day 28
Length of Life:	65 years, 10 months, 2 days

Result: The sum of the lengths of reign of Necho II, Psammetichus II, and Apries = 40 years. As Necho II reigned for 15 years, and Psammetichus II for 6 years, Apries' reign amounts to 19 years.

4. GRAVE STELE OF ANOTHER PSAMMETICHUS

Date of Birth:	Year 3 of Necho II, Month 10, Day 1 or 2
Date of Death:	Year 35 of Amasis, Month 2, Day 6
Length of Life:	71 years, 4 months, 6 days

Result: The same as under 3.

5. GRAVE STELE OF ONE BESMAUT

Year of Birth:	Year 18 of Psammetichus I
Year of Death:	Year 23 of Amasis
Length of Life:	99 years

Result: The total of 94 years for the lengths of reign from Psammetichus I to Apries inclusive is once more confirmed.

102 Kienitz, *op. cit.,* pp. 155, 156. The grave stelae under no. 1, 2, and 3 were translated and published by James Henry Breasted in *Ancient Records of Egypt,* Vol. IV (Chicago: The University of Chicago Press, 1906), pp. 497, 498, 501–503, 518–520. For no. 4 and 5, see the references by Kienitz, *op.cit.,* p. 156, notes 1 and 2.

103 Lines 5/6 of the Ank-nes-nefer-ib-Re Stele. See G. Maspero, *Ann. Serv.* 5 (1904), pp. 85, 86, and the translation by J. H. Breasted, *op. cit.,* IV, p. 505.

Consequently, these contemporary death stelae conclusively establish the lengths of reign of the first four kings of the twenty-sixth dynasty of Egypt as follows:

Psammetichus I	54 years
Necho II	15 years
Psammetichus II	6 years
Apries (= Hophra)	19 years

For the last two kings of the twenty-sixth dynasty, Amasis and Psammetichus III, material of this kind unfortunately is lacking. However, both Greek historian Herodotus (c. 484–425 BCE.) and the Graeco-Egyptian priest and historian Manetho (active c. 300 B.C.E.) give forty-four years to Amasis and six months to Psammetichus III.[104] And these lengths of reign have been confirmed by modem discoveries, as follows:

In the papyrus *Rylands IX* (also called "Petition of Petiese") dating from the time of Darius I (521–486 B.C.E.), the *forty-fourth year* of Amasis is mentioned in a context indicating it was his last full year. Each year, a prophet of Amun of Teuzoi (Psammetkmenempe by name) who lived in the Nile Delta, used to send a representative to fetch his stipend. This he did until the *forty-fourth year* of Amasis. This, in itself, is not decisive. But in the "Demotic Chronicle," a report on the compilation of Egyptian laws written under Darius I, there are also two mentions of the forty-fourth year of Amasis as some sort of terminal point. Finally, the same figure is given in an inscription from Wâdi Hammâmât.[105] The figure given by Herodotus and Manetho, therefore, is strongly supported by this combination of inscriptions.

104 Manetho's *Egyptian History,* which was written in Greek and probably was based on the temple archives, is preserved only in extracts by Flavius Josephus and Christian chronographers, especially by Julius Africanus in his *Chronographia* (c. 221 C.E.) and by Eusebius of Caesarea in his *Chronicon* (c. 303 C.E.). Africanus, who transmits Manetho's data in a more accurate form, gives forty-four years to Amasis and six months to Psammetichus III. This agrees with Herodotus's figures.—W. G. Waddell, *Manetho* (London: Harvard University Press, 1948), pp. xvi–xx, 169–174.

105 W. Spiegelberg, *Die Sogenannte Demotische Chronik* (Leipzig: J. C. Hinrichs'sche Buchhandlung, 1914), p. 31; Kienitz, *op. cit.,* p. 156; and Richard A. Parker, "The Length of Reign of Amasis and the Beginning of the Twenty-Sixth Dynasty," *Mitteilungen des Deutschen Archäologischen Instituts,* Kairo Abteilung, XV, 1957, p. 210. For some time it was held that Amasis died in his forty-fourth regnal year, and because of the Egyptian nonaccession year system, whereby a king's accession year was reckoned as his first regnal year, they gave Amasis only forty-three full years. But in 1957, in the article referred to above, R. A. Parker demonstrated conclusively that Amasis reigned for forty-four full years. This, of course, moved the reigns of the earlier kings of the Saite dynasty one year backwards. The beginning of the dynasty, therefore, was re-dated to 664 instead of 663 B.C.E., as had been held previously. (R. A. Parker, *op. cit.,* 1957, pp. 208–212.) Since 1957, Parker's conclusions have obtained general acceptance among scholars.—For additional information on the nonaccession year reckoning, see Appendix For Chapter Two: "Methods of reckoning regnal years."

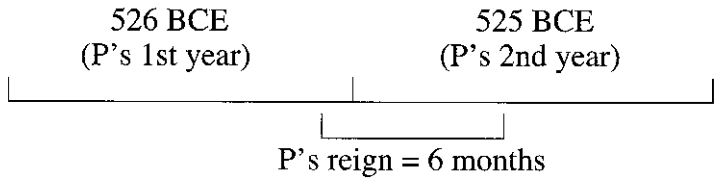
As to Psammetichus III, the highest date available for this king is Year Two. Three documents (papyri) dated to the third, fourth, and fifth months of his second year have been discovered. And yet, this is no contradiction to the statement made earlier that the rule of this king actually covered only *six months*. How so?

The Egyptians used a nonaccession year system. According to this system *the year in which a king came to power* was reckoned as his first regnal year. Psammetichus III was dethroned by the Persian king Cambyses during his conquest of Egypt, generally dated to 525 B.C.E. by the authorities.[106] At this time the Egyptian civil calendar year almost coincided with the Julian calendar year.[107] If the conquest of Egypt occurred in the sixth month of the reign of Psammetichus III, this must have been in May or June, 525 B.C.E.[108] With this prerequisite, his six months of rule began at the end of the previous year, 526 B.C.E., quite possibly only a few days or weeks before the end of that year. Though he ruled for only a fraction of that year, this fraction of a few days or weeks was reckoned as his *first* regnal year according to the Egyptian *nonaccession* year system. Thereby his *second* regnal year began to count only a few days or weeks after his accession to the throne. Thus, although he ruled for only six months, documents dated up to the fifth month of his second year are, in view of the supporting evidence, only what we should expect to find. The following illustration makes the matter plain:

106 Kienitz, *op. cit.,* p. 157, note 2. This date is also accepted by the Watch Tower Society, as can be seen from *Insight on the Scriptures,* Vol. 1 (1988), pp. 698, 699.

107 In the two years 526 and 525 B.C.E. the Egyptian civil calendar year began on January 2 in the Julian calendar.—Winfried Barta, "Zur Datierungspraxis in Ägypten unter Kambyses and Dareios I," *Zeitschrift für Ägyptische Sprache and Altertumskunde,* Band 119:2 (Berlin: Akademie Verlag, 1992), p. 84.

108 The *exact* time of the year for Cambyses' capture of Egypt is not known. (Compare Molly Miller, "The earlier Persian dates in Herodotus," in *Klio,* Band 37,1959, pp. 30, 31.)—In the nineteenth century E. Revillout, one of the founders of the scholarly journal *Revue Égyptologique* in the 1870's, claimed that Psammetichus III ruled for at least two years, as one document dated to the *fourth* year of a king Psammetichus seemed to be written at the end of the Twenty-Sixth Dynasty. *(Revue Égyptologique,* Vol. 3, Paris, 1885, p. 191; and Vol. 7, 1896, p. 139.) But since then many new documents have been discovered that make Revillout's theory untenable. The document evidently refers either to one of the earlier kings known by the name of Psammetichus, or to one of the later vassal kings by that name. There were three kings by the name Psammetichus during the Saite period, and also two or three vassal kings by that name in the fifth century, and sometimes it has been difficult to decide which of them is referred to in a text. Some documents that an earlier generation of Egyptologists dated to the reign of Psammetichus III have later had to be re-dated. Wolfgang Helck & Wolfhart Westendorf (eds.), *Lexikon der Ägyptologie,* Band IV (Wiesbaden, 1982), pp. 1172–75.



As demonstrated by the discussion above, the chronology of the Twenty-Sixth Dynasty of Egypt is soundly and independently established. The results are summarized in the following table:

CHRONOLOGY OF THE TWENTY-SIXTH DYNASTY:

Psammetichus I	54 years	664 – 610 B.C.E.
Necho II	15	610 – 595
Psammetichus II	6	595 – 589
Apries (= Hophra)	19	589 – 570
Amasis	44	570 – 526
Psammetichus III	1	526 – 525

C-2: Synchronisms to the chronology of the Saite period

Does the chronology of the Egyptian Saite period square with that of the Neo-Babylonian era as established above? Or, instead, does it harmonize with the chronology of the Watch Tower Society as presented, for example, in its Bible dictionary *Insight on the Scriptures,* Vol. 1, pages 462–466?

The four synchronisms to the Egyptian chronology mentioned earlier (the first three of these coming from the Scriptures) decide the matter:

> *First synchronism—2 Kings 23:29:* In his [king Josiah's] days Pharaoh Nechoh the king of Egypt came up to the king of Assyria by the river Euphrates, and King Josiah proceeded to go to meet him; but he put him to death at Megiddo as soon as he saw him. (*NW*)

Here it is clearly shown that Judean king Josiah died at Megiddo in the reign of Pharaoh Necho of Egypt. According to the chronology of the Watch Tower Society, Josiah's death took place in 629 B.C.E. (See *Insight on the Scriptures,* Vol. 2, pp. 118, 483.) But according to clear historical evidence, Necho's reign *did not begin until nineteen years later,* in 610 B.C.E. (see table above).[109] So Josiah's death did not take place in 629 B.C.E. but twenty years later, in 609.[110]

109 Helck & Westendorf, *op. cit.,* Band IV, pp. 369–71. Necho succeeded to the throne at the death of his father Psammetichus I in the spring or summer of 610 B.C.E., but according to the Egyptian antedating method his first year was counted from the beginning of the Egyptian civil calendar year, which this year began on January 23 of the Julian calendar. —W. Barta, *op. cit.,* p. 89.

110 For a discussion of the exact date of Josiah's death, see the final section of the Appendix: "Chronological tables covering the seventy years."

> *Second synchronism—Jeremiah 46:2:* For Egypt, concerning the military force of Pharaoh Necho the king of Egypt, who happened to be by the river Euphrates at Carchemish, whom Nebuchadrezzar the king of Babylon defeated in the fourth year of Jehoiakim the son of Josiah, the king of Judah. *(NW)*

This battle in the "fourth year of Jehoiakim" is placed in the year 625 B.C.E. by the Watch Tower Society *(Insight on the Scriptures,* Vol. 2, p. 483.), which again cannot be harmonized with the contemporary chronology of Egypt. But if this battle at Carchemish took place twenty years later, in the accession-year of Nebuchadnezzar, that is, in June, 605 B.C.E. according to all the lines of evidence presented earlier, we find this date to be in perfect harmony with the recognized reign of Pharaoh Necho, 610–595 B.C.E.

> *Third synchronism—Jeremiah 44:30:* This is what Jehovah has said: 'Here I am giving Pharaoh Hophra, the king of Egypt, into the hand of his enemies and into the hand of those seeking for his soul, just as I have given Zedekiah the king of Judah into the hand of Nebuchadrezzar the king of Babylon, his enemy and the one seeking for his soul.' *(NW)*

As the context shows (verses 1 ff.) these words were uttered not long after the destruction of Jerusalem and its temple, when the rest of the Jewish population had fled to Egypt after the assassination of Gedaliah. At that time Egypt was ruled by Pharaoh Hophra, or Apries, as he is named by Herodotus.[111]

If Apries ruled Egypt at the time when the Jews fled there some months after the desolation of Jerusalem, this desolation cannot be dated to 607 B.C.E., for Apries *did not begin his reign until 589 B.C.E.* (see table above). But a dating of the desolation of Jerusalem to 587 B.C.E. is in good agreement with the years of reign historically established for him: 589–570 B.C.E.

> *Fourth synchronism—B.M. 33041:* As mentioned earlier, this text refers to a campaign against king Amasis ([Ama]-a-su) in Nebuchadnezzar's thirty-seventh year. A. L. Oppenheim's translation of this scanty fragment reads as follows: ". . . [in] the 37th year, Nebuchadnezzar, king of Bab[ylon], mar[ched against] Egypt *(Misir)* to deliver a battle. *[Ama]sis* (text: [. . .]*-a(?)-su),* of Egypt, [called up his a]rm[y] . . . [. . .]*ku* from the town *Putu-laman*

111 His name in the Egyptian inscriptions is transcribed as *Wahibre.* In the Septuagint version of the Old Testament (LXX), his name is spelled *Ouaphre.*

> . . . distant regions which (are situated on islands) amidst the sea . . . many . . . which/who (are) in Egypt . . . [car]rying weapons, horses and [chariot]s . . . he called up to assist him and . . . did [. . .] in front of him . . . he put his trust . . .. "[112]

This text is badly damaged, but it does definitely state that the campaign into Egypt took place in Nebuchadnezzar's "thirty-seventh year," and while it is true that the name of the pharaoh is only partly legible, the cuneiform signs that are preserved seem only to fit Amasis, and no other pharaoh of the twenty-sixth dynasty.

The Watch Tower Society dates the thirty-seventh year of Nebuchadnezzar to 588 B.C.E. *(Insight on the Scriptures,* Vol. 1, p. 698), but this was during the reign of Apries (see the table). On the other hand, if Nebuchadnezzar's thirty-seventh year was 568/67 BCE., as is established by all the lines of evidence presented earlier, this date is in excellent agreement with the reign of Amasis (570–526 B.C.E.).

Consequently, not one of the four synchronisms with the independently established chronology of Egypt agrees with the chronology developed by the Watch Tower Society. The discrepancy in that Society's reckoning is consistently about twenty years out of harmony.

Interestingly, however, all four synchronisms are in perfect harmony with the dates arrived at from the other lines of evidences that have been discussed. These synchronisms to the Egyptian chronology, therefore, add *yet another* line of evidence to the others, which point consistently to 587 B.C.E. as the definitive date for the destruction of Jerusalem.

SUMMARY AND CONCLUSION

Seven lines of evidence have been presented above against any possible dating of the destruction of Jerusalem to the year 607 B.C.E., all of which lines of evidence agree in dating that event twenty years later. At least four of these lines of evidence are clearly *independent of each other.*

Consider first the three which give evidence of interdependence:

(1) Early historians, the Neo-Babylonian chronicles, and the Uruk kinglist

We first saw that in the third century B.C.E., Babylonian priest *Berossus* wrote a history of Babylonia, quoted from by later historians, both in the B.C.E. and early C.E. periods. The validity

112 Translated by A. Leo Oppenheim in Pritchard's *ANET* (see note 2 above), p. 308.

of the dates presented by Berossus in his history is evidenced by their accurate reflection of historical material now available on ancient cuneiform tablets unearthed in Babylon, particularly the *Neo-Babylonian Chronicles* (a series of historical vignettes setting out certain episodes relating to the Babylonian empire, notably records of kingly succesion and of military campaigns waged), and also the *Babylonian kinglists* (particularly the one known as the Uruk kinglist) which list the Babylonian rulers by name along with the years of their reign.

Likewise with the source known as the *Royal Canon,* a list of Babylonian rulers, which, though only fully extant in manuscripts of Ptolemy's *Handy Tables* dated to the eighth century C.E. and in later manuscripts, seems clearly to have been the common source relied upon by astronomer Claudius Ptolemy (70–161 C.E.) and by earlier scholars, such as Hipparchus of the second century B.C.E., when these dealt with and dated events of the Neo-Babylonian period. Though the Royal Canon evidently drew upon sources common to those employed by Berossus—that is, the ancient *Neo-Babylonian chronicles and kinglists—the* order and forms of the names of kings found in it differ from his presentation sufficiently to indicate that it is a record developed independently of his writings.

It is acknowledged that the *Neo-Babylonian chronicles* unearthed up to this point are still incomplete, and also that some of the figures in the *Uruk kinglist* for the reigns of the Neo-Babylonian kings are damaged and only partially legible. However, the figures that *are* there and *are* legible on these cuneiform tablets all agree with the corresponding figures found both in the writings of Berossus and in the listing of the Royal Canon.

There is, then, strong reason to believe that the chronological information originally given in those Neo-Babylonian sources has been preserved unaltered by Berossus and the Royal Canon. Both of these agree as to the overall length of the Neo-Babylonian era. In the crucial area here under investigation, their figures point to 604/03 B.C.E. as the first year of Nebuchadnezzar's reign, and 587/86 B.C.E. as his eighteenth year when he desolated Jerusalem.

Though this evidence is substantial, it remains true that Berossus and the Royal Canon are secondary sources, and even those ancient tablets known as the Babylonian Chronicles and the Uruk kinglist are evidently copies of earlier originals. What supporting evidence is there, then, to believe the records involved were actually written *contemporaneously* with the times and events described?

(2) Inscriptions Nabon. No.18 and Nabon. No. 8 (the Hillah stele)

Aside from the Babylonian Chronicles and kinglists there are other ancient documents which give evidence of being, not copies, but originals. The royal inscription *Nabon. No. 18,* dated by the aid of another inscription known as the *Royal Chronicle* to the second year of Nabonidus, fixes this year astronomically to 554/53 B.C.E. As Nabonidus' reign ended with the fall of Babylon in 539 B.C.E., the total length of his reign is shown by this inscription to have been seventeen years (555/54–539/38 B.C.E.).

The *whole length of the Neo-Babylonian period prior to Nabonidus* is given by *Nabon. No. 8* (the *Hillah stele),* which gives the time elapsed from the sixteenth year of initial ruler Nabopolassar up to the accession-year of final ruler Nabonidus as *fifty-four years.* The stele thus fixes the sixteenth year of Nabopolassar to 610/09 B.C.E.

If this was Nabopolassar's sixteenth year, his twenty-first and last year was 605/04 B.C.E. Nebuchadnezzar's first year, then, was 604/03 B.C.E. and his eighteenth year was 587/86, during which Jerusalem was destroyed.

(3) Nabon. H 1, B (the Adad-guppi' stele)

Nabon. H 1, B (the *Adad-guppi' stele)* gives the reigns of all the Neo-Babylonian kings (except for that of Labashi-Marduk, as his brief reign does not affect the chronology presented) from Nabopolassar up to the ninth year of Nabonidus. Since the Watch Tower Society indirectly accepts a seventeen-year rule for Nabonidus (as was shown above in the discussion of the *Nabonidus Chronicle),* this stele of itself overthrows their 607 B.C.E. date for the desolation of Jerusalem and shows this event to have taken place twenty years later, in 587 B.C.E.

These three lines of evidence may logically be grouped together because it cannot be clearly established that the various documents involved are wholly independent of one another. Reasons for believing that Berossus and the Royal Canon both got their information from Babylonian chronicles and kinglists have already been pointed out. It is also possible that the chronological information given in the royal inscriptions was derived from the chronicles (although this is something that cannot be proved).[113] Grayson's suggestion, that the chronicles themselves may have

113 A. K. Grayson, "Assyria and Babylonia," *Orientalia,* Vol. 49 (1980), p. 164

been composed with the help of the information given in the astronomical "diaries" has been strongly argued against by other scholars.[114]

This possible interdependence of some of these sources, however, does not nullify their conclusive power. As the *ancient royal inscriptions* preserve chronological information that is *contemporary with* the Neo-Babylonian era itself, we have every reason to accept it as *factual* and *true* information. This would be true even if this information was based upon contemporary Babylonian chronicles. For, although the chronology of these chronicles is preserved only in a few fragmentary copies, in a late kinglist, and by Berossus and the Royal Canon, the *agreement* between these later sources and the ancient royal inscriptions is striking. This agreement confirms that the figures of the original Neo-Babylonian chronicles have been correctly preserved in these later sources.

There remain four lines of evidence which have sound claim to independence.

(4) Economic-administrative and legal documents

Tens of thousands of economic, administrative and legal texts, dated to the year, month, and the day of the reigning king, have come down to us from the Neo-Babylonian period. A large number of dated tablets are extant *from each year* during this whole period. The length of reign of each king may, then, be established by these documents, *sometimes almost to the day.*

The results arrived at are in good agreement with the figures given by Berossus, the Royal Canon, the chronicles, and the contemporary royal inscriptions from the reign of Nabonidus.

The twenty years demanded by the chronology of the Watch Tower Society are totally missing.

The business and administrative documents are *original* documents, *contemporary with* the Neo-Babylonian era itself, which makes this line of evidence exceedingly strong. These documents definitely point to 587/86 B.C.E. as Nebuchadnezzar's eighteenth regnal year, when he desolated Jerusalem.

(5) Prosopographical evidence

The *prosopographical study* of the cuneiform tablets provides various checks on the accuracy of the Neo-Babylonian chronology.

114 *Ibid.,p.* 174. Cf. John M. Steele, *Observations and Predictions of Eclipse Times by Early Astronomers* (Dordrecht, etc: Kluwer Academic Publishers, 2000), pp. 127, 128. The astronomical observations recorded in these diaries must anyway be treated as separate and independent lines of evidence.

The careers of scribes, temple administrators, slaves, business men, and others may be followed for decades, in some cases through almost the whole Neo-Babylonian period and on into the Persian era. Thousands of dated documents give insight into the business, legal, religious, family and other activities of these individuals. Many texts deal with matters that extend over weeks, months, or even years, such as inventories, lease of land or houses, instalments of debts, hire of slaves and livestock, run-away slaves, court proceedings, and so on.

The activities of some individuals may be followed through almost their whole lives. But never do we find that their activities cross the established chronological borders of the period into some unknown twenty-year period that the Watch Tower Society would add to the Neo-Babylonian era. The insertion of these twenty years would, in fact, not only distort the understanding of the careers, activities, and family relations of many individuals, but it would also give many of them abnormal life spans.

(6) Chronological interlocking joints

Sometimes a text may contain activities and dates that intersect two or more consecutive reigns in a way that chronologically ties them together and excludes every possibility of inserting extra kings and years between them.

As was demonstrated in this particular section, quite a number of such documents exist that interlock each reign with the next *throughout the whole Neo-Babylonian period.* Although eleven documents of this kind were presented earlier, a close examination of the tens of thousands of unpublished tablets from the Neo-Babylonian period would probably multiply the number. Those presented, however, suffice to show that the length of the whole Neo-Babylonian era may be securely established by the aid of such "chronological joints" alone.

(7) Synchronisms with the contemporary Egyptian chronology

The chronology of contemporary Egyptian kings provides an excellent test of Neo-Babylonian chronology, as there are four synchronisms tied to it, three of which are given in the Bible.

These synchronisms are of the utmost importance, as the contemporary chronology of Egypt has been established *independently* of the chronologies of other nations of that time. Yet it was shown that the Egyptian chronology is in complete harmony with the data given by Berossus, the Royal Canon, and all the

cuneiform documents discussed above, while a comparison with the chronology of the Watch Tower Society shows a consistent difference of about twenty years.

These four synchronisms to Egyptian chronology all refute the 607 B.C.E. date for the desolation of Jerusalem and once again uphold 587/86 B.C.E. as the correct date for that event.

The evidence from all this material is overwhelming and should certainly be considered *conclusive*. For most scholars, just *two or three* of these seven lines of evidence would be sufficient proof of the accuracy of the Neo-Babylonian chronology. For the leaders of the Watch Tower Society, however, not even *seven* lines of evidence are enough to change their minds, as shown by their consistent rejection of such evidence presented to them earlier.

Since the chronology constitutes the very foundation for the major claims and message of the organization, they evidently feel that too much is at stake for abandoning their Gentile times chronology, not least of this being their own claimed position of divine authority. It is extremely unlikely, therefore, that even *twice* the number of lines of evidence will have any influence on their minds.

For the sake of completeness, however, *another seven lines* of evidence will be presented in detail in the next chapter, and a few others wil1 be briefly described. As all of them are based on ancient Babylonian *astronomical* texts, they will be shown to turn the chronology of the whole Neo-Babylonian era into what is termed an *absolute chronology*.

4

THE ABSOLUTE CHRONOLOGY OF THE NEO-BABYLONIAN ERA

AS EXPLAINED earlier in chapter 2, an absolute chronology is usually best established by the aid of ancient astronomical observations.

Although no observations usable for dating purposes are recorded in the Bible, it was pointed out that at 2 Kings 25:2, 8 the dating of the desolation of Jerusalem to "the eleventh year of King Zedekiah," the last king of Judah, is synchronized with "*the nineteenth year of King Nebuchadnezzar,*" the Babylonian desolator of the city. If the reign of Nebuchadnezzar could be fixed astronomically to our era, it would be possible to establish the B.C.E. date for the desolation of Jerusalem.

In this chapter it will be demonstrated that the *whole* Neo-Babylonian period, including the reign of Nebuchadnezzar, may be established as an *absolute chronology* by the aid of astronomical cuneiform documents found in Mesopotamia.

The study of the Babylonian astronomical documents

The study of the astronomical cuneiform texts started more than one hundred years ago. One of the leading Assyriologists at that time was J. N. Strassmaier (1846–1920). He was a diligent copyist of the cuneiform texts that from the 1870's onwards were being brought from Mesopotamia to the British Museum in enormous quantities.

Strassmaier found that a great number of the texts contained astronomical data. He sent copies of these texts to his colleague J. Epping, who taught mathematics and astronomy in Falkenburg, Holland. Thus Epping (1835–1894) was to become the pioneer in

the study of the Babylonian astronomical texts. After his death another of Strassmaier's colleagues, Franz Xaver Kugler (1862–1929), took over the work of Epping.

Few, if any, have contributed as much to the study of the astronomical texts as Kugler. He published his results in a series of monumental works, such as *Die Babylonische Mondrechnung* (1901), *Sternkunde and Sterndienst in Babel,* Vol. I and II (1907–1924), and *Von Moses bis Paulus* (1922). The last two works include detailed studies of ancient chronology, in which the astronomical texts are fully developed and studied in depth.[1]

After Kugler's death in 1929 some of the key names in the study of the Babylonian astronomy have been P. J. Schaumberger (deceased 1955), Otto Neugebauer (1899–1990), and Abraham J. Sachs (1914–1983). Many other modern scholars have contributed much to the understanding of the astronomical texts, some of whom have been consulted for the following discussion.

Ancient astronomy

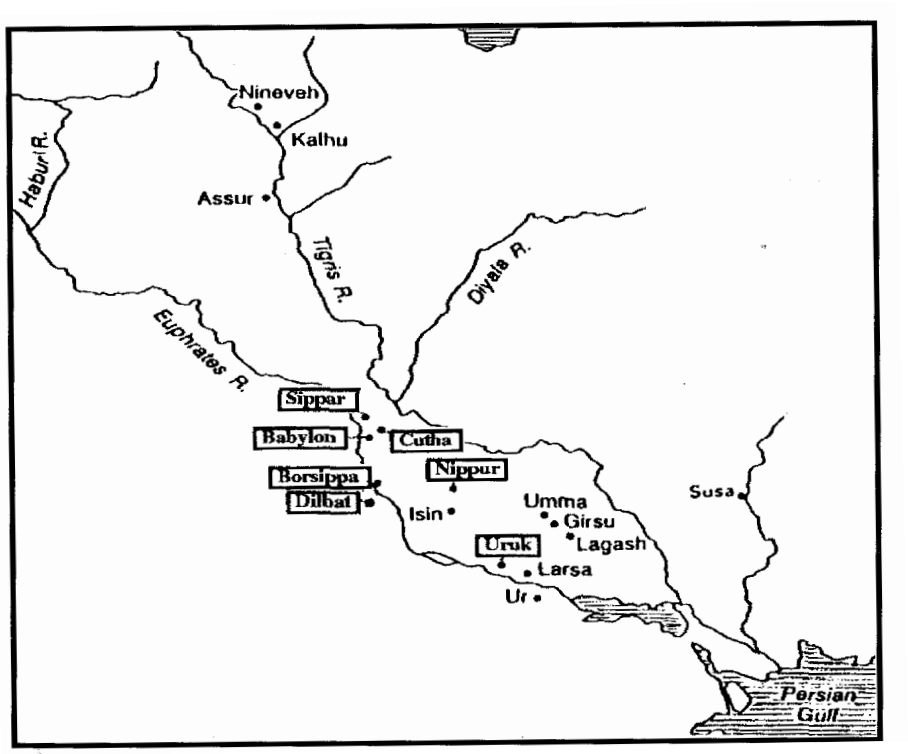
As can be deduced from the Babylonian astronomical tablets, a regular and systematic study of the sky began in the mid-eighth century B.C.E., perhaps even earlier. Trained observers were specifically employed to carry out a regular watch of the positions and movements of the sun, the moon and the planets, and to record from day to day the phenomena observed.

This regular activity was performed at a number of observational sites in Mesopotamia, located in the cities of Babylon, Uruk, Nippur, Sippar, Borsippa, Cutha, and Dilbat.[2] (See the accompanying map.)

As a result of this activity, the Babylonian scholars at an early stage had recognized the various cycles of the sun, the moon and the five planets visible to the naked eye (Mercury, Venus, Mars, Jupiter, and Saturn), enabling them even to predict certain phenomena, such as lunar eclipses.

1 Kugler's results are of lasting value. Dr. Schaumberger states that Kugler "on all essential points has fixed the chronology for the last centuries before Christ, having thus performed an invaluable service to the science of history."—P. J. Schaumberger, "Drei babylonische Planetentafeln der Seleukidenzeit," *Orientalia,* Vol. 2, Nova Series (Rome, 1933), p. 99.

2 In Assyrian times, such observations were also performed in the cities of Assur and Nineveh. The observations in Babylonia were possibly performed on top of temple-towers, *ziggurats,* such as the ziggurat of Etemenanki in Babylon.



Astronomical Observation Sites in Babylonia

Finally, in the Persian and Seleucid eras, they had developed a very high level of scientific and mathematical astronomy that had never been reached by any other ancient civilization.[3]

*The nature of the Babylonian astronomical texts**

Although astronomical cuneiform texts have been found also in the ruins of Nineveh and Uruk, the bulk of the texts—about 1,600—comes from an astronomical archive somewhere in the city of Babylon.

3 It has often been pointed out that the Babylonian interest in the sky to a great extent was *astrologically* motivated. Although this is correct, Professor Otto Neugebauer points out that the main purpose of the Babylonian astronomers was not astrology, but the study of calendaric problems. (Otto Neugebauer, *Astronomy and History. Selected Essays.* New York: Springer-Verlag, 1983, p. 55.) For further comments on the astrological motive, see the Appendix for chapter four, section 1: "Astrology as a motive for Babylonian astronomy."

* Consideration of astronomical evidence inescapably involves much technical data. Some readers may prefer to bypass this and go to the summary at the end of this chapter. The technical data is nonetheless there for corroboration.

The archive was found and emptied by local inhabitants from nearby villages, and the exact finding spot within the city is not known today. Most of the texts were obtained for the British Museum from dealers in the latter part of the nineteenth century.

About 300 of the texts are concerned with scientific mathematical astronomy and belong to the last four centuries B.C.E. Most of them are *ephemerides,* that is, tables with calculations of the positions of the moon and the five naked-eye planets.

The greater part of the remaining texts, however, about 1,300 in number, are non-mathematical and principally *observational* in nature. The observations date from about 750 B.C.E. to the first century of the Christian era.[4] The great number of observational texts are of the utmost importance for establishing the absolute chronology of this whole period.

With respect to content, the non-mathematical texts may be subdivided into various categories. By far the largest group are the so-called *astronomical "diaries. "* These record on a regular basis a large number of phenomena, including the positions of the moon and the planets. It is generally accepted that such "diaries" were kept continuously from the mid-eighth century B.C.E. onwards. The other categories of texts, which include *almanacs* (each recording astronomical data for one particular Babylonian year), texts with *planetary observations* (each giving data for one specific planet), and texts recording *lunar eclipses,* were apparently excerpts from the "diaries."

Thus, although only a handful of diaries from the four earliest centuries are extant, quite a number of the observations recorded in other diaries compiled in this early period have been preserved in these excerpts.

A comprehensive examination of all the non-mathematical texts was started several decades ago by Dr. A. J. Sachs, who devoted the last thirty years of his life to the study of these texts.[5] After his death in 1983, Sachs' work has been continued by Professor Hermann Hunger (in Vienna, Austria), who today is the leading expert on the astronomical observational texts. Both of these authorities were consulted for the following discussion.

4 Asger Aaboe, 'Babylonian Mathematics, Astrology, and Astronomy," *The Cambridge Ancient History,* Vol. III:2 (Cambridge: Cambridge University Press, 1991), pp. 277–78. The observational texts may also occasionally contain descriptions of eclipses calculated in advance.

5 The various kinds of texts were classified by A. J. Sachs in the *Journal of Cuneiform Studies,* Vol. 2 (1948), pp. 271–90. In the work *Late Babylonian Astronomical and Related Texts* (Providence, Rhode Island: Brown University Press, 1955), Sachs presents an extensive catalogue of the astronomical, astrological, and mathematical cuneiform texts, most of which had been copied by T. G. Pinches and J. N. Strassmaier in the late nineteenth century. The catalogue lists 1520 astronomical texts, but many more have been discovered since.

A. THE ASTRONOMICAL DIARIES

A "diary" usually covers the six or seven months of the first or second half of a particular Babylonian year and records, often on a day-to-day basis, the positions of the moon and the planets in relation to certain stars and constellations, and also gives details of lunar and solar eclipses. Much additional information is added, such as meteorological events, earthquakes, market prices, and similar data. Sometimes also historical events are recorded.[6] Over 2,000 years old, it is only to be expected that these clay tablets are often fragmentary.

More than 1,200 fragments of astronomical diaries of various sizes have been discovered, but because of their fragmentary condition only about a third of the number are datable.

Most of these cover the period from 385 to 61 B.C.E. and contain astronomical information from about 180 of these years, thus firmly establishing the chronology of this period.[7]

Half a dozen of the diaries are earlier. The two oldest are *VAT 4956* from the sixth and *BM. 32312* from the seventh centuries B.C.E. Both provide absolute dates that firmly establish the length of the Neo-Babylonian period.

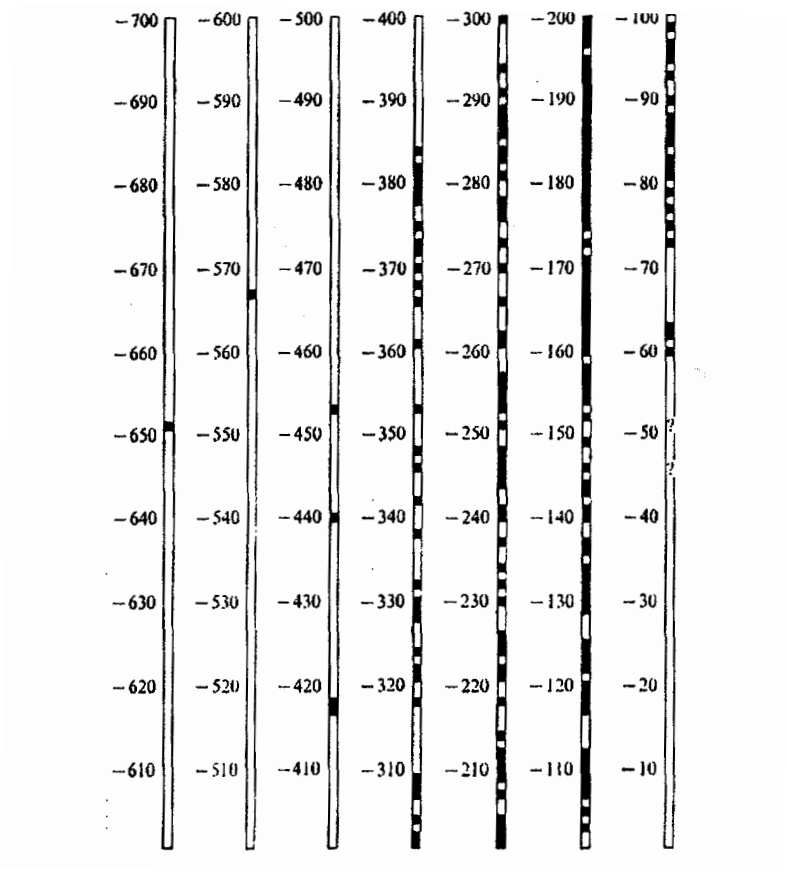
A-1: The astronomical diary VAT 4956

The most important astronomical diary for our discussion is designated *VAT 4956* and is kept in the Near Eastern department ("Vorderasiatischen Abteilung") in the Berlin Museum. This diary is dated from Nisanu 1 of Nebuchadnezzar's thirty-seventh regnal year to Nisanu 1 of his thirty-eighth regnal year, recording observations from five months of his thirty-seventh year (months 1, 2, 3, 11 and 12). The most recent transcription and translation of the text is that of Sachs and Hunger, published in 1988.[8]

6 The scribes evidently kept running records of their day-to-day observations, as may be seen from smaller tablets that cover much shorter periods, sometimes only a few days. From these records the longer diaries were compiled.—A. J. Sachs & H. Hunger, *Astronomical Diaries and Related Texts from Babylonia, Vol.* I (Wien: Verlag der Österreichischen Akademie der Wissenschaften, 1988), p. 12.

7 Otto Neugebauer, for example, explains: "Since planetary and lunar data of such variety and abundance define the date of a text with absolute accuracy—lunar positions with respect to fixed stars do not even allow 24 hours of uncertainty which is otherwise involved in lunar dates—we have here records of Seleucid history [312–64 B .C.E.] which are far more reliable than any other historical source material at our *disposal."—Orientalistische Literaturzeitung,* Vol. 52 (1957), p. 133.

8 Sachs—Hunger, *op.cit.* (1988), pp. 46–53. The first translation of the text, which also includes an extensive commentary, is that of P. V. Neugebauer and Ernst F. Weidner, "Ein astronomischer Beobachtungstext aus dem 37. Jahre Nebukadnezars II. (–567/66)," *in Berichte über die Verhandlungen der Königl. Sachsischen Gesellschaft der Wissenschaften zu Leipzig: Philologisch-Historische Klasse,* Band 67:2, 1915, pp. 29–89.



The extant datable astronomical diaries

The earliest diary is from 652/51 B.C.E. Then follows VAT 4956 from 568/67 B.C.E. Most cover the period from 385 to 61 B.C.E., containing astronomical information from about 180 of these years. — The chart is reproduced from A. J. Sachs, "Babylonian observational astronomy," in F. R Hodson (ed.), *The Place of Astronomy in the Ancient World* (London: Oxford University Press, 1974), p. 47.

Among the many observed positions recorded on VAT 4956, there are about thirty which are so exactly described that modern astronomers can easily fix the precise dates when they were seen. By doing so they have been able to show that all these observations (of the moon and the five then known planets) must have been made during the year 568/67 B.C.E.

If Nebuchadnezzar's thirty-seventh regnal year was 568/67 B.C.E., then it follows that his first year must have been 604/03 B..C.E.,and his eighteenth year, during which he desolated

Jerusalem, 587/86 B.C.E.[9] This is the same date indicated by all the *seven lines of evidence* discussed in the previous chapter!

Could all these observations also have been made twenty years earlier, in the year 588/87 B.C.E., which according to the chronology of the Watch Tower Society's Bible dictionary *Insight on the Scriptures* corresponded to Nebuchadnezzar's thirty-seventh regnal year?[10] The same dictionary (page 456 of Vol. 1, where VAT 4956 is obviously alluded to) acknowledges that "Modern chronologers point out that such a combination of astronomical positions would not be duplicated again in thousands of years."

Let us consider one example. According to this diary, on Nisanu 1 of Nebuchadnezzar's thirty-seventh year the planet Saturn could be observed "in front of the Swallow," the "Swallow" *(SIM)* referring to the south-west part of the constellation of the Fishes (Pisces) of the Zodiac.[11] As Saturn has a revolution of c. 29.5 years, it moves through the whole Zodiac in 29.5 years. This means that it can be observed in each of the twelve constellations of the Zodiac for about 2.5 years on the average. It means also that Saturn could be seen "in front of the Swallow" 29.5 years previous to 568/67 B.C.E., that is, in 597/96 B.C.E, but certainly not *20 years* earlier, in 588/87 B.C.E., the date the Watch Tower would like to assign for Nebuchadnezzar's thirty-seventh regnal year. That is simply an astronomical impossibility, even in the case of this one planet. But there are *five planets* that figure in the diary's astronomical observations.

Add, therefore, the different revolutions of the *other four planets,* the positions of which are specified several times in the text, along with the positions given for the *moon* at various times of the year, and it becomes easily understood why such a *combination* of observations could not be made again in thousands of years. The observations recorded in VAT 4956 must have been made in the year 568/67 B.C.E., because they fit no other situation which occurred either thousands of years before or after that date!

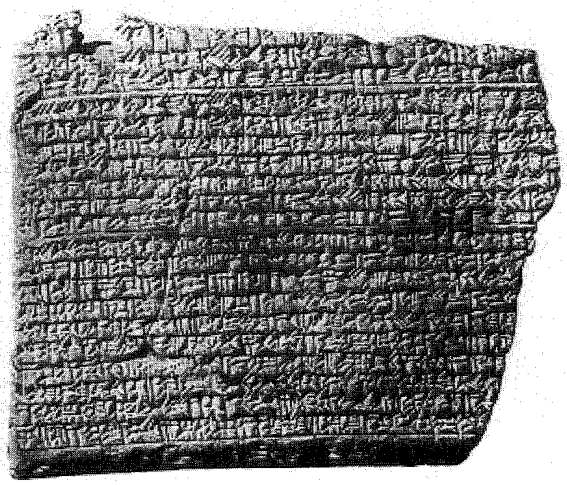
9 The diary clearly states that the observations were made during Nebuchadnezzar's thirty-seventh year. The text opens with the words: "Year 37 of Nebukadnezar, king of Babylon." The latest date, given close to the end of the text, is: "Year 38 of Nebukadnezar, month I, the 1st."—Sachs–Hunger, *op. cit.,* pp. 47, 53.

10 *Insight on the Scriptures,* Vol. 2 (Brooklyn, New York: Watchtower Bible and Tract Society, 1988), p. 481, under the subheading "Takes Tyre."

11 Sachs-Hunger, *op. cit.,* pp. 46–49. The expression "in front of" in the text refers to the daily westward rotation of the celestial sphere and means "to the west of". *(Ibid.,* p.22) For a discussion of the Babylonian names of the constellations, see Bartel L. van *der Waerden, Science Awakening,* Vol.II (New York: Oxford University Press, 1974), pp. 71–74, 97.

Obverse

Reverse



VAT 4956, now in the "Vorderasiatisches Abteilung" in the Berlin Museum, gives detail on about 30 positions of the moon and the five then known planets for the 37th year of Nebuchadnezzar (568/67 B.C.E.), *establishing that year as the most reliable absolute date in the sixth century B.C.E.*—Reproduced from A. J. Sacks & H. Hunger, *Astronomical Diaries and Related Texts from Babylonia*, Vol. I (Wien: Verlag der österreichischen Akademie der Wissenschaften, 1988), Plate 3. Photo used courtesy of the Vorderasiatisches Museum in Berlin.

Thus VAT 4956 gives very strong support to the chronology of the Neo-Babylonian era as established by the historians. Attempting to overcome this evidence, the Watch Tower Society, in the above-mentioned Bible dictionary, goes on to state that, "While to some this might seem like incontrovertible evidence, there are factors greatly reducing its strength."

What are these factors? And do they genuinely reduce the strength of the evidence in this ancient tablet?

> (a) The first is that the observations made in Babylon may have contained errors. The Babylonian astronomers showed greatest concern for celestial events or phenomena occurring close to the horizon, at the rising or setting of the moon or the sun. However, the horizon as viewed from Babylon is frequently obscured by sandstorms.

Then Professor Otto Neugebauer is quoted as saying that Ptolemy complained about "the lack of reliable planetary observations [from. ancient Babylon] ."[12]

However, many of the observations recorded in the diaries were not made close to the horizon, but higher up in the sky. Further, Babylonian astronomers had several means of overcoming unfavorable weather conditions.

As noted earlier, the observations were performed at *a number* of sites in Mesopotamia. What could not be observed at one place due to clouds or sandstorms, could probably be observed somewhere else.[13]

One method used to get over the difficulty of observing stars close to the horizon due to dust was to observe, instead, "the simultaneously occurring of other stars, the so-called ziqpu-stars," that is, stars crossing the meridian higher up on the sky at their culmination.[14]

Finally, the horizon as viewed from Babylon was not obscured by sandstorms every day, and some planetary events could be observed many days or weeks in succession, also higher up in the sky, for example, the position of Saturn which, according to our text, could be observed "in front of the Swallow [the south-west part of the Fishes]." As was pointed out above, Saturn can be observed in each of the twelve constellations of the Zodiac for about 2.5 years on the average.

12 *Insight on the Scriptures,* Vol. 1, p. 456.

13 See the comments by Hermann Hunger (ed.) in *Astrological Reports to Assyrian Kings* (Helsinki: Helsinki University Press, 1992), p. XXII.

14 B. L. van der Waerden, *op. cit.,* pp. 77, 78. *ziqpu* is the Babylonian technical term for culmination. The procedure is explained in the famous Babylonian astronomical compendium MUL.APIN from about the seventh century B.C.E. (van der Waerden, *ibid.)*

Saturn's position in the vicinity of the southern Fish, then, could have been observed for several months in succession, which would have made it impossible for Babylonian astronomers in their regular observations of the planets to make any mistake as to where this planet could be seen during the thirty-seventh year of Nebuchadnezzar, *in spite of frequent sandstorms*. Our text, in fact, directly states that Saturn was observed "in front of the Swallow" not only on the first day of Nisanu (the first month), but also on the first day of Ayyaru (the second month)!

That the observations recorded in VAT 4956 are substantially correct may be seen from the fact that all of them (except for one or two containing scribal errors) fit the same year. This would not have been the case if the observations were erroneous.[15]

The next factor brought up in the Watch Tower Society's Bible dictionary that is held to reduce the strength of VAT 4956 is the fact that some diaries are not original documents but later copies:

> (b) Second, the fact is that the great majority of the astronomical diaries found were written, not in the time of the Neo-Babylonian or Persian empires, but in the Seleucid period (312–65 B.C.E.), although they contain data relating to those earlier periods. Historians assume that they are copies of earlier documents.

There is nothing to show that most diaries are later copies, but *some* are, as indicated by writing conventions used in the text. The earliest dated diaries frequently reflect the struggle of the copyists to understand the ancient documents they were copying, some of which were broken or otherwise damaged, and often the documents used an archaic terminology which the copyists tried to "modernize." This is clearly true of VAT 4956, too. Twice in the text the copyist added the comment "broken off," indicating he was unable to decipher a word in the copy. Also, the text reflects

15 Some events recorded in the diaries are actually not observations, but events calculated in advance. Thus VAT 4956 records an *eclipse of the moon* which occurred on the 15th day of the month Simanu (the third month). That this eclipse had been calculated in advance is evident from the expression AN-KU$_{10}$ *sin* (also transcribed *atalû Sin),* which denotes *a predicted* lunar eclipse. It is further pointed out in the text that the eclipse "was omitted" (literally, "passed by"), that is, it was invisible in Babylon. (Sachs-Hunger, *op. cit.,* Vol. I, 1988, pp. 23, 48, 49) This does not mean that the prediction failed. The expression implied that the eclipse was *expected not to be seen.* According to modern calculations, the eclipse took place on July 4,568 B.C.E. (Julian calendar), but as it took place in the afternoon it was not visible at Babylon. The method that may have been used by the Babylonian astronomers for predicting this eclipse is discussed by Professor Peter Huber in B. L. van der Waerden *(op. cit.,* note 11 above), pp. 117–120.

his attempt to change the archaic terminology. But did he also change the *content* of the text?

On this the first translators of the text, P. V. Neugebauer and E. F. Weidner, concluded: "As far as the contents are concerned the copy is of course a faithful reproduction of the original."[16] Other scholars, who since have examined the document, agree. Professor Peter Huber states:

> It is preserved only in a copy of much later date, but that appears to be a faithful transcript (orthographically somewhat modernized) of an original of NEBUCHADNEZZAR'S time.[17]

Suppose that some of the material in the about thirty completely received observations recorded in VAT 4956 had been distorted by later copyists. How great is the possibility that *all* these "distorted" observations would fit into one and the same year—the very one corroborated by Berossus, the Royal Canon, the chronicles, the royal inscriptions, the contract tablets, the Uruk kinglist, and many other documents—that is, Nebuchadnezzar's thirty-seventh regnal year? Accidental errors of this kind do not "cooperate" to such a great extent. So there is no sound reason to doubt that the original observations have been correctly preserved in our copy.

> (c) Finally, as in the case of Ptolemy, even though the astronomical information (as now interpreted and understood) on the texts discovered is basically accurate, this does not prove that the historical information accompanying it is accurate. Even as Ptolemy used the reigns of ancient kings (as he understood them) simply as a framework in which to place his astronomical data, so too, the writers (or copyists) of the astronomical texts of the Seleucid period may have simply inserted in their astronomical texts what was then the accepted, or "popular," chronology of that time![18]

What is suggested by the Watch Tower organization is that the later copyists changed the dates found in the "diaries" in order to adapt them to their own concepts of the ancient Babylonian and Persian chronology. Thus a writer in the *Awake!* magazine imagines that "the copyist of 'VAT 4956' may, in line with the chronology

16 P. V. Neugebauer and E. F. Weidner, *op. cit.* (see note 8), p. 39.

17 Peter Huber in B . L. van der Waerden, *ap. cit.,* p. 96.

18 *Insight an the Scriptures,* Vol. 1, p. 456. As pointed out in chapter 3 above (section A2), the so-called "Ptolemy's Canon" (or, Royal Canon) was not worked out by Claudius Ptolemy. Further, as his quotations from ancient Babylonian astronomical texts available to him show that these were already dated to specific regnal years of ancient kings, he cannot have used the canon "as a framework in which to place his astronomical data."

accepted in his time, have inserted the 'thirty-seventh year of Nebuchadnezzar' ."[19] Is this a plausible theory?

As was pointed out above, VAT 4956 is dated from Nisanu 1 of Nebuchadnezzar's thirty-seventh year to Nisanu 1 of his thirty-eighth year. Further, almost all events mentioned in the text are dated, with the *month,* the *day* and—when necessary—the *time of the day* given. About *forty* dates of this kind are given in the text, though the year, of course, is not repeated at all these places. All known diaries are dated in a similar way.

In order to change the years in the text, the copyists would also have been forced to change the name of the reigning king. Why? Nebuchadnezzar died in his forty-third year of rule. If his thirty-seventh year fell in 588/87 B.C.E., as the Watch Tower Society holds, he must have been dead for many years by 568/67 B.C.E. when the observations of VAT 4956 were made.

Is it really likely that the Seleucid copyists devoted themselves to such large-scale forgeries? What do we know about the "popular" chronology of their time, which is proposed in the Watch Tower's publication as the motive for this deliberate fraud?

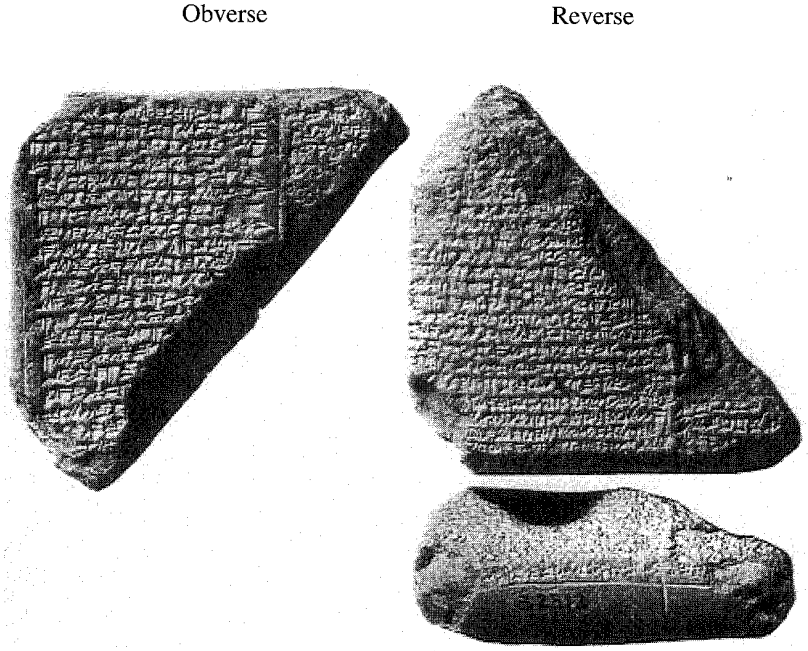
The chronology for the Neo-Babylonian era composed by Berossus early in the Seleucid period evidently represents the contemporary, "popular" concept of Neo-Babylonian chronology.[20] If counted backwards from the fall of Babylon in 539 B.C.E., Berossus' figures for the reigns of Neo-Babylonian kings place Nebuchadnezzar's thirty-seventh year in 568/67 B.C.E. as does VAT 4956.

More importantly, Berossus' Neo-Babylonian chronology, as shown earlier in chapter three, *is of the same length as that given by the many documents contemporary with the Neo-Babylonian era itself* such as chronicles, royal inscriptions, business documents, as well as with contemporary Egyptian documents!

The "popular" Neo-Babylonian chronology as presented in the Seleucid era, then, was not something based on mere supposition, but meets the qualifications of a true and correct chronology, and there was no need for copyists to alter the ancient documents in order to adapt them to it. The theory that they falsified these documents, therefore, is groundless. Besides, it is refuted completely by *other* astronomical texts, including the next diary to be discussed.

19 *Awake!,* May 8, 1972, page 28.

20 As explained in chapter 3 above (section A-1), Berossus' chronology was composed about 281 B.C.E. The Seleucid era began in 312 B.C.E.



The astronomical diary B.M. 32312

This diary gives details on the positions of Mercury, Saturn, and Mars, which date it to the year 652/51 B.C.E. An historical notice, also repeated in the *Akitu Chronicle* and there dated to the 16th year of Shamashshumukin, fixes that year to 652/51 B.C.E., which prevents any extension of the Neo-Babylonian era backwards in time. Photo used courtesy of the Trustees of the British Museum.

A-2: The astronomical diary BM. 32312

In an article published in 1974, Professor Abraham J. Sachs gives a brief presentation of the astronomical diaries. Mentioning that the oldest datable diary contains observations from the year 652 B.C.E., he explains how he was able to fix its date:

> When I first tried to date this text, I found the astronomical contents to be just barely adequate to make this date virtually certain.

> It was a great relief when I was able to confirm the date by matching up a historical remark in the diary with the corresponding statement for –651 in a well-dated historical chronicle.[21]

As this diary seemed to be of great importance for the question of Babylonian chronology, I wrote to Professor Sachs back in 1980 and asked two questions:

1. What information in the diary makes the date –651 [=652 B.C.E.], "virtually certain"?
2. What kind of historical remark in the diary corresponds with what statement in which well-dated chronicle?

In his answer Professor Sachs enclosed a copy of a photograph of the diary in question, *B.M. 32312,* and added information which fully answered my two questions. The astronomical contents of the diary clearly establish the year as 652/51 B.C.E. when the observations were made. Sachs writes that "the preserved astronomical events (Mercury's last visibility in the east behind Pisces, Saturn's last visibility behind Pisces, both around the 14th of month I; Mars' stationary point in Scorpio on the 17th of month I; Mercury's first visibility in Pisces on the 6th of month XII) *uniquely determine the date.*"[22]

Interestingly, it cannot be claimed that this diary was redated by later copyists, because the name of the king, his regnal year, and month names *are broken away.* Yet these data may justifiably be supplied because of a historical remark at the end of the diary. For "the 27th" of the month (the month name is broken away) the diary states that at the site of "Hiritu in the province of Sippar the troops of Babylonia and of Assyria fou[ght with each] other, and

21 A. J. Sachs, 'Babylonian observational astronomy," in F. R. Hodson (ed.), *The Place of Astronomy in the Ancient World (Philosophical transactions of the Royal Society of London,* ser. A. 276, London: Oxford University Press, 1974), p.48. — For the purpose of facilitating astronomical computations, the year preceding 1 C.E. is called 0 instead of 1 B.C.E. and the year preceding 0 is called -1 instead of 2 B.C.E. The year 652 B.C.E., therefore, is astronomically written as —651.

22 Letter Sachs-Jonsson, dated February 10, 1980. The diary has since been published in Sachs-Hunger, *op. cit.,* Vol. I (1988; see note 6 above), pp. 42–47. Of the first two events, the scribe says: "I did not watch because the days were overcast " *(Ibid.,* p. 43) This statement does not make the astronomically fixed date of the positions less certain. As pointed out earlier, the Babylonian scholars not only knew the various cycles of the visible planets , but they also regularly watched their daily motions and positions relative to certain fixed stars or constellations along the ecliptic. Thus, even if a planet could not be observed for some days due to clouds, its position could easily be deduced from its position when it was last seen.

the troops of Babylonia withdrew and were heavily defeated."[23] Fortunately, it is possible to place the time of this battle since it is also mentioned in a well-known Babylonian chronicle.

The chronicle is the so-called *Akitu Chronicle,* B.M. 86379, which covers a part of Shamashshumukin's reign, especially his last five years (the sixteenth to the twentieth). The battle at Hiritu is dated in his sixteenth year as follows:

> The sixteenth year of Shamash-shuma-ukin: . . . On the twenty-seventh day of Adar [the 12th month] the armies of Assyria and Akkad [Babylonia] did battle in Hirit. The army of Akkad retreated from the battlefield and a major defeat was inflicted upon them.[24]

The astronomical events described in the diary fix the battle at Hiritu on Adam 27 to 651 B.C.E.[25] The Akitu Chronicle shows that this battle at this place on this day was fought in the sixteenth year of Shamashshumukin. Thus Shamashshumukin's sixteenth year was 652/51 B.C.E. His entire reign of twenty years, then, may be dated to 667/66 – 648/47 B.C.E.

Now this is the way historians have dated Shamashshumukin's reign for a long time, and that is why Professor Sachs concluded his letter by saying: "I should perhaps add that the absolute chronology of the regnal years of Shamash-shuma-ukin was never in doubt, and it is only confirmed again by the astronomical diary."

Shamashshumukin's reign has been known, for example, through the Royal Canon which gives him twenty years and his successor Kandalanu twenty-two years. Thereafter Nabopolassar, Nebuchadnezzar's father, succeeded to the throne.[26] These figures are in good agreement with the ancient cuneiform sources. Business documents, as well as the Akitu Chronicle, show that Shamashshumukin ruled for twenty years. Business documents, supported by the Uruk King List, also show that from the first year

23 Sachs-Hunger, *op. cit.,* p. 45. For a discussion of this battle, see Grant Frame, *Babylonia 689–627 B.C.* (Leiden: Nederlands Historisch-Archaeologisch Institut to Istanbul, 1992), pp. 144–45, 289–92.

24 A. K. Grayson, *Assyrian and Babylonian Chronicles* (Locust Valley, New York: J. J. Augustin Publisher, 1975), pp. 131–32.

25 As the first month, Nisanu, began in March or April, 652 B.C.E., Adaru, the twelfth month, began in February or March, 651 B.C.E.

26 That Kandalanu was succeeded by Nabopolassar is directly stated in the Akitu Chronicle: "After Kandalanu, in the accession year of Nabopolassar"— Grayson, *op. cit.,* p. 132.

of Kandalanu to the first year of Nabopolassar was a period of twenty-two years. Thus the chronology of that era, supplied by these sources, is as follows:

Shamashshumukin	20 years	667 – 648 B.C.E.
Kandalanu	22 years	647 – 626 B.C.E.
Nabopolassar	21 years	625 – 605 B.C.E.
Nebuchadnezzar	43 years	604 – 562 B.C.E.

The diary B.M. 32312, although establishing a date *prior to* the Neo-Babylonian period (which began with Nabopolassar), again coincides with and helps corroborate the chronology of that era.

This diary, then, adds yet another witness to the increasing amount of evidence against the 607 B.C.E. date. A change of Nebuchadnezzar's eighteenth year from 587 to 607 B .C.E. would also change Shamashshumukin's sixteenth year from 652 to 672 B.C.E. But the diary B.M. 32312 rules out such a change.

And, as already pointed out, no one can claim that later copyists inserted "the 16th year of Shamashshumukin" in this diary, because the text is damaged at this point and that datum is broken away! It is the unique historical information in the text, information repeated in the Akitu Chronicle, that fixes the diary to Shamashshumukin's sixteenth year.

This diary, therefore, may be regarded as an independent witness which upholds the authenticity of the dates given in VAT 4956 and other diaries.[27]

27 A catalogue of business documents compiled by J. A. Brinkman and D. A. Kennedy that includes the reigns of Shamashshumukin and Kandalanu is published in the *Journal of Cuneiform Studies* (JCS), Vol. 35, 1983, pp. 25–52. (Cf. also JCS 36, 1984, pp. 1–6, and the table of G. Frame, *op. cit.,* pp. 263–68.) Cuneiform texts show that Kandalanu evidently died in his twenty-first regnal year, after which several pretenders to the throne fought for power, until Nabopolassar succeeded in ascending to the throne. Some business documents span the period of interregnum by artificially carrying on Kandalanu's reign after his death, the last one (B.M. 40039) being dated to his "22nd year" ("the second day of Arahsamnu [the 8th month] of the 22nd year *after Kandalanu").* This method is also used by the Royal Canon, which gives Kandalanu a reign of twenty-two years. Other documents span the period differently. The Uruk King List gives Kandalanu twenty-one years, and gives the year of interregnum to two of the combatants, Sin-shum-lishir and Sin-shar-ishkun. See chapter three above, section B-1-b.) The Babylonian chronicle B.M. 25127 states of the same year: "For one year there was no king in the land" (Grayson, *op. cit.,* p. 88) All documents agree, however, to the total length of the period from Shamashshumukin to Nabopolassar. (For additional details on Kandalanu's reign, see the discussion by G. Frame, *op. cit.,* pp. 191–96, 209–13, 284–88.)

B. THE SATURN TABLET (BM. 76738 + BM. 76813)

One of the most important astronomical texts from the seventh century B.C.E. is the Saturn tablet from the reign of the Babylonian king Kandalanu (647–626 B.C.E.), predecessor of Nabopolassar, Nebuchadnezzar's father.

This text consists of two broken pieces, B.M. 76738 and B.M. 76813.[28] The text was first described by C. B. F. Walker in 1983 in the *Bulletin of the Society for Mesopotamian Studies*.[29] A transcription and a translation with a full discussion of the text by Mr. C.B.F. Walker has recently been published.[30]

As explained earlier (section A-1 above), the planet Saturn has a revolution of c. 29.5 years. Due to the revolution of the earth round the sun, Saturn disappears behind the sun for a few weeks and reappears again at regular intervals of 378 days.

The Saturn tablet gives the dates (regnal year, month, and day in the Babylonian calendar) and the positions of the planet Saturn at its first and last appearances for a period of fourteen successive years, specifically, the first fourteen years of Kandalanu (647–634 B.C.E.). The name of the king, given only in the first line, is partially damaged, but may be restored as *[Kand]alanu*. The name of the planet is nowhere mentioned in the text, but the observations fit Saturn and no other planet.

As Mr. Walker explains:

> The name of the planet Saturn is not given on the tablet, and the name of Kandalanu is to be restored from only a few traces in the first line. It is, however, certain that we are dealing with Saturn and Kandalanu. Saturn is the slowest moving of the visible planets, and only Saturn would move the distances indicated between successive first visibilities.[31]

The text is damaged in several places, and many of the *year numbers* are illegible. Years 2, 3, 6, 7, 8, and 13 are undamaged, however.

28 Listed as AH 83-1-18, 2109+2185 in E. Leichty et al, *Catalogue of the Babylonian Tablets in the British Museum*. VIII (London: British Museum Publications Ltd, 1988), p. 70.

29 C. B. F. Walker, "Episodes in the History of Babylonian Astronomy," *Bulletin of the Society for Mesopotamian Studies, Vol.* 5 (Toronto, May 1983), pp. 20, 21.

30 C. B. F. Walker, 'Babylonian observations of Saturn during the reign of Kandalanu," in N. M. Swerdlow (ed.), *Ancient Astronomy and Celestial Divination* (Cambridge, Massachusetts, and London: The MIT Press, 2000), pp. 61–76.

31 Walker, *ibid.,* p. 63.

Besides this, each year is covered by two lines in the text, one for the last appearance of the planet and the other for its first, the total number of lines covering the fourteen years, therefore, being twenty-eight. With this framework there is no problem in restoring the year numbers that are damaged.

Most of the *positions* given for Saturn at its first or last appearance are legible.[32] The entry for year eight, which is almost wholly preserved, is quoted here as an example:

> Year 8, month 6, day 5, behind the Furrow (α+ Virginis), last appearance.
>
> [Year 8], month 7, day 5, 'between' the Furrow (α+ Virginis) and the Balance (Libra), first appearance.[33]

What is the implication of this astronomical tablet for the chronology of the Neo-Babylonian era?

As noted, Saturn has a revolution of 29.5 years, which also means that the planet moves through the whole ecliptic in this period.

But for the planet to be seen again at a specific point (close to a certain fixed star, for example) of the ecliptic *at the same time of the year, we* have to wait for 59 *solar* years (2 x 29.5). This interval, actually, is much longer in the Babylonian *lunar* calendar. As C. B. F. Walker explains:

> A complete cycle of Saturn phenomena in relation to the stars takes 59 years. But when that cycle has to be fitted to the lunar calendar of 29 or 30 days then identical cycles recur at intervals of rather more than 17 centuries. Thus there is no difficulty in determining the date of the present text.[34]

In other words, the absolute chronology of Kandalanu's reign is definitely fixed by the Saturn tablet, because the pattern of positions described in the text and fixed to specific dates in the Babylonian lunar calendar *is not repeated again in more than seventeen centuries!* The first fourteen years of his reign mentioned in the document are thus fixed to 647–634 B.C.E. As Kandalanu's total reign may chronologically be counted as twenty-two years

32 In three cases the dates given for the first or last appearance are followed by the comment "not observed", the reason in two cases being said to be clouds; and in another case it is said to have been "computed" (for the same reason). As suggested by Walker, "in these cases the date of theoretical first or last visibility was deduced from the planet's position when first or last actually seen." —*Ibid.,* pp. 64, 65, 74.

33 *Ibid.,* p. 65.

34 *1bid.,* p. 63.

(twenty-one years plus one year "after Kandalanu"; see section A-2 above), our tablet establishes the absolute chronology of his reign as 647–626 B.C.E.[35]

Like the previous text discussed earlier (B.M. 32312), the Saturn tablet puts a definite block to the attempts at lengthening the chronology of the Neo-Babylonian period. If twenty years were to be added to this period, the reign of Nabopolassar, the father of Nebuchadnezzar, would have to be moved from 625–605 back to 645–625 B.C.E., and this in turn would mean moving the reign of his predecessor, Kandalanu, from 647–626 back to 667–646 B.C.E. The astronomical data on the Saturn tablet makes such changes completely impossible.

C. THE LUNAR ECLIPSE TABLETS

Many of the Babylonian astronomical tablets contain reports of consecutive lunar eclipses , dated to the year, month, and often also the day of the reigning king. About forty texts of this type, recording several hundreds of lunar eclipses from 747 to about 50 B.C.E., were catalogued by Abraham *J.* Sachs in 1955.[36]

In about a third of the texts the eclipses are arranged in 18-year groups, evidently because the Babylonians knew that the pattern of lunar eclipses is repeated at intervals of approximately 18 years and 11 days, or exactly 223 lunar months (= 6585 1/3 days). This cycle was used by the Babylonian astronomers "to predict the dates of possible eclipses by at least the middle of the 6th century B.C. and most probably long before that."[37]

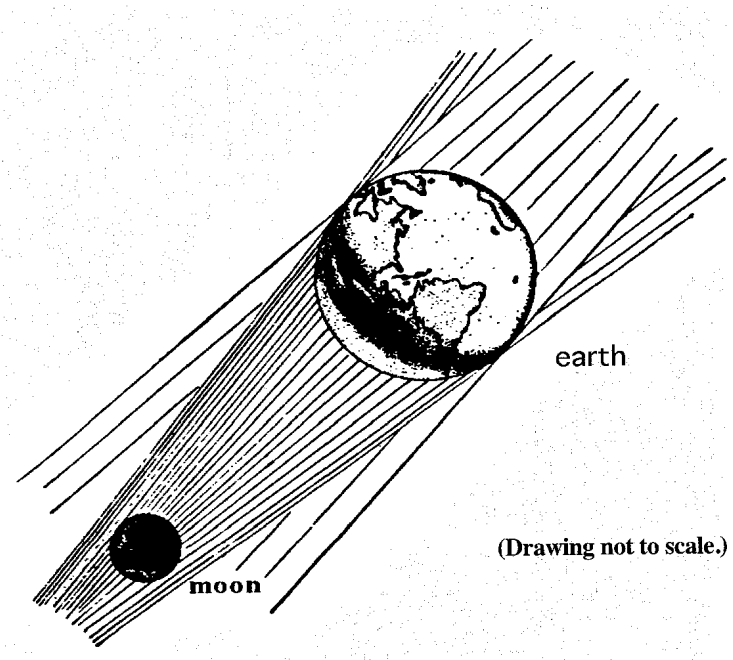
As modern scholars call this cycle the *Saros cycle,* the 18-year texts are often referred to as the *Saros cycle texts.*[38] Some of these texts record series of 18-year intervals extending over several centuries.

35 In his earlier discussion of the tablet, Walker points out that the pattern of Saturn phenomena described in this text, dated in terms of the phase of the moon, "will in fact occur approximately every 1770 years:"—C. B. F. Walker, "Episodes in the History of Babylonian Astronomy," *Bulletin of the Society for Mesopotamian Studies, Vol.* 5 (Toronto, May 1983), p. 20.

36 Abraham J. Sachs, *Late Babylonian Astronomical and Related Texts* (Providence, Rhode Island: Brown University Press, 1955), pp. xxxi–xxxiii. See nos. 1413–30, 1432, 1435–52, and 1456–57. For translations of most of these, see now H. Hunger et al, *Astronomical Diaries and Related Texts from Babylonia* (ADT), Vol. V (Vienna, 2001).

37 Paul-Alain Beaulieu and John P. Britton, 'Rituals for an eclipse possibility in the 8th year of Cyrus," in *Journal of Cuneiform Studies,* Vol.46 (1994), p. 83.

38 The Greek word *saros* is derived from the Babylonian word *SAR,* which actually denoted a period of 3,600 years. "The use of the term 'Saros' to denote the eclipse cycle of 223 months is a modem anachronism which originated with Edmund Halley *[Phil. Trans.* (1691) 535–40] . . . The Babylonian name for this interval was simply '18 years' " — Beaulieu & Britton, *op. cit.,* p.78, note 11.



Lunar Eclipse

Lunar eclipses are possible only at full moon, when the earth is between the moon and the sun and the moon may enter the shadow of the earth. This would occur at every full moon if the moon's orbital plane were the same as the earth's orbital plane (the *ecliptic).* But as the moon's orbital plane is inclined about 5° to the ecliptic, lunar eclipses can occur only when the moon, on approaching its full phase, is close to one of two points (the *nodes)* where its orbit intersects with the ecliptic. This occurs at about every eighth full moon on the average, which means there are about 1.5 lunar eclipses per year, although they are not evenly dispersed in time.

Most of the lunar eclipse texts were compiled during the Seleucid era (312–64 B.C.E.). The evidence is that the eclipse records were extracted from astronomical diaries by the Babylonian astronomers, who evidently had access to a large number of diaries from earlier centuries.[39] Thus, even if most of the diaries from the

39 "It is all but certain that these eclipse records could have been extracted only from the astronomical diaries." — A. J. Sachs, "Babylonian observational astronomy," in F. R. Hodson (ed.), *The Place of Astronomy in the Ancient World (Philosophical Transactions of the Royal Society of London,* ser. A. 276, 1974), p. 44. See also the comments by F. Richard Stephenson and Louay J. Fatoohi, "Lunar eclipse times recorded in Babylonian history," in *Journal for the History of Astronomy,* Vol. 24:4, No. 77 (1993), p. 256.

earliest centuries are missing, many of their entries on eclipses have been preserved in these excerpts.

Many of the eclipse texts were copied by T. G. Pinches and J. N. Strassmaier in the latter part of the nineteenth century, and these copies were published by A. Sachs in 1955.[40] Translations of a few of the texts appeared in print in 1991.[41] The rest of the texts, translated by H. Hunger, were published in ADT V, 2001. (See footnote 36 above.)

A preliminary typescript with transliterations and translations of most of the lunar eclipse texts was prepared in 1973 by Professor Peter Huber, but he never brought it into a form ready for publication, although it has been unofficially circulated among scholars for a long time. Huber's memoir has been consulted in the following discussion, but every passage used has been checked, and in several cases improved upon or corrected, by Professor Hermann Hunger, whose transliterations and translations of these eclipse texts have since been published.

The texts recording the earliest lunar eclipses are LBAT 1413–1421 in Sachs' catalogue. Only the last four of these, nos. 1418–1421, contain eclipses from the Neo-Babylonian period. But as LBAT 1417 contains eclipses from the reigns of Shamashshumukin and Kandalanu, the last two Babylonian kings prior to the Neo-Babylonian period (cf. sections A-2 and B above), this text, too, is an important witness to the length of the Neo-Babylonian period.

A discussion of four of these texts and their implications for the Neo-Babylonian chronology of the Watch Tower Society is presented in the following section.[42]

40 A. J. Sachs, *op. cit.* (1955; see note 36 above), pp. 223ff.

41 A. Aaboe, J. P. Britton, J. A. Henderson, O. Neugebauer, and A. J. Sachs, "Saros Cycle Dates and Related Babylonian Astronomical Texts," in *Transactions of the American Philosophical Society,* Vol. 81:6 (1991), pp. 1–75. The Saros cycle texts published are those designated LBAT 1422, 1423, 1424, 1425, and 1428 in Sachs catalogue. As these texts belong to a separate small group of *theoretical* texts, none of them are used in the present study. (See J. M. Steele in H. Hunger, ADT V, (2001), p. 390.)

42 A discussion of LBAT 1418 is not included here, as this is one of the theoretical texts 'referred to in note 41 above. It contains no royal names , just year numbers. (Royal names are usually mentioned only with a ruler's first year.) Still, as pointed out by Professor Hermann Hunger, "the records of lunar eclipses are detailed enough that they can be dated." The preserved part of the text gives years and months of lunar eclipse possibilities at 18-year intervals from 647 to 574 B.C.E. The eclipses dated in the text at 18-year intervals to years "2", "20", "16", and "13", for example, correspond to eclipses in years "2" and "20" of *Kandalanu* (646/45 and 628/27 B.C.E.), year "16" of *Nabopolassar* (610/09), and year "13" of *Nebuchadnezzar* (592/91). Thus LBAT 1418 strongly supports the chronology established for the reigns of these kings. —A transliteration and translation of this tablet is published by Hunger, ADT V (2001), pp. 88, 89.

The lunar eclipse table LBAT 1417

The tablet records four lunar eclipses at 18-year intervals dated to the 3rd year of Sennacherib, the accession year and 18th year of Shamashshumukin, and the 16th year of Kandalanu. The four eclipses may be shown to have occurred on April 22, 686; May 2, 668; May 13, 650, and on May 23, 632 B.C.E. — Published by A. J. Sachs, *Late Babylonian Astronomical and Related Texts* (Providence, Rhode Island: Brown University Press, 1955), p. 223.

C-1: The lunar eclipse tablet LBAT 1417

LBAT 1417 records four lunar eclipses at 18-year intervals from 686 to 632 B.C.E .It seems to be a part of the same tablet as the previous two texts in the series, LBAT 1415 and 1416. The first entry records an eclipse from Sennacherib third year of reign in Babylonia,[43] which may be identified with the eclipse that took place on April 22, 686 B.C.E. Unfortunately, the year number is damaged and only partially legible.

The next entry, dated to the accession year of Shamashshumukin, gives this information:

> Accession year Shamash-shum-ukin,
> Ayyaru, 5 months,
> which passed by.
> At 40° after sunrise.

43 Babylonian chronicles and king lists show that the Assyrian king Sennacherib also, for two periods, was the actual ruler of Babylonia, the first time for two years (dated to 704–703 B.C.E.), and the second time for eight years (dated to 688–681 B.C.E.). Our text evidently refers to the second period.

At a cursory glance this report seems to give very little information. But there is more in the few brief lines than one might possibly imagine.

The Babylonian astronomers had developed such an abbreviated technical terminology in describing the various celestial phenomena that their reports assumed an almost stenographic character. The Akkadian phrase translated "which passed by" *(shá DIB),* for example, was used in connection with a *predicted* eclipse to indicate that it *would not be observable.*

As Hermann Hunger explains, "the eclipse was known to the Babylonians as occurring at a time when the moon could not be observed. It does *not* show that they looked for an eclipse and were disappointed that it did not occur."[44] The Babylonians had not only computed this eclipse some time in advance by means of a known cycle (perhaps the Saros cycle); their computation also showed it would not be observable from the Babylonian horizon.

This is also implied in the next line, "At 40° after sunrise." 40° is a reference to the movement of the celestial sphere, which, due to the rotation of the earth, is seen to make a full circle in 24 hours. The Babylonians divided up this period into 360 time units (degrees) called *USH,* each of which corresponded to four of our minutes. The text, therefore, tells us that the eclipse had been calculated to begin 160 minutes (40 USH x 4) after sunrise, which means it would take place in the daytime and thus not be observable in Babylonia.

Modern astronomical calculations confirm this. If Shamashhumukin's first year was 667/66 B.C.E. as is generally held (see above, section A-2), his accession year was 668/67. The eclipse is dated to Ayyaru, the second month, which began in April or May. (The "5 months" indicates the time interval from the previous eclipse.)

Was there an eclipse of the type described in our text at that time of the year in 668 B.C.E.? Yes, there was.

Modern lunar eclipse catalogues show that such an eclipse took place on May 2, 668 B.C.E. (Julian calendar). It began at about 9:20 local time*, which only roughly agrees with the Babylonian computation that it would begin 160 minutes —2 hours and 40

44 Letter Hunger–Jonsson, dated October 21, 1989. (Cf. also note 15 above.) In a later letter (dated June 26, 1990) Hunger adds: "The technical expression if the observer waits for an eclipse and finds that it does not occur is 'not seen when watched for'."

*Note: Times listed in this discussion are according to a 24-hour format, rather than the 12 hour a.m./p.m format.

minutes — after sunrise. As sunrise occurred at about 5:20, the error in computation was ca. 1 hour and 20 minutes.[45]

In the chronology of the Watch Tower Society the accession year of Shamashshumukin is moved back twenty years to 688/87 B.C.E. No lunar eclipses occurred in April or May that year, but there was a total one on June 10, 688 B.C.E. Contrary to the eclipse recorded in our text, however, this one *was observable* in Babylonia. It is, therefore, an impossible alternative.

The next entry in the text is dated to the eighteenth year of Shamashshumukin, that is, 650/49 B.C.E. This eclipse, too, was a computed one, predicted to "pass by" in the second month. It would begin about four hours (60 USH) "before sunset". According to modern calculations the eclipse took place on May 13, 650 B.C.E. The canon of Liu and Fiala shows it began at 16:25 and ended at 18:19, about half an hour before sunset at that time of the year.[46]

According to the chronology of the Watch Tower Society this eclipse occurred twenty years earlier, in 670 B.C.E. No lunar eclipses took place in April or May that year, but there was a total one on June 22, 670 B.C.E. However, it *did not* occur "before sunset", as did the one recorded in our text, but early in the forenoon, beginning about 7:30. So, again, it does not fit.

The next and last entry in LBAT 1417 is dated to the sixteenth year of Kandalanu. The eclipse recorded was observed in Babylonia and several important details are given:

> (Year) 16 Kandalanu
> (month) Simanu, 5 months, day 15.2 Fingers (?)
> on the northeast side covered (?)
> On the north it became bright. The north wind [blew]
> 20° onset, maxima1 phase, [and clearing.]
> Behind Antares (α Scorpio) [it was eclipsed.]

As indicated by the question marks and the square brackets, the text is somewhat damaged at places, but the information preserved

45 See Bao-Lin and Alan D. Fiala, *Canon of Lunar Eclipses 1500 B.C.–AD. 3000* (Richmond, Virginia: Willman-Bell, Inc., 1992), p. 66, No. 2010. As demonstrated in Dr. J. M. Steele's detailed study of the Babylonian lunar eclipses, the accuracy of Babylonian timings of *observed* eclipses was within about half an hour as compared to modem calculations, while the accuracy of the timings of *predicted* eclipses usually was about an hour and half. It should be noted that before about 570 B.C.E. the Babylonians also rounded off their timings to the nearest 5–10 USH (20–40 minutes). Although rough, these timings are close enough for the eclipses to be identified. (See John M. Steele, *Observations and Predictions of Eclipse Times by Early Astronomers,* Dordrecht, etc: Kluwer Academic Publishers, 2000, pp. 57–75, 231–235.) For further comments on the identification of ancient 1unar eclipses, see the Appendix for chapter four: "Some comments on ancient lunar eclipses".

46 Liu/Fiala, *op. cit.,* p. 67, No 2056. Steele's computation shows it began at 16:45.

is sufficient for identifying the eclipse. It took place on "day 15" of Simanu, the third month, which began in May or June. "2 fingers" means it was partial, with only two twelfths of the moon's diameter being eclipsed. The total duration of the eclipse was 20°, that is, 80 minutes.

If Kandalanu's sixteenth year began on Nisan 1, 632 B.C.E., as is generally held (compare above, sections A-2 and B), we want to know if there was a 1unar eclipse of this type in the third month of that year.

Modern calculations show there was. According to the eclipse canon of Liu and Fiala the eclipse began on May 23, 632 B.C.E. at 23:51 and lasted until 1:07 on May 24, which means its total duration was about 76 minutes, that is, very close to the period given in the text. The same canon gives the magnitude as 0.114.[47]

These data are in good agreement with the ancient record. In the chronology of the Watch Tower Society, however, this eclipse should be looked for twenty years earlier, in May, June, or possibly July, 652 B.C.E. It is true that there was an eclipse on July 2 that year, but in contrast to the *partial* one recorded in our text it was *total.* But as it began about 15:00. no phase of it was observable in Babylonia.

In summary, LBAT 1417 records four lunar eclipses at successive 18-year intervals (18 years and nearly 11 days), all of which may be easily identified with those of April 21, 686; May 2, 668; May 13, 650, and May 23, 632 B.C.E. The four eclipse records are interlaced by the successive Saros cycles into a pattern that fit no other series of years in the seventh century B.C.E.[48]

The last three dates are thus established as the absolute dates of the accession year and the eighteenth year of Shamashshumukin and the sixteenth year of Kandalanu, respectively. The Watch Tower Society's attempt to add twenty years to the Neo-Babylonian era, in that way moving the reigns of the earlier kings twenty years backwards in time, is once again effectively blocked by a Babylonian astronomical tablet, this time by the lunar eclipse text LBAT 1417.

C-2: The lunar eclipse tablet LBAT 1419

LBAT 1419 records an uninterrupted series of lunar eclipses at

47 Liu/Fiala, *ap. cit.,* p. 68, No. 2103.

48 It is to be noted that the Saros cycle does not comprise an *even* number of days; it consists of 6,585 1/3 days. The excess third part of a day (or c: a 7.5 hours) implies that the subsequent eclipses in the series are not repeated *at the same time of the day,* but about 7.5 hours later after each successive cycle. The duration and magnitude, too, are changing from one eclipse to the next in the cycle. An eclipse, therefore, cannot be mixed up with the previous or the next ones in the series. — See the discussion by Beaulieu and Britton, *op. cit.* (note 37 above), pp. 78–84.

18-year intervals from 609/08 to 447/46 B.C.E. The first entries, which evidently recorded eclipses that ocurred in September 609 and March 591 B.C.E., are damaged. Royal names and year numbers are illegible. However, two of the following entries are clearly dated to the reign of Nebuchadnezzar (the words in parentheses are added to elucidate the laconic reports):

> 14th (year of) Nebukadnezar,
> month VI, (eclipse) which was omitted [literally, "passed by"]
> at sunrise,
> ……..
> 32nd (year of) Nebukadnezar,
> month VI, (eclipse) which was omitted.
> At 35° (= 35 USH, i.e. 140 minutes) before sunset.

The royal name in the original text is written as "Kudurri", which is an abbreviation of *Nabu-kudurri-usur,* the transcribed Akkadian form of Nebuchadnezzar.

Nebuchadnezzar's fourteenth and thirty-second years are generally dated to 591/90 and 573/72 B.C.E., respectively. The two eclipses recorded, one Saros cycle apart, both took place in the sixth month (Ululu), which began in August or September. Both eclipses had been calculated in advance, and the Babylonians knew that none of them would be observable in Babylonia. The first eclipse began "at sunrise", the second 140 minutes (35 USH) "before sunset." Thus both of them occurred in the daytime in Babylonia.

This is confirmed by modem calculations. The first eclipse occurred on September 15, 591 B.C.E. It began about 6:00. The second took place in the afternoon on September 25, 573 B.C.E.[49] Both eclipses, then, fit in very well with the chronology established for the reign of Nebuchadnezzar.

In the chronology of the Watch Tower Society, however, the two eclipses should be sought for twenty years earlier, in 611 and 593 B.CE. But no eclipses that fit those described in the text occurred in the autumn of any of those years.[50]

The next entry, which records the subsequent eclipse in the 18-year cycle, gives the following detailed information:

49 Liu and Fiala, *op. cit.,* pp. 69–70, Nos. 2210 and 2256. The entries also record eclipses in the twelfth month of both years, but the text is severely damaged at both places.

50 On Sept. 26, 611 and Oct. 7, 593 B.C.E. there were so-called *penumbral* eclipses, i.e., the moon passed through the half-shadow *(penumbra) outside* the shadow *(umbra) of* the earth. (Liu & Fiala, *op. cit.,* pp. 68–69, nos. 2158 and 2205.) Such passages are hardly observable even at night, and the Babylonians evidently recorded them as "passed by' . The first eclipse (Sept. 26, 611 B.C.E.) began *well after sunset, not at sunrise* as is explicitly stated in the text. The penumbral phase of the second eclipse (Oct. 7, 593 B.C.E.) began *well before sunrise, not before sunset* as stated in the text. Both alternatives, therefore, are definitely out of the question anyway.

> Month VII, the 13th, in 17° on the east side
> all (of the moon) was covered. 28° maximal phase.
> In 20° it cleared from east to west.
> Its eclipse was red.
> Behind the rump of Aries it was eclipsed.
> During onset, the north wind blew, during clearing, the west wind. At 55° before sunrise.

As stated in the text, this eclipse took place on the thirteenth day of the seventh month (Tashritu), which began in September or October. The royal name and the year number unfortunately are missing.

Yet, as Professor Hunger points out, "the eclipse can nevertheless be identified with certainty from the observations given."[51] The various details about the eclipse—its *magnitude* (total), *duration* (the total phase lasting 112 minutes), and *position* (behind the rump of Aries)—clearly identify it with the eclipse that took place in the night of Oct. 6–7, 555 B.C.E.[52]

According to the generally established chronology for the Neo-Babylonian period, this eclipse took place in the first year of Nabonidus, which began on Nisan 1, 555 B.C.E. Although the royal name and year number are missing, it is of the utmost importance to notice that the text places this eclipse *one Saros cycle after* the eclipse *in the thirty-second year of Nebuchadnezzar.* As the last eclipse may be securely dated in 555 B.C.E., it at once also places Nebuchadnezzar's thirty-second year eighteen years earlier, in 573 B.C.E.

Consequently, all three eclipses in our text concur in establishing 591 and 573 B.C.E. as the absolute dates of Nebuchadnezzar's 14th and 32nd regnal years, respectively.

The Saros cycle text LBAT 1419 thus provides yet another independent evidence against 607 B.C.E. as the eighteenth year of Nebuchadnezzar. If, as is established by the text, his thirty-second year was 573/72 B.C.E. and his fourteenth year was 591/90 B.C.E., then his first year was 604/03, and his eighteenth year, in which he desolated Jerusalem, was 587/86 B.C.E.

51 Letter Hunger-Jonsson, dated October 21, 1989.

52 According to the calculations of Liu and Fiala the eclipse, which was total, began on October 6 at 21:21 and ended on October 7 at 1:10 The total phase lasted from 22:27 to 0:04, i.e. for 97 minutes, which is not far from the figure given in the text, 28 USH (112 minutes).—Liu and Fiala, *op. cit.,* p.70, n. 2301.

C-3: The lunar eclipse tablet LBAT 1420

Instead of recording eclipses at 18-year intervals, LBAT 1420 contains *annual* eclipse reports. All eclipses in the text are from the reign of Nebuchadnezzar, dating from his first year (604/03 B.C.E.) to at least his twenty-ninth year (576/75 B.C.E.).

The first entry, which records two eclipses that "passed by" (that is, though correctly predicted would not be observable), is damaged and the year number is illegible. But the last part of Nebuchadnezzar's name is preserved:

> [(Year) 1 Nebuchadn]ezzar, (month) *Simanu*.

The name of the king is not repeated in the subsequent entries, indicating that the king is the same during the whole period. This is also confirmed by the continuous series of increasing year numbers right until the last year preserved in the text, "(Year) 29".

The entries recording eclipses in the period 603–595 B.C.E. are very damaged, too, and the year numbers for this period are missing. The first entry in which the year number is preserved records two eclipses from the eleventh year:

> (Year) 11, (month) Ayyaru [. . . . .] 10(?) *USH* after sunset and it was total. 10 [+x . . .] (Month) Arahsamnu, which passed by. $Addaru_2$.

The eleventh year of Nebuchadnezzar began on Nisan 1, 594 B.C.E. "$Addaru_2$" is added to indicate that there was an intercalary month at the end of the year.

There is no problem in finding both of these eclipses. Ayyaru, the second month, began in April or May, and Arahsamnu, the eighth month, began in October or November. The first eclipse occurred on May 23, and the second one on November 17. The eclipse canon of Liu and Fiala confirms that the first eclipse was total and was observable in Babylonia, as stated in the text. It began at 20:11 and ended at 23:48. The second eclipse "passed by" (was unobservable) as it occurred in the daytime. According to the canon of Liu and Fiala it began at 7.08 and ended at 9:50.[53]

Most of the year numbers from the twelfth to the seventeenth year (593/92–588/87 B.C.E.) are legible.[54] Thirteen lunar eclipses

53 Liu & Fiala, *op. cit.,* p.69, nos. 2201 and 2202.

54 In the entries for the fourteenth and fifteenth years the year numbers are damaged and only partially legible. But as these entries stand between those for years "13" and "16", the damaged numbers obviously were "14" and "15".

are described and dated in this period, eight of which "passed by" and five were observed. Modern calculations confirm that all these eclipses occurred in the period 593–588 B.C.E.

After the seventeenth year there is a gap in the record until the twenty-fourth year. The entry for that year records two eclipses, but the text is damaged and most of it is illegible. From then on, however, year numbers and also most of the text are well preserved.

These entries contain annual records of a total of nine eclipses (five observable and four that "passed by") dating from the twenty-fifth to the twenty-ninth year (580/79–576/75 B.C.E.). There are no difficulties in identifying any of these eclipses. They all occurred in the period 580–575 B.C.E. It would be tiresome and useless to expose the reader to a detailed examination of all these reports. The entry for year "25" may suffice as an example:

> (Year) 25, (month) Abu, 1 1/2 *beru* after sunset.
> (Month) Shabatu, it occurred in the evening watch.

Abu, the fifth Babylonian month, began in July or August. The Babylonians divided our 24-hour day into twelve parts called *beru.* One *beru,* therefore, was two hours. The first eclipse is said to have occurred 1 1/2 *beru,* that is, three hours, after sunset. As Nebuchadnezzar's twenty-fifth year is dated to 580/79 B.C.E., this eclipse should be found in July or August that year, about three hours after sunset.

The eclipse is not difficult to identify. According to the canon of Liu and Fiala it was a total eclipse which began on August 14, 580 B.C.E. at 21:58 and ended at 1:31 on August 15.[55]

The next eclipse occurred six months later in Shabatu, the eleventh month, which began in January or February. It is said to have occurred "in the evening watch" (the first of the three watches of the night).

This eclipse, too, is easy to find. It took place on February 8, 579 B.C.E. and lasted from 18:08 to 20:22. according to the canon of Liu and Fiala.[56]

In the chronology of the Watch Tower Society the twenty-fifth year of Nebuchadnezzar is dated twenty years earlier, in 600/599 B.C.E. But no lunar eclipses observable in Babylonia occurred in 600 BCE. And although there was an eclipse in the night of February 19–20, 599 B.C.E., it did not occur "in the evening watch" as the one reported in our text.[57]

55 Liu & Fiala, *op. cit.,* p. 69, no. 2238. Sunset occurred at ca. 19:00.
56 *Ibid.,* p. 69, no. 2239.
57 Ibid., p. 69, no. 2188. The eclipse began at 23:30 and ended at 2:25. There were four eclipses in 600 B.C.E. (Liu & Fiala, nos. 2184–87), but al1 these were *penumbral* and thus not observable (see note 50 above).

Details on some *two dozens of lunar eclipses,* dated to specific years and months in the reign of Nebuchadnezzar, are preserved on LBAT 1420. Not one of them is found to agree with the Watch Tower Society's chronology for the reign of Nebuchadnezzar.

Together these lunar eclipses form an irregular but very distinct pattern of events scattered over the first twenty-nine years of Nebuchadnezzar's reign. Only on the assumption that his reign began in 604 B.C.E. do we find a far-reaching correspondence between this pattern and the celestial events that gave rise to it. But if Nebuchadnezzar's reign is moved back one, two, five, ten, or twenty years, this correlation between the records and reality *immediately dissolves.* LBAT 1420 alone, therefore, suffices to disprove completely the idea that the eighteenth year of Nebuchadnezzar should be dated to 607 B.C.E.

C-4: The lunar eclipse tablet LBAT 1421

The preserved part of LBAT 1421 records two eclipses observed in Babylonia in the sixth and twelfth month of year "42", evidently of the reign of Nebuchadnezzar:

> (Year) 42, (month) Ululu, (day) 14. It rose eclipsed [. . .]
> and became bright. 6 (USH) to become bright.
> At 35° [before sunset] .
>
> (Month) Addaru, (day) 15, 1,30° after sunset [. . .].
> 25° duration of maximal phase. In 18° it [became bright.]
> West(wind) went. 2 cubits below
> *γ* Virginis eclipsed
> [. . . . . .]

Provided that these eclipses occurred in the forty-second year of Nebuchadnezzar—and there was no other Babylonian king ruling that long in the sixth, seventh, or eighth centuries B.C.E.—they should be looked for in 563/62 B .C.E. And there is no difficulty in identifying them: The first, dated in the sixth month, occurred on September 5, 563 B.C.E., and the second one, dated in the twelfth month, occurred on March 2–3, 562 B.C.E.

The first eclipse "rose eclipsed", meaning that it began some time before sunset, so that when the moon rose (at about 18:30 at that time of the year), it was already eclipsed. This agrees with modern calculations, which show that the eclipse began about 17:00 and lasted until about 19:00.[58]

58 Liu & Fiala, *op. cit.,* p. 70, no. 2281.

The lunar eclipse tablet LBAT 1421

The tablet records two lunar eclipses dated to months six and twelve of year "42," evidently of Nebuchadnezzar. The details given help to identify them with eclipses that occurred on September 5, 563 and March 2-3, 562 B.C.E. respectively. — From A. J. Sachs, *Late Babylonian Astronomical and Related Texts* (Providence, Rhode Island: Brown University Press, 1955), p. 223.

The canon of Liu and Fiala confirms that the second eclipse was total. "1,30° [six hours] after sunset" probably refers to the beginning of the total phase, which began after midnight, at 0:19, and lasted until 2:03, i.e. it lasted for 104 minutes.[59] This is in good agreement with our text, which gives the duration of the maximal phase as 25 USH, that is, 100 minutes.

In the chronology of the Watch Tower Society, Nebuchadnezzar's forty-second year is dated to 583/82 B .C.E. But no eclipses of the type described in our text occurred in that year.

A possible alternative to the first one might have been that of October 16, 583 B.C.E., had it not began too late—at 19:45 according to Liu and Fiala—to be observed at moonrise (which occurred at about 17:30). And as for the second eclipse, there were no eclipses at all that could be observed in Babylonia in 582 B.C.E.[60]

The lunar eclipse texts presented above provide four additional independent evidences for the length of the Neo-Babylonian period.

59 *Ibid.*, p. 70, no. 2282. Sunset began ca. 18:00.

60 In 582 B.C.E. there were four lunar eclipses, but all of them were penumbral. — Liu & Fiala, *op. cit.*, p.69, nos. 2231–34.

The first text (LBAT 1417) records lunar eclipses from the accession year and eighteenth year of Shamash-shum-ukin and the sixteenth year of Kandalanu, turning these years into absolute dates that effectively block any attempt to add even one year to the Neo-Babylonian period, far less twenty.

The other three texts (LBAT 1419, 1420, and 1421) records dozens of lunar eclipses dated to various years within the reign of Nebuchadnezzar, thus time and again turning his reign into an absolute chronology. It is like fastening a painting to a wall with dozens of nails all over it, although but one would suffice.

Similarly, it would have sufficed to establish only one of Nebuchadnezzar's regnal years as an absolute date to overthrow the idea that his eighteenth year began in 607 B.C.E.

Before concluding this section on the lunar eclipse texts, it seems necessary to forestall an anticipated objection to the evidence provided by these texts. As the Babylonian astronomers as early as in the seventh century B.C.E. were able to *compute in advance* certain astronomical events such as eclipses, could it be that they also, in the later Seleucid era, were able to *retrocalculate* lunar eclipses and attach them to the chronology established for the earlier centuries? Could the lunar eclipse texts simply be the results of such a procedure?[61]

It is certainly true that the various cycles used by the Babylonians *for predicting* eclipses just as well could be used for *retrocalculating* eclipses, and there is a particular small group of tablets showing that Seleucid astronomers did extrapolate such cycles backwards in time.[62]

However, the observational texts record a number of phenomena that were impossible for the Babylonians to predict or retrocalculate. Of the records in the diaries and planetary texts

61 This idea was held by A. T. Olmstead, who in an article published back in 1937 (in *Classical Philology, Vol.* XXXII, pp. 5f.) criticized Kugler's use of some of the eclipse texts. As explained later by A. J. Sachs, Olmstead "completely misunderstood the nature of a group of Babylonian astronomical texts which Kugler used. He was under the misapprehension that they were *computed* at a later date and hence of dubious historical value; in reality, they are compilations of extracts taken directly from authentic, contemporary Astronomical Diaries and must therefore be handled with great respect"—A. J. Sachs & D. J. Wiseman, "A Babylonian King List of the Hellenistic Period," *Iraq,* Vol. XVI (1954), p. 207, note 1.

62 These texts do not record any observations at all and are, therefore, classified as *theoretical texts*. They are quite different from the diaries and the eclipse texts discussed above. Five such theoretical texts are known, four of which were published by Aaboe *et al* in 1991 (see note 41 above). Two of these are known as the "Saros Canon" (LBAT 1428) and the "Solar Saros" (LBAT 1430). The fifth tablet is LBAT 1418, described in note 42 above.—See J. M. Steele in Hunger, ADT V (2001),p. 390.

Professor N. M. Swerdlow points out that, although the distances of planets from normal stars could be predicted, "Conjunctions of planets with the moon and other planets, with their distances, could neither be calculated by the ephemerides nor predicted by periodicities."[63] With respect to lunar eclipses, the Babylonians could predict and retrocalculate their occurrences, "but none of the Babylonian methods could have allowed them to calculate circumstances such as the direction of the eclipse shadow and the visibility of planets during the eclipse."[64]

Thus, although the Babylonians were able to calculate certain astronomical phenomena, the observational texts record a number of details connected with the observations that they were unable to predict or retrocalculate. This disproves conclusively the idea proposed by some that the data may have been calculated backwards from a later period.

SUMMARY AND CONCLUSION

In the previous chapter the length of the Neo-Babylonian era was firmly established by seven different lines of evidence. All of them were based upon ancient Babylonian cuneiform texts such as chronicles, kinglists, royal inscriptions, and tens of thousands of economic, administrative, and legal documents from the Neo-Babylonian period.

In this chapter *another seven independent evidences* have been presented. All of these are based on ancient Babylonian *astronomical* texts, which provide a whole string of absolute dates from the sixth and seventh centuries B.C.E. These tablets establish—over and over again—the *absolute chronology* of the Neo-Babylonian era:

63 N. M. Swerdlow, *The Babylonian Theory of the Planets* (Princeton University Press, 1998), pp. 23, 173.—The diaries also record a number of other phenomena that could not be calculated, such as solar halos, river levels, and bad weather—clouds, rain, fog, mist, hail, lightning, winds, etc. Some data in the diaries were computed because of bad weather, but most are observations. This is also evident from the Akkadian name of the diaries engraved at the end of their edges: *natsaru sha ginê,* "regular watching".

64 Communication J. M. Steele-Jonsson, dated March 27, 2003. As pointed out in footnote 45 above, there is also a clear difference of accuracy in the timings given for observed and predicted eclipses.

1) The Astronomical diary VAT 4956

The diary VAT 4956 contains about thirty completely verified observed astronomical positions from Nebuchadnezzar's thirty-seventh regnal year.

Such a combination of astronomical positions is not duplicated again in thousands of years. Consequently, there is only one year which fits this situation: 568/67 B.C.E.

If this was Nebuchadnezzar's thirty-seventh regnal year, as is twice stated on this tablet, then 587/86 B.C.E. must have been his eighteenth year, in which he desolated Jerusalem.

(2) The astronomical diary B.M. 32312

B.M. 32312 is the *oldest preserved astronomical diary.* It records astronomical observations that enable scholars to date this tablet to 652/51 B.C.E.

A historical remark in the text, repeated in the Babylonian chronicle B.M. 86379 (the "Akitu Chronicle") shows this to have been the sixteenth year of Shamashshumukin. The diary, then, fixes his twenty-year reign to 667–648 B.C.E., his successor Kandalanu's twenty-two-year reign to 647–626, Nabopolassar's twenty-one-year reign to 625–605, and Nebuchadnezzar's forty-three-year reign to 604–562 B.C.E.

This, again, sets Nebuchadnezzar's eighteenth year and the destruction of Jerusalem at 587/86 B.C.E.

(3) The Saturn tablet B.M. 76738+76813

The Saturn tablet records *a successive series of positions of the planet Saturn at its first and last appearances ,* dated to the first fourteen years of Kandalanu.

Such a pattern of positions, fixed to specific dates in the Babylonian lunar calendar, is not repeated again in more than seventeen centuries.

This text, then, again fixes Kandalanu's twenty-two-year reign to 647–626 B.C.E., Nabopolassar's twenty-one-year reign to 625–605, and Nebuchadnezzar's reign to 604–562 B.C.E.

(4) The lunar eclipse tablet LBAT 1417

LBAT 1417 records four *lunar eclipses,* each succeeding the other at intervals of 18 years and nearly 11 days, an eclipse period known as the *Saros cycle.*

The eclipses are dated to the third year of Sennacherib's reign in Babylonia, to the accession year and the eighteenth year of Shamashshumukin, and to the sixteenth year of Kandalanu, respectively.

The four interrelated eclipses may be clearly identified with a series of eclipses that occurred in 686, 668, 650 and 632 B.C.E. This tablet, therefore, once again fixes the absolute chronology for the reigns of Shamashshumukin and Kandalanu, and also—indirectly for the reigns of Nabopolassar and Nebuchadnezzar.

(5) The lunar eclipse tablet LBAT 1419

LBAT 1419 contains reports of an *uninterrupted series of lunar eclipses* at 18-year intervals *directly from the Neo-Babylonian era itself.*

Two of the eclipses are dated to the fourteenth and thirty-second years of Nebuchadnezzar. They may be identified with eclipses that occurred in 591 and 573 B.C.E., respectively, confirming again at these points the chronology established for the reign of this king.

Although the royal name and year number are missing in the report on the next eclipse in the 18-year series, the very detailed information makes it easy to identify it with the eclipse that occurred on October 6–7, 555 B.C.E. This date, therefore, confirms and adds further strength to the two earlier dates in the 18-year series, 573 and 591 B.C.E.

As these years correspond to Nebuchadnezzar's thirty-second and fourteenth years, respectively, his eighteenth year is, of course, once again fixed to 587/86 B.C.E. by this tablet.

(6) The lunar eclipse tablet LBAT 1420

LBAT 1420 gives an *annual record of lunar eclipses* from the first to the twenty-ninth years of Nebuchadnezzar, except for a gap between his eighteenth and twenty-third years. The entries in which regnal year numbers are preserved—about a dozen—give details on some *two dozens of eclipses,* all of which are found exactly in the B.C.E. years that has been established earlier for the regnal years mentioned in the text.

As this specific compound of dated lunar eclipses does not tally with any corresponding series of eclipses that occurred in the immediate preceding decades, this tablet alone suffices to establish the absolute chronology of Nebuchadnezzar's reign.[65]

65 This tablet "was probably compiled shortly after –575 [576 BCE]."—J. M. Steele in Hunger, ADT V, p. 391.

(7) The lunar eclipse tablet LBAT 1421

LBAT 1421 records *two eclipses* dated in the sixth and twelfth months of year "42", evidently of Nebuchadnezzar, generally dated to 563/62 B.CE. And both eclipses are also actually found in these months of that year. But no eclipses of the type recorded in the text occurred in 583/82 B.CE.—the date of Nebuchadnezzar's forty-second year in the chronology of the Watch Tower Society. This tablet, therefore, provides an additional proof of the falsity of that chronology.

(8-11) Another four astronomical tablets

The seven astronomical texts discussed above provide more than enough evidence against the Watch Tower Society's 607 B .C.E. date. And yet this is not all. Another four texts have recently been published that will be described only briefly here. Translations of three of these are published in Hunger, ADT V (2001).

The first is LBAT 1415 which, as mentioned on page 174 above, is part of the same tablet as LBAT 1417. It records lunar eclipses dated to year 1 of Bel-ibni (702 B.C.E.), year 5, evidently of Sennacherib (684 B.C.E.), and year 2, evidently of Shamash-shum-ukin (666 B.C.E).

The second is lunar eclipse text no. 5 in Hunger, ADT V. It is badly damaged and the royal name is missing, but some historical remarks in the text shows it is from the reign of Nabopolassar. One of the eclipses described is dated to year 16 and may be identified with the eclipse of September 15, 610 B.C.E.

The third is text no. 52 in Hunger, ADT V. This is a planetary text containing over a dozen legible records of the positions of Saturn, Mars, and Mercury dated to years 14, 17, and 19 of Shamash-shum-ukin (654, 651, and 649 B.C.E), years 1, 12, and 16 of Kandalanu (647, 636, and 632 B.C.E.), and years 7, 12, 13, and 14 of Nabopolassar (619, 614, 613, and 612 B.C.E.). Like some of the previous texts discussed above, these three texts effectively prevent all attempts at lengthening the chronology of the Neo-Babylonian period.

The fourth is a planetary tablet, SBTU IV 171, which records first and last appearances and stationary points of Saturn in years 28, 29, 30, and 31 of an unknown king.[66] However, as Professor Hermann Hunger has demonstrated, the year numbers combined with the position of Saturn in the constellation of Pabilsag (roughly Sagittarius) exclude all alternatives in the first millennium B.C.E.

66 Hermann Hunger, "Saturn beobachtungen aus der Zeit Nebukadnezars II.," *Assyriologica et Semitica* (=AOAT, Band 252), (Munster: Ugarit-Verlag, 2000), pp. 189–192.

except years 28–31 of Nebuchadnezzar, fixing these to 577/76–574/73 B.C.E. Again, this establishes his 18th year as 587/86 B.C.E.

As has been clearly seen, the Watch Tower Society's interpretation of the "Gentile Times" requires that these have a starting date of 607 B.C.E., their claimed date for the fall of Jerusalem. Since that event took place in Nebuchadnezzar's eighteenth year, that regnal year must also be dated as of 607 B.C.E. This creates a gap of twenty years when compared with all existing ancient historical records, since these place the start of Nebuchadnezzar's eighteenth year in 587 B.C.E. How can this twenty-year gap possibly be explained?

In this chapter it has been demonstrated that the ten astronomical texts presented establish the absolute chronology of the Neo-Babylonian period at a number of points, especially within the 43-year-reign of Nebuchadnezzar. Their combined witness proves beyond all reasonable doubt that his reign cannot be moved backwards in time even one year, far less twenty.

Together with the evidence presented in Chapter 3, therefore, we now have *seventeen different evidences,* each of which in its own way overthrows the Watch Tower Society's dating of Nebuchadnezzar's eighteenth year to 607 B.C.E., showing it to have begun twenty years later, that is, in 587 B.C.E.

Indeed, few reigns in ancient history may be dated with such conclusiveness as that of the Neo-Babylonian king Nebuchadnezzar.

Suppose for a moment that *Berossus'* figures for the reigns of the Neo-Babylonian kings contain an error of twenty years, as is required by the chronology of the Watch Tower Society. Then the compiler(s) of the *Royal Canon* must have made exactly the same mistake, evidently independently of Berossus!

It might be argued, though, that both simply repeated an error contained in the *sources* they used, namely the Neo-Babylonian chronicles. Then the scribes of Nabonidus, too, who possibly used the same sources, would have had to have dropped twenty years from the reign of the same king (or kings) when they made the inscriptions of the *Hillah stele* and the *Adad-guppi' stele.*

Is it really likely, however, that those scribes, who *wrote right during the Neo-Babylonian era,* did not know the lengths of the reigns of the kings under whom they lived, especially since those reigns also functioned as calendar years by which they dated different events?

If they really made such a strange mistake, how is it possible that contemporary scribes *in Egypt* also made the same mistake, dropping the same period of twenty years when making inscriptions on *death stelae* and other documents?

Curiously then, the Babylonian astronomers must also have regularly made similar "mistakes" when dating the observations recorded in VAT 4956, LBAT 1420, SBTU IV 171, and also other tablets from which later astronomers abstracted their Saros cycle eclipse records — unless of course changes were purposely made by copyists in the Seleucid era, as the Watch Tower Society posits.

Still more incredible is the idea that scribes and astronomers could remove twenty years from the Neo-Babylonian era several years prior to that era—as is shown by the oldest diary, BM. 32312, the lunar eclipse tablets LBAT 1415+1416+1417 and ADTV, no. 5, the Saturn tablet B.M.76738+76813 , and the planetary tablet ADT V, no.52—all the five of which inexorably block all attempts at lengthening the Neo-Babylonian period.

But the most remarkable "coincidence" is this: *Tens of thousands* of dated economic, administrative and legal documents have been excavated from the Neo-Babylonian period, covering every year of this period—except, as the Watch Tower Society would have it, for a period of twenty years from which *not one tablet has been found.*

Again, most curiously, according to this logic, that period happens to be exactly the same as that lost through a series of other "mistakes" by scribes in Babylon and Egypt, and by later copyists and historians.

Either there was an international agreement during several centuries to erase this twenty-year period from the recorded history of the world—or it never existed! If such an international "plot" ever took place it was so successful that of all the tens of thousands of documents unearthed from the Neo-Babylonian era there is *not one, not even a line in any of them,* that indicates that such a twenty-year period ever existed. We can safely conclude, then, that the Watch Tower Society's chronology is unquestionably in error.

But if this is the conclusion of our study, how are we to harmonize this fact with the Biblical prophecy of the seventy years, during which the land of Judah and Jerusalem would lay desolate according to the Watch Tower Society? And how are we to view the year 1914, the supposed terminal date for the times of the Gentiles according to the prophetic time scale of the Watch Tower Society? Do not world events clearly show that Bible prophecies have been fulfilled since that year? These questions will be dealt with in the following chapters.

5

THE SEVENTY YEARS FOR BABYLON

> *For thus says the LORD, "When seventy years have been completed for Babylon, I will visit you and fulfill my good word to you, to bring you back to this place."* — Jeremiah 29:10, *NASB.*

THE DATE 607 B.C.E. as given by Watchtower chronologists for the destruction of Jerusalem and its temple by the Babylonians is determined by adding the seventy years predicted by Jeremiah to 537 B.C.E., the date when the Jewish remnant are thought to have returned from exile. It is held that these seventy years were a period of *complete desolation* for Judah and Jerusalem:

> The Bible prophecy does not allow for the application of the 70-year period to any time other than that between the desolation of Judah, accompanying Jerusalem's destruction, and the return of the Jewish exiles to their homeland as a result of Cyrus' decree. It clearly specifies that the 70 years would be years of *devastation of the land of Judah.*[1]

If no other understanding of the seventy-year period is allowed for by Bible prophecy, then a choice has to be made between the date determined by this application and the one established by at least seventeen lines of historical evidence.

When a certain interpretation of a Biblical prophecy contradicts historical fact, this indicates that either the prophecy failed or

1 *Insight on the Scriptures, Vol.* 1 (Brooklyn. N.Y.: Watchtower Bible and Tract Society of New York, Inc., 1988), p. 463.

the interpretation is wrong. It is true that a certain application sometimes looks very convincing, so much so that no other appears feasible. It seems to the reader to be given by the Bible itself. In such a case it may also seem to be a sound Christian position to discard the historical evidence and "just stick to what the Bible says."

When this position is taken, however, those taking it often overlook the fact that the fulfillment of a prophecy cannot be demonstrated *aside from history,* because only history can show whether, when, and how it was fulfilled. Actually, prophecy is not generally understood until after it has been fulfilled historically through events in time. Serious mistakes have sometimes been made by sincere Bible students because historical evidence *contrary* to a certain application or interpretation has been rejected. One example will be given below to illustrate this fact.

History and time prophecies—a lesson

Most commentators agree that Daniel's prophecy of the "seventy weeks" (Daniel 9:24–27) refers to a period of 490 years. But various opinions have been held regarding the *starting point* of this period. Although it is stated at Daniel 9:25 that "from the going forth of [the] word to restore and to rebuild Jerusalem until Messiah [the] Leader, there will be seven weeks, also sixty-two weeks" (*NW*), different views are held regarding when and by whom this "word" was sent forth.[2]

If we "just stick to the Bible," it seems to point to the Persian king Cyrus. At Isaiah 44:28 Jehovah "saith of Cyrus, He is my shepherd, and shall perform all my pleasure, even saying of Jerusalem, She shall be built; and of the temple, Thy foundation shall be laid" *(ASV).* And further, in chapter 45, verse 13: "I myself have roused up someone in righteousness [Cyrus], and all his ways I shall straighten out. *He is the one that will build my city,* and those of mine in exile he will let go, not for a price nor for bribery" (*NW*).

Thus it would seem clear that according to the Bible itself the "word to restore and rebuild Jerusalem" was issued by Cyrus. This application, however, limits the period from Cyrus' edict (Ezra 1:1–4) until Messiah to 483 years ("seven weeks, also sixty-two weeks"). If this period ended at the baptism of Christ, usually dated somewhere in the period 26–29 C.E., Cyrus' first year as king of

2 The principal interpretations are stated by Edward J. Young in *The Prophecy of Daniel* (Grand Rapids: Wm. B. Eerdman's Publishing Co., 1949), pp. 192–195.

Babylon would have to be dated in the period 458–455 B.C.E. instead of 538, the historically acknowledged date.

Contrary to all historical evidence, several Christian commentators in the past have chosen this application, and it is still adhered to by some expositors. The idea was popularized in the last century by Martin Anstey in his work *The Romance of Bible Chronology,* London 1913.[3] Dr. E. W. Bullinger (1837–1913) accepted the same position, as may be seen in Appendix 91 (pp. 131–32) of his *The Companion Bible.*

The reasoning underlying this unhistorical position is clearly demonstrated by one of its adherents, George Storrs, a Bible student from the 19th century and editor of the periodical *Bible Examiner.* In an article dealing with the seventy weeks, he states:

> In examining this point, we have nothing to do with profane chronology, or the chronology of the historians. The Bible must settle the question, and if profane chronology does not tally with it, we have a right to conclude such chronology is false, and not to be trusted.[4]

Storrs, like some other expositors before and after him, tried to cut off nearly 100 years from the Persian period, holding that a number of the Persian kings mentioned in "Ptolemy's canon" (the Royal Canon) and other historical sources never existed! George Storrs surely was an honest and sincere Christian Bible student, but his (and others') rejection of historical sources proved to be a grave mistake.[5]

3 Republished in 1973 by Kregel Publications under the title *Chronology of the Old Testament.* See p. 20 on the 490 years. Among more recent Bible commentators, Dr. David L. Cooper, founder of the Biblical Research Society and editor of the *Biblical Research Monthly,* held this same thesis in his *The Seventy Weeks of Daniel* (Los Angeles: Biblical Research Society, 1941).

4 George Storrs (ed.), *Bible Examiner* (published in Brooklyn, N.Y.), April, 1863, p. 120.

5 The early Christian writer Tertullian (c. 160–c. 225 C.E.), in his *Against the Jews,* reckoned the 490 years from the first year of "Darius the Mede" (Dan. 9:1, 2) to the destruction of the second temple by the Romans in 70 C.E. This would date the first year of "Darius the Mede" to 421 B.C.E. instead of 538. Jewish rabbis in the Talmud *(Seder Olam Rabbah)* counted the 490 years from the destruction of the first temple by the Babylonians to the destruction of the second temple by the Romans, which would place the destruction of the first temple in 421 B.C.E. instead of 587. (R. T. Beckwith, "Daniel 9 and the Date of Messiah's Coming in Essene, Hellenistic, Pharisaic, Zealot and Early Christian Computation," in *Revue de Qumran,* Vol. 10:40, 1981, pp. 531–32, 539–40.) Although modern discoveries have made such applications wholly untenable, they still find adherents. See, for example, Rabbi Tovia Singer in *Outreach Judaism. Study Guide to the "Let's Get Biblical!" Tape Series, Live!* (Mousey, NY: Outreach Judaism, 1995), pp. 40–41.

That the Persian kings mentioned in the Royal Canon really did exist has been proved beyond all doubt by archeological discoveries in modern times.[6] This is an instructive illustration of the necessity of considering the historical evidence in relation to biblical time prophecies. Although this special application of the seventy weeks seemed *very biblical* and very convincing, it has been refuted by historical facts and therefore cannot be correct.

The same is also true of the application of the seventy-year prophecy made by the Watch Tower Society. Although on the surface it may seem to be supported by some passages in the Bible, it should be abandoned because it is incompatible with historical facts established by a multitude of modern discoveries.

Is it possible, then, to find an application of the seventy years that accords with the historical evidence? It is, and a close examination of biblical texts dealing with the seventy years will demonstrate that there is no real conflict between the Bible and secular history in this matter. As will be shown below, *it is the application made by the Watch Tower Society that conflicts, not only with secular history, but also with the Bible itself.*

There are seven scriptural texts referring to a period of seventy years which the Watch Tower Society applies to one and the same period: Jeremiah 25:10–12; 29:10; Daniel 9:1–2; 2 Chronicles

6 During the years 1931–1940, reliefs, tombs, and inscriptions of the kings these expositors thought never existed were excavated in Persia. (Edwin M. Yamauchi, *Persia and the Bible.* Grand Rapids: Baker Book House, 1990, pp. 368–70.) That the Roya1 Canon puts these kings in the right order is also demonstrated by the inscription discovered on the walls of a palace of Artaxerxes III (358–337 B.C.E.), which reads: "Says Artaxerxes the great king, king of kings, king of countries, king of this earth: I (am) the son of Artaxerxes (II) the king: Artaxerxes (was) the son of Darius (II) the king; Darius (was) the son of Artaxerxes (I) the king; Artaxerxes (was) the son of Xerxes the king; Xerxes (was) the son of Darius (I) the king; Darius was the son of Hystaspes by name." (E. F. Schmidt, *Persepolis I.* Chicago: University of Chicago Press, 1953, p. 224.) The absolute chronology of the later Persian kings thought not to have existed is today firmly established by numerous astronomical cuneiform texts extant from this period.
In passing, the Watch Tower Society's application of the 490 years is basically as historically unsound as are those of the others mentioned in this section. The dating of the 20th year of Artaxerxes I to 455 B.C.E. instead of 445 is in direct conflict with a number of historical sources, including several astronomical texts. When, therefore, *The Watchtower* of July 15, 1994, p. 30, claims that, "Accurate secular history establishes 455 B.C.E. as that year," this is grossly misleading. (Cf. the similar misstatement in *Awake!,* June 22, 1995, p. 8.) No secular historian today would date the 20th year of Artaxerxes I to 455 B.C.E. (For a refutation of the idea, se the web essay referred to in footnote 14 on page 82 above.)

36:20–23; Zechariah 1:7–12; 7:1–7, and Isaiah 23:15–18. These will now be examined one by one in chronological order.[7]

A. JEREMIAH 25:10–12

The original prediction is that of Jeremiah 25:10–12, which is dated to "the fourth year of Jehoiakim the son of Josiah, the king of Judah, that is, the first year of Nebuchadrezzar the king of Babylon" (verse 1). Jehoiakim ruled for eleven years and was followed by his son Jehoiachin, who ruled for three months. Jehoiachin in turn was succeeded by his uncle Zedekiah, in whose eleventh year Jerusalem was desolated. Jeremiah's prophecy, then, was given eighteen years prior to the destruction of Jerusalem.

Jeremiah 25:10–12:

"And I will destroy out of them the sound of exultation and the sound of rejoicing, the voice of the bridegroom and the voice of the bride, the sound of the hand mill and the light of the lamp. And all this land [Judah) must become a devastated place, an object of astonishment, and *these nations will have to serve the king of Babylon seventy years.* And it must occur that *when seventy years have been fulfilled I shall call to account against the king of Babylon and against that nation,"* is the utterance of Jehovah, "their error, even against the land of the Chaldeans, and I will make it desolate wastes to time indefinite." *(NW)* [8]

7 The seventy years for Tyre at Isaiah 23:15–18 will not be discussed here, as it cannot be proved that they refer to the period of Neo-Babylonian supremacy. Some scholars, in fact, apply it to circa 700–630 B.C.E., when Tyre was controlled by Assyria. See, for example, Dr. Seth Erlandsson, *The Burden of Babylon (= Coniectanea Biblica. Old Testament Series 4)* (Lund, Sweden: CWK Gleerup, 1970), pp. 97–102.

8 The quotation is from *The New World Translation* (NW), which is based on the Hebrew Masoretic text (MT). The Greek *Septuagint* version (LXX) says: "and they will serve among the nations," instead of: "and these nations wil1 have to serve the king of Babylon." In Jeremiah 25:1–12 of the LXX, for some unknown reason, all references to Babylon and king Nebuchadnezzar are omitted. There are many differences between Jer-MT and Jer-LXX. Jer-LXX is about one-seventh shorter than Jer-MT, which contains 3,097 more words than Jer-LXX. A number of modem scholars hold that Jer-LXX was translated from a Hebrew text that was earlier than the text tradition represented by Jer-MT, arguing that Jer-MT represents a later revision and expansion of the original text, either by Jeremiah himself, his scribe Baruch, or some later editor(s). Thus, with respect to Jeremiah's prediction that the Babylonian king Nebuchadnezzar would attack and destroy the kingdom of Judah, these scholars often find it difficult to believe that Jeremiah was able to give such concrete and specific forecasts. They find it easier to accept the more general and vague wordings of the Jer-LXX as representing the original prediction, with all references to Babylon and king Nebuchadnezzar being left out. However, some of the scholars who have adopted this view admit that it creates problems. If the origina1 prophecy of Jeremiah 25:1–12, which was given in the fourth year of [continued on next page]

Three things are predicted in this prophecy:

(1) The land of Judah would become a "devastated place".
(2) "These nations" would "serve the king of Babylon seventy years".
(3) When the seventy years had been "fulfilled" God would "call to account against the king of Babylon and against that nation . . . their error, even against" the land of the Chaldeans.

What does this passage really tell us about the "seventy years"?

A-1: Desolation or servitude—which?

Although it is predicted in the passage that the land of Judah would be a devastated place, it should be noted that this "devastation" is not equated with, or linked with, the period of the seventy years. All that is clearly and unambiguously stated in the text is that "these nations will have to *serve the king of Babylon* seventy years" The phrase "these nations" is a reference back to verse 9, in which it is predicted that Nebuchadnezzar would come against "this land [that is, Judah] and its inhabitants, and *also against all these nations round about."*

The seventy years, then, should be understood to mean years of *servitude* for these nations. This conclusion is so obvious that the Watch Tower Society, at the head of page 826 of its large-print

Jehoiakim and was presented to the king a few months later (Jeremiah 36:1–32), did not contain any references to Babylon and king Nebuchadnezzar, how then could Jehoiakim, after having listened to and burned up the roll with the prophecy, ask Jeremiah: "Why is it that you have written on it, saying: *The king of Babylon will come without fail and will certainly bring this land to ruin and cause man and beast to cease from it?' "* (Jeremiah 36:29, *NW)* As this same question is found *both in Jer-MT and Jer-LXX,* the original prophecy must have explicitly mentioned the king of Babylon. Professor Norman K. Gottwald cites this verse and says: "If the prophet had not somewhere in his scroll openly identified Babylon as the invader, the sharp retort of the king is difficult to explain." (N. K. Gottwald, *All the Kingdoms of the Earth.* New York, Evanston, and London: Harper & Row, Publishers, 1964, p. 251.) This strongly indicates that Jer-MT might very well represent the original text here.

It should be kept in mind that LXX is *a translation* made hundreds of years after the time of Jeremiah from a Hebrew text that is now lost, and, as the editors of Bagster's *The Septuagint Version of the Old Testament* point out in the "Introduction," some of the translators of the LXX were not competent to their task and often inserted their own interpretations and traditions. Most scholars agree with this observation. The Watch Tower Society, too, emphasizes that "the Greek translation of this book [Jeremiah] is defective, but that does not lessen the reliability of the Hebrew *text."—Insight an the Scriptures,* Vol. 2, 1988, p. 32.

For a thorough defense of the superiority of the MT text of Jeremiah, see Dr. Sven Soderlund, *The Greek Text of Jeremiah (= Journal for the Study of the Old Testament,* Supplement Series 47), Sheffield, England: JSOT Press, 1985.

edition of the *New World Translation* (1971 ed.), automatically describes the seventy years as "70 years' *servitude* due."[9]

Yet, in their discussions of this text, Watchtower writers never point out that Jeremiah spoke of seventy years of *servitude,* or that this servitude related to *the nations surrounding Judah.* They try always to give the impression that the seventy years referred to Judah, and Judah only, and they always describe the seventy years as a period in which Judah suffered *complete desolation, "without an inhabitant."*[10] This they reckon as having happened from the destruction of Jerusalem and its temple. But their application is in direct conflict with the exact wording of Jeremiah's prediction, and it can be upheld only by ignoring what the text actually says.

"Servitude" here should not be taken to mean the same thing as desolation and exile. For the nations surrounding Judah the

9 As the attention was drawn to this heading in the original version of the present work (sent to the Watchtower headquarters in 1977), and also in the published edition of 1983, it was no surprise to find that it had been changed in the 1984 large-print edition of NW. The heading (p. 965) now reads: "70 years' *exile* due."

10 The Hebrew word for "desolation," *chorbáh* is also used in verse 18, where Jerusalem and the cities of Judah are stated to become "a desolation *(chorbáh), . . . as it is today."* As Dr. J. A. Thompson remarks, "The phrase *as it is today* suggests that at the time of writing some aspects of this judgment, at 1east, were apparent." *(The Book of Jeremiah,* Grand Rapids: Eerdmans, 1980, p. 516) The prophecy was uttered and written down in the fourth year of Jehoiakim . . . that is, the first year of Nebuchadnezzar." (Jer. 25:1; 36:1–4) But as that scroll was burned by Jehoiakim some months later, in the ninth month of his fifth year (36:9–25), another scroll had to be written. (36:32) At that time Nebuchadnezzar's armies had already invaded and ravaged the land of Judah. At the time of writing, therefore, the phrase "as it is today" was probably added as a result of this desolation.

That the word *chorbáh* does not necessarily imply a state of *total* desolation "without an inhabitant" can be seen from other texts which use the word, for example Ezekiel 33:24, 27 (*"*the *inhabitants* of these *devastated places")* and at Nehemiah 2:17. During Nehemiah's time Jerusalem was inhabited, yet the city is said to be "devastated *(chorbáh)."* The phrase "desolate waste, *without an inhabitant"* is found at Jeremiah 9:11 and 34:22. Although it refers to Jerusalem and the cities of Judah it is nowhere equated with the period of seventy years. As pointed out by Professor Arthur Jeffrey in the *Interpreter's Bible* (Vol. 6, p. 485), *chorbáh* is 'often employed to describe the state of a devastated land after the armies of an enemy have passed (Leviticus 26:31, 33; Isaiah 49:19; Jeremiah 44:22; Ezekiel 36:34; Malachi 1:4; 1 Maccabees 1:39)." It would not be inaccurate, therefore, to talk of Judah as *chorbáh* eighteen years prior to its depopulation, *if the land had been ravaged by the army of an enemy at that time.* Inscriptions from Assyria and Babylonia show that, in order to break the power and morale of a rebel quickly, the imperial army would try to ruin the economic potential "by destroying unfortified settlements, cutting down plantations and devastating fields" — Israel Eph'al, "On Warfare and Military Control in the Ancient Near Eastern Empires," in H. Tadmor & M. Weinfield (eds.), *History, Historiography and 1nterpretatian* (Jerusalem: The Magnes Press, 1984), p. 97.

servitude first of all meant *vassalage.*[11] Although Judah, too, was subdued by Babylon, it time and again revolted and attempted to throw off the Babylonian yoke, which brought wave after wave of devastating military ravages and deportations until the country was at last desolated and depopulated after the destruction of Jerusalem in 587 B.C.E. That such a fate was not the same thing as servitude, but would come as a punishment upon any nation that *refused to serve* the king of Babylon, had been clearly predicted by Jeremiah, at chapter 27, verses 7, 8, and 11:

> "And all the nations must serve even him [Nebuchadnezzar] and his son and his grandson until the time even of his own land comes, and many nations and great kings must exploit him as a servant.
>
> "And it must occur that *the nation and the kingdom that will not serve him,* even Nebuchadnezzar the king of Babylon; and the one that will not put its neck under the yoke of the king of Babylon, *with the sword and with the famine and with the pestilence I shall turn my attention upon that nation,"* is the utterance of Jehovah, "*until I have finished them off by his hand."*
>
> *"And as for the nation that will bring its neck under the yoke of the king of Babylon and actually serve him, I will also let it rest upon its ground,"* is the utterance of Jehovah, "*and it will certainly cultivate it and dwell in it."* (*NW*)

From these verses it is very clear what it meant to a nation to *serve* the king of Babylon. It meant to accept the yoke of Babylon as a vassal and by that be spared from desolation and deportation. The servitude, therefore, was *the very opposite of revolt, desolation, deportation, and exile.*[12] That is why Jeremiah warned the people

11 As brought out by any Hebrew dictionary , the Hebrew verb '*abad, "work,* serve," could also mean to serve as a subject or vassal, e.g. by paying tribute. The corresponding noun '*ebed, "*slave, servant," is often used of vassal states or tributary nations. In fact, the technical term for "vassal" in Hebrew was precisely '*ebed.* —See Dr. Jonas C. Greenfield, "Some aspects of Treaty Terminology in the Bible," *Fourth World Congress of Jewish Studies: Papers,* Vol. I, 1967, pp. 117–119; also Dr. Ziony Zevit, "The Use of '*ebed* as a Diplomatic Term in Jeremiah," *Journal of Biblical Literature,* Vol. 88, 1969, pp. 74–77.

12 The difference is noted by Dr. John Hill in his analysis of Jeremiah 25:10, 11: "In vv. 10–11 there is a twofold elaboration of the punishment announced in v. 9. The first part of the elaboration is in vv. 10–11a, which refers to the subjugation and devastation of Judah. The second part is in v. 11b which refers to the subjugation of Judah's neighbours. Vv. 10–11 then distinguishes the fate of Judah from that of its neighbours, which is that of subjugation. Judah's fate is to suffer the devastation of its land."—J. Hill, *Friend or Foe? The Figure of Babylon in the Book of Jeremiah MT* (Brill:Leiden etc., 1999, p. 110, note 42.

against attempting to throw off the Babylonian yoke and admonished them: "Serve the king of Babylon and keep on living. Why should this city become a devastated place?" —Jeremiah 27:17, *NW*.

Thus, the nations that accepted the Babylonian yoke would *serve* the king of Babylon seventy years. But the nations that *refused to serve* the Babylonian king would become *devastated*. This fate at last befell Judah after about eighteen years of servitude, interrupted by repeated rebellions. The seventy years of servitude foretold by Jeremiah, therefore, did not apply to Judah as a nation, but only to the nations who submitted to the king of Babylon. As Judah refused to submit, it had to get the punishment for this—desolation and exile—exactly as had been predicted at Jeremiah 25:11. Of course, the exiled Jews also had to perform various kinds of "service" in Babylonia. This was not the service of a *vassal* state, however, but the service of *captured* and *deported* slaves![13]

A-2: When would the seventy years end?

The prediction that "these nations will have to serve the king of Babylon seventy years" (Jeremiah 25:11) implies that there would be a change in Babylon's position of supremacy at the end of the seventy-year period. This change is described in verse 12 of Jeremiah 25:

> "And it must occur that *when seventy years have been fulfilled* I shall call to account against the king of Babylon and against that nation," is the utterance of Jehovah, "their error, even against the land of the Chaldeans, and I will make it desolate wastes to time indefinite." *(NW)*

All historians, and also the Watch Tower Society, agree that the Neo-Babylonian empire ended in 539 B.C.E. On October 12 (Julian calendar) that year the city of Babylon was captured by the

13 Other nations, too, who refused to accept the Babylonian yoke, were desolated, and captives were brought to Babylon. For example, one of the Philistine city-states, probably *Ashkelon* (the name is only partly legible), was "plundered and sacked" and "turned . . . into a ruin heap," according to the *Babylonian Chronicle* (B. M. 21946). This destruction, predicted by Jeremiah at Jeremiah 47:5–7, took place in the month Kislimu (9th month) of the first year of Nebuchadnezzar according to the chronicle, that is, in November, or December, 604 B.C.E. (A. K. Grayson, *Assyrian and Babylonian Chronicles,* Locust Valley, N.Y.: J.J. Augustin Publisher, 1975, p. 100.) That Ashkelon was mined is now confirmed by excavations. In 1992, Lawrence E. Stager uncovered at Ashkelon the archaeological evidence for this Babylonian destruction.— See L. E. Stager, "The Fury of Babylon: Ashkelon and the Archaeology of Destruction," Biblical *Archaeology Review,* Vol. 22:1 (1996), pp. 56–69, 76–77.

armies of the Persian king Cyrus. Belshazzar, the son of king Nabonidus, was killed, according to the book of Daniel, chapter 5, verse 30. Nabonidus himself was taken prisoner and exiled to Carmania in the east, where he spent the rest of his life as governor of that province, according to Berossus.[14]

The year in which Jehovah would "call to account against the king of Babylon and against that nation . . . their error, even against the land of the Chaldeans" therefore was evidently 539 B.C.E. At that time the seventy years had "been fulfilled," according to Jeremiah's prophecy. The Persian conquest of Babylonia in 539 B.C.E. definitely put an end to the Babylonian supremacy over the nations who had served as its vassals up to that year. After that year it was impossible to "serve the king of Babylon" in any sense, either as vassals or as exiled captives in Babylonia. From that year onward these people had to serve, not the king of Babylon, but the king of Persia.[15] The seventy years of servitude, therefore, definitely ended in 539 B.C.E., *not later.*

Note, then, that Jeremiah's prophecy is clearly incompatible with the view that the seventy years referred to the period of *the desolation of Judah and Jerusalem.* Why? Because this desolation did not end in 539 B.C.E. but later, when a remnant of the Jewish exiles had returned to Judah as a result of Cyrus' edict. (Ezra 1:13:1) According to the Watch Tower Society this took place *two years after* the fall of Babylon, or in 537 B.C.E. In that year, they hold, the seventy years ended. But *how* did Jehovah "call to account *against the king of Babylon and against that nation* . . . their error" *in 537 B.C.E.,* two years *after* his dethronement and the fall of Babylon? A solution to this problem has never been presented in the publications of the Watch Tower Society.

A-3: The historical setting of the seventy-year prophecy

If the seventy years ended in 539 B.C.E., when did they begin? Clearly, they cannot be counted from the year of the desolation of Jerusalem. The period from the established date of 587 B.C.E. to 539 was only forty-eight years. However, as the seventy years have been shown above to refer to the period of *subservience to Babylon,*

14 See the comments of Paul-Alain Beaulieu in *The Reign of Nabonidus, King of Babylon, 556–539 B.C.* (New Haven and London: Yale University Press, 1989), pp. 230, 231

15 In accordance with this, 2 Chron. 36:20 states that the exiled Jews "came to be servants to him [Nebuchadnezzar] and his sons *until the royalty of Persia began to reign"* (*NW*), that is, until the autumn of 539 B.C.E., *but no longer.*

not to Jerusalem's desolation , the right question to be asked is: When did the period of *servitude* begin?

First of all, it is important to establish the historical background against which this prophecy was given. As pointed out earlier, it was given eighteen years before the destruction of Jerusalem and its temple, "in the fourth year of Jehoiakim" (Jeremiah 25:1), that is, in 605 B.C.E.

That year saw a very important event take place, with momentous consequences to Judah and its neighbours. It was the year of the well known *battle of Carchemish* (on the Euphrates river in northern Syria), when Nebuchadnezzar decisively defeated the Egyptian Pharaoh Necho and his military force. This important victory opened the way for the Babylonian king to the areas in the west, Syria and Palestine, which for a few years previous (609–605 B.C.E.) had been controlled by Egypt. This famous battle is also referred to, and dated, at Jeremiah 46:2:

> For Egypt, concerning the military force of Pharaoh Necho the king of Egypt, who happened to be by the river Euphrates at Carchemish, whom Nebuchadrezzar the king of Babylon defeated *in the fourth year of Jehoiakim* the son of Josiah, the king of Judah. (*NW*)

The prophecy of the seventy years was thus given at a crucial point of time. Could it be that Judah and her neighbours were made vassals to and began to serve the king of Babylon in that year? Research does find evidence to show that Judah and a number of the surrounding nations *began to be made subservient to the king of Babylon very soon after the battle of Carchemish, in the fourth year of Jehoiakim and thereafter.*

In 1956 Professor D. J. Wiseman published a translation of the Babylonian Chronicle *B.M. 21946,* covering the period from the last (21st) year of Nabopolassar up to and including the tenth year of his son and successor, Nebuchadnezzar.[16] This tablet commences with a concise description of the battle at Carchemish and the subsequent events. The opening portion is quoted here in full because of its importance for our examination:[17]

16 D. J. Wiseman, *Chronicles of the Chaldean Kings* (London: The Trustees of the British Museum, 1961), pp. 66–75.

17 The quotations in the following are taken from A. K. Grayson's more recent translation of the chronicles in his *Assyrian and Babylonian Chronicles* (Locust Valley, N.Y.: J. J. Augustin Publisher, 1975), pp. 99, 100.

Nebuchadnezzar II (604–562 B.C.E.)

The only portrait of Nebuchadnezzar II extant is found on this cameo, now in the Berlin Museum. It was probably engraved by a Greek in the service of the great king. The surrounding cuneiform inscription reads: "To Marduk his lord, Nebuchadnezzar, King of Babylon, for his life this made." The picture of the cameo, which has the inventory number VA 1628, is used courtesy of the Vorderasiatisches Museum in Berlin.

[The twenty-first year]: The king of Akkad stayed home (while) Nebuchadnezzar (II), his eldest son (and) the crown prince, mustered [the army of Akkad]. He took his army's lead and marched to Carchemish which is on the bank of the Euphrates. He crossed the river *[to encounter the army of Egypt]* which was encamped at Carchemish. [...] They did battle together. The army of Egypt retreated before him. He inflicted a [defeat] upon them (and) finished them off completely. In the district of Hamath the army of Akkad overtook the remainder of the army of [Egypt which]

> managed to escape [from] the defeat and which was not overcome. They (the army of Akkad) inflicted a defeat upon them (so that) a single (Egyptian) man [did not return] home. At that time Nebuchadnezzar (II) conquered all of Ha[ma]th.[18]
>
> For twenty-one years Nabopolassar ruled Babylon. On the eighth day of the month Ab he died. In the month Elul Nebuchadnezzar (II) returned to Babylon and on the first day of the month Elul he ascended the royal throne in Babylon.[19]
>
> In (his) accession-year Nebuchadnezzar (II) returned to Hattu. Until the month Shebat he marched about victoriously in Hattu. In the month Shebat he took the vast booty of Hattu to Babylon.
>
> . . .
>
> The first year of Nebuchadnezzar (II): In the month Sivan he mustered his army and marched to Hattu. Until the month Kislev he marched about victoriously in Hattu. *All the kings of Hattu came into his presence and he received their vast tribute.*

The chronicle makes evident the far-reaching consequences of Egypt's defeat at Carchemish. Immediately after the battle in the summer of 605 B.C.E., Nebuchadnezzar began to take over the western areas in vassalage to Egypt, using Riblah in Hamath in Syria as his military base.

The terrifying annihilation of the whole Egyptian army at Carchemish and in Hamath paved the way for a rapid occupation of the whole region by the Babylonians, and they do not seem to have met much resistance. During this victorious campaign Nebuchadnezzar learned that his father Nabopolassar had died, so he had to return to Babylon to secure the throne, evidently leaving his army in Hattu to continue the operations there.

As Wiseman points out, *Hattu* was a geographical term that at that time denoted approximately Syria-Lebanon. As argued by Dr.

18 *Hamath* was a district at the river Orontes in Syria where Pharaoh Nechoh, at a place called Riblah, had established the Egyptian headquarters. After the defeat of the Egyptian army, Nebuchadnezzar chose the same site as the base for his operations in the west.—See 2 Kings 23:31–35; 25:6, 20–21; Jeremiah 39:5–7; 52:9–27.

19 Nabopolassar's death on 8 Abu corresponds to August 16, 605 B.C.E. (Julian calendar). Nebuchadnezzar ascended the throne on Ululu 1 (September 7, 605). The battle of Carchemish in May or June, 605, therefore, took place in the same year as his *accession-year*. His first regnal year began next spring, on Nisanu 1, 604 B.C.E. The reason why the Bible dates the battle to the *first year* of Nebuchadnezzar (cf. Jer. 46:2 and 25:1) seems to be that the Jewish kings applied the nonaccession-year system, in which the accession-year was counted as the first year. See the Appendix for chapter two, "Methods of reckoning regnal years."

J. D. Hawkins in *Reallexikon der Assyriologie,* it also, 'in an extended sense,' included Palestine and Phoenicia.[20]

After his enthronement in Babylon (on September 7, 605), Nebuchadnezzar quickly went back to the Hattu territory, where he "marched about victoriously" for some months until "the month Shebat" (the eleventh month, corresponding to February, 604 B.C.E.). Evidently most of the countries in the west had now been brought under Babylonian control, and he could, therefore, take a heavy tribute to Babylon, which also, as will be shown immediately, included prisoners from Judah and adjacent countries.

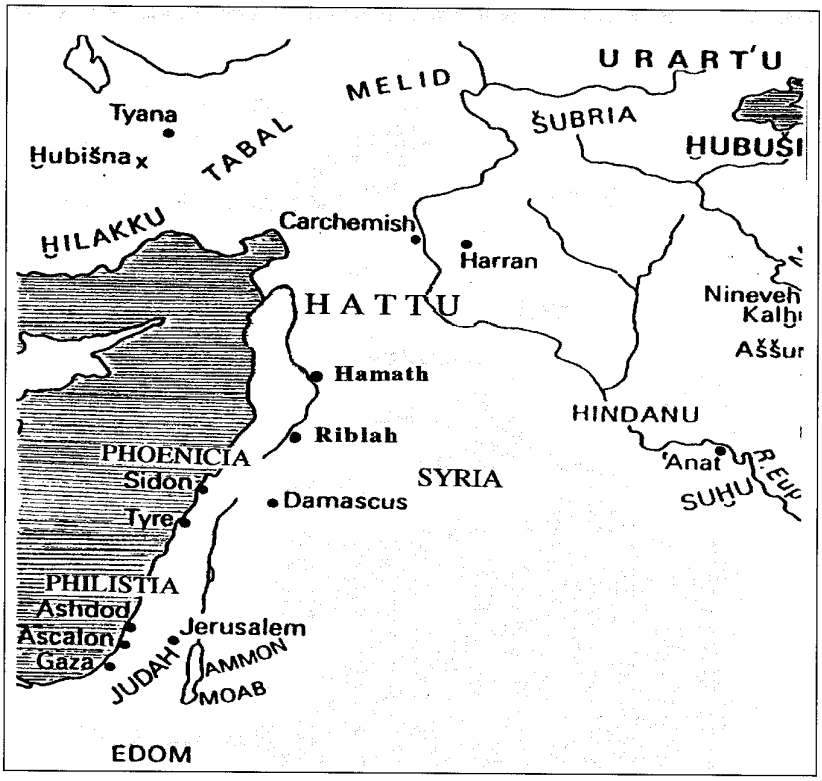
Early in his first regnal year (in June, 604 B.C.E.) Nebuchadnezzar led another campaign to Hattu to maintain his rule over the conquered territories. Similar campaigns are also recorded for the following years. Clearly, the nations in the Hattu area became vassals to Babylon very soon after the battle at Carchemish. The seventy years of servitude had evidently begun to run their course.

A-4: The Babylonian occupation of Hattu and Daniel 1:1–6

Not only did Nebuchadnezzar bring a number of the nations surrounding Judah under his dominion in 605 B.C.E., but he also laid siege to Jerusalem and brought some Jewish captives to Babylon in that very year. This is clear from Daniel 1:1–6.

In recording the event, Daniel states that it occurred "in the *third* year of the kingship of Jehoiakim" Yet the siege and deportation apparently followed the battle at Carchemish which Jeremiah places "in the *fourth* year of Jehoiakim." (Jeremiah 46:2) This seeming contradiction has caused much debate, and different solutions have been proposed in order to resolve the difficulty. But if, as is pointed out in note 19, the different methods of reckoning regnal years in Judah and Babylon are taken into consideration, the whole matter is easily cleared up. Daniel, as a Jewish exile living in Babylon and as an official at the Babylonian court, quite naturally conformed to the Babylonian regnal year system and adopted the accession-year method and even did so when referring to Jewish

20 D. J. Wiseman, *Nebuchadrezzar and Babylon,* Oxford: Oxford University Press, 1985, p. 18; *Reallexikon der Assyriologie,* Vol. 4 [ed. D. O. Edzard], 1972–1975, pp. 154–56. Reasonably, Jehoiakim must have been one of "all the kings of Hattu" paying tribute to Nebuchadnezzar at this time. Of this, J. P. Hyatt says: "It was probably in 605, or in the following year, that Jehoiakim submitted to the Babylonian king, as recorded in II Kings 24:1; . . . and II Kings 24:7 says that 'the king of Babylon took all that belonged to the king of Egypt from the Brook of Egypt to the River Euphrates.' "—J. P. Hyatt, "New Light on Nebuchadnezzar and Judean History," in *Journal of Biblical Literature,* 75 (1956), p. 280.



Judah and the surrounding nations

kings. This method of counting would make Jehoiakim's fourth year his third, in accordance with the accession-year system.

Daniel 1:2 states that at this time "Nebuchadnezzar king of Babylon came to Jerusalem and besieged it. And the Lord gave Jehoiakim king of Judah into his hand" (NASB). This does not necessarily imply that the city was taken and Jehoiakim brought captive to Babylon. To be given into someone's hand may simply mean to be forced into submission. (Compare Judges 3:10; Jeremiah 27:6, 7, and similar texts.) The indication is that Jehoiakim *capitulated* and became a *tributary* to the king of Babylon. He evidently paid a tribute to Nebuchadnezzar at this time in the form of "some of the vessels of the house of God"—Daniel 1:2.

As this clearly points to a beginning of the servitude early in the reign of Jehoiakim, the Watch Tower Society has advanced several arguments *against* a natural and direct reading of this text. Thus it holds that the "third year" should be understood as *the third year of Jehoiakim's vassalage* to Nebuchadnezzar, which, it is argued, was *his*

eleventh and last regnal year (which partly overlapped the *seventh* year of Nebuchadnezzar, or his *eighth* year in the nonaccession-year system).

But this explanation directly contradicts Daniel 2:1, which shows Daniel at the court of Nebuchadnezzar and interpreting his dream of the image already in the "second year" of this king. If Daniel was brought to Babylon in Nebuchadnezzar's *seventh* year, how could he be there interpreting his dreams in his *second* year? So, to save their interpretation, this text, too, had to be changed and made to say something else besides what it *clearly* says. Two different explanations have been offered through the years, the last one being that in this verse Daniel reckons Nebuchadnezzar's years from the destruction of Jerusalem in his eighteenth year. Nebuchadnezzar's *second* year, then, should be understood as his *nineteenth* year (the *twentieth* year in the nonaccession-year system)!

Thus, once again we find that the application of the seventy years held to by the Watch Tower Society contradicts the Bible, this time Daniel 1:1–2 and 2:1. In order to uphold its theory, it is forced to reject the easiest and most direct reading of these texts?[21]

That some Jewish captives had already been brought to Babylon in the year of Nebuchadnezzar's accession is also confirmed by Berossus in his Babylonian history written in the third century B.C.E. His account of the events of this year reads as follows:

> Nabopalassaros, his father, heard that the satrap who had been posted to Egypt, Coele Syria, and Phoenicia, had become a rebel. No longer himself equal to the task, he entrusted a portion of his army to his son Nabouchodonosoros, who was still in the prime of life, and sent him against the rebel. Nabouchodonosoros drew up his force in battle order and engaged the rebel. He defeated him and subjected the country to the rule of the Babylonians again. At this very time Nabopalassaros , his father fell ill and died in the city of the Babylonians after having been king for twenty-one years.
>
> Nabouchodonosoros learned of his father's death shortly thereafter. After he arranged affairs in Egypt and the remaining territory, he ordered some of his friends *to bring the Jewish, Phoenician, Syrian, and Egyptian prisoners together with the bulk of the army and the rest of the booty to Babylonia.* He himself set out with a few companions and reached Babylon by crossing the desert.[22]

21 For additional comments on Daniel 1:1, 2 and 2:1, see the Appendix for Chapter 5.

22 Stanley Mayer Burstein, *The Babyloniaca of Berossus* (Malibu: Undena Publications, 1978), pp. 26, 27.

Thus Berossus gives support to Daniel's statement that Jewish captives were brought to Babylon in the year of Nebuchadnezzar's accession. This confirmation of Daniel 1:1 is important because, as was shown in Chapter three, Berossus derived his information from the Babylonian chronicles, or sources close to those documents, originally written during the Neo-Babylonian era itself.[23]

A-5: The servitude as reflected in Jeremiah, chapters 27, 28, and 35

That the servitude of "these nations" (Jer. 25:11) began long before the destruction of Jerusalem in 587 B.C.E. is also clear from Jeremiah, chapters 27, 28, and 35.

In chapter 27, as discussed earlier, Jeremiah urges Zedekiah not to revolt, but to bring his neck under the yoke of the king of Babylon and serve him. The context shows this occurred in the fourth year of Zedekiah, that is, in 595/94 B.C.E.[24] The background of this "word . . . from Jehovah" was, according to verse 2, that messengers had come to Zedekiah from Edom, Moab, Ammon, Tyre, and Sidon, apparently in order to enlist him in an extensive revolt against the Babylonian yoke. Obviously all these nations were *vassals* to Babylon at this time, as was Judah.

The revolt plans aroused unfounded hopes and enthusiasm among the people, and the prophet Hananiah even foretold that the Babylonian yoke would be broken within two years:

23 Berossus' account of these events has been the subject of criticism, but was accepted by historians such as Hugo Winkler, Edgar Goodspeed, James H. Breasted and Friedrich Delitzsch. See "The Third Year of Jehoiakim," by Albertus Pieters, in *From the Pyramids to Paul,* edited by Lewis Gaston Leary (New York: Thomas Nelson and Sons, 1935), p. 191. The discovery of the Babylonian Chronicle B.M. 21946 has given additional support to Berossus' description of Nebuchadnezzar's conquests after the battle at Carchemish. D. J. Wiseman, the first translator of this chronicle, says that Berossus' account of these events "rings true" *(The Cambridge Ancient History,* Vol. III:2, J. Boardman *et al* [eds.], Cambridge: Cambridge University Press, 1991, pp. 230–231.) On Berossus' description of Pharaoh Necho as *a rebellious satrap* Dr. Menahem Stem says: "From the point of view of those who regarded the neo-Babylonian empire as a continuation of the Assyrian, the conquest of Coele-Syria and Phoenicia by the Egyptian ruler might be interpreted as the rape of Babylonian territory."—M. Stem, *Greek and Latin Authors on Jews and Judaism,* Vol. 1 (Jerusalem 1974), p.59.

24 In verse 1 of chapter 27 this message is dated to the beginning of the reign of "Jehoiakim," but a comparison with verses 3 and 12 shows that the original reading most probably was "Zedekiah." This is also confirmed by the next chapter, Jeremiah 28, dated in verse 1 to "the same year," which is explained to be "in the beginning of the reign of Zedekiah king of Judah, in the fourth year" (NASB), that is, in 595/94 B.C.E.

> This is what Jehovah of armies, the God of Israel, has said, "I will break the yoke of the king of Babylon. Within two full years more I am bringing back to this place all the utensils of the house of Jehovah that Nebuchadnezzar the king of Babylon took from this place that he might bring them to Babylon. "—Jeremiah 28:2, 3, *NW*.[25]

This prophecy, of course, presupposed that the Babylonian yoke had already been put on the neck of the nations. That is why Hananiah could take the yoke bar from the neck of Jeremiah, break it and say: "This is what Jehovah has said, 'Just like this I shall break the yoke of Nebuchadnezzar the king of Babylon within two full years more *from off the neck of all the nations.*' " (Jeremiah 28: 10, 11) So, in the fourth year of Zedekiah the Babylonian yoke lay on "the neck of all the nations." The servitude was a hard felt reality for "all these nations" at that time, and had evidently been so for a number of years.

The Babylonian invasion of Judah soon after the battle at Carchemish is also reflected in Jeremiah chapter 35, dated in "the days of Jehoiakim the son of Josiah." (verse 1) The Rechabites, who normally dwelt in tents in obedience to the command of their forefather, Jehonadab the son of Rechab, lived in Jerusalem at that time. Why? They explained to Jeremiah:

> But it came about *when Nebuchadrezzar the king of Babylon came up against the land* that we began to say, "Come, and let us enter into Jerusalem because of the military force of the Chaldeans and because of the military force of the Syrians, and let us dwell in Jerusalem."— Jeremiah 35:11, *NW*.

Thus, some time earlier in the reign of Jehoiakim, the Babylonian army had invaded the territory of Judah, forcing the Rechabites to seek refuge inside the walls of Jerusalem. Either this invasion was the one described in Daniel 1:1–2, or the one that took place in the following year, when, according to the Babylonian chronicle, "all the kings of Hattu" presented their tribute to the Babylonian king as a sign of their vassalage.

That Judah became a vassal of Babylon early in the reign of Jehoiakim is clearly stated in 2 Kings 24:1, which says that in the

25 The reason for the widespread revolt plans in this year could have been the rebellion in Nebuchadnezzar's own army in Babylonia, in the tenth year of his reign (= 595/94 B.C.E.) according to the Babylonian Chronicle B.M. 21946.—A. K. Grayson, ABC (see note 17 above), p. 102. Nebuchadnezzar's tenth year partly overlapped Zedekiah's fourth year. See the remarks on this revolt in the last section of the Appendix: "Chronological tables covering the seventy years."

days of Jehoiakim "Nebuchadnezzar the king of Babylon came up, and so *Jehoiakim became his servant* for three years. However, he turned back and rebelled against him." *(NW)* This rebellion caused the king of Babylon "to send against him marauder bands of Chaldeans and marauder bands of Syrians and marauder bands of Moabites and marauder bands of the sons of Ammon [these nations were now obviously under the control of the king of Babylon], and he kept sending them against Judah to destroy it." (Verse 2, *NW*)

It has been demonstrated above that Jeremiah's prediction of the seventy years in Jeremiah 25:10–12 did not refer to a period of complete desolation of Jerusalem, but a period of *servitude,* not for Judah, but for "these nations," that is, the nations surrounding Judah.

It was further shown that the Bible and secular historical sources, such as the Babylonian chronicle and Berossus, all agree that the servitude for these nations began long before the destruction of Jerusalem in 587 B.C.E. The Babylonian chronicle B.M. 21946 shows that Nebuchadnezzar started to conquer these areas immediately after the battle at Carchemish in 605 B.C.E. Daniel 1:1–6 relates that Nebuchadnezzar, in the same year, laid siege to Jerusalem and brought Jewish captives to Babylon. Berossus confirms Daniel 1:1–6 with respect to this first deportation (which probably was rather small). Jeremiah, chapters 27, 28, and 35 all show that Judah and the surrounding nations were vassals to Babylon as early as in the reign of Jehoiakim, and this is also apparent from 2 Kings 24:1–2. For Judah and a number of the surrounding nations, the servitude evidently began in the same year Jeremiah uttered his prophecy, that is in 605 B.C.E.

The application of the seventy years made by the Watch Tower Society, on the other hand, is in direct conflict with the prophecy of Jeremiah. It applies the seventy years to Judah only, ignoring the fact that Jeremiah's prophecy refers to a period of *servitude for a number of nations,* not a state of complete desolation "without an inhabitant" of Jerusalem and Judah.

The next text which deals with the seventy years will be seen to be in direct conflict with the Society's application as well.

B: JEREMIAH 29:10

Jeremiah's second reference to the seventy years is given in a letter that Jeremiah sent from Jerusalem to the Jews who had been

deported to Babylon, not only those who had been brought there in the first deportation in 605 B.C.E., but also those "whom Nebuchadnezzar had carried into exile from Jerusalem to Babylon, after *Jeconiah the king* [= Jehoiachin; compare 2 Kings 24:10–15] *and the lady and the court officials, the princes of Judah and Jerusalem, and the craftsmen and the builders of bulwarks had gone forth from Jerusalem."* — Jeremiah 29:1–2, *NW*.

This would date the prophecy to the reign of Zedekiah (verse 3) and probably about the same time as the preceding chapter, that is, to the fourth year of Zedekiah, 595/94 B.C.E.—Jeremiah 28:1.

The background situation seems to have been the same in both chapters: The widespread revolt plans which stirred up hopes of liberation from the Babylonian yoke in Judah and the surrounding nations also reached the exiles at Babylon. As in Judah, false prophets arose among the Jews at Babylon and promised release in a short time. (Jeremiah 29:8–9) This was the reason why at this time, *several years prior to the destruction of Jerusalem,* Jeremiah sent a letter to these exiles at Babylon, calling their attention to the prophecy of the seventy years:

Jeremiah 29:8–10:

> For this is what Jehovah of armies, the God of Israel, has said: "Let not YOUR prophets who are in among YOU and YOUR practicers of divination deceive YOU, and do not YOU listen to their dreams that they are dreaming. For it is in falsehood that they are prophesying to YOU in my name. I have not sent them," is the utterance of Jehovah. For this is what Jehovah has said, "In accord with the fulfilling of *seventy years at Babylon* I shall turn my attention to YOU people, and I will establish toward YOU my good word in bringing YOU back to this place." *(NW)*

This utterance clearly presupposed that the seventy years were in progress at the time. If the period had not *commenced,* why did Jeremiah connect it with the exiles' staying on at Babylon? If the seventy-year period was not *already in progress,* what relevance is there in Jeremiah's reference to it? Jeremiah did not urge the exiles to wait until the seventy years would *begin,* but to wait until the period *had been completed.* As Jeremiah sent his message to the exiles some six or seven years *before* the destruction of Jerusalem, it is obvious that he reckoned the beginning of the seventy years from a point many years *prior to* that event.

The context of Jeremiah 29:10, therefore, further supports the earlier conclusion that the seventy years should be reckoned from a point several years before the destruction of Jerusalem.

However, apart from the context, the text itself makes it clear that the seventy years can be applied neither to the period of the desolation of Jerusalem nor to the period of the Jewish exile.

B-1: Seventy years—"at" Babylon or 'for" Babylon?

The *New World Translation's* rendering of Jeremiah 29:10 seems to depict the seventy years as a period of *captivity:* "seventy years *at* Babylon." Although it is true that the Hebrew preposition *l*[e], here translated "at", in certain expressions may have a local sense ("at,

JEREMIAH 29:10:

"seventy years ... for Babylon"

כִּי כֹה אָמַר יְהוָה: כִּי־ נְאֻם־ יְהוָה שְׁלַחְתִּים

when Yahweh he-says this indeed (10) Yahweh declaration-of I-sent-them

לְפִי מְלֹאת לְבָבֶל שִׁבְעִים שָׁנָה אֶפְקֹד אֶתְכֶם

to-you I-will-come year seventy for-Babylon to-be-completed by-mouth-of-me

וַהֲקִמֹתִי עֲלֵיכֶם אֶת־ דְּבָרִי הַטּוֹב לְהָשִׁיב אֶתְכֶם אֶל־

to you to-bring-back the-gracious promise-of-me *** for-you and-I-will-fulfill

הַמָּקוֹם הַזֶּה: כִּי אָנֹכִי יָדַעְתִּי אֶת־הַמַּחֲשָׁבֹת אֲשֶׁר אָנֹכִי חֹשֵׁב עֲלֵיכֶם

for-you planning I that the-plans *** I-know I for (11) the-this the-place

From John R. Kohlenberger III (ed.), *NIV Interlinear Hebrew-English Old Testament*, (Grand Rapids: Zondervan Publishing House, 1979).

in"), its general meaning is "for, to, in regard to, with reference to," and is so rendered at Jeremiah 29:10 by most modern translations.[26]

The following examples are taken from some of the better known translations in English:

Revised Version (1885): "After seventy years be accomplished *for* Babylon."

26 The view that the basic meaning of l[e] (l) is *local* and *directional* is rejected by Professor Ernst Jenni, who is probably the leading authority on the Hebrew prepositions today.—Ernst Jenni, *Die Hebräischen Präpositionen, Band 3: Die Präposition Lamed* (Stuttgart, etc.: Verlag Kohlhammer, 2000), pp. 134, 135. This work devotes 350 pages to the examination of the preposition l[e] alone. (Interestingly, the Danish *NWT* of 1985 has "for Babylon", and the new revised Swedish *NWT* of 2003, too, has now changed its earlier "in" to "for Babylon"!)

Rotherham's *The Emphasized Bible* (3rd ed., 1897): "That as soon as there are fulfilled *to* Babylon seventy years."

American Standard Version (1901): "After seventy years are accomplished *for* Babylon."

New American Standard Version (1973): "When seventy years have been completed *for* Babylon."

New *International Version* (1978): "When seventy years are completed *for* Babylon."

The New Jerusalem Bible (1985): "When the seventy years granted *to* Babylon are over."

Other translations give expression to the same thought in other words:

Smith-Goodspeed's *The Complete Bible* (1931): "As soon as Babylon has finished seventy years."

Byington's *The Bible In Living English* (1972): "As soon as Babylon has had a full seventy years."

The Anchor Bible (John Bright: *Jeremiah,* 2nd ed., 1986): "Only when Babylon's seventy years have been completed."

Tanakh. The Holy Scriptures (The Jewish Publication Society, 1988): "When Babylon's seventy years are over."

The Revised English Bible (1989): "When a full seventy years have passed over Babylon

All these translations express the same thought, namely, that the seventy years refer to *the Babylonian supremacy,* not to the Jewish captivity nor to the desolation following the destruction of Jerusalem in 587 B.C.E.

That this is what the Hebrew text meant to say is supported by the fact that it is in agreement with Jeremiah's prophecy at Jeremiah 25:11 on the seventy years' *servitude.* As long as the Babylonian king held supremacy, other nations had to serve him.

The *New World Translation,* however, is not the only translation that renders the preposition *l*ᵉ by "at" in Jeremiah 29:10. Some other translations, too, use the preposition "at" in this text. The best known is the *King James Version* (KJV), originally published in 1611, which for more than three centuries remained the *Authorized Version* (AV) for Anglican and many other Protestant churches. In the course of time this translation has acquired an authority and sanctity of its own. This is also reflected in modern revisions of

KJV. A recent example is the *New King James Version* (NKJV), published in 1982. Although the language has been modernized, the editors have endeavoured to retain the text of the old venerable KJV as far as possible. The progress made in the last two centuries, especially by the discoveries of numerous ancient manuscripts of the Bible, is at best reflected in the footnotes, not in the running text. That this very conservative version retains the preposition "at" in Jeremiah 29:10, therefore, is not to be wondered at.

It is interesting to note, however, that other, less tradition-bound revisions of KJV, such as RV, ASV, and RSV, have replaced "at" by "for" in Jeremiah 29:10, as shown by the quotations given above. And the latest revision of this kind, the *New Revised Standard Version* (1990), has replaced KJV's "seventy years . . . at Babylon" by "Babylon's seventy years".[27]

Why do these and most other modern translations reject the rendering "at Babylon" in Jeremiah 29:10 in favour of "for Babylon" or some paraphrase conveying the same idea?

B-2: What Hebrew scholars say

Modern Hebrew scholars generally agree that the local or spatial sense of *l*ᵉ is highly improbable, if not impossible, at Jer. 29:10. Dr. Tor Magnus Amble at the University of Oslo, Norway, for example, says:

> "The preposition *l*ᵉ means 'to', 'for' (`direction towards' or 'reference to'). *Aside from in a few fixed expressions, it hardly has a locative sense, and in any case not here.* Very often it introduces an indirect object ('respecting to', corresponding to a Greek dative). This is also how the translators of LXX have understood it, as you quite correctly point out. Thus the translation has to be: seventy years 'for Babel'." — Private letter dated November 23, 1990. (Emphasis added.)

The Swedish Hebraist Dr. Seth Erlandsson is even more emphatic:

> *"The spatial sense is impossible at Jer. 29:10.* Nor has LXX 'at Babylon', but dative; consequently 'for Babylon' ." — Private letter dated December 23, 1990. (Emphasis added.)

27 A few other modem translations that still have "at Babylon" in Jeremiah 29:10 may have been influenced, directly or indirectly, by KJV. One of my friends , a Danish 1inguist, has also drawn my attention to the fact that the Latin Vulgate (4th century C.E.) has "in Babylon" in our text, which, like KJV's "*at* Babylon", is an interpretation rather than a translation. It is quite possible that this ancient and highly esteemed translation, too, may have influenced some modern translations.

It would be easy to add many other similar statements by Hebrew scholars, but it may suffice here to quote Professor Ernst Jenni at Basel, Switzerland. This leading authority on l[e] (footnote 26 above) says:

> The rendering in all modern commentaries and translations is "for Babel" (Babel as world power, not city or land); this is clear from the language as well as also from the context. By the "local meaning" a distinction is to be made between where? (in, at) and where to? (local directional "to, towards"). The basic meaning of *l* is with reference to, and with a following local specification it can be understood as local or local-directional *only in certain adverbial expressions* (e.g. Num. 11, 10 [Clines DCH IV, 481b] "at the entrance", cf. *Lamed* pp. 256, 260, heading 8151).
>
> On the translations: LXX has with *babylôni* unambiguously a dative ("for Babylon"). Only Vulgata has, to be sure, *in Babylone,* "in Babylon", thus King James Version "at Babylon", and so probably also the New World Translation.—Letter Jenni-Jonsson, October 1, 2003. (Emphasis added.)

Thus, as Jeremiah 29:10 literally speaks of seventy years "for Babylon," it is clear that they cannot refer to the period of the desolation of Jerusalem and its temple, or even to the period of the Jewish exile at Babylon. Rather, like Jeremiah 25:10–12, what is in view is *the period of Babylonian supremacy.* This is also the conclusion arrived at by scholars who have carefully examined the text. Some typical comments are cited in the accompanying box.

Jeremiah 25:10–12 and 29:10 contain the *prophecy* of the seventy years. The next two texts to be discussed, Daniel 9:2 and 2 Chronicles 36:20–21, are just *brief references* to Jeremiah's prophecy. Neither of them pretends to be a thorough discussion of the prophecy nor gives a detailed application of the period. Every attempt to find an application of the seventy-year period, therefore, must *proceed from the prophecy,* not from the references to it. It is only the prophecy that gives specific details on the seventy years, as follows, (1) that they refer to "these nations," (2) that they were to be a period of *servitude* for these nations, (3) that they refer to the period of Babylonian supremacy, and (4) that this period would be fulfilled when the king of Babylon was punished. Such detailed information is missing in the latter references to the prophecy by Daniel and Ezra. The discussion of these references, then, should always be done in the light of what the prophecy actually is about.

The seventy years "for Babylon"

"The sense of the Hebrew original might even be rendered thus: 'After seventy years of (the rule of) Babylon are accomplished etc.' The seventy years counted here evidently refer to Babylon and *not* to the Judeans or to their captivity. They mean seventy years of Babylonian rule, the end of which will see the redemption of the exiles"—Dr. Avigdor On, "The seventy years of Babylon," *Vetus Testamentum,* Vol. VI (1956), p. 305.

"It is appropriate to begin with the passages of Jeremiah and to observe, with On, that the references in Jer. 25:11-12 and 29:10—whether original to the passages or not—are to a period of seventy years of Babylonian rule, and not to a period of seventy years of actual captivity"—Dr. Peter R. Ackroyd, "Two Old Testament historical problems of the early Persian period," *Journal of Near Eastern Studies,* Vol. XVII (1958), p. 23.

"Certainly it must be stressed that the seventy years refer primarily to the time of Babylonian world dominion and not to the time of the exile, as is often carelessly supposed. As an estimate of Babylon's domination of the ancient Near East it was a remarkably accurate figure, for from the Battle of Carchemish (605) to the fall of Babylon to Cyrus (539) was sixty-six years"—Professor Norman K. Gottwald, *All the Kingdoms of the Earth* (New York, Evanston, London: Harper & Row, Publishers, 1964), pp. 265, 266.

"It has often been pointed out that the textually unobjectionable verse with its seventy years does not have in view the length of the exile , but rather the duration of the Babylonian dominion, which from its beginning until the Persian conquest of Babylon may be calculated to about seven decades. "—Dr. Otto Plöger, Aus *der Spätzeit des Alten Testaments* (Göttingen: Vandenhoeck & Ruprecht, 1971), p. 68. (Translated from the German.)

C: DANIEL 9:1–2

The Babylonian dominion was definitely broken when the armies of Cyrus the Persian captured Babylon in the night between the 12th and 13th October, 539 B.C.E. (Julian calendar). Previously in the same night Belshazzar, the son of king Nabonidus and his deputy on the throne, got to know that the days of Babylon were numbered. Daniel the prophet, in his interpretation of the miraculous writing on the wall, told him that "God has numbered

[the days or years of] your kingdom and has finished it." In that very night Belshazzar was killed, and the kingdom was given to "Darius the Mede." (Daniel 5:26–31, *NW*) Obviously, the seventy years allotted to Babylon ended that night. This sudden collapse of the Babylonian empire incited Daniel to turn his attention to Jeremiah's prophecy of the seventy years. He tells us:

Daniel 9:1–2:

> In the first year of Darius the son of Ahasuerus of the seed of the Medes, who had been made king over the kingdom of the Chaldeans; in the first year of his reigning I myself, Daniel, discerned by the books the number of the years concerning which the word of Jehovah had occurred to Jeremiah the prophet, for fulfilling the devastations of Jerusalem, [namely,] seventy years. — Daniel 9:1–2, *NW*.

It is not unreasonable to think that the "books" consulted by Daniel may have been a collection of scrolls containing the prophecies of Jeremiah. But the sources for his inquiry may as well have been limited to the letters that Jeremiah had sent to the exiles in Babylon fifty-six years earlier (Jeremiah 29:1–32), the first of which dealt with the seventy years "for Babylon."[28] No doubt, these letters, at 1east, were available to him. The content of Daniel 9, in fact, and especially the prayer of Daniel recorded in verses 4–19, is closely related to the content of Jeremiah's 1etters, as has been demonstrated in detail by Dr. Gerald H. Wilson.[29]

C-1: Did Daniel understand the seventy-year prophecy?

When Daniel states that he "discerned" (*NW*) in the writings of Jeremiah the prophecy of the seventy years, does this mean that he "understood" *(KJV, RV, ASV)* the sense of this prophecy and realized that the period had now ended? Or is he merely saying that he "noticed" (Moffatt) or "observed" *(NASB)* the seventy years mentioned by Jeremiah and "tried to understand" *(NAB)* them? The Hebrew verb used here, *bîn,* may contain all these various shades of meaning. However, if Daniel had any difficulties in

28 The Hebrew word translated "books" at Dan. 9:2, *s*e*parîm,* the plural form of s*eper,* was used of writings of various kinds, including legal documents and letters. Thus the word *seper i*s also used of Jeremiah's first "letter" to the exiles at Babylon recorded in Jeremiah 29:1–23. Verses 24–32 of the same chapter quotes from a second letter sent by Jeremiah to the Jewish exiles, probably later in the same year or early next year.

29 Gerald H. Wilson, "The Prayer of Daniel 9: Reflection on Jeremiah 29," *Journal for the Study of the Old Testament,* Issue 48, October 1990, pp. 91–99.

understanding the meaning of this seventy-year period, one would expect that the prayer he offered as a result of his reading would contain a plea for understanding the prediction. But not once in his lengthy prayer does Daniel mention the seventy years. Instead, the whole emphasis of his prayer is on the Jewish exiles and the conditions set forth in Jeremiah's letter for their return to Jerusalem.[30]

It seems logical to conclude, therefore, that Daniel had no problems in understanding the seventy-year prophecy. As a Hebrew-speaking Jew, he would have no difficulties in understanding that the Hebrew text of Jeremiah 29:10 speaks of seventy years "for Babylon," and that this was a reference to the period of Babylonian supremacy. From the fact that this supremacy had just ended, Daniel could draw only one conclusion: The seventy years had ended!

Of greater importance for Daniel, however, was what the end of the seventy years could mean for his own people, the Jewish exiles at Babylon, and for the devastated city of Jerusalem and its ruined temple. And this was the subject that Daniel brought up in his prayer.

C-2: The purpose of Daniel's prayer

According to Jeremiah's letter, Jehovah had promised that, "When seventy years have been completed for Babylon, *I will visit you and fulfill my good word to you, to bring you back to this place."* —Jeremiah 29:10, *NASB.*

As the seventy years "for Babylon" were now completed and "the first year" of "Darius the Mede" was well in progress, why had Jehovah still not fulfilled his promise to bring the exiles in Babylon back to Jerusalem (the "place" from which they had once been deported, Jeremiah 29:1, 20), thus ending the desolate state of their city? Would not the end of the seventy years "for Babylon" *be followed by the end of the exile and the desolation of Jerusalem? Why the delay?* Judging from Daniel's prayer this matter appears to have been his prime concern and the actual cause for his prayer.

In his letter to the exiles Jeremiah also had explained that Jehovah's fulfilling of his promise to restore them to Jerusalem after the end of the seventy years *rested on certain conditions:*

> If you invoke me and pray to me, I will listen to you: when you seek me, you shall find me; if you search with all your heart, I will let you find me, says the LORD. I will restore your fortunes and

30 Compare the discussion of Gerald H. Wilson, *op. cit.,* pp. 94, 95.

> gather you again from all the places to which I have banished you, says the LORD, and bring you back to the place from which I have carried you into exile.—Jeremiah 29:12–14a, *NEB*.

The conditions to be fulfilled before the exiles could be returned to Jerusalem, then, were that they had to return to Jehovah, by seeking him with prayer, confessing their sins, and starting to listen to his voice. *And this was precisely what Daniel did:*

> "And I proceeded to set my face to Jehovah the [true] God, in order to seek [him] with prayer and entreaties, with fasting and sackcloth and ashes."—Daniel 9:3, *NW*.

From Daniel's prayer, recorded in the subsequent verses (4–19), it is clear that his main interest was in seeking forgiveness for his people in order that they might be returned to their homeland. He knew that the "devastations of Jerusalem" and the desolation of the land were the curse predicted "in the law of Moses" (Daniel 9:13; compare Leviticus 26 and Deuteronomy 28), because of their violating Jehovah's law. (Daniel 9:11) He knew that Jehovah would bring them back to their land only when they returned to him and began to listen to his voice. Awareness of this condition, laid down in the law (Deuteronomy 30:1–6) and repeated and emphasized in the letter of Jeremiah, is reflected in Daniel's prayer. Obviously, his interest in Jeremiah's prophecy of the seventy years was motivated by the exciting discovery that the end of the desolation of Jerusalem was close at hand, as the seventy years "for Babylon" now had been completed.

C-3: The relation of the seventy years to "the devastations of Jerusalem"

Daniel, then, in his examination of Jeremiah's letter, evidently took a great interest in the fact that the end of the seventy years "for Babylon" was directly linked to the end of the desolation of Jerusalem. The end of the latter period presupposed and was dependent on the end of the former:

> Only when Babylon's seventy years are completed will I visit you, and I will fulfill to you my promise and bring you back to this place [Jerusalem] . — Jeremiah 29:10, *NRSV*.

This was evidently the reason why Daniel, in his reference to Jeremiah's prophecy, connected the seventy years "for Babylon"

with *Jerusalem,* speaking of them as "the number of years . . . *for fulfilling the devastations of Jerusalem."* (Daniel 9:2, *NW)* It was clear from Jeremiah's letter that the completion of Babylon's seventy years would entail the "fulfilling of the desolations of Jerusalem" (by the return of the exiles), and it is this *consequence* that Daniel lays the stress on in his statement.[31]

Read in isolation from the wider context, however, these words could easily be misinterpreted to mean that Daniel equated the seventy-year period with the period of Jerusalem's desolation. Some Bible translators have understood the text that way. Thus *Tanakh,* a translation published by the Jewish Publication Society in 1985, speaks of "the number of years that . . . *were to be the term of Jerusalem's desolation—seventy years ."* Similarly, *The New International Version (NIV)* presents Daniel as saying that, "I understood from the Scriptures . . . that *the desolation of Jerusalem would last seventy years."*

Both of these translations, however, are freely *paraphrasing* the passage, which neither speaks of the "term" of Jerusalem's desolation, nor that it would "last" seventy years. None of these words are found in the original text. They have been added in an attempt to *interpret* the text. There is no compelling reason to accept this interpretation, not only because it is arrived at by a paraphrasing of the text, but also because it is in direct conflict with Jeremiah's own prophecy.[32]

It should be noted that Daniel himself does not equate the seventy years with the period of Jerusalem's desolation. It is only the *expiration* of the seventy-year period—not the period as a whole — that he relates to the "fulfilling of the desolations of Jerusalem." This focusing on the *end* of the period is totally absent in the two translations quoted above *(Tanakh* and *NIV),* as they both fail to

31 Dr. C. F. Keil, one of the greatest Hebrew scholars of the 19th century, noticed in his grammatical analysis how Daniel connected and yet distinguished the two periods, concluding: "Consequently, in the first year of the reign of Darius the Mede over the kingdom of the Chaldeans the seventy years prophesied of by Jeremiah were now full, the period of the desolation of Jerusalem determined by God was almost expired?' —C. F. Keil, *Biblical Commentary on the Book of Daniel* (Edinburgh: Clark, 1872), pp. 321, 322.

32 A number of critical scholars, who regard the book of Daniel as a late composition from the end of the reign of Antiochus IV Epiphanes (175–164 B.C.E.), have argued that Jeremiah's original prophecy of the seventy years was repeatedly reinterpreted and reapplied by the later Bible writers Ezra, Zechariah, and Daniel. There is no reason to discuss these theories here, especially as there is wide disagreement on them among these scholars.

translate the Hebrew word *lᵉmal'ot,* "fulfilling, to fulfill". Most translations (including *The New World Translation)* are more in conformity with the original text in this respect.[33]

What Daniel discovered by reading Jeremiah's letter, then, was not that Jerusalem's desolation would last for seventy years (for this is nowhere stated in Jeremiah), but that the desolations of Jerusalem would not cease until the seventy years "for Babylon" had ceased. The focus of the "seventy years" was on Babylon, and her period of dominance, rather than on Jerusalem.

The end of Babylon's dominance would, of course, as a *natural consequence* or *byproduct,* open up the prospect for a Jewish return to Jerusalem. This is the simplest meaning of Daniel's words in the light of what was actually written in Jeremiah's letter. As the Babylonian supremacy suddenly had been replaced by the Medo-Persian rule and the seventy years "for Babylon" and her international domination had thus been completed, Daniel understood—by the aid of Jeremiah's letter—that the completion of the devastations of Jerusalem was now due. This was the reason for Daniel's excitement and strong feelings, as expressed in his prayer.

D: 2 CHRONICLES 36:20–23

The two books of Chronicles record the history of Israel up to the end of the Jewish exile in Babylon. These books, therefore, must have been finished some time after that event. The last verses of 2 Chronicles connect the fulfillment of Jeremiah's prophecy of the seventy years with the Persian conquest of Babylon and the end of the Jewish captivity, as follows:

2 Chronicles 36:20–23:

> **20** Furthermore, he [Nebuchadnezzar] carried off those remaining from the sword captive to Babylon, and they came to be servants to him and his sons until the royalty of Persia began to reign; **21** to fulfill Jehovah's word by the mouth of Jeremiah, *until the land had paid off its Sabbaths. All the days of lying desolated it kept sabbath,* to fulfill seventy years.

33 A detailed grammatical analysis *of* the Hebrew text of Dan. 9:2 has been received from the linguist mentioned in note 27 above, which step by step clarifies the exact meaning of the verse. In conclusion, the following translation was offered, in close accord with the original text: "In his [Darius'] first regnal year I, Daniel, ascertained, in the writings, that the number of years, which according to the word of JHWH to Jeremiah the prophet would be completely fulfilled, with respect to the desolate state of Jerusalem, were seventy years."

> **22** And in the first year of Cyrus the king of Persia, that Jehovah's word by the mouth of Jeremiah might be accomplished, Jehovah roused the spirit of Cyrus the king of Persia, so that he caused a cry to pass through all his kingdom, and also in writing, saying: **23** "This is what Cyrus the king of Persia has said, 'All the kingdoms of the earth Jehovah the God of the heavens has given me, and he himself has commissioned me to build him a house in Jerusalem, which is in Judah. Whoever there is among YOU of all his people, Jehovah his God be with him. So 1et him go up.' "*(NW)*

It may be observed that the Chronicler repeatedly emphasizes the *agreement* between the prophecies of Jeremiah and its fulfillment in the events he records. Thus the statement in verse 20 is an application of Jeremiah 27:7: "And all the nations *shall serve him, and his son, and his grandson, until the time of his own land comes".* This time of Babylon came, the Chronicler explains, when "the royalty of Persia began to reign [i.e., in 539 B.C.E.], to fulfill Jehovah's word by the mouth of Jeremiah, . .. to fulfill seventy years." This, then, would also fulfill the prediction at Jeremiah 25:12, that the time of Babylon would come "when seventy years have been fulfilled." Thus the Chronicler seems clearly to be saying that the seventy years were fulfilled at the Persian conquest of Babylon.

What complicates the matter in our text is the statement (italicized in the quotation above) about the "sabbath rest" of the land, which is inserted in the middle of the reference to Jeremiah's prophecy. This has caused a number of scholars to conclude that the Chronicler *reinterpreted* the prophecy of Jeremiah by applying the seventy years to the period of the desolation of Judah.[34]

Such an understanding, however, would not only conflict with Jeremiah's prophecy; it would also contradict the Chronicler's own emphasis on the agreement between the original prophecy and its fulfillment. So what did the Chronicler mean by his insertion of the statement about the sabbath rest of the land?

D-1: The sabbath rest of the land

A cursory reading of verse 21 could give the impression that the Chronicler states that the land had enjoyed a sabbath rest of seventy years, and that this had been predicted by Jeremiah. But

34 See, for example, Avigdor Orr in *Vetus Testamentum,* Vol. VI (1956), p. 306, and Michael Fishbane in *Biblical Interpretation in Ancient Israel* (Oxford: Clarendon Press, 1985) pp. 480–81.

Jeremiah does not speak of the seventy years in terms of allowing the land to pay off its sabbath years. In fact, there is no reference at all to a sabbath rest for the land in his book.

Therefore Ezra's words, "until the land had paid off its sabbaths; all the days of lying desolated it kept sabbath," could not be a fulfillment of "Jehovah's word *by the mouth of Jeremiah."* The two clauses about the sabbath rest are, as has been observed by Bible commentators, a reference to *another prediction,* found at Leviticus, chapter 26.

Among other things, this chapter forewarns that, if the people did not obey *the law of the sabbatical years* (discussed in the preceding chapter, Leviticus 25), they would be scattered among the nations and their land would be desolated.[35] In this way the land would be allowed to "pay off its sabbaths":

> At that time *the land will pay off its sabbaths all the days of its lying desolated,* while YOU are in the land of YOUR enemies. At that time the land will keep sabbath, as it must repay its sabbaths. *All the days of its lying desolated it will keep sabbath,* for the reason that it did not keep sabbath during YOUR sabbaths when YOU were dwelling upon it.—Leviticus 26:34–35, *NW.*

Like Daniel earlier, the writer of the Chronicles understood the desolation of Judah to be a fulfillment of this curse predicted in the law of Moses. He therefore inserted this prediction from Leviticus 26 to show that it was fulfilled after the final deportation to Babylon, exactly as was predicted through Moses, "while you are in the land of your enemies."[36] By inserting the two clauses from Leviticus 26, the Chronicler did not mean to say that the land enjoyed a sabbath rest of *seventy years,* as this was not predicted, either by Moses or by Jeremiah. He *does not tell explicitly how long it rested,* only that "all the days of lying desolated it kept sabbath."—2 Chronicles 36:20.[37]

As with Daniel, the main interest of the Chronicler was the return of the exiles, and therefore he points out that they had to remain in Babylonia until two prophecies had been fulfilled: (1)

35 According to the law of the sabbatical years the land would enjoy a sabbath rest every seventh year, i.e., the land should lie fallow and not be cultivated. (Leviticus 25:1–7) This "served to reduce the quantity of alkalines, sodium and calcium, deposited in the soil by irrigation waters."—Baruch A. Levine, *The JPS Commentary: Leviticus* (Philadelphia, New York, Jerusalem: The Jewish Publication Society, 1989), p. 272. Violation of this ordinance would gradually destroy the soil and drastically reduce the crop yields.

36 Some translators have put the Chronicler's quotation from Leviticus 26 within dashes or in parentheses (as does the Swedish translation of 1917), in order to emphasize that they do not refer to Jeremiah.

37 The actual length of the land's sabbath rest was 49 years, from the final desolation and depopulation in 587 B.C.E. until the return of the exiles in 538.

that of Jeremiah on the seventy years of supremacy "for Babylon," and (2) that in Leviticus on the desolation and sabbath rest for the land of Judah. These prophecies should not be mixed up or confused, as is often done. Not only do they refer to periods of different character and different 1engths; they also refer to different nations. But as the two periods were closely connected in that the end of one period was contingent on the end of the other, the Chronicler, like Daniel, brought them together.

D-2: Jeremiah's prophecy on the return of the exiles

Many commentators hold that the Chronicler ended the seventy years in the first year of Cyrus (538/37 B.C.E.), because of what he says in the last two verses:

> And in the first year of Cyrus the king of Persia, that Jehovah's word by the mouth of Jeremiah might be accomplished, Jehovah roused the spirit of Cyrus the king of Persia, so that he caused a cry to pass through all his kingdom, and also in writing, saying:
>
> "This is what Cyrus the king of Persia has said, 'All the kingdoms of the earth Jehovah the God of the heavens has given me, and he himself has commissioned me to build him a house in Jerusalem, which is in Judah. Whoever there is among YOU of all his people, Jehovah his God be with him. So let him go up.' "—2 Chronicles 36:22–23, *NW*.

If Jehovah's word "by the mouth of Jeremiah" is here taken to be another reference to the seventy years, it might prove that Ezra ended that period in 538/37 B.C.E. But in view of the fact that these verses actually deal with Cyrus' decree allowing the Jews

Perhaps it is just a coincidence, but this was also the maximal period during which a Hebrew could be deprived of the proprietorship of his ancestral inheritance, according to the law of land tenure. If he became so poor that he had to sell his land, it could not be sold beyond reclaim. If it could not be bought back, the purchaser had to return it to him at the next jubilee.—Leviticus 25:8–28.

If the 49 years of sabbath rest corresponded to the exact number of sabbatical years that had been neglected by the Israelites, the whole period of violation of the law would be 49 x 7 = 343 years. If this period extended to 587 B.C.E., its beginning would date from about 930 B.C.E. Interestingly, modern chronologers who have carefully examined both the Biblical and extra-Biblical evidence, usually date *the division of the kingdom* to 930 B.C.E. or thereabouts. (F. X. Kugler, for example, has 930, E. R. Thiele and K. A. Kitchen 931/30, and W. H. Barnes 932 B.C.E.) As this national disaster resulted in a massive break away from the temple cult in Jerusalem by a majority of the people, it is not unreasonable to think that an extensive neglect of the sabbatical years also dates from this time.

to return to their homeland, it is more natural to understand his reference to Jeremiah's prophecy as a reference to what the prophet said immediately after his prediction of the seventy years "for Babylon" at Jeremiah 29:10:

> For thus says the LORD, 'When seventy years have been completed for Babylon, *I will visit you and fulfill my good word to you, to bring you back to this place.'* — Jeremiah 29:10, *NASB.*

Note that the prophet did not say that Jehovah first would visit the exiles, causing them to return to Jerusalem, and that *as a result of that* the seventy years would be accomplished. This is how the Watch Tower Society applies this prophecy. To the contrary, the prophet clearly states that the seventy years would be accomplished first, and *after their fulfillment* Jehovah would visit the exiles and cause them to return to Jerusalem. *The seventy years, then, would be fulfilled while the Jewish exiles were still in Babylon!*

And so it happened: Babylon fell to Cyrus, the king of Persia, in October, 539 B.C.E., thus fulfilling the prophecy of the seventy years "for Babylon." The next year Cyrus issued his decree, allowing the Jewish exiles to return to Jerusalem.[38] The end of the seventy years at the fall of Babylon, and the return of the Jews one year later are two separate events, and it is the last of these that Ezra is speaking of at 2 Chronicles 36:22–23. His reference to the word "by the mouth of Jeremiah" in these verses, then, must be a reference to the second half of verse 10 in chapter 29 of the book of Jeremiah.

Thus we find that 2 Chronicles 36:20–23, like Daniel 9:2, may be brought into harmony with the prophecy of Jeremiah on the seventy years. The Chronicler ends the period while the Jewish exiles were stil1 living in Babylonia, when "the royalty of Persia began to reign" in 539 B.C.E. He lays stress upon the fact that the Jewish exiles could not return to Jerusalem until *Babylon's* seventy years had been fulfilled, and the land had paid off its sabbaths. After that Jehovah caused them to return to their homeland, in fulfillment of Jeremiah 29:10b, in the first year of Cyrus. The words of the Chronicler, correctly understood, cannot be taken to mean that the desolation of Judah after the destruction of Jerusalem and its temple lasted for seventy years.

38 As argued earlier (chapter 3 above, note 2), the Jewish remnant most probably returned from the exile in 538 B.C.E., not in 537 as the Watch Tower Society insists.

The last two texts to be discussed, Zechariah 1:7–12 and 7:1–5, are sometimes thought to be two additional references to Jeremiah's prophecy about the seventy years, and the Watch Tower Society holds them to be so. But the evidence for this conclusion is totally lacking.

None of the texts contains any reference to Jeremiah (as do Daniel 9:1–2 and 2 Chronicles 36:20–23), and the *context* of these texts strongly indicates that the seventy years mentioned there must be given a different application. This is also the conclusion of many commentators.[39] This will also become apparent in the following discussion.

E: ZECHARIAH 1:7–12

The first statement about a period of seventy years in the book of Zechariah appears in a vision given to Zechariah on "the twenty-fourth [day] of the eleventh month, that is, the month Shebat, in the second year of Darius."—Zechariah 1:7.

Darius' second regnal year corresponded to 520/19 B.C.E., and the twenty-fourth day of the eleventh month may be translated to 15 February 519 B.C.E. in the Julian calendar.[40] Although the Jews had resumed the work on the temple in Jerusalem five months earlier (Haggai 1:1, 14–15), Jerusalem and the cities of Judah were still in a sorry condition. That is why the angel in Zechariah's vision brings up a question that undoubtedly troubled many of the repatriated Jews:

Zechariah 1:12:

> So the angel of Jehovah answered and said: "O Jehovah of armies, how long will you yourself not show mercy to Jerusalem and to the cities of Judah, whom you have denounced these seventy years?" (*NW*)

39 Dr. Otto Plöger, for example, notes that "the two texts in the book of Jeremiah are not referred to here"—O. Plöger, Aus *der Spätzeit des Alten Testaments* (Göttingen: Vandenhoeck & Ruprecht, 1971), p.69.

40 R. A. Parker & W. H. Dubberstein, *Babylonian Chronology 626 B.C.—A.D. 75* (Providence, Rhode Island: Brown University Press, 1956), p. 30. This presupposes that the date is given according to the Persian accession year system. If Zechariah applies the Jewish nonaccession year system, the date would have fallen about one year earlier, in February, 520 B.C.E. (See E. J. Bickerman's discussion of this problem in *Revue Biblique,* Vol. 88, 1981, pp. 19–28). The Watch Tower Society accepts the secular dating of Darius' reign, as may be seen, for example, on page 124 of the book *Paradise Restored to Mankind—By Theocracy!* (Brooklyn, N.Y.: Watchtower Bible and Tract Society, 1972).

E-1: Denunciation for seventy years or ninety?

According to the angel, Jehovah had denounced Jerusalem and the cities of Judah for seventy years. The Watch Tower Society applies these seventy years of denouncement ("indignation," *KJV, ASV;* "wrath," *NEB)* to the period 607–537 B.C.E., thus equating them with the seventy years of Jeremiah 25:10–12 and 29:10.[41] It seems evident, though, that the reason why the angel put this question about the denouncement was that Jehovah still, in Darius' second year (519 B.C.E.), had not shown mercy to the cities of Judah. Or did the angel mean to say that Jehovah had denounced Jerusalem and the cities of Judah for seventy years up to 537 B.C.E., and then continued to be hostile against them for about eighteen more years up to 519? This would make the period of hostility nearly *ninety* years, not seventy.[42]

But the "indignation" or "wrath" clearly refers to the devastated state of the cities of Judah, including Jerusalem and its temple, which began after the destruction of Jerusalem in 587 B.C.E. This condition was still prevailing, as may be seen from Jehovah's answer to the angel's question:

> Therefore this is what Jehovah has said, "I shall certainly return to Jerusalem with mercies. My own house will be built in her," is the utterance of Jehovah of armies, "and a measuring line itself will be stretched out over Jerusalem."
>
> Call out further, saying, "This is what Jehovah of armies has said: 'My cities will yet overflow with goodness; and Jehovah will yet certainly feel regrets over Zion and yet actually choose Jerusalem.' " —Zechariah 1:16–17, *NW*.

41 *Paradise Restored to Mankind—by Theocracy!,* pp. 131–134.

42 The Watch Tower Society attempts to explain this contradiction by arguing that Jehovah had denounced the cities of Judah for 70 years up to 537 B.C.E., but allowed the Gentile nations to carry on the denunciation up to the time of Zechariah, making it *seem* as if he was still denouncing the cities of Judah! —*Ibid.,* pp. 131–34.

Also from a grammatical point of view it is difficult to uphold the idea that the seventy years here refer to a period that had ended many years in the past. The demonstrative pronoun "these" (Hebr. *zeh)* denotes something near in time or space. Commenting on the expression "these seventy years" at Zech. 1:12, the Swedish Hebraist Dr. Seth Erlandsson explains: "Literally it says 'these 70 years,' also at 7:5, which is tantamount to 'now for 70 years.' " (Letter Erlandsson-Jonsson, dated Dec. 23, 1990.) This is evidently the reason why Professor Hinckley G. Mitchell renders the phrase as "*now seventy years"* in both texts.—H. G. Mitchell in S. R. Driver, A. Plummer, & C. A. Briggs (eds.), *The International Critical Commentary. A Critical and Exegetical Commentary on Haggai, Zechariah, Malachi and Jonah* (Edinburgh: T. & T. Clark, 1912), pp. 123–24, 199–200.

Counted from 587 B.C.E. the indignation had now, in 519, lasted for nearly seventy years, or sixty-eight years to be exact. And if counted from the *beginning* of the siege on January 27, 589 B.C.E. (2 Kings 25:1; Ezekiel 24:1–2; Jeremiah 52:4), the indignation had lasted for almost exactly seventy years on February 15, 519. But just two months earlier the work on the foundation of the temple had been finished. (Haggai 2:18) From that time onward Jehovah began to remove his indignation: "From this day I shall bestow blessing." — Haggai 2:19, *NW*.

It seems clear, therefore, that the seventy years mentioned in this text do not refer to the prophecy of Jeremiah, but simply to the time that had elapsed by 519 B.C.E. since the siege and destruction of Jerusalem and its temple in 589–587 B.C.E.[43]

That seventy years elapsed from the destruction of the temple in 587 B.C.E. to its rebuilding in the years 520–515 is also confirmed by the next text in the book of Zechariah to be considered.

F: ZECHARIAH 7:1–5

Again, the event recorded in this passage is exactly dated, to "the fourth year of Darius . . . on the fourth [day] of the ninth month." (Zech. 7: 1) This date corresponds to December 7, 518 B.C.E. (Julian calendar).[44]

Zechariah 7:1–5:

> Furthermore, it came about that in the fourth year of Darius the king the word of Jehovah occurred to Zechariah, on the fourth [day] of the ninth month, [that is,] in Chislev. And Bethel proceeded to send Sharezer and Regem-melech and his men to

43 This is also the conclusion of many modern commentators. J.A. Thompson, for example, says: "In Zech. 1:12 it seems to denote the interval between the destruction of the temple in 587 B .C. and its rebuilding in 520–515 B.C." *(The Book of Jeremiah.* Grand Rapids: Wm. B. Eerdmans Publishing Co., 1980, p. 514.) Dr. Carroll Stuhlmueller observes that, "if we tabulate from the beginning of Babylon's plans for the first siege of Jerusalem (590/589; 2 Kgs. 24:10) to the time of this vision (520), the seventy years show up in a remarkably accurate way!" — Stuhlmueller, *Rebuilding with Hope. A Commentary an the Books of Haggai and Zechariah* (Grand Rapids: Wm. B. Eerdmans Publ. Co., 1988), p. 64.

44 Parker & Dubberstein, *ap. cit.* (note 40 above), p. 30.

> soften the face of Jehovah, saying to the priests who belonged to the house of Jehovah of armies, and to the prophets, even saying: "Shall I weep in the fifth month, practicing an abstinence, the way I have done these O how many years?" And the word of Jehovah of armies continued to occur to me, saying: "Say to all the people of the 1and and to the priests, 'When YOU fasted and there was a wailing in the fifth [month] and in the seventh [month] , *and this for seventy years* [literally 'these seventy years,' as in 1:12], did you really fast to me, even me?' " *(NW)*

F-1: Fasting and wailing—for seventy years or ninety?

Why did "all the people of the land" fast and wail in the fifth month and in the seventh month? Speaking of the fast in the fifth month the Watch Tower Society admits:

> It was observed evidently on the tenth day of that month (Ab), in order to commemorate how on that day Nebuzaradan, the chief of Nebuchadnezzar's bodyguard, after two days of inspection, burned down the city of Jerusalem and its temple. (Jer. 52:12, 13; 2 Kings 25:8, 9)[45]

Further, the fast in the seventh month was "to commemorate the assassination of Governor Gedaliah, who was of the royal house of King David and whom Nebuchadnezzar made governor of the land for the poor Jews who were allowed to remain after the destruction of Jerusalem. (2 Kings 25:22–25; Jer. 40:13 to 41:l0)"[46]

For how long had the Jews been fasting in these months in memory of the destruction of Jerusalem and its temple and the assassination of Gedaliah? For "seventy years," according to Zecharaiah 7:5. The year 518/17 was the seventieth year since 587 B.C.E.![47]

That the Jews still, in 518 B.C.E., held these fasts in the fifth and seventh months is clear from the fact that the men from Bethel had come to ask if they, "now that the faithful remnant of Jews were rebuilding the temple of Jehovah at Jerusalem and were

45 *Paradise Restored to Mankind—by Theocracy!,* p. 235.

46 *Ibid.—Zechariah* 8:19 shows that days of fasting and mourning in memory of various fateful events during the siege and destruction of Jerusalem were held in four different months: (1) *in the tenth month* (because of the beginning of the siege of Jerusalem in January, 589 B.C.E., 2 Kings 25:1–2); (2) *in the fourth month* (because of the capture of Jerusalem in July, 587 B.C.E., 2 Kings 25:2–4; Jer. 52:67); (3) *in the fifth month* (because of the burning of the temple in August, 587 B.C.E., 2 Kings 25:8–9); and (4) *in the seventh month* (because of the assassination of Gedaliah in October, 587 B.C.E., 2 Kings 25:22–25).

47 From the end of August 587 B.C.E., when the temple was burned down, to December 518 it was sixty-nine years and about four months. From October 587, when the remaining Jews fled to Egypt and left Judah desolated, to December 518 was sixty-nine years and about two months.

about half through, should . . . continue to hold such a fast."[48]

If now the destruction of Jerusalem and its temple is dated in 607 B.C.E. instead of 587, once again this would make the time these fasts had been observed *ninety* years rather than seventy. This is actually conceded by the Watch Tower Society in the book quoted above, but no satisfying explanation is given for this discrepancy.[49]

Thus Zechariah 1:7–12 and 7:1–5 both give very strong support for the year 587 B.C.E. as the correct date for the destruction of Jerusalem. As in the case of Jeremiah 25:10–12; 29:10; Daniel 1:12 and 2:1, the easiest and the most direct reading of Zechariah 1:7–12 and 7:1–7, too, is seen to be in open conflict with the interpretation the Watch Tower Society gives to the seventy years.

G: THE APPLICATION OF THE SEVENTY YEARS OF SERVITUDE

From a close examination of the texts dealing with the seventy years, certain facts have been established that cannot be ignored in any attempt to find an application of the seventy-year period that is in harmony with both the Bible and historical facts:

(1) The seventy years refer to *many nations,* not Judah only: Jeremiah 25:11.

(2) The seventy years refer to a period of *servitude* for these nations, that is, vassalage to Babylon: Jeremiah 25:11.

(3) The seventy years refer to the period of *Babylonian supremacy,* "seventy years *for Babylon":* Jeremiah 29:10.

(4) The seventy years were accomplished *when the Babylonian king and his nation were punished,* that is, in 539 B.C.E.: Jeremiah 25:12.

48 *Paradise Restored to Mankind—by Theocracy!,* p. 235.

49 "When the exiled Jews fasted during the seventy years of desolation of the land of Judah *and also during all these years since the remnant of them returned to their homeland,* were they really fasting to *Jehovah?"—Paradise Restored to Mankind—by Theocracy!,* p. 237. (Emphasis added.)

(5) The seventy years of servitude began *many years before the destruction of Jerusalem:* Jeremiah chapters 27, 28, and 35; Daniel 1:1–4; 2:1; 2 Kings 24:1–7; the Babylonian chronicles, and Berossus.

(6) *Zechariah 1:7–12 and 7:1–5 are not references to Jeremiah's prophecy,* but refer to the period from the siege and destruction of Jerusalem in the years 589–587 to the rebuilding of the temple in the years 520–515 B.C.E.

The application given by the Watch Tower Society to the seventy-year prophecy, that it refers to Judah only, and to the period of complete desolation of the land, "without an inhabitant," following the destruction of Jerusalem and its temple, is seen to be in direct conflict with each of the above established Biblical and historical facts.

An application that is in clear conflict with both the Bible and such historical facts cannot have anything to do with reality. In a serious discussion of possible applications of the seventy years, this alternative is *the first which must be rejected.* It is held to by the Watch Tower Society, not because it can be supported by the Bible and historical facts, but because it is a necessary prerequisite for their calculation of the supposed 2,520 years of Gentile times, 607 B.C.E.–1914 C.E.

If their application of the seventy years is dropped, the Gentile times calculation leading to 1914 C.E. immediately proves false, together with all the prophetic claims and speculations that are tied to it.

G-1: The use of "seventy" as a "round" number

The conclusion arrived at in the above discussion is that Judah and a number of the surrounding nations became vassals to the king of Babylon soon after the battle of Carchemish in 605 B.C.E. Does this mean that the seventy-year period "for Babylon" must be applied to the period 605–539 B.C.E.? To this suggestion it may quite naturally be objected that the length of this period is not seventy, but a little more than sixty-six years, which is, of course, true.

Many scholars argue, however, that the numeral "70" in the Bible often seems to be used as "a round number" It occurs fifty-two times independently in the Old Testament, and is used with a variety of different meanings—for weights, lengths of measurements, numbers of people, periods of time, and so forth.[50] In a discussion of the biblical use of the numeral "70," which also includes extra-biblical occurrences, Dr. F. C. Fensham concludes:

> It is quite probably used as a kind of symbolic figure, just like seven. With the usage of seven and seventy the ancient Semites tried to make a difference between a smaller symbolic figure and a larger one.[51]

When used of periods of time it might have been used as an appropriate period of punishment. In a building inscription of the Assyrian king Esarhaddon (680–667 B.C.E.), it is stated that the desolation of Babylon after its destruction by Sennacherib in 689 B.C.E. should have lasted seventy years, but the god Marduk in his mercy changed the period to eleven years.[52] A few decades earlier Isaiah predicted that "Tyre must be forgotten seventy years, *the same as the days of one king."* (Isaiah 23:15) The explanation that the seventy years should be understood as "the same as the days of one king" is often interpreted to mean a normal life-span of a king, or "the full span of human life," in accordance with Psalm 90:10, where the number seventy clearly is not meant to be viewed as a precise figure.

Thus it is quite possible and perhaps probable that the seventy years of servitude predicted by Jeremiah were used as a round number. Such an understanding could also be supported by the fact that not all the nations surrounding Judah (some of which are obviously enumerated in Jeremiah 25:19–26) seem to have been made vassals to the king of Babylon at the same time, in 605 B.C.E. Some of them seem to have been brought into subjection somewhat later. The period of servitude, therefore, was not of exactly the same duration for all these nations. Yet the prophet said that all of them were to serve the king of Babylon "seventy years."

G-2: The seventy years 'for Babylon": 609–539 B.C.E.

Although it is true that the servitude of a number of nations turned out to be somewhat less than seventy years, the prophecy does not

50 Some examples are: *70 years* (Gen. 5:12; 11:26; Ps. 90:10); *70 days* (Gen. 50:3); *70 descendants of Jacob* (Gen. 46; Ex. 1:5; Deut. 10:22); *70 palm trees* (Ex. 15:27); *70 elders* (Ex. 24:1; Num. 11:16; Ezek. 8:11); *70 submissive Canaanite kings* (Judg. 1:7); *70 sons* (Judg. 8:30; 12:14; 2 Kings 10:1).

51 F. C. Fensham, "The Numeral Seventy in the Old Testament and the Family of Jerubbaal, Ahab, Panammuwa and *Athirat," Palestine Exploration* Quarterly July–December 1977, pp. 113–115. Cf. also Eric Burrows, "The Number Seventy in Semitic" Orientalia, Vol. V,1936, pp. 389–92.

52 The inscription says: "Seventy years as the period of its desolation he wrote (down in the Book of Fate). But the merciful Marduk—his anger 1asted but a moment—turned (the Book of Fate) upside down and ordered its restoration in the eleventh year." — D. D. *Luekenbill, Ancient Records of Assyria and Babylonia, Vol.II* (Chicago: The University of Chicago Press, 1927), p. 243. As pointed out by Luckenbill, "the Babylonian numeral 70,' turned upside down or reversed, becomes '11,' just as our printed '9,' turned upside down, becomes '6.e " *(Ibid.,* p. 242. Cf. also R. Borger in *Journal of Near Eastern Studies,* Vol. XVII, 1958, p.74.) In this way Esarhaddon "explained" his decision to restore Babylon after the death of his father Sennacherib in 681 B.C.E.

clearly imply that the seventy years "for Babylon" should be reckoned from 605 B.C.E. It must be remembered that *all* nations were predicted to become servants of Babylon: "*all the nations* must serve him and his son and his grandson."[53] (Jeremiah 27:7, *NW)* Some nations had become subject to Babylon *even prior to* the battle of Carchemish in 605 B.C.E. If the seventy years "for Babylon" are counted from the time when Babylon crushed the Assyrian empire, thus beginning to step forward as the dominant political power itself, even a more exact application of the seventy years is possible. A short review of the last years of Assyria will make this clear.

ASSYRO-BABYLONIAN CHRONOLOGY, 680-609 B.C.E.

ASSYRIA	*B.C.*	*B.C.*	*BABYLONIA*
Esarhaddon (12 years)	*680*	*680*	Esarhaddon (12 + 1 years)
	669	*668*	
	668	*667*	
			Shamashshumukin (20 yrs)
Assurbanipal (42 yrs)		*648*	
		647	
			Kandalanu (21 + 1 years)
	627		
Assur-etillu-ilani (4 yrs?)	*626*	*626*	
		625	
Sinsharishkun (11 yrs?)	*612*		
Assur-uballit (2 yrs)	*611-610*		Napopolassar (21 yrs)
Assyria crushed	*609*		
		605	

Up to 627 B.C.E. Assyria held hegemony over many countries, including Babylonia and the Hattu-area. But on the death of Ashurbanipal in that year, Assyria's power began to wane. Nabopolassar, the governor of southern Babylonia, drove the Assyrians from Babylon in 626 and occupied the throne. In the following years he successfully established Babylonian independence.

The most important source for the history of the final years of the Assyrian empire is the Babylonian chronicle *B.M. 21901,* which describes the events from the tenth year of Nabopolassar until the beginning of his eighteenth regnal year, that is, from 616 to 608 B.C.E.

53 Nebuchanezzar's son and successor was Evil-Merodach. His grandson was evidently Belshazzar, the son of Nabonidus who, according to R. P. Dougherty was married to Nitocris, a daughter of Nebuchadnezzar.—R. P. Dougherty, *Nabonidus and Belshazzar* (New Haven: Yale University Press, 1929), pp. 30–32, 79. *See* also *the* comments by D. J. Wiseman, *Nebuchadrezzar and Babylon* (Oxford: Oxford University Press, 1985), pp. 11–12.

In 616, Nabopolassar attacked the Assyrians and defeated them, but an Egyptian army led by Psammetichus I came up to assist the Assyrian king (Sin-shar-ishkun), and Nabopolassar chose to withdraw to Babylon.

By this time the Medes, too, began to attack Assyria, and in 614 they took Ashur, the ancient Assyrian capital. After the city had fallen, Nabopolassar, whose army arrived too late to help the Medes, made a treaty with the Median ruler, Cyaxares.

In 612, the two allies attacked the Assyrian capital, Nineveh, captured it and destroyed it. The Assyrian king, Sin-shar-ishkun, perished in the flames. His successor, Ashur-uballit II, fled to the provincial capital of Harran, where he established his government, still claiming sovereignty over Assyria.

During the subsequent years Nabopolassar successfully campaigned in Assyria, and by the end of 610, he marched against Harran, joined by Median forces.[54] Ashur-uballit fled, and the city was captured and plundered either late in 610 or early in 609 B.C.E.[55] Late in the summer of 609 Ashur-uballit, supported by a large Egyptian force headed by Pharaoh Necho, made a last attempt to recapture Harran, but failed. This definitely put an end to the Assyrian empire.

That 609 B.C.E. marked the definite end of the Assyrian empire is the prevailing view among leading authorities today. Some typical statements are quoted in the following box:

THE FALL OF ASSYRIA — 609 B.C.E.

"In 610 the Babylonians and their allies took Harran, and Ashur-uballit with the wreckage of his forces fell back across the Euphrates into the arms of the Egyptians. An attempt (in 609) to retake Harran failed miserably. Assyria was finished."— Professor John Bright, *A History of Israel,* 3rd ed. (Philadelphia: Westminster Press, 1981), p. 316.

In 609 B.C.E. "Assyria ceased to exist and her territory was taken over by the Babylonians."— Professor D. J. Wiseman in *The*

54 The term used for the Medes in the chronicle, "Umman-manda," has often been taken to refer to, or at least include, the *Scythian.* This hypothesis appears to be untenable in the light of recent research. See the extensive discussion by Stefan Zawadzki in *The Fall of Assyria and Median-Babylonian Relations in Light of the Nabopolassar Chronicle* (Poznan: Adam Mickiewicz University Press, 1988), pp. 64–98.

55 According to the Babylonian chronicle BM 21901 the two armies set out against Harran in *Arahsamnu,* the eighth month, which in 610 B.C.E. roughly corresponded to November in the Julian calendar. After the capture of the city they returned home in *Addaru,* the twelfth month, which roughly corresponded to March in the following year, 609 B.C.E. Most probably, therefore, the city was captured *early in 609 B.C.E.—A.K. Grayson, Assyrian and Babylonian Chronicles (Locust* Valley, N.Y.: JJ. Augustin Publisher, 1975), pp. 95–96.

New Bible Dictionary, J. D. Douglas (ed.), 2nd ed. (Leicester, England: Inter-Varsity Press, 1982), p. 101.

"In 609, the Babylonians finally routed the Assyrians and began the establishment of their control over Phoenicia, Syria and Palestine."—The Russian Assyriologist M. A. Dandamaev in *History of Humanity,* Vol. III, ed. by J. Herrman & E. Zürcher (Paris, London, New York: UNESCO, 1996), p. 117.

"In 609 Assyria was mentioned for the last time as a still existing but marginal formation in northwestern Mesopotamia. After that year Assyria ceased to exist."—Stefan Zawadzki in *The Fall of Assyria* (Poznan: Adam Mickiewicz University Press, 1988), p. 16.

Thus, the seventy years "for Babylon" may also be reckoned from 609 B.C.E. From that year the Babylonian king regarded himself as the legitimate successor of the king of Assyria, and in the following years he gradually took over the control of the latter's territories, beginning with a series of campaigns in the Armenian mountains north of Assyria.

The Egyptian Pharaoh, Necho, after the failed attempt to recapture Harran in 609, succeeded in taking over the areas in the west, including Palestine, for about four years, although his control of these areas seems to have been rather general and loose.[56] But the battle at Carchemish in 605 B.C.E. put an end to this brief Egyptian presence in the west. (Jeremiah 46:2) After a series of successful campaigns to "Hattu," Nebuchadnezzar made it clear to Necho that he was the real heir to the Assyrian Empire, and "never again did the king of Egypt come out from his land, for the king of Babylon had taken all that happened to belong to the king of Egypt up to the river of Euphrates."—2 Kings 24:7, *NW*.[57]

If the Babylonian supremacy is reckoned from 609 B.C.E., the year that marked the definite end of the Assyrian Empire, exactly seventy years elapsed up to the fall of Babylon in 539 B .C.E. This period may be counted as the "seventy years for Babylon." (Jeremiah 29:10)[58]

As not all the nations previously ruled by Assyria were brought under the Babylonian yoke in that same year, the "seventy years" of servitude in reality came to mean a round number for individual nations .[59]

56 Compare 2 Kings 23:29–34; 2 Chronicles 35:20–36:4. On Necho's "general, but 1oose" control of the areas in the west, see the comments by T. G. H. James in *The Cambridge Ancient History,* Vol. III:2 (see note 23 above), p. 716.

57 Ross E. Winkle, too, concludes that "the defeat of Assyria is the obvious choice for the actua1 beginning of the seventy years. This is because of the fact that with Assyria out of the way, Babylon was truly the dominant power in the North."—R. E. Winkle,

"Jeremiah's seventy years for Babylon: a re-assessment," Andrews *University Seminary Studies* (AUSS),Vol.25:3 (1987), p. 296. Winkle's discussion of the texts dealing with the seventy years (in AUSS 25:2, pp. 201–213, and 25:3, pp. 289–299) is remarkably similar to that published already in the first edition of the present work in 1983. Winkle does not refer to it, however, and it is quite possible that it was not known to him.

58 Several historians and biblical scholars have been amazed at the exactness with which Jeremiah's prediction was fulfilled. Some scholars have tried to explain this by suggesting that the passages in Jer. 25:11 and 29:10 were added to the book of Jeremiah *after* the Jewish exile. There is no evidence in support of this theory, however. Professor John Bright, for example, commenting on Jer. 29:10, says: "One cannot explain rationally why it was that Jeremiah was assured that Babylon's rule would be so relatively brief. But there is no reason to regard the verse as a *vaticinium ex eventu* [a 'prophecy' made after the event]; we can only record the fact that the prediction turned out to be approximately correct (which may be why later writers made so much of it). From the fall of Nineveh (612) to the fall of Babylon (539) was seventy-three years; from Nebuchadnezzar's accession (605) to the fall of Babylon was sixty-six years." —John Bright, *The Anchor Bible: Jeremiah* (Garden City, New York: Doubleday and Company, Inc., 2nd. ed. 1986), pp. 208–09.

59 Interestingly, the Watch Tower writers, too, seem finally to have realized this. Commenting on the 70 years that Tyre would be forgotten according to Isaiah 23:15–17—a period they equate with the 70 years for Babylon—their recent commentary on Isaiah says: "True, the island-city of Tyre is not subject to Babylon for a full 70 years, since the Babylonian Empire falls in 539 B.C.E. Evidently, the 70 years represent the period of Babylonia's greatest domination . . . Different nations come under that domination at different times. But at the end of 70 years, that domination will crumble." *(Isaiah's Prophecy. Light for All Mankind,* Vol 1, 2000, p. 253) These remarkable statements are more or less a reversal of earlier views.

6

THE "SEVEN TIMES" OF DANIEL 4

IN THE PREVIOUS chapter it was shown that the prophecy of the seventy years may be given an application that is in full agreement with a dating of the desolation of Jerusalem in 587 B.C.E. Would this mean , then , that a period of 2,520 years of Gentile times started in 587 B.C.E. and ended—not in 1914—but in 1934 C.E.? Or could it be that the 2,520-year calculation is not founded on a sound biblical basis after all? If not, what meaning should be attached to the outbreak of war in 1914—a year that had been pointed forward to decades in advance?

These are the questions discussed in this chapter. We will first take a look at the attempts made to end the Gentile times in 1934.

A. THE 1934 PROPHECY

Ending the times of the Gentiles in 1934 would not be a new idea. As far back as 1886 the British expositor Dr. Henry Grattan Guinness pointed to 1934 in his book *Light for the Last Days.*[1] Dr. Guinness made use of three different calendars in his calculations and thus succeeded in giving the Gentile times three time periods of different lengths: 2,520, 2,484, and 2,445 years respectively. In addition, he also used several starting-points, the first in 747 and the last in 587 B.C.E.[2] This provided a series of terminal dates, extending from 1774 CE. to 1934 CE., all of which were regarded as important dates in God's prophetic timetable.

With the 1934 date, however, the Gentile times would definitely end, reckoned according to Dr. Guinness' longest scale and from his last starting-point. The four most important dates in his scheme were 1915, 1917, 1923 and 1934.

1. H. Grattan Guinness, *Light for the Last Days* (London, 1886).
2. The others were 741, 738, 727, 713, 676, 650–647, and 598.

Dr. Guinness had predicted that the year 1917 would be perhaps the most important year in the termination of the trampling of Jerusalem. When the British general Edmund Allenby on December 9 that year captured Jerusalem and freed Palestine from the Turkish domination, this was seen by many as a confirmation of his chronology. Quite a number of people interested in the prophecies began to look forward to 1934 with great expectations.[3] Among these were also some of the followers of Pastor Charles Taze Russell.

A-1: Pastor Russell's chronology emended

At the climax of the organizational crisis in the Watch Tower Society following the death of Russell in 1916, many Bible students left the parent movement and formed the *Associated Bible Students,* in 1918 chartered as *The Pastoral Bible Institute.*[4]

In the same year Paul S. L. Johnson broke away from this group and formed *The Laymen's Home Missionary Movement,* today one of the strongest groups to grow out of the Bible Student movement aside from the parent organization.

Early in the 1920s the Pastoral Bible Institute *changed* Russell's application of the Gentile times, which caused an interesting debate between that movement, the Laymen's Home Missionary Movement, and the Watch Tower Society.

An article entitled "Watchman, What of the Night?" published in the Pastoral Bible Institute's periodical *The Herald of Christ's Kingdom,* April 15, 1921, marked a significant break with Pastor Russell's chronological system. Mainly responsible for this reevaluation was R. E. Streeter, one of the five editors of the *Herald.* His views, accepted by the other editors, reflected a growing concern on the part of many Bible Students (as evidenced from letters received from nearly every part of the earth) who had experienced deep perplexity "as to the seeming failure of much that was hoped for and expected would be realized by the Lord's people by this time."[5] Some of the questions which had arisen were:

3 Most of these expositors seemed to be unaware of the fact that Guinness himself back in 1909, in his book *On the Rock,* had revised his chronology and "had calculated that the end would occur in 1945 instead of 1934."—Dwight Wilson, *Armageddon Now!* (Tyler, Texas: Institute for Christian Economics, 1991), pp. 90–91.

4 The Pastoral Bible Institute (P.B.I.) was headed by former board members of the Watch Tower Society who were illegally dismissed by J. F. Rutherford in 1917 together with other prominent members.

5. *The Herald of Christ's Kingdom,* April 15, 1921, p. 115.

> Why has not the Church realized her final deliverance and reward by this time? . . . Why is not the time of trouble over with by now — why has not the old order of things passed away, and why has not the Kingdom been established in power before this? Is it not possible that there may be an error in the chronology?[6]

Calling attention to the fact that Pastor Russell's predictions for 1914 had not been fulfilled, it was concluded that there was evidently an error in the former reckoning. This error was explained to be found in the calculation of the times of the Gentiles:

> Careful investigation has resulted in our locating the point of difficulty or discrepancy in what we have considered our great chain of chronology. It is found to be in connection with the commencement of the 'Times of the Gentiles'.[7]

First, it was argued, the seventy years, formerly referred to as a period of desolation, more properly should be called "the seventy years of servitude." (Jeremiah 25:11) Then, referring to Daniel 2:1, 37–38, it was pointed out that Nebuchadnezzar was the "head of gold" already in his second regnal year, and actually dominated the other nations including Judah, beginning from his very first year, according to Daniel 1:1. Consequently, the era of seventy years commenced eighteen to nineteen years *before* the destruction of Jerusalem. This destruction, therefore, had to be moved forward about nineteen years, from 606 to 587 B.C.E.

But the 606 B.C.E. date could still be retained as a starting-point for the times of the Gentiles, as it was held that the *lease of power* to the Gentiles started with Nebuchadnezzar's rise to world dominion. Thus 1914 marked the end of *the lease of power,* but not necessarily the full end of *the exercise of power,* nor the complete fall of the Gentile governments, even as the kingdom of Judah did not fall and was not overthrown in the final and absolute sense until Zedekiah, a vassal king under Nebuchadnezzar, was taken captive nineteen years after the period of servitude began. The *Herald* editors concluded:

> Accordingly it was 587 B.C. when Zedekiah was taken captive, and not 606 B.C., and hence while the 2520 years' 1ease of Gentile power starting in Nebuchadnezzar's first year, 606 B.C., would run out in 1914; yet the full end of the Gentile Times and

6 *Ibid.,* pp. 115, 116.
7 *Ibid.,* p. 118.

> the complete fall of Gentile governments is not indicated as taking place till nineteen years later, or in about 1934.[8]

So what could be expected to take place in 1934? *The Herald of Christ's Kingdom* indicated:

> The reasonable deduction is that the great changes and events which we have heretofore expected to take place in 1914 would, in view of the foregoing, be logically expected to be in evidence somewhere around 1934.[9]

Other articles followed in the issues of May 15 and June 1 of the *Herald,* giving additional evidence for the necessity of these changes and answering questions from the readers. The changes evoked much interest among the Bible Students:

> Many have freely written us that they have heartily accepted the conclusions reached. . . .
>
> It has been of special interest to us to receive advice from brethren in several different quarters telling of how for some months or years before receiving our recent treatment of the subject, they had been led to make an exhaustive examination of the chronology and had arrived at exactly the same conclusions as those presented in the HERALD with regard to the 19 years difference in the starting of the Gentile Times , and found that all the evidences showed that Nebuchadnezzar's universal kingdom began in his first year instead of his nineteenth.[10]

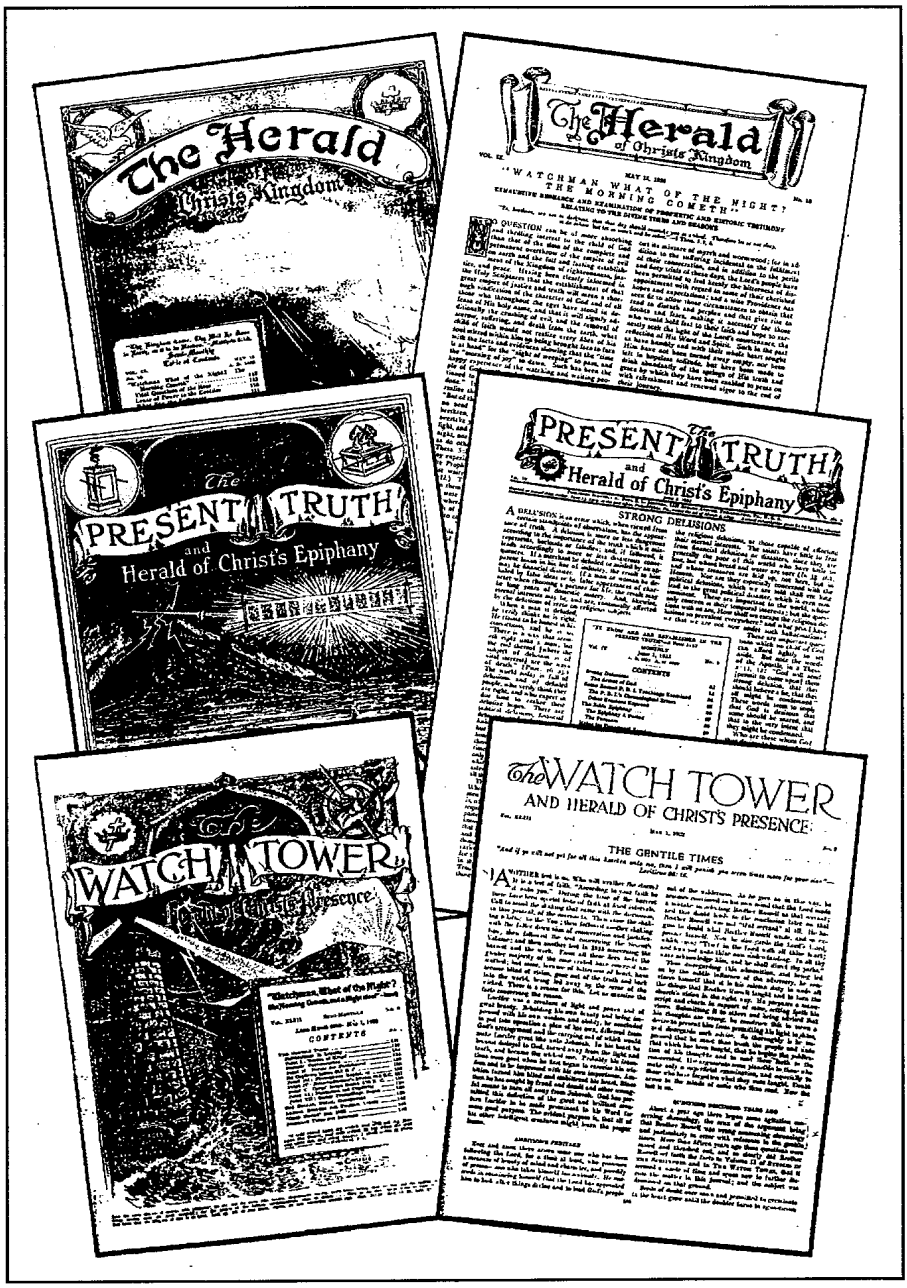
A-2: The Bible Student controversy on the Gentile times chronology

However, most Bible Student groups rejected the conclusions of the Pastoral Bible Institute. The first counterattack came from P. S. L. Johnson, the founder of the Laymen's Home Missionary Movement and editor of its periodical *The Present Truth.*

8 *Ibid.,* p. 120.

9 *Ibid.*

10 *The Herald of Christ's Kingdom,* June 1, 1921, p. 163. Interestingly, the November 1, 1921 issue of the Herald published an article prepared by another Bible Student in 1915, in which he presented evidence and conclusions practically identical to those of R. E. Streeter, although he dated the destruction of Jerusalem in 588 instead of 587 B.C.E. The 588 date was adopted by P.B.I. in subsequent issues of the *Herald.* As this man had no connection with P.B.I., he preferred to be anonymous, signing the article with the initials J.A.D. *The Beraean Bible Institute,* a Bible Student group with headquarters in Melbourne, Australia, also accepted the conclusions of the P.B.I. editors, as seen from their *People's Paper* of July 1 and September 1, 1921, pp. 52, 68.



Periodicals published by the three principal Bible Student groups involved in the controversy in the early 1920's about the application of the Gentile times.

In the issue of June 1, 1921, he published a critical article entitled "'Watchman, What of the Night?' —Examined" (pages 87–93), in which he defended Pastor Russell's understanding of Daniel 1:1 and 2:1 and the seventy years of desolation, also adding some arguments of his own. This was followed by other articles in the issues of July 1 and September 1.[11]

In 1922, the Watch Tower Society, too, plunged into the debate. Evidently the chronological changes in the *Herald* rapidly came to the knowledge of many Bible Students from different quarters, and seem to have caused no little agitation among the readers of *The Watch Tower* magazine, too. This was openly admitted in the first article on the subject, "The Gentile Times," published in the May 1, 1922, issue of *The Watch Tower:*

> About a year ago there began some agitation concerning chronology, the crux of the argument being that Brother Russell was wrong concerning chronology and particularly in error with reference to the Gentile times. . . .
>
> Agitation concerning the error in chronology has continued to increase throughout the year, and some have turned into positive opposition to that which has been written. This has resulted in some of the Lord's dear sheep becoming disturbed in mind and causing them to inquire, Why does not THE WATCH TOWER say something?[12]

Consequently, beginning with this article, the Watch Tower Society started a series in defense of Pastor Russell's chronology. The second article, entitled "Chronology," published in *The Watch Tower* of May 15, 1922, opened with a reaffirmation of belief in Russell's dates, and added the date 1925:

> We have no doubt whatever in regard to the chronology relating to the dates of 1874, 1914, 1918, and 1925. Some claim to have found new light in connection with the period of "seventy years of desolation" and Israel's captivity in Babylon, and are zealously seeking to make others believe that Brother Russell was in error.

11 "'Ancient Israel's Jubilee Year' Examined" in the July 1, 1921 issue Of *The Present Truth,* pp. 100–104, and "Further P.B.I. Chronology Examined" in the September 1 issue, pp. 134–136.

12 *The Watch Tower,* May 1, 1922, pp. 131–132. Other articles published during 1922 were "Chronology" (May 15, pp. 147–150), "Seventy Years' Desolation (Part I)" (June 1, pp. 163–168), "Seventy Years' Desolation (Part II)" (June 15, pp. 183–187), "The Strong Cable Of Chronology" (July 15, pp. 217–219), "Interesting Letters: Mistakes of Ptolemy, the Pagan Historian" (August 15, pp. 253–254; this was written by Morton Edgar), and "Divinely-given Chronological Parallelisms (Part I)" (November 15, pp. 355–360).

The arguments put forth in this and subsequent articles were much the same as those earlier published by Paul S. L. Johnson. Johnson, who involuntarily had to side with the Watch Tower Society in this "battle," supported *The Watch Tower* with a series of new articles in the *Present Truth,* running parallel with the articles in *The Watch Tower.*[13]

These responses were not long left unanswered. The *Herald* of June 15, 1922, contained the article "The Validity of Our Chronological Deductions," which was a refutation of the arguments put forth in support of Pastor Russell's interpretation of Daniel 1:1 and 2:1. In the July 1 issue, a second article "Another Chronological Testimony" considered the evidence from Zechariah 7:5, and the July 15 issue contained a third on the desolation period, again signed by J.A.D. (See note 10.)

Gradually the debate subsided. The Pastoral Bible Institute editors summarized their arguments and published them in a special double number of the *Herald,* August 1–15, 1925, and, again, in the May 15, 1926 issue. Then they waited to see what the 1934 date would bring.

As 1934 approached the Institute's editors assumed a very cautious attitude:

> If the nineteen years was intended to indicate the exact length of time of the running out of the Gentile Times from 1915 onward, then that would carry us to approximately 1933–1934; but we do not *know* that this was so intended, nor do we have positive evidence as to the exact length of the closing out of the Gentile Times beyond 1915.[14]

This cautiousness proved to be wise, and when the 1934 date had passed, they could assert:

> Brethren who have perused carefully the pages of this journal, are well aware that much cautiousness and conservatism have been urged upon all in the direction of setting dates and fixing the time for various occurrences and events; and this continues to be the editorial policy of the 'Herald'.[15]

As to the question of why 1934 did not see the passing away of the Gentile nations, it was explained that 1934 should be looked

13 *The Present Truth,* June 1, 1922: "Some Recent P.B.I. Teachings Examined" (pp. 84–87); July 1: "Some Recent P.B.I. Teachings Examined" (pp. 102–108); August 1: "Further P.B.I. Chronology Examined" (pp.117–122); November 1: "Some Mistakes in Ptolemy's Canon" (pp. 166–168).

14 *The Herald of Christ's Kingdom,* May I, 1930, p. 137.

15 The Herald of Christ's Kingdom, May, 1935, p. 68.

upon as an *approximate* date, and that "we believe the progress of events and all the facts as we see them unfolding before us in this day of the Lord, lead us to look for the running out of the present order more by degrees or stages rather than that of the sudden crash and passing away of everything at one point of time, as the Apostle Paul suggests — 'As travail upon a woman'."[16] The worsening situation in the world leading to The Second World War seemed to give support to this way of looking at the matter.[17]

The years 1914 and 1934 have come and gone, and the Gentile nations still rule the earth. In fact, the number of independent nations has *tripled* since 1914, from 66 in that year to about 200 at present. Thus, instead of *ending* in 1914, the times for the majority of nations on earth today have *begun* after that year!

Some proper questions to ask now surely are: Is the 2,520-year period really a well-founded biblical calculation? Was Jesus' mention of the "Gentile times" at Luke 21:24 a reference to Nebuchadnezzar's "seven times" of madness? And should these "seven times" be converted into 2,520 years?

B. ARE THE GENTILE TIMES "SEVEN TIMES" OF 2,520 YEARS?

When Jesus, at Luke 21:24, referred to the "times of the Gentiles," or, according to the *New World Translation,* "the appointed times of the nations," did he then have in mind the "seven times" of madness that fell upon the Babylonian king Nebuchadnezzar in fulfillment of his dream about the chopped-down tree, as recorded in the book of Daniel, chapter four? And were these "seven times" of madness meant to have a greater fulfillment beyond that upon Nebuchadnezzar, representing a period of 2,520 years of Gentile dominion?

In spite of the fanciful arguments put forth in support of these conjectures, positive proof is missing, and serious objections may be raised against them. A critical examination of the Watch Tower Society's chief arguments, as presented in its Bible dictionary *Insight on the Scriptures,* will make this abundantly clear.[18]

16 *Ibid.,* p. 69.

17 The year 1934 was still held to be an important date, occupying "a prominent place in chronological prophecy." In support of this conclusion, the P.B.I. editors referred to a statement by Edwin C. Hill, a press reporter of international reputation, to the effect that "the year 1934 had been a most remarkable one. There had been many important occurrences and developments, he said, affecting the destinies of all the nations of the earth and marking the year as *one of the most significant of history."—The Herald of Christ's Kingdom,* May, 1935, pp. 71–72. (Emphasis added)

18 See the article "Appointed times of the nations," in *Insight on the Scriptures,* Vol. 1 (Brooklyn, New York: Watchtower Bible and Tract Society, 1988), pp. 132–135.

B-1: The supposed connection between Luke 21:24 and Daniel 4

It is true that in his last great prophecy (Matthew 24–25; Luke 21, and Mark 13), Jesus "at least twice" referred to the book of Daniel.[19]

Thus, when mentioning the "disgusting thing that causes desolation" (*NW*) he directly states that this was "spoken of through Daniel the prophet." (Matthew 24:15; Daniel 9:27; 11:31, and 12:11) And when speaking of the "great tribulation [Greek *thlipsis]* such as has not occurred since the world's beginning until now" (Matthew 24:21, *NW*), he clearly quotes from Daniel 12:1: "And there will certainly occur a time of distress [the early Greek translations—the *Septuagint* version and Theodotion's version—use the word *thlipsis,* in the same way as in Matthew 24:21] such as has not been made to occur since there came to be a nation until that time." *(NW)*

However, *no such clear reference to chapter four of Daniel may be found at Luke 21:24.* The word "times" (Greek *kairoí,* the plural form of *kairós)* in this text is no clear reference to the "seven times" of Daniel 4 as the Watch Tower Society maintains.[20]

This common word occurs many times in both its singular and plural forms in the Greek Scriptures, and about 300 times in the Greek *Septuagint* translation of the Hebrew Scriptures. In Daniel 4 and Luke 21 the word "times" is explicitly applied to two quite different periods—the "seven times" to the period of Nebuchadnezzar's madness, and the "times of the Gentiles" to the period of the trampling down of Jerusalem—and the two periods may be equalized only by giving them a greater application beyond that given in the texts themselves. Therefore, the supposed connection between the "times of the Gentiles" at Luke 21:24 and the "seven times" at Daniel 4:16, 23, 25, and 32 appears to be no more than a conjecture.

B-2: The greater application of the "seven times"

Several arguments are proposed by the Watch Tower Society to support the conclusion that Nebuchadnezzar's "seven times" of madness prefigured the period of Gentile dominion up to the establishment of Christ's Kingdom, viz., a) the *prominent element of time* in the book of Daniel; b) the *time* at which the vision of the chopped-down tree was given; c) the *person* to whom it was given,

19 *Ibid.,* p. 133.
20 *Ibid.*

and d) the *theme* of the vision. Let us have a closer look at these arguments.

a) The element of time in the book of Daniel

To prove that the "seven times" of Daniel 4 are related to the "times of the Gentiles," the Watch Tower Society argues that "an examination of the entire book of Daniel reveals that the element of time is everywhere prominent in the visions and prophecies it presents," and that "the book repeatedly points toward the conclusion that forms the theme of its prophecies: the establishment of a universal and eternal Kingdom of God exercised through the rulership of the 'son of man'."[21]

Although this is true of *some* of the visions in the book of Daniel, it is not true of all of them. And as far as can be seen, no other vision or prophecy therein has more than *one* fulfillment.[22] There is nothing to indicate, either in the book of Daniel or elsewhere in the Bible, that Nebuchadnezzar's dream of the chopped-down tree in Daniel 4 has more than one fulfillment. Daniel clearly says that the prophecy was fulfilled upon Nebuchadnezzar: "All this befell Nebuchadnezzar the king" (Daniel 4:28, *NW).* And further, in verse 33: "At that moment the word itself was fulfilled upon Nebuchadnezzar." (*NW*) Dr. Edward J. Young comments:

> lit., *was ended,* i.e., it came to an end in that it was completed or fulfilled *with respect to* Neb."[23]

21 *Ibid.,* pp. 133–34.

22 When Jesus, in his prophecy on the desolation of Jerusalem, twice referred to the prophecies of Daniel (Matthew 24:15, 21), he did not give these prophecies a second and "greater" fulfillment. His first reference was to the "disgusting thing that is causing desolation," a phrase found in Daniel 9:27; 11:31, and 12:11. The original text is that of Daniel 9:27, which contextually (verse 26) seems to point forward to the crisis culminating with the desolation of Jerusalem in 70 C.E. The same holds true of his reference to the "great tribulation" of Daniel 12:1. Jesus applied, not *reapplied,* both of these prophecies to the tribulation on the Jewish nation in 67–70 C.E. Phrases and expressions used by earlier prophets are often also used, or alluded to, by later prophets, not because they gave a second and greater application to an earlier, fulfilled prophecy, but because they readily reused the "prophetic language" of earlier prophets, using similar phrases, expressions, ideas, symbols, metaphors, etc. in their prophecies of events to come. Thus, for example, it has often been pointed out that the apostle Paul, in his description of the coming "man of lawlessness" (2 Thessalonians 2:35), borrows some of the expressions used by Daniel in his prophecies about the activities of Antiochus IV Epiphanes (cf. Daniel 8:10–11; 11:36–37).

23 Edward J. Young, *The Prophecy of Daniel* (Grand Rapids: Wm. B. Eerdmans Publ. Co., 1949), p. 110.

Actually, most of the chapters in the book of Daniel do *not* contain material that could be said to point forward toward "the establishment of a universal eternal kingdom of God through the rulership of the 'son of man' ": *chapter 1* deals with Daniel and his companions at the court of Babylon; *chapter 3* tells the story about the three Hebrews in the fiery furnace; *chapter 5* deals with Belshazzar's feast, which ended with the fall of Babylon; *chapter 6* tells the story of Daniel in the den of lions, and *chapter 8* contains the vision of the ram and the he-goat, which culminates with the end of the tyrannical rule of Antiochus IV, in the second century before Christ's coming.[24]

And although the prophecy of the "seventy weeks" in *chapter 9* points forward to the coming of Messiah, it does not say anything about the establishment of his kingdom. Not even the lengthy prophecy in the fina1 chapters, *Daniel 10–12,* which end with the "great tribulation" and the resurrection of "many of those asleep in the ground" (Daniel 12:1–3), explicitly connects this with the establishment of the kingdom of Christ.

The fact is that the only *clear* and *direct* references to the establishment of the kingdom of God are found in chapters 2 and 7 (Daniel 2:44–45 and 7:13–14, 18, 22, 27).[25]

Thus any precedent which would call upon us to give a greater application to Nebuchadnezzar's "seven times" of madness simply does not exist.

b) The time of the vision

If, as claimed, the *time* at which this vision was given should indicate a greater fulfillment, pointing to a 2,520-year break in the royal dynasty of David, it should have been given close to, or

24 This is how the vision is understood by most commentators. The statements at Daniel 8:17 and 19 that "the vision pertains to the time of the end" should not automatically be understood as a reference to a final, eschatological "End of Time" In the Old Testament words and phrases such as "the day of the Lord," the "end" (Hebrew *qetz)* and the "time of the end" (compare Amos 5:18–20, Ezekiel 7:1–6; 21:25, 29; Daniel 11:13, 27,35, 40) "do not refer to an End of Time but rather to a divinely appointed crisis, a turning point in history, i.e., a point within historical time and not a post- or supra-historical date." (Shemaryahu Talmon, *Literaty Studies in the Hebrew Bible,* Jerusalem-Leiden: The Magnes Press, 1993, p. 171) The attempt of Antiochus IV to destroy the Jewish religion, as predicted in Daniel 8:9–14, 23–26, was certainly such a "crisis" and has often been described as a "turning point in history" See, for example, the comments by Al Walters in *The Catholic Biblical Quarterly,* Vol. 55:4, 1993, pp. 688–89.

25 Compare the careful study of this question by Dr. Reinhard Gregor Kratz, "*Reich Gottes und Gesetz im Danielbuch und im werdenden Judendom,"* in A. S. van der Woude (ed.), *The Book of Daniel in the Light of New Findings* (Leuven, Belgien: Leuven University Press, 1993), pp. 433–479. (See especially pp. 441–442, and 448.)

preferably in the same year as the dethronement of Zedekiah. Often, when the *time* a prophecy is given is important and has a connection with its fulfillment, the prophecy is dated. This is, for example, the case of the prophecy of the seventy years. (Jeremiah 25:1)[26] The visions and prophecies in the book of Daniel are usually dated: the dream of the image in the *second year* of Nebuchadnezzar (Daniel 2:1), the vision of the four beasts in *the first year* of Belshazzar (Daniel 7:1), the vision of the ram and the he-goat in the *third year* of Belshazzar (Daniel 8:1), the prophecy of the seventy weeks in the *first year* of Darius the Mede (Daniel 9:1), and the last prophecy in the *third year* of Cyrus (Daniel 10:1).[27]

But no such date is given for the vision of the chopped-down tree in Daniel 4, which should logically have been done if this was important. The only information concerning time is given in verse 29, where the fulfillment of the dream is stated to have occurred twelve months later. Although no regnal year is given, it seems probable that Nebuchadnezzar's "seven times" of madness took place somewhere near the close of his long reign. The reason for this conclusion is the boastful statement that triggered off the fulfillment of his dream:

> Is not this Babylon the Great, that I myself have built for the royal house with the strength of my might and for the dignity of my majesty? —Daniel 4:30, *NW*.

When could Nebuchadnezzar possibly have uttered these words? Throughout most of his long reign he engaged in numerous building projects at Babylon and many other cities in Babylonia. The cuneiform inscriptions demonstrate that Nebuchadnezzar was

26 See chapter 5 above, section A-3.

27 That at least some dates given for the visions of Daniel are closely related to their contents may be seen from chapters 7 and 8, dated to the 1st and 3rd years of Belshazzar, respectively. According to the "Verse Account of Nabonidus" (B .M. 38299), Nabonidus "entrusted the kingship" to his son Belshazzar "when the third year was about to begin." (J. B. Pritchard, *Ancient Near Eastern Texts Relating to the Old Testament,* Princeton, New Jersey: Princeton University Press, 1950, pp. 312–13) As the 1st year of Nabonidus was 555/54 BCE, his 3rd year—and thus the 1st year of Belshazzar—was 553/52 BCE. Now, according to the *Sippar Cylinder,* it was in this very year, the 3rd year of Nabonidus, that the god Marduk "aroused" Cyrus in a rebellion against his Median overlord, king Astyages. As stated in the *Nabonidus Chronicle,* Astyages was finally defeated three years later, in the 6th year of Nabonidus, that is, in 550/49 BCE. It can hardly be a coincidence that Daniel shortly before this, in Belshazzar's 3rd year(Daniel 8:1), that is, in 551/50 BCE, was transferred in a vision to Susa, the future administrative capital of Persia, to be shown the emergence of the Medo-Persian empire in the form of a two-horned ram "making thrusts to the west and to the north and to the south?' (Daniel 8:1–4, 20) His vision, then, began to be fulfilled probably just a few months after it was given!

Nebuchadnezzar's madness

as depicted in the book "*The Truth Shall Make You Free,*" (New York: Watchtower Bible and Tract Society, Inc., 1943), page 237.

primarily a builder, not a warrior. He renovated and restored sixteen temples in Babylon including the two temples of Marduk, completed the two great walls of the city, built a network of canals across the city, embellished the streets of Babylon, rebuilt the palace of Nabopolassar, his father, and constructed another palace for his own use that was finished about 570 B.C.E., in addition to many other architectural achievements.[28]

It was evidently at the close of this building activity that the vision of the chopped-down tree was given, as is indicated by Nebuchadnezzar's proud words in Daniel 4:30. This points towards the close of his forty-three-year-long reign, and consequently many years *after* the destruction of Jerusalem in his eighteenth regnal year.

A prophecy is, by definition, forward looking. How then could the *time* at which the vision was given indicate anything about a greater fulfillment, one beginning with the dethronement of Zedekiah many years *earlier?* Should not the *fulfillment* of a prophecy start, not before, but *subsequent to* the time at which the prophecy is given? The *time* of this particular dream, therefore, does not only seem to be unimportant, as the prophecy is not dated, but can actually be used as an argument *against* an application to a period starting with the destruction of Jerusalem, as the dream evidently was given many years *after* that event.

c) The person to whom the vision was given

Does the *person* to whom this vision was given, that is Nebuchadnezzar, indicate it has to be applied to a supposed 2,520-year break in the royal dynasty of David?

It is true that Nebuchadnezzar was instrumental in causing the break in this dynasty. But is it not improbable that Nebuchadnezzar's oppressive exercise of sovereignty would be a symbol of Jehovah's sovereignty expressed through the Davidic dynasty, while contemporaneously during the "seven times" of madness his total powerlessness was a symbol of world dominion exercised by Gentile nations? Or did he play *two* roles during his "seven times" of madness—(1) his *powerlessness,* representing the break in the dynasty of David during the 2,520-year period; and (2) his *beastlike state,* picturing the Gentile rule of the earth?

28 D. J. Wiseman, *Nebuchadrezzar and Babylon* (Oxford: Oxford University Press, 1985), pp. 42–80.

As may be seen, the parallels between the literal fulfillment and the claimed greater application are strained, and the greater application, therefore, becomes quite complicated and confusing. Would not this application have been far more probable if the vision had been given to one of the last kings of *Judah* instead of to Nebuchadnezzar? Would not a king of the royal dynasty of David be a more *natural* figure of that dynasty, and the "seven times" of loss of power experienced by such a king a more natural figure of the loss of sovereignty in the Davidic line?

Evidently, then, the *person* to whom the vision was given is no clear indication of another application beyond that one given directly through Daniel the prophet.

d) The theme of the vision

The *theme* of the vision of the chopped-down tree is expressed in Daniel 4:17, namely, "*that people living may know that the Most High is Ruler in the kingdom of mankind and that to the one he wants to, he gives it and he sets up over it even the lowliest one of mankind.*"

Does this stated intent of the vision indicate it pointed forward to the time for the establishment of God's kingdom by his Christ?[29]

To draw such a conclusion would be to read more into this statement than it actually says. Jehovah has always been the supreme ruler in the kingdom of mankind, although his supremacy has not always been recognized by everyone. But David did realize this, saying:

> Jehovah himself has firmly established his throne in the very heavens; and *over everything* his own kingship has held dominion. — Psalms 103:19, *NW*.
>
> Your kingship is a kingship *for all times indefinite,* And your dominion is throughout all successive generations.— Psalms 145:13, *NW*.

Thus Jehovah has always exercised control over the history of mankind and maneuvered the events according to his own will:

> And he is changing times and seasons, removing kings and setting up kings, giving wisdom to the wise ones and knowledge to those knowing discernment. —Daniel 2:21, *NW*.

This was a lesson that Nebuchadnezzar—as well as kings before and after him—had to learn. The period that followed upon Nebuchadnezzar's desolation of Judah and Jerusalem represented no exception or interruption to Jehovah's supreme rule, in spite of

29 *Insight on the Scriptures, Vol.* 1 (1988), p. 134.

the break in the royal dynasty of David. The Gentile nations during this period did not rule supremely. Jehovah took action against the Babylonian empire by raising up Cyrus to capture Babylon in 539 B.C.E. (Isaiah 45:1), and later Alexander the Great destroyed the Persian empire.

Further, the expression "lowliest one of mankind" at Daniel 4:17 is no clear indication that Jesus Christ is intended, as Jehovah in his dealings with mankind many times has overthrown mighty and haughty kings and exalted lowly ones.[30] This was stressed centuries later by Mary, the mother of Jesus:

> He [God] has performed mightily with his arm, he has scattered abroad those who are haughty in the intention of their hearts. He has brought down men of power from thrones and *exalted lowly ones*. — Luke 1:51–52, *NW*.

Therefore, when the holy watcher in Nebuchadnezzar's dream announced that "the Most High is Ruler in the kingdom of mankind and that to the one he wants to, he gives it and he sets up over it the lowliest one of mankind," he simply seems to be stating a *universal principle* in Jehovah's dealing with mankind. There is no indication that he is giving a *prophecy* concerning the establishment of the Messianic kingdom with Jesus Christ on the throne. The *theme* of this vision—that the Most High is ruler in the kingdom of mankind—is demonstrated by Jehovah's dealing with the haughty Nebuchadnezzar who through his experience came to realize this universal principle. (Daniel 4:3, 34–37) By reading about Nebuchadnezzar's humiliating experience, people living in every generation may come to realize this same truth.

B-3: The collapsed foundation of the 2,520-year calculation

As was shown in Chapter 1, the calculation that the "seven times" represented a period of 2,520 years is founded upon the so-called "year-day concept."

This concept is no longer accepted as a *general principle* by the Watch Tower Society. It was taken over by Pastor Russell from the Second Adventists, but was abandoned by the Society's second

30 Commenting on the statement at Daniel 4:17 that God gives the kingdom "to the one whom he wants to," the Watch Tower Society states: "We know that this 'one' to whom the Most High chooses to give the 'kingdom' is Christ *Jesus."—True Peace and Security—From What Source?* (Brooklyn, N.Y.: Watchtower Bible and Tract Society, 1973), p. 74.

president, J. F. Rutherford, in the 1920's and early 1930's.[31] The 2,300 evenings and mornings (Dan. 8:14), and the 1,260, 1,290, and 1,335 days (Daniel 12:7,11, 12; Revelation 11:2, 3; 12:6, 14), earlier held to be as many *years,* have since then been interpreted to mean *days* only.

The two texts in the Bible which earlier were quoted in proof of the year-day principle (Numbers 14:34 and Ezekiel 4:6) are no longer understood as stating a *universal principle of interpretation,* although they are still cited in support of this particular 2,520-year calculation. As was shown in Chapter 1, note 2, it is not even likely that the year-day rule should be applied to the "seventy weeks" of Daniel 9:24–27. That prophecy does not speak of days, but "weeks" or, literally, "sevens." So, rather than calling for a conversion of the "weeks" into days and then applying a "year-day principle," the contextual connection with the "seventy years" at verse 2 strongly supports the prevalent conclusion that the angel was simply multiplying those seventy years by seven: "Seven times [or: sevenfold] seventy [years] are decreed."

Even the adherents of the year-day theory themselves find it impossible to be consistent in their application of the supposed "principle" that in biblical time-related prophecies *days* always mean *years.* For example, when God told Noah that "after seven more days, I will send rain on the earth forty days and forty nights" (Genesis 7:4, *NASB),* they do not interpret this to mean that "after seven more *years,* I wil1 send rain on the earth forty *years"* Or when Jonah told the inhabitants of Nineveh that "yet forty days and Nineveh will be overthrown" (Jonah 3:4), they do not understand this to mean that Nineveh should be overthrown after forty *years.* Many other examples could be given.[32]

To apply the year-day principle to the "seven times" of Daniel 4, then, is evidently quite arbitrary, and this is especially true if those doing the applying no longer apply that principle to other prophetic time periods.

Like other adherents of the 2,520-year calculation, the Watch Tower Society argues that the "seven times" (the period of Nebuchadnezzar's madness) are 2,520 days, because at Revelation 12:6, 14 "a time and times and half a time" (3 1/2 times) are equated with 1,260 days. (The validity of this reasoning will be discussed in the section below.) But while the 2,520 days are interpreted to mean a period of 2,520 *years,* the 1,260 days are

31 For a thorough refutation of the year-day concept, see pp. 111–126 of Samuel P. Tregelles , *Remarks on the Prophetic Visions in the Book of Daniel,* originally published in 1852. Reference here is to the seventh edition (London: The Sovereign Grace Advent Testimony, 1965).

32 For additional examples, see Milton S. Terry, *Biblical Hermeneutics* (Grand Rapids: Academic Books, 1974; reprint of the 1883 edition), pp. 386–90.

understood to mean just 1260 literal *days*. As the interpretation of the "seven times" is derived from the three-and-a-half times (1260 days), why is not a consistent interpretation given to both periods? How do we know that the supposed 2520 days mean *years,* but that this is not the case with the 1,260 days?[33]

Obviously there is no real basis for the conclusion that "seven times" mean 2,520 *years*.

B-4: Were the "seven times" really seven years?

Nebuchadnezzar's "seven times" of madness are often understood as a period of seven *years*. However, anyone acquainted with the reign of Nebuchadnezzar knows there are great problems with this understanding. It is difficult to find a period of seven years within his reign of 43 years when he was absent from his throne or inactive as ruler.

Where, then, during Nebuchadnezzar's 43 years of rule, can we find a period of seven years when he was absent from the throne and not involved in royal activities of any kind? The accompanying table on the following page lists the years when the Biblical and extra-Biblical sources show Nebuchadnezzar still actively ruling on his throne.

As can be seen, the documented activities of Nebuchadnezzar appear to exclude an absence from the throne for any period of seven years. The longest period for which we have no evidence of his activity is from his thirty-seventh to his forty-third and last year, a period of about six years. This period ended with his death. It should be remembered, however, that Nebuchadnezzar, after his "seven times" of madness, was re-established on his throne and evidently ruled for some time afterward.—Daniel 4:26, 36.

So what about the "seven times"? Do they necessarily refer to *years,* as is often held?

Actually, the word for "times" in the original Aramaic text of Daniel (sing. *'iddan)* commonly means "time, period, season" and may refer to any fixed and definite period of time.[34] Admittedly, the view that at Daniel chapter four, verses 16, 23, 25, 32 it refers

33 C. T. Russell was at least consistent in claiming that both periods were *year*s, "for if three and a half times are 1260 days (years), seven times will be a period just twice as long, 2520 years."— *Studies in the Scriptures,* Vol. II (originally published in 1889), p. 91.

34 Compare the use of the same word in Daniel 2:8 *("time* is what you men are trying to gain"), 2:9 ("until the *time* itself is changed"), 2:21 ("he is changing *times* and seasons"), 3:5,15 ("at the *time* that you hear the sound"), 7:12 ("there was a lengthening in life given to them for a time and a *season"),* and 7:25 ("they will be given into his hands for a *time,* and *times* and half a *time").*

Documented activity of Nebuchadnezzar's rule

Events	References	N, on the throne	Years B.C.E.
Battle at Carchemish. Invasion	Jer. 46:2; Jer. 25:1; Dan. 1:1f.,	accession-year	605
of Judah and first deportation	BM 21946	accession-year	605/04
Campaign to Hattu	BM 21946	1st year	604/03
N's dream of the image	Dan. 2:1f.	2nd year	603/02
Campaigns to Hattu	BM 21946	2nd–6th years	603–599/98
Building activity of N.	Royal inscription (Berger, AOAT 4:1, p. 108)*	7th year	598/97
Second deportation. Jehoiachin brought to Babylon	2 Ki. 24:11–12; 2 Chron. 36:10; Jer. 52:28; BM 21946	7th year	597
Campaigns to Hattu and Tigris	BM 21946	8th–9th years	597–596/95
Rebellion in N's army. Revolt plans among exiles spread to Judah. Jeremiah's letters to exiles. N. marches to Hattu	BM 21946; Jer. 28:1f.; Jer. 29:1–3, 4–30	10th year	595/94
Campaign to Hattu	BM 21946	11th year	594/93
Building activity of N.	Royal inscription (Berger, AOAT 4:1, p. 108)*	12th year	593/92
Jerusalem besieged for 2.5 years, desolated. Third deportation	2 Ki. 25:1f., Jer. 32:1–2; 52:4–16	15th–18th years	589–87
Ezekiel predicts siege of Tyre	Ez. 26:1, 7	18th year	587
N. besieges Tyre for 13 years	Josephus' Ant. X:xi,1; Ap. 1:21	19th–32nd years	586–573/72
Ezekiel confirms siege ended	Ez. 29:17-18	33rd year	572/71
N. attacks Egypt as predicted	BM 33041 (Jer. 43:10f.; Ez. 29:1–16, 19–20)	37th year	568/67
N. dies. Evil-merodach's accession-year	Jer. 52:31–34; 2 Ki. 25:27–30	43rd year	562/61

*AOAT 4:1 = *Alter Orient and Altes Testament*, Vol. 4:1 (Neukirchen-Vluyn: Neukirchener Verlag, 1973.)

to years is not restricted to the Watch Tower Society. This understanding can be found in ancient sources.

Thus, the *Septuagint* (LXX) version of Daniel translated the word as "years," and so does Josephus in *Antiquities* X:x,6. But the LXX text of Daniel was rejected by early Christians in preference of the Greek version of Theodotion (usually dated to about 180 C.E.) which says "times" (Greek *kairoi),* not "years" in Daniel chapter four.[35]

That some Jews at an early stage interpreted the "times" of Daniel chapter four as "years" can also be seen in the so-called "Prayer of Nabonidus," a fragmentary Aramaic document found among the Dead Sea scrolls at Qumran, Cave 4, and dating from ca. 75–50 B.C.E. This document says that Nabonidus was stricken with a "pernicious inflammation ... for seven years" in the Teman oasis.[36]

What are the other alternatives? Realizing that the literal meaning of the Aramaic word *iddan* is not "year" but "period" or "season," Hippolytus of the third century says that some viewed a "time" as one of the four seasons of the year. Hence "seven seasons" would be less than two years. Bishop Theodoret of the fifth century, however, noted that people of ancient times, such as the Babylonians and Persians, spoke of only *two* seasons a year, summer and winter, the rainless and the rainy seasons.[37] This was also the custom among the Hebrews. In the Bible there are no references to spring and autumn, only to the summer and winter seasons. According to this line of reasoning, the "seven seasons" of Nebuchadnezzar's madness meant three and one-half years.

35 As a number of citations from Daniel in the New Testament agree with Theodotion's Greek text of Daniel against LXX, Theodotion's translation is thought to have been based on an earlier, pre-Christian textual tradition, which may have been either independent of or a revision of LXX.—John J. Collins, *Daniel* (Minneapolis: Fortress Press, 1993), pp. 2–11. See also Peter W. Coxon, "Another look at Nebuchadnezzar's madness," in A. S. van der Woude, *op. cit.* (see note 25 above), pp. 213–14.

36 For a recent reconstruction and translation of the text, see Baruch A. Levine and Anne Robertson in William W. Hallo (ed.), *The Context of Scripture,* Vol. I (Leiden: Brill, 1997), pp. 285–86. Most scholars suppose that the story about the "seven times" of madness originally dealt with Nabonidus and that the "Prayer of Nabonidus" reflects an earlier state of the tradition. The book of Daniel, it is held, attributes the experience to Nebuchadnezzar because he was better known to the Jews. However, there is no evidence in support of this theory, and it is quite as likely that the "Prayer of Nabonidus" is a late, distorted version of Daniel's narrative.—Compare the comments by D. J. Wiseman, *op. cit.* (see note 28 above), pp. 103–105.

37 E, J. Young, *op. cit.* (see note 23 above), p. 105. Dr. H. Neumann confirms that in Mesopotamia there are only two seasons: "a cloudless and dry summer from May to October, and a cloudy and rainy winter from November to April." —Heinz Neumann in *Wiener Zeitschrift für die Kunde des Morgenlandes,* Vol. 85 (Wien 1995), p. 242.

Some of the most highly regarded conservative Bible scholars of recent times, such as Carl F. Keil and Edward J. Young, either reject or feel strong doubts about the theory that the "seven times" of Daniel chapter four refer to seven *years*. The Assyriologist Donald J. Wiseman even suggests that the "seven times" should be understood as "seven months."[38] Any of these last-mentioned viewpoints would be in acceptable agreement with the information we have on the rule of Nebuchadnezzar.

Some, of course, will point to Revelation chapter twelve, arguing that since the 3 1/2 "times" in verse 14 correspond to the 1260 days (= 3 1/2 years) of verse 6, seven times must mean 2520 days, or seven years.

There is, however, no reason to conclude that the way "times" is used in Revelation chapter twelve must automatically apply also in other contexts. The fact remains that, since the Aramaic word *'iddan* simply means "time, period, season," it could refer to periods of different lengths. It does not refer to the same, fixed period everywhere it is used. The context must always decide its meaning. And even if it could be shown that the "time, and times and half a time" at Daniel chapter seven, verse 25, mean three and a half years, this still would not prove that the "seven times" or "periods" *(New American Standard Bible),* or "seasons" *(Rotherham, Tanakh),* at Daniel chapter four, verses 16, 23, 25 and 32, mean "seven years." The two chapters deal with two very different events and periods and therefore should not be confused.

In the discussion above it has been shown that the Gentile times of Luke 21:24 cannot be proved to be an allusion to the "seven times" of Daniel 4. Nor is there any evidence to show that Nebuchadnezzar's "seven times" of madness prefigured another period, amounting to 2,520 years of Gentile dominion. Finally, it was demonstrated that the "seven times" cannot even be proved to mean seven *years*. These identifications are obviously no more than a guesswork without solid foundation in the Bible itself.

38 Donald J. Wiseman in J. D. Douglas (ed.*), New Bible Dictionary, 2nd* edition (Leicester, England: Intervarsity Press, 1982), p. 821. Dr. Wiseman explains that this understanding of *'iddan* at Daniel 4 "arose from my view that a 'month' might be an appropriate 'period' since the nature of Nebuchadrezzar's illness . . . is unlikely to have been a recurrent one."—Letter Wiseman-Jonsson, dated May 28, 1987. Compare Wiseman's discussion of Nebuchadnezzar's illness in B. Palmer (ed.), *Medicine and the Bible* (Exeter: The Paternoster Press, 1986), pp. 26–27.

C. THE SETTING UP OF CHRIST'S KINGDOM

As was pointed out in Chapter 1 of this work, Pastor Russell's predictions for 1914 were not fulfilled. When the First World War ended, the Gentile nations still ruled the earth instead of Christ's Kingdom, and Jerusalem in Palestine was still occupied by a Gentile nation. Evidently, the *time* for the events expected could not be right. But to draw this simple conclusion was not an easy thing. Additionally, *something* had happened: the World War. So it was felt that the time was right after all. Russell's followers, therefore, concluded that they had been expecting the "wrong thing at the right time."[39]

C-1: Failed expectations—wrong things at the right time?

Gradually a new apocalyptic pattern emerged. The World War with the many crises following it came to be regarded merely as a *beginning* of the overthrow of the Gentile nations. In 1922 J. F. Rutherford, the new president of the Society, explained:

> God granted to the Gentiles a lease of dominion for a term of 2520 years, which term or lease ended about August, 1914. Then came forward the Landlord, the rightful Ruler (Ezekiel 21:27), and began ouster proceedings. *It is not to be expected that he would suddenly wipe everything out of existence,* for that is not the way the Lord does things; but that he would overrule the contending elements, causing these to destroy the present order; and that while this is going on he would have his faithful followers give a tremendous witness in the world.[40]

This reminds us of later explanations of the 1934 failure by the Pastoral Bible Institute editors discussed above. The setting up of Christ's kingdom had earlier been seen as a process which began in 1878 and which would culminate in 1914 with the destruction of the Gentile nations.[41] But in 1922 the starting-point of this process was moved forward to 1914 and the overthrow of the Gentile nations was expected to take place in the near future. This new view was presented by J. F. Rutherford at the Cedar Point Convention of September 5–13, 1922 in his address, "The Kingdom of Heaven is at Hand".

39 A. H. Macmillan, *Faith on the March* (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1957), pp. 48–49.

40 *The Watch Tower,* May 1, 1922, p. 139; also published in the booklet *The Bible on Our Lord's Return* (Brooklyn, N.Y.: International Bible Students Association, 1922), pp. 93–94. Emphasis added.

41 See the article "The Setting Up of Christ's Kingdom" in *The Watch Tower* of June 1, 1922, which still has the 1878 date.

Three years later, in the article "Birth of the Nation" in *The Watch Tower,* March 1, 1925, a new interpretation of Revelation 12:1–6 was presented in accordance with the new understanding of the setting up of Christ's kingdom, to the effect that the kingdom had been "born" in heaven in 1914. That year Jesus Christ "took unto himself his great power and began his reign: the nations were angry, and the day of God's wrath began. —Ezekiel 21:27; Revelation 11:17, 18."[42]

C-2: The "downtrodden" city of Jerusalem relocated

But what about the trampling of Jerusalem by the Gentiles? At the end of 1914 the city of Jerusalem was still occupied by a Gentile nation, the Turkish Empire. In an attempt to "explain" this embarrassing fact, Pastor Russell argued that the persecution of the Jews at that time seemed to have practically stopped all around the world, and he saw in this a confirmation of his belief that the Gentile times had expired.[43]

However, in December, 1917, more than one year after Russell's death, an interesting thing happened. On December 9, 1917, the British under General Allenby in alliance with the Arabs captured Jerusalem and thus made an end of the nearly seven-centuries-long Turkish occupation. This event was looked upon by many Christians as a very important sign of the times.[44]

The deliverance of Jerusalem from the Turks in 1917, together with the so-called Balfour declaration of November 2, 1917 which proclaimed that the British Government supported the

42 *The Bible on Our Lord's Return* (1922), p. 93.

43 *The Watch Tower,* November 1, 1914, pp. 329–30; *Reprints,* p. 55–68.

44 Christian commentators of several different denominations regarded this event as a sign of the times. It will be remembered that as early as 1823, John A. Brown, in his *The Even-Tide,* ended the "seven times" in 1917. In his opinion 1917 would see "the full glory of the kingdom of Israel . . . perfected" (Vol. 1, pp. xliii f.) Later in the same century the British expositor Dr. Henry Grattan Guinness, too, pointed forward to 1917 as a very important date: "There can be no question that those who live to see this year 1917 will have reached one of the most important, perhaps the most momentous, of these terminal years of crisis"—Light *for the Last Days,* London, 1886, pp. 342–46.

Aware of these predictions, eight well-known English clergymen, among whom were Dr. G. Campbell Morgan and Dr. G. B. Meyer, issued a manifesto which among other things declared: "FIRST. That the present crisis points towards the close of the times of the Gentiles. . . . FIFTH. That all human schemes of reconstruction must be subsidiary to the second coming of our Lord, because all nations will be subject to his rule." The manifesto was published in the London magazine *Current Opinion* of February 1918 and subsequently republished by other papers throughout the world.

Although this manifesto has been cited several times in Watchtower publications in support of the 1914 date, it was actually issued in support of the 1917 date and resulted from Allenby's "liberation" of Jerusalem in the latter year.

establishment of a Jewish National Home in Palestine, drastically accelerated Jewish immigration to Palestine. Thus, from October, 1922, to the spring of 1929 the Jewish population of Palestine doubled from 83,794 to about 165,000.

At that time Palestine was still administered by a non-Jewish or Gentile nation (England) and the Jews still constituted only a minority (about twenty percent) of the population in Palestine. To all appearances, Palestine and the city of Jerusalem were still controlled by the Gentiles. Yet the Watch Tower Society's president, J. F. Rutherford, in his book *Life,* published in 1929, insisted that the Gentile times spoken of by Jesus at Luke 21:24 had expired in 1914, arguing that the accelerating Jewish immigration to Palestine was the tangible proof of the conclusion that this prophecy had been fulfilled.

But shortly after the publication of *Life,* this whole idea was abandoned; the return of the Jews to the Promised Land was no longer seen as a fulfillment of Bible prophecies. Since 1931 such prophecies have been applied to *spiritual* Israel.[45] The logical consequence of this change could only be that the end of the treading down of Jerusalem was no longer applicable to the *literal* city of Jerusalem:

> The present-day city of Jerusalem over in Palestine is not the city of the Great King Jehovah God, even though Christendom calls certain places over there "holy". That city is doomed to destruction at the end of this world. But the true Jerusalem will live forever as the capital of Jehovah's universal organization. We mean the New Jerusalem, of which Jesus Christ gave a symbolic vision to the apostle John on the isle of Patmos. . . .
>
> Jesus Christ is the "King of kings and Lord of lords" over that true Jerusalem. At the close of the Gentile times in 1914 he was enthroned as acting Ruler in the "city of the great King", Jehovah. Thus, after an interruption of 2,520 years by Gentile powers, Theocratic Government over earth rose again to power in the New Jerusalem, never to be trodden down by the Gentiles.[46]

What, exactly, was this "New Jerusalem"? The Watchtower book *Your Will Be Done On Earth* (1958) explains on page 94:

> Back in 607 B.C. the Jerusalem that was overthrown stood for the kingdom of God because it had the typical throne of Jehovah on which the anointed one of Jehovah sat as his king. Likewise,

45 *The Watch Tower,* 1931, pp. 253–54; J. F. Rutherford, *Vindication, Vol.* II (Brooklyn, N.Y.: Watchtower Bible and Tract Society, 1932), pp. 258, 267–69.

46 *The Watchtower,* November 1, 1949, pp. 330–31.

> the Jerusalem that is trampled upon by worldly nations stands for the kingdom of God. . . . So the end of the trampling down of Jerusalem at the complete fulfillment of the "appointed times of the nations" would mean the rising again of the symbolic Jerusalem, namely, *the kingdom of God.*

Thus the end of the trampling down of Jerusalem was interpreted to mean the installation of Jesus Christ on Jehovah's throne in the *heavenly* Jerusalem in 1914.[47] But this relocation of the "downtrodden Jerusalem" from earth to heaven created other questions, discussed below, which never have been satisfactorily answered.

C-3: Have two "kingdoms of Christ" been set up?

In the publications of the Watch Tower Society it is constantly stressed that Jesus Christ was "enthroned" and his kingdom "set up" or "established" in heaven at the end of the Gentile times in 1914. At that time, it is held, he began to rule "in the midst of his enemies" in fulfillment of Psalm 110:1–2. Thereafter, as an initial action against these enemies, Jesus Christ is thought to have thrown Satan and his demon angels out of heaven and down to the earthly realm, in fulfillment of Revelation 12:1–10.[48]

One problem with this scenario is that a number of texts in the Bible clearly show that Jesus Christ was enthroned in heaven already at the time of his resurrection and exaltation. For example, in his revelation to the apostle John, Jesus said:

> To the one that conquers I will grant to sit down with me on my throne, *even as I conquered and sat down with my Father on his throne.*—Revelation 3:21, *NW.*

That the kingdom of Christ existed already back in the first century is also confirmed by the apostle Paul, who in his letter to the Christians in Colossae stated:

> He [the Father] delivered us from the authority of the darkness and *transferred us into the kingdom of the Son of his love,* by means of whom we have our release by ransom, the forgiveness of our sins. —Colossians 1:13–14, *NW.*

47 See *"Babylon the Great Has Fallen!" God's Kingdom Rules!* (Brooklyn, N.Y.: Watchtower Bible and Tract Society, 1963), pp. 452–53; *"The Nations Shall Know that I Am Jehovah"—How?* (1971), pp. 232–35; *Insight on the Scriptures, Vo1.* 1 (1988), pp. 132–33.

48 Recent presentations of these views may be found, for example, in the books *You Can Live Forever in Paradise on Earth* (1982), pp. 134–41, and *Knowledge That Leads to Everlasting Life* (1995), pp. 90–97. Both books are published by the Watchtower Bible and Tract Society of New York, Inc.

If Jesus Christ was enthroned at his resurrection and exaltation and has been reigning in his heavenly kingdom since then, how can it be claimed that he was enthroned and his kingdom set up *in 1914?*

In order to resolve this problem the Watch Tower Society has been forced to conclude that *two* kingdoms of Christ have been set up: 1) the "Kingdom of the Son of His Love" (Colossians 1:13), which was set up at Christ's resurrection and exaltation, and 2) the "Kingdom of Our Lord and of His Christ" (Revelation 11:15), which is held to have been set up in 1914.

Note how the Watch Tower Society, in its Bible dictionary *Insight on the Scriptures,* attempts to tell the difference between these two "kingdoms of Christ." Commenting on Paul's statement at Colossians 1:13–14 quoted above, this dictionary states:

> Christ's kingdom from Pentecost of 33 CE. onward has been a spiritual one ruling over spiritual Israel, Christians who have been begotten by God's spirit to become the spiritual children of God. (Joh 3:3, 5, 6)[49]

This *first* kingdom of Christ, then, is explained to have been a *limited* kingdom, with Jesus Christ ruling only over his congregation of followers from Pentecost onward.

The *second* kingdom of Christ, on the other hand, is *much greater in scope* and was not set up unti1 1914. In support of this view the above-cited dictionary refers to Revelation 11:15, where the apostle John heard loud voices in heaven proclaiming that, "The kingdom of the world did become the kingdom of our Lord and of his Christ, and he will rule as king forever and ever." (*NW*) In explanation of this vision, the Society's dictionary states:

> This Kingdom is of greater proportions and bigger dimensions than "the kingdom of the Son of his love," spoken of at Colossians 1:13. "The kingdom of the Son of his love" began at Pentecost 33 C.E. and has been over Christ's anointed disciples; "the kingdom of our Lord and of his Christ" is brought forth at the end of "the appointed times of the nations" and is over all mankind on earth.[50]

But even on the supposition that Christ's rule from Pentecost onward was limited to his rule over his anointed disciples

49 *Insight on the Scriptures,* Vol. 2 (1988), p. 169.

50 *Ibid.,* p. 169. Similarly, on page 136 of the book *You Can Live Forever in Paradise on Earth* (1982), the Watch Tower Society refers to "the kingdom of the Son of [God's) love" mentioned at Colossians 1:13 and states: "But this rule, or 'kingdom,' over Christians with the hope of heavenly life *is not the Kingdom government for which Jesus taught his followers to pray."* (Emphasis added.)

("spiritual Israel"), as the Watch Tower Society holds, the consequence of this view is that Christ, as the legal heir to the throne of David, since Pentecost onward has been sitting on the throne of Jehovah (Revelation 3:21) in *heavenly* Jerusalem and ruling over *spiritual* Israel, just as David and his son Solomon were said to be sitting upon the "throne of Jehovah" in *earthly* Jerusalem, reigning over *fleshly* Israel.[51]

In view of this first-century restoration of the "kingdom of David," *how can it be held that 'Jerusalem", understood as being the Kingdom of God, went onto be trodden down by the Gentile nations on earth during the whole subsequent period, from Pentecost onward right up to 1914?*

The Gentile nations, of course, could not "ascend into heaven" (John 3:13) in order to interfere with Christ's rule during this period. Nor can the treading down of "Jerusalem" refer to the persecution of "spiritual Israel" (Christ's followers), as such persecution did not stop in 1914. So what did the treading down of "Jerusalem" really mean, and how did it stop in 1914? In spite of the theory of the two kingdoms of Christ, this question still calls for an answer.

C-4: The universal power of the resurrected Christ

Does the Bible really support the view that there are *two* kingdoms of Christ entrusted him at two different occasions? Was Christ's "first" kingdom limited to a rule over his anointed disciples from Pentecost onward?

This idea seems clearly to be contradicted by a number of Bible passages which emphasize the *universal* scope of the authority given to Jesus Christ at his resurrection and exaltation. Even some time before his ascension Jesus stated to his disciples:

> All authority has been given me in heaven and on the earth. — Matthew 28:18, *NW*.

The past tense, "has been given," shows that Jesus Christ *already at that time was in possession of all authority or power in heaven and*

51 The angel Gabriel told Mary that the son she was to bear "will be called the Son of the Most High; and *the Lord will give him the throne of His father David."* (Luke 1:32, *NASB)* That Christ was given "the throne of his father David" at his resurrection and exaltation was later confirmed by James, the half brother of Jesus, when he at Acts 15:1318 explained to his fellow believers that "the tabernacle of David which has fallen" had been erected again, in fulfillment of the prophecy of Amos 9:11f. As pointed out by Dr. F. F. Bruce, "James' application of the prophecy finds the fulfillment of its first part (the rebuilding of the tabernacle of David) in the resurrection and exaltation of Christ, the Son of David, and the reconstitution of His disciples as the new Israel, and the fulfillment of its second part in the presence of believing Gentiles as well as believing Jews in the Church." — F. F. Bruce, *Commentary an the Book of the Acts* (Grand Rapids, Michigan: Wm. B. Eerdmans Publishing Co., 1980 reprint), p. 310.

on the earth. What additional power, then, could possibly have remained to be given him in 1914?

Jesus' position of power after his resurrection was also accentuated by the apostle Paul at Ephesians 1:20–23:

> He [God] raised him up from the dead and seated him at his right hand in the heavenly places, *far above every government and authority and power and lordship and every name named, not only in this system of things, but also in that to come. He also subjected all things under his feet,* and made him head over all things to the congregation, which is his body, the fullness of him who fills up all things in all. (*NW*)

Notice that Paul in this passage declares that Christ's dominion at that time was not limited to a rule over his congregation only, but embraced "all things," "every government and authority and lordship and every name named." Similarly, at Colossians 2:10 Paul states that Christ "is the head of all government and authority" (*NW*). And at Revelation 1:5 the apostle John sent greetings to "the seven congregations that are in the [district of] Asia" from Jesus Christ, "*The Ruler of the kings of the earth" (NW).*

Strangely enough, the Watch Tower Society, in the article on "Jesus Christ" in its Bible dictionary *Insight on the Scriptures,* seems to *contradict* its idea of a limited kingdom of Christ from Pentecost onward by stating that he since his resurrection "*heads a government of universal domain."* Notice the following remarkable statements on page 61 of Volume 2:

> Following his resurrection, Jesus informed his disciples, "All authority has been given me in heaven and on the earth," thereby showing that he *heads a government of universal domain.* (Mt 28:18) The apostle Paul made clear that Jesus' Father has "left nothing that is not subject to him [Jesus] ," with the evident exception of "the one who subjected all things to him," that is, Jehovah, the Sovereign God. (1 Co. 15:27; Heb 1:1–14; 2:8) Jesus Christ's "name," therefore, is more excellent than that of God's angels, in that his name embraces or stands for *the vast executive authority that Jehovah has placed in him.* (Heb 1:3,4) [Emphasis added.]

If Jesus Christ already at his resurrection and exaltation was given "all authority ... in heaven and on the earth," and if he since then has been "the head of all government and authority" and "the Ruler of the kings of the earth" and therefore, from then on, "heads a government of universal domain" as even the Watch Tower Society admits, how, then, can it be claimed that Christ's kingdom from Pentecost onward was limited to a rule over his

congregation of followers, and that the "kingdom of the world" did not become "the kingdom of our Lord and of his Christ" until the year 1914?

C-5: Waiting "at the right hand of God" for what?

On the last day of his earthly life Jesus explained to the members of the Sanhedrin, the Jewish high court, that his kingdom rule was now due to begin, stating that, *'from now on the Son of man will be sitting at the powerful right hand of God."—Luke* 22:69, *NW*.[52]

That Christ after his resurrection was elevated to "the right hand of God" is repeatedly emphasized by the New Testament writers. The phrase "sitting at the powerful right hand of God" is a reference to Psalm 110:1, a text quoted or alluded to in the New Testament more often than any other passage of the Old Testament.[53] This psalm is consistently interpreted by the New Testament writers as depicting Christ's exaltation to the throne of God after his resurrection.[54] The first two verses say:

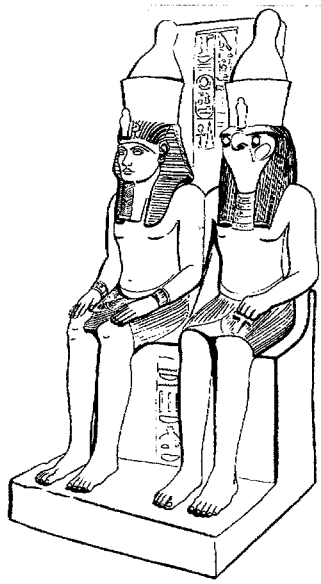
> The utterance of Jehovah to my Lord is: "Sit at my right hand until I place your enemies as a stool for your feet." The rod of your strength Jehovah will send out from Zion, [saying:] "Go subduing in the midst of your enemies"—Psalm 110:1–2, *NW*.

52 The parallel passage at Matthew 26:64 adds another feature to Jesus' statement: "From henceforth you will see the Son of man sitting at the right hand of power and *coming on the clouds of heaven"* (Compare Mark 14:62) The last part of the statement is an allusion to Daniel 7:13–14, where Daniel in his vision saw "with the clouds of the heavens someone like a son of man happened to be coming; and to the Ancient of Days he gained access, and they brought him up close even before that One. And to him there were given rulership and dignity and kingdom". It should be noticed that in this vision the "son of man" did not come from heaven to earth. Rather, his "coming" is in the opposite direction, to the "Ancient of Days" on the heavenly throne, to be given rulership, dignity, and kingdom. This passage, therefore, does not seem to be dealing with Christ's second coming, but rather with his enthronement at his resurrection and exaltation.

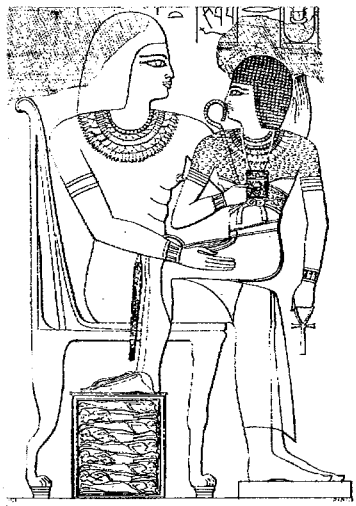
53 Professor Martin Hengel finds that Psalm 110:1 is used in twenty-one passages in the New Testament, seven of which are direct quotations. The passages are: Matt. 22:44; 26:64; Mark 12:36; 14:62; 16:19; Luke 20:42f.; 22:69; Acts 2:33; 2:34f.; 5:31; 7:55f.; Rom. 8:34; 1 Cor. 15:25; Eph. 1:20; Co1.3:1; Heb. 1:3,13; 8:1; 10:12f.; 12:2; and 1 Pet. 3:22. —M. Hengel, *Studies in Early Christology* (Edinburgh: T&T Clark Ltd, 1995), p. 133.

54 To sit "at the right hand of God" obviously means to sit with God *on his throne,* in view of Jesus' statement at Rev. 3:21. This enthronement of Christ is not nullified by the fact that the letter to the Hebrews twice presents him as being seated "at the right hand *of the throne* of God." (Heb. 8:1; 12:2) The language here, of course, is figurative. God is not sitting on a literal throne. At Matthew 5:34 Jesus says that "*heaven . . .* is God's throne." A "throne" is a symbol of *rulership.* Whether Christ is pictured as being seated on God's throne or on a separate throne to the right of it, the meaning is the same, viz., that he is *ruling.* Besides, as Professor Hengel argues, the sense of the text at Heb. 8:1 and 12:2 is "at the right hand *of God on his throne,'* rather than "at the right hand *of the throne of God."—M.* Hengel, *op. cit.,* pp. 142, 148–49. Compare also Revelation 22:1, 3, which speaks of "the throne of God and of the Lamb" as one common throne only.

Thutmosis III (c. 1490-1436 BCE) at the right hand of his god Amon.



Pharaoh Horemheb (c. 1332-1305 BCE) at the right hand of his god Horus.



Amenophis II (c. 1427-01 BCE) and Amenophis III (1391-53 BCE) pictured on Egyptian paintings as enfants on their nurses' laps, with Egypt's enemies placed as a footstool beneath the feet of the future kings.

The image of the king as sitting on the throne of his god was also used in the Biblical world outside the Bible, as was also the image of subjugated enemies being placed as a footstool under his feet. — R. Lepsius, *Denkmäler aus Aegypten und Aetiophien* (Berlin 1849—58), Vol. 5, Bl. 62 and 69a; L. Borchardt, *Statuen und Statuetten von Königen und Privatleuten* (Berlin, 1925), Bl. 93:554; O. Keel, *The Symbolism of the Biblical World* (Winona Lake: Eisenbrauns, 1997), pp. 255, 263.

To overcome the problem created by the Scriptural evidence for Christ's universal rule "in the midst of his enemies" to have begun at the time of his resurrection and exaltation, the Watch Tower Society explains that Christ's sitting "at the right hand of God" means, not that he has been *ruling* from then on, but rather that he has been sitting there *waiting for his rulership to begin.* Support for this view is found in the way Psalm 110:1–2 is referred to at Hebrews 10:12–13:

> When Christ returned to heaven after his resurrection, he did not start ruling then as King of God's government. Rather, there was to be a time of waiting, as the apostle Paul explains: "This man [Jesus Christ] offered one sacrifice for sins perpetually and sat down at the right hand of *God, from then on awaiting* until his enemies should be placed as a stool for his feet." (Hebrews 10:12, 13) When the time came for Christ to begin to rule, Jehovah told him: "Go subduing [or, conquering] in the midst of your enemies."[55]

This explanation of the word "awaiting" at Hebrews 10:12–13, however, creates other problems. In his outline of the reign of Christ at 1 Corinthians 15:24–28, the apostle Paul concludes by stating that "when all things will have been subjected to him [Christ], then the Son himself will also subject himself to the One who subjected all things to him, that God may be all things to everyone." This statement gives rise to the following question:

1. If Christ would have to wait until God had put all enemies under his feet *before his rulership could begin,* and if he then, "when all things will have been subjected to him," would hand over the kingdom to God, *what becomes of his reign?* When the time has come for him to start ruling, it is time for him to hand over the kingdom to God!

Another question occasioned by the Watch Tower Society's explanation is this:

2. If Christ could not *start ruling* until God had placed all his enemies as a stool for his feet, and if Christ's rule began in 1914, how can it be held that all enemies—including "the last enemy, death" (1 Corinthians 15:25)—had been put under his feet at that time?

55 *You Can Live Forever in Paradise on Earth* (1982), pp. 136–37. The more recent book *Knowledge That Leads to Everlasting Life* (Brooklyn, N.Y.: Watchtower Bible and Tract Society of New York, Inc., 1995), similarly explains that Christ's sitting at the right hand of God "indicates that *Jesus' rulership would not begin immediately after his ascension to heaven.* Rather, he would wait" for this rulership to begin, that is, until 1914. (Pages 96–97. Emphasis added.)

Strangely, the Watch Tower Society admits that these enemies *were still active* at the time of Christ's enthronement in 1914, so that his rule began "in the midst of his enemies." In fact, his very first action as king is stated to have been an attack on his chief enemies, Satan and his angels, whom he is supposed to have thrown out of heaven in 1914![56]

A third question to ask, therefore, is:

3. If Christ could not *start ruling* until God had put all his enemies *under his feet,* how can his rule have begun "in the midst of his enemies," and why did he have to start his reign with a war against them?

Obviously, an interpretation that is so patently inconsistent cannot be correct. Christ's "awaiting" at the right hand of God cannot have been a waiting for his rulership *to begin.* Instead, as shown by other parallel passages, it has been a waiting for his rule "in the midst of his enemies" *to end,* to reach its conclusive stage.

Christ's sitting at the right hand of God cannot have been a period of passively waiting for God to put his enemies under his feet. To be sure, God is repeatedly pictured as the one who puts the enemies under the feet of Christ. But as shown already at Psalm 110:12, it is Christ himself who takes action against these enemies, though in the power given him by God. Jehovah's inviting him to sit down at his right hand is followed by the words:

> The rod of your strength Jehovah will send out from Zion,[saying:] '*Go subduing in the midst of your enemies.*'

The text clearly indicates that this active ruling in the midst of the enemies would begin as soon as Christ had sat down at the right hand of God, not after a waiting period of some 1900 years. Christ's "waiting," therefore, is best explained as *his looking forward with expectation to the end result of his own active exercise of rule,* the final and complete victory over his enemies.[57]

This is evidently also how the apostle Paul understood Christ's sitting at the right hand of God, namely, as a period of active reigning on his part until he has put all enemies under his feet. In his first letter to the Corinthians, Paul explains:

> Then comes the end, when he hands over the kingdom to God the Father, *after he has destroyed every ruler and every authority and power.*

56 *You Can Live Forever in Paradise on Earth* (1982), pp. 136–38, 141.

57 The Greek word for "awaiting" at Hebrews 10:13, *ekdechomai,* means to "await, wait for, expect."—Colin Brown (ed.), *The New International Dictionary of New Testament Theology,* Vol. 2 (Exeter: The Paternoster Press, 1976), pp. 244–245.

> *For he must reign until he has put all his enemies under his feet.* —1 Corinthians 15:24–25, *NRSV*.

Notice that Paul is saying that Christ must reign *until—not from the time when—the* enemies have been put under his feet. According to Paul, Christ has been ruling as king ever since his resurrection and exaltation. Christ's enemies, of course, existed also at that time. His reign from that time onward, therefore, of necessity has been a ruling "in the midst of his enemies."

Paul's statement indicates that the very purpose of Christ's reign is to conquer and subjugate these enemies. When this purpose has been accomplished, he is to hand over the kingdom to God. As Bible commentator T. C. Edwards aptly remarks in his comment on this passage:

> This verse means that Christ reigns until He has put, after long protracted warfare, all enemies under His feet. The reign of Christ, therefore, is not a millennium of peace, but a perpetual conflict ending in a final triumph.[58]

Thus, invested with "all authority in heaven and on the earth," Christ has been *ruling,* even "*subduing* in the midst of his enemies," ever since his resurrection and exaltation to the throne of God. Who are these "enemies" and in what way has Christ been "subduing" them since then?

C-6: Ruling "in the midst of his enemies"

At Psalm 110:5–6 the enemies to be subjugated are portrayed as earthly kings and nations:

> Jehovah himself at your right hand will certainly break kings to pieces on the day of his anger. He will execute judgement among the nations; he will cause a fullness of dead bodies. He will certainly break to pieces the head one over a populous land.[59]

58 T. C. Edwards, *Commentary on the First Corinthians* (Minneapolis: Klock and Klock, 1979; reprint of the 1885 edition), p. 417.

59 Daniel, too, in explaining Nebuchadnezzar's dream of the image, pictures the enemies of God's kingdom as earthly kingdoms. The four metals of the image are explained to mean four successive kingdoms or empires, starting with Nebuchadnezzar's own kingdom. (Dan. 2:36–43) Then in verse 44 Daniel states that God's kingdom would be set up "in the days of *those* kings." Contextually, "those kings" can only be a reference to the kings existing at the time of the *fourth* kingdom described in the preceding verses (40–43). This supports the identification of the fourth kingdom with *Rogme,* which held power at the time of the setting up of Christ's kingdom. As Daniel further explains, God's kingdom would then "crush and put an end to all these kingdoms." As this evidently is a parallel to Christ's "subduing in amidst his enemies" following his enthronement at the right hand of God, as described in Psalm 110 and the New Testament, the "crushing" of the kingdoms should be understood as *a protracted* warfare.

In the New Testament, however, the attention is turned from the visible enemies to the hostile powers of the spiritual world. Undoubtedly, the reason for this is that destruction of earthly kings and nations hostile to Christ's kingdom will not free the universe from the real enemies—the spiritual powers, who by means of sin and its consequence, death, keep men in slavery. As Paul explains, our wrestling is "not against blood and flesh, but against *the governments, against the authorities, against the world rulers of this darkness, against the wicked spirit forces in the heavenly places."*—Ephesians 6:12, *NW*.

It is these spiritual powers that the New Testament writers, at 1 Corinthians 15:24–26 and elsewhere, identify as Christ's primary enemies, which he has been combatting and finally will bring "to nothing."[60]

Empowered with "all authority in heaven and on earth" it would, of course, have been an easy matter for Christ to instantly bring to nothing all these hostile powers. Some Bible passages actually present the warfare as already won at Christ's resurrection and exaltation, and the powers as already conquered and subjected. (Colossians 2:15; 1 Peter 3:22) Such language, however, is evidently used to describe Christ's all-embracing power and elevated position since his resurrection, "far above every government and authority and power." (Ephesians 1:21–22) As the author of the letter to the Hebrews clarifies, there is more involved, as "we do not yet see all things in subjection to him."—Hebrews 2:8, *NW*.

If Christ's principal enemies are the hostile spiritual powers, his "subduing" in amidst them can hardly mean that he is subjugating them in a protracted *physical* or *literal* warfare. As explained by the apostle Paul, Satan, "the ruler of the authority of the air, the spirit that now operates in the sons of disobedience," is able to hold men in slavery only because of their trespasses and sins. (Ephesians 2:1–2, *NW*) Through Christ's death, however, God provided a "release by ransom, the forgiveness of our sins," by which it was made possible for man to be "delivered . . . from the authority of the darkness and transferred . . . into the kingdom of the Son of his love."—Colossians 1:13–14, *NW*.

Throughout the centuries, millions upon millions of people, by their faith in Christ have been delivered from the "authority of

60 According to Colossians 1:15–16, the spiritual powers were originally created by means of Christ. Later a number of them, headed by Satan, "the ruler of the authority of the air," "did not keep their original position" but became enemies of God. (Judea, verse 6)—Compare Dr. G. Delling's discussion of these powers in G. Kittel (ed.), *Theological Dictionary of the New Testament,* Vol. 1 (Grand Rapids: Wm. B. Eerdmans Publ. Co., 1964), pp. 482–84.

darkness". By such conquests "in amidst his enemies" Christ's kingdom has been increasing and truly been proved to be victorious. The Bible, therefore, presents Christ's death for our sins as a turning-point for mankind and as a decisive victory over Satan, the head of the hostile powers in the spiritual world. (Hebrews 2:14–15) Though still active, their power and influence since then are restricted and curbed. They have not been able to prevent the good news about Jesus Christ to reach growing numbers of people around the world, making it possible for them to be delivered from the "authority of darkness" and brought under the authority of Christ.

C-7: The "casting out" of Satan

In the metaphorical language of the Bible, someone's elevation to a high position may be spoken of as his being "exalted to heaven" or "to the skies," where he may be likened to a shining star.[61] Correspondingly, someone's humiliation, defeat or fall from a high position may be likened to a throwing down or falling "from heaven."[62] In his prediction of the fall of the proud and arrogant king of Babylon, Isaiah the prophet used this imagery:

> O how you have fallen from heaven, you shining one, son of the dawn! . . . As for you, you have said in your heart, "To the heavens I shall go up. Above the stars of God I shall lift up my throne, and I shall sit down upon the mountain of meeting, in the remotest parts of the north. I shall go up above the high places of the clouds; I shall make myself resemble the Most High" However, down to Sheol you will be brought, to the remotest parts of the pit. —Isaiah 14:12–15 , *NW*.[63]

Jesus, too, used similar language in speaking of the town of Capernaum, which he had chosen as his dwelling-place and where he had performed many of his miracles. (Matthew 4:13–16) This, however, would not become a reason for the town to boast:

> And you, Capernaum, will you perhaps be exalted to heaven? Down to Hades you will come! —Luke 10:15, *NW*.

61 Similarly, in the English language we may speak of someone being "praised to the skies."

62 The same metaphors are also found in extra-Biblical sources from ancient times. For example, Cicero and Horace (1st century B.C.E.) both likened a fall from a great political height to a "fall from heaven."—See Edward J. Young, *The Book of Isaiah* (Grand Rapids: Wm. B. Eerdmans Publ. Co., 2nd ed. 1972), p. 440, note 77.

63 Compare Daniel 8:9–12, which uses the same figurative language in describing the presumptuous actions of the "little horn," usually understood as referring to the attempt of the Seleucid king Antiochus IV Epiphanes (175–164 B.C.E.) to root out the worship of Jehovah at the temple of the Jews.

Another example of this manner of speech is found in the subsequent verses, which tell of the seventy disciples sent out by Jesus, who now returned with joy, saying: "Lord, even the demons are made subject to us by the use of your name." Their joyful report was evidently owing to their success in expelling demons, thanks to the power bestowed upon them by Jesus at his sending them out. (Luke 10:1, 19) In answer, Jesus said: "I began to behold Satan already fallen like a lightning from heaven"—Luke 10:17–18, *NW*.

It does not seem likely that Jesus meant he saw Satan literally falling from heaven. Rather, his statement vividly expressed the excitement he felt at the disciples' report, as he knew that their successful ministry (as well as his own) portended the imminent fall of Satan from his position of power.

That the death, resurrection and exaltation of Jesus Christ would mean a decisive defeat for Satan is also indicated by what he said to the Jews at his arrival in Jerusalem a few days before his death:

> Now there is a judging of this world; *now the ruler of this world will be cast out.*—John 12:31, *NW*.

It is evidently this victory over Satan and his angels that is depicted in symbolic scenes at Revelation 12:1–12. In a vision the

20 THE WATCHTOWER — MAY 1, 1981

The woman arrayed with the sun, the seven-headed dragon, and the child caught away to the throne of God as pictured in *The Watchtower* magazine of May 1, 1981, page 20. According to the present Watch Tower teaching, this prophetic scene was fulfilled in 1914, when Christ's kingdom (the child) is said to have been established (born) in heaven by "God's heavenly organization" (the woman), despite the effort of Satan (the dragon) to prevent Christ's enthronement.

apostle John saw "in heaven" a pregnant woman, "arrayed with the sun, and the moon was under her feet, and on her head was a crown of twelve stars." A great seven-headed dragon, later identified as "the original serpent, the one called Devil and Satan," was seen standing before the woman ready to devour her child. The woman "gave birth to a son, a male, who is to shepherd all the nations with an iron rod. And her child *was caught away to God and to his throne."*—Revelation 12:1–5, *NW*.

This cannot possibly picture the setting up of Christ's kingdom in heaven *in 1914,* as the Watch Tower Society holds. How could Christ's kingdom have been so weak in 1914 that it ran the risk of being devoured by Satan and therefore had to be "caught away" from his gaping jaws to God's throne? Such a view is in the most pointed contrast to the New Testament teaching that Christ ever since his resurrection is in possession of "all authority in heaven and on earth" and is exalted "far above every government and authority and power and lordship."—Matthew 28:18; Ephesians 1:21, *NW*.

There was only one time when Jesus Christ apparently was in such a vulnerable situation that Satan felt he could "devour" him, and that was during his earthly life. It was during this period that Satan attempted to thwart the "birth" of Christ as the ruler of the world. From the child-murders in Bethlehem to Jesus' final execution under Pontius Pilate, Jesus was his chief target. Satan did not succeed, however, as Christ was resurrected and "caught away to God and to his throne."

As has often been noticed, the presentation of Christ's enthronement as a "birth" at Revelation 12:5 is an allusion to Psalm 2:6–9:

> "I, even I, have installed my king upon Zion, my holy mountain." Let me refer to the decree of Jehovah; He has said to me: "You are my son; I, today, I have become your father. Ask of me, that I may give nations as your inheritance and the end of the earth as your own possession. You will break them with an iron scepter, as though a potter's vessel you will dash them to pieces." *(NW)*

The New Testament writers repeatedly apply this psalm to Christ's exaltation to the right hand of God. (Acts 13:32–33;

64 Notice also how the "wrath" of "the kings of the earth" against "Jehovah and against his anointed one" at Psalm 2:1–3 is directly applied by the apostle Peter at Acts 4:25–28 to the actions taken against Jesus by the Jewish and Roman authorities. The same passage is also alluded to at Revelation 11:15–18, which first refers to the beginning of Christ's universal reign in the midst of his wrathful enemies and then about God's "wrath" upon these enemies.

Romans 1:4; Hebrews 1:5; 5:5)[64] This Messianic psalm also, like Revelation 12:5, speaks of Christ as been given the power to crush the nations "with an iron scepter."[65]

At Revelation 12:7–12 another scene "in heaven" is presented to John, a war scene: "Michael and his angels battled with the dragon, and the dragon and its angels battled" with them. The battle ended in a complete defeat for Satan and his angels:

> So down the great dragon was hurled, the original serpent, the one called Devil and Satan, who is misleading the entire inhabited earth; he was hurled down to the earth, and his angels were hurled down with him. And I heard a loud voice in heaven say: "Now have come to pass the salvation and the power and the kingdom of our God and the authority of his Christ, because the accuser of our brothers has been hurled down, who accuses them day and night before our God."—Revelation 12:9–10, *NW*.

The exclamation following the "casting out" of Satan and his angels, that "now has come to pass the salvation and the power and the kingdom of our God and the authority of his Christ," clearly points to the time of the death, resurrection and exaltation of Christ, who at that time was given all authority in heaven and on earth.

That the "war in heaven" hardly is meant to be taken as a *literal* war is indicated by the subsequent verses. When Satan had been hurled down to the earth, he persecuted the heavenly "woman" and then "went off to *wage war* with the remaining ones of her seed" who "have the work of bearing witness to Jesus" (Revelation 12:13–17). Verse 11 states that followers of Christ who became martyrs in this war "conquered him [Satan] because of the blood of the Lamb and because of the word of their witnessing".

This explains the nature of the "war": Through his death as a sacrificial lamb, Christ conquered Satan and brought about his "fall from heaven". Christian martyrs are shown to be partakers in this victory, being enabled to conquer Satan "because of the blood of the Lamb." Satan, the "accuser," is no longer able to accuse them "day and night before our God" because, through the death of Christ, their sins are forgiven. To all appearances, then, the "war in heaven" is a figurative presentation of Christ's victory over Satan through his sacrificial death as a Lamb. Obviously, this "war" has nothing to do with the year 1914.

65 As Christ explained to the congregation in Thyatira, he was already at that time in possession of this "iron rod" and could, therefore, promise to share his "authority over the nations" with the one "that conquers and observes my deeds down to the end," —Revelation 2:26–27, *NW*.

As was shown above, the failed prediction that the trampling down of Jerusalem would end in 1914 necessitated a reinterpretation of this idea. When the year 1914 had passed and the city of Jerusalem continued to be controlled by Gentile nations, the Watch Tower Society finally changed the location to *heavenly* Jerusalem, arguing that the trampling down ended by the setting up of Christ's kingdom *in heaven* in 1914.

This idea, however, was shown to be contradicted by several texts in the Bible, which unequivocally establish that Christ's universal kingdom was set up at his resurrection and exaltation, when he also began to rule "in the midst of his enemies."

Finally, the claim that Satan was hurled down from heaven in 1914 was examined and found to be biblically untenable. The Bible brings it out clearly that the "fall of Satan" was occasioned by Christ's death and resurrection.

Thus, a number of events that the Watch Tower Society claims to have taken place in 1914 are actually shown by the Bible to have occurred at Christ's death, resurrection, and exaltation.

What, then, about 1914? Does this year have any prophetic meaning at all?

D. 1914 IN PERSPECTIVE

As discussed in Chapter 1, the upheavals in Europe and other parts of the world brought about by the French Revolution and the Napoleonic Wars impelled many to believe that the "time of the end" had begun in 1798 or thereabouts, and that Christ would return before the end of that generation. Numerous schedules for the end-time events were worked out, which later on either had to be scrapped or revised.

When, finally, the nineteenth century was gone and the chaotic events that inaugurated that century became increasingly remote, the prophetic significance attached to the period faded away and was soon forgotten by most people.

The chaotic events of 1914–18, too, now belong to the early part of a past century. Is it possible that the interpretations attached to the 1914 date will also fade away and finally be abandoned and forgottten? There are reasons to believe that this date will not so easily be done away with.

It is not just a question of an erroneous chronology that has to be corrected. The unique claims of the Watch Tower movement are closely connected with the year 1914.

If the leaders of the Watch Tower organization would admit that Christ's kingdom *was not* set up in 1914 and that Christ *did not* come invisibly that year, they would also have to admit that Christ *did not* make any specific inspection of the Christian denominations at that time and *did not* appoint the members of the Russellite movement "over his domestics" in 1919. Then they would have to admit that their claim of being God's sole "channel" and "mouthpiece" on earth *is false,* and that they for almost a whole century have appeared on the world scene *in a false role with a false message.*

So much of the movement's identity is invested in the 1914 date that it would be an unthinkable step to admit that the sophisticated system of prophetic explanations infused into that date is nothing but a pipe dream. To openly confess this would amount to theological suicide. It's hardly likely that the present leaders of the organization are prepared to undercut their own power base by a frank admission of abject human failure.

Besides, the Watch Tower Society insists that not only its *chronology,* but also the *events* since 1914 prove that this date marked the beginning of the "time of the end."[66] Referring to Jesus' prophecy at Matthew 24, it is held that wars, famines, pestilences, earthquakes, lawlessness, and other calamities since 1914 constitute the "sign" of Christ's "invisible presence" since that year. Although it is admitted that earlier generations, too, have had their share of such calamities, the Watch Tower Society claims that they have been increasing *on an unprecedented scale* since 1914. Is this true?

To be able to check if this claim is correct, it is necessary to examine the extent of these calamities in earlier centuries, something that so far has never been done in the Watchtower publications. As most people to a great extent are strangers to the past, they are usually easy to convince that the period since 1914 has been more disastrous than earlier periods. Most people may find it difficult to believe that this conclusion *is disproved by a careful examination of the extent of the calamities in the past.*

An examination of history shows that most of the calamities mentioned by Jesus at Matthew 24 *have not* increased since 1914, and that some of them, such as famines and pestilences, even have

66 On p. 95 of the book *Reasoning from the Scriptures* (1985) the Watch Tower Society summarizes these "two lines of evidence" as follows: "Why do Jehovah's Witnesses say that God's Kingdom was established in 1914? *Two lines of evidence point to that year:* (1) Bible chronology and (2) the events since 1914 in fulfillment of prophecy."

decreased markedly since that year! The historical evidence of this is discussed in the work *The Sign of the Last Days—When?*[67]

If 1914 did not mark the end of the Gentile times, nor the beginning of Christ's invisible presence, why did the First World War break out at a date predicted thirty-nine years in advance? This may seem very remarkable. But it must first be remembered that none of the things predicted to occur on that date actually happened. Secondly, an endless number of dates have been set for the second coming of Christ, and also for the end of the Gentile times. A predicted date sometimes *accidentally* happens to coincide with some important historical event, although the event itself was not predicted. Such a coincidence may be almost unavoidable if *nearly every year* during a certain period have been pointed to in advance by various expositors!

Of the many dates fixed for the expiration of the Gentile times, some were put very near to the 1914 date: 1915 (Guinness, 1886), 1917 (J. A. Brown, 1823), 1918 (Bickersteth, 1850), 1919 (Habershon, 1844), 1922 *(The Prophetic Times,* December 1870), and 1923 (Guinness, 1886).[68]

The Watch Tower Society made many predictions regarding 1914, but the outbreak of a major war in Europe was not one of them. It did not lead to the "universal anarchy" that *had* been predicted. That a major event happened to take place in that year is not remarkable. Somewhat more remarkable is when a predicted date produces an event that *does* have some apparent relation to the events foretold for the date in question. This, too, has happened. For example, 1917 would, according to John Aquila Brown in 1823, see "the full glory of the kingdom of Israel . . . perfected."[69] Although this did not happen in 1917, an important step was taken that year toward the establishment of the state of Israel.[70]

67 C. O. Jonsson & W. Herbst, *The Sign of the Last Days—When?* (Atlanta: Commentary Press, 1987). xv+271 pages. Available from Commentary Press, P.O. Box 43532, Atlanta, Georgia 30336, USA.

68 See Table 2 of Chapter 1.

69 See Chapter 1, note 24.

70 See note 44 above. Another example is the predictions that pointed forward to 1941 as the culmination of the "time of trouble." A number of expositors of the prophecies, including John Bacon (in 1799), George Stanley Faber (in 1811), Edward D. Griffin (in 1813), Joseph Emerson (in 1818), George Duffield (in 1842), and E. B. Elliott (in 1862), ended the 1260 year-days in 1866 and the 1335 year-days in 1941, arguing that the "time of the end" was a period of 75 years (the difference between 1335 and 1260). This "time of trouble" would culminate in 1941 and be followed by the millennium. 1941 was certainly a "time of trouble" as it was in this year that the United States joined the war that had started in 1939 and it was turned into a world war. The millennium, however, did not follow. — See LeRoy Edwin Froom, *The Prophetic Faith of Our Fathers,* Vol. III (Washington, D.C.: Review and Herald, 1946), pp. 721–22; Vol. IV (1954), pp. 73, 105–06, 174, 262, 337.

More remarkable still was Robert Fleming's prediction that the French monarchy would fall towards the end of the eighteenth century, a prediction made *nearly a hundred years prior to that event!*

Fleming's book *The Rise and Fall of Papacy* was first published in 1701. Commenting upon the fourth vial at Revelation 16:8–9, he identifies the "sun" as the Papacy, and France as instrumental in pouring out the fourth vial. After that, France itself will be humbled:

> We may justly suppose that *the French monarchy,* after it has scorched others, will itself consume by doing so—its fire, and that which is the fuel that maintains it, wasting insensibly, till it be exhausted at last towards the end of this century.[71]
>
> I cannot but hope that some new mortification of the chief supporters of Antichrist will then happen; and perhaps the French monarchy may begin to be considerably humbled about that time; that whereas the present French king takes the sun for his emblem, and this for his motto, "Nec pluribus impar," he may at length, or rather his successors, and the *monarchy itself (at least before the year 1794)* be forced to acknowledge that, in respect to neighbouring potentates, he is even "Singulis impar." But as to the expiration of this vial, I do fear it will not be until the year 1794.[72]

Shortly after the Republic had been proclaimed in 1792, when the horrors of the French Revolution were at their most extreme and Louis XVI was about to die on the scaffold, Fleming's remarkable "predictions" were recalled to memory. Thus his book began to be reprinted both in England and America. The sensation his predictions produced was great and caused much excitement; and their (partial) fulfillment was a strong incentive to increased study of biblical prophecies after the French Revolution.

Fleming's calculation of the 1,260 year-days (552–1794) was taken over by many others, although the termination date for them was soon changed by many from 1794 to 1798, the year when the Pope was deposed as ruler of the Papal States and banished by French troops. Thus the 1798 date came to be regarded as marking the beginning of the "time of the end" by Adventist groups. The calculation was later adopted also by C. T. Russell and his followers

71 Robert Fleming, Jr., *The Rise and Fall of Papacy* (London, 1849; reprint of the 1701 edition), p.68. Emphasis added.

72 *1bid.,* p. 64. Emphasis added.

but changed slightly (in the 1880's) to the following year, 1799. The Seventh-Day Adventists still believe that the "time of the end" began in 1798.

Should not "fulfilled" predictions of this kind help us to take a more sober view of the 1914 date?

In Chapters 3 and 4 of this work much strong evidence was presented against the 607 B.C.E. date as the year of the destruction of Jerusalem and the starting-point of the 2,520 year Gentile times calculation.

In Chapter 5 it was demonstrated that the seventy-year prophecy is in good agreement with the 587 B.C.E. date for the fall of Jerusalem to Nebuchadnezzar. Thus, the 2,520 years *could not have ended in 1914*.

Then, in this chapter, it has been shown that a change of the expiration date of those times from 1914 to 1934 resulted in just another failed prophecy. Next, the question was raised, "Is the 2,520-year calculation really founded on a sound biblical basis?" The examination that followed demonstrated it is not. Finally, the reevaluation of the meaning of the 1914 date in the Watch Tower publications since 1922 was examined and found to be deficient.

For all these reasons, should not the 1914 date be wholly and entirely discarded as the pivotal point in the application of Bible prophecies to our time? The answer is a resounding "YES!"

E. SOME NOTES ON THE "GENTILE TIMES" OF LUKE 21:24

What, then, about the period called "times of the Gentiles"? If it does not refer to a period of 2,520 years , to what period may this expression refer?

The phrase "times of the Gentiles" ("appointed times of the nations," *NW*) occurs in the lengthy prophecy of Jesus known as the *Olivet discourse*. This discourse is recorded by all the three Synoptics (Matthew 24, Mark 13, and Luke 21). Only Luke, however, uses the expression "times of Gentiles" *(kairoí ethnôn)*. The phrase is used in connection with Jesus' prediction of the coming judgment upon Jerusalem and the Jewish nation. Stating that there would be "great distress in the land and wrath against this people," Jesus went on to explain how this "wrath" would be vented on the people:

> They will fall by the sword and will be taken as prisoners to all the nations. Jerusalem will be trampled on by the Gentiles until *the times of the Gentiles (kairoí ethnôn)* are fulfilled. — Luke 21:24, *NIV*.

Following normal English usage, translators have usually employed the definite article when rendering the words *kairoí ethnôn as, "the* times of *the* Gentiles." In Greek, the use of the definite article would point to a definite and well-known period. Since, however, the definite article is not found in the Greek text, the phrase "times of Gentiles" can refer to an imprecise period rather than one specific period already known to the readers (or listeners).

The words *kairoí ethnôn* have been variously interpreted throughout the centuries. Bible commentator Dr. Alfred Plummer observed:

> The "seasons of the Gentiles" or "opportunities of the Gentiles" cannot be interpreted with certainty. Either (1) *Seasons* for executing the Divine judgements; or (2) for lording it over Israel; or (3) for existing as Gentiles; or (4) for themselves becoming subject to Divine judgements; or (5) *Opportunities* of turning to God; or (6) of possessing the privileges which the Jews had forfeited. The first and last are best, and they are not mutually exclusive.[73]

A few comments may be necessary to clarify what may be implied in each of these alternatives:

(1) Seasons for executing the divine judgments

A number of expositors understand the "times of Gentiles" as the period allotted to the Gentile armies of Rome for executing the divine judgment upon the Jewish nation and its capital. As the period required for crushing the Jewish rebellion and recapturing Jerusalem lasted for about three and a half years—from the arrival of Vespasian's armies in Galilee in the spring of 67 until the desolation of Jerusalem by Titus' armies in the autumn of 70 C.E.—these expositors usually also equate the "times of Gentiles" with the "42 months" of Revelation 11:2, during which period the Gentiles would "trample on the holy city."[74]

(2) Seasons for lording it over Israel

In this view the "times of Gentiles" are understood as referring to the period of Gentile domination of Jerusalem, dating either from 70 C.E. or from an earlier point of time.

73 Alfred Plummer, *A Critical and Exegetical Commentary on the Gospel according to S. Luke*. International Critical Commentary (Edinburgh: T. & T. Clark, 1896), p. 483.

74 Dr. Milton S. Terry, for example, who adopted this view, states: "These 'times of the Gentiles' are obviously the period allotted to the Gentiles to tread down Jerusalem, and those times are fulfilled as soon as the nations shall have accomplished their work of treading down the holy city."—M. S. Terry, *Biblical Apocalyptics* (Grand Rapids, Michigan: Baker Book House, 1988. Reprint of the 1898 edition), p. 367.

It is certainly true that Jerusalem, after the destruction of the city in the year 70 C.E., was controlled by a successive number of non-Jewish nations: Rome (up to 614 C.E.), Persia (up to 628 C.E.), the Byzantine Empire (up to 638 C.E.), the Saracen Empire (up to 1073 C.E.), the Seljuks (up to 1099), the Christian Crusader Kingdom (up to 1291 C.E., interrupted by brief periods of Egyptian control), Egypt (up to 1517 C.E.), Turkey (up to 1917 C.E.), Great Britain (up to 1948 C.E.), and Jordan (up to 1967, when Israel gained control of the old walled city of Jerusalem).[75]

Many expositors regard this long period of Gentile domination as the "times of Gentiles," or at least as a part of this period, arguing that the restoration of the state of Israel marks the end of the "times of Gentiles." For this reason, many of these expositors believe that the "times of Gentiles" ended either in 1948 or in 1967.[76]

(3) Seasons for existing as Gentiles

According to this view, Jesus was saying that Jerusalem would be trampled upon by Gentile nations as long as there are any Gentile nations on earth. The "times of Gentiles" are simply regarded as referring to the whole period of human history during which there have been and will be nations on earth.

If the Jews can be said to have resumed full control of Jerusalem in 1967, it has to be concluded that the Gentile nations have continued to exist on earth after the end of the "Gentile times." This, of course, would invalidate the view under discussion.

However, it may also be argued that, although the Jews have been in control of Jerusalem since 1967, the most central part of the city, the old temple site, is still in the hands of the Arabs, and this site is still occupied by the Muslim "Dome of the Rock" edifice. For this reason it may be held that Jerusalem is still being "trampled on" or desecrated by "Gentiles."

75 A detailed history of the long period of foreign control of Jerusalem is included in Karen Armstrong, Jerusalem. *One City, Three Faiths* (New York: Alfred A. Knopf, Inc., 1996).

76 An excellent overview of the applications of Luke 21:24 and other Biblical prophecies given by various expositors to Israel's conquest of Jerusalem in 1967 and the subsequent events is found in Dwight Wilson, *Armageddon Now!* (Tyler, Texas: Institute for Christian Economics, 1991; reprint of the 1977 edition), pp. 188–214. An update since 1977 is included in the Foreword on pp. xxv–xlii. A very thorough discussion of the various aspects of the significance of Jerusalem in Jesus' prophecy can be found in the book *Jesus and the Holy City,* by P. W. L. Walker (Grand Rapids: Eerdmann's, 1996).

(4) seasons for the Gentiles becoming subject to divine judgments

Advocates of this view argue that the "times of Gentiles" refer to the period for a judgment of the Gentile nations. This period, therefore, is still future. As the Roman war against the Jews in the period 67–70 C.E. was a time for the judgment of the Jewish nation, so there will also be a time for the judgment of the Gentile nations. Until these "times of Gentiles" arrive, the Gentiles will continue to trample on Jerusalem.[77]

(5) Opportunities of turning to God

Those holding this view connect the "times of Gentiles" with Paul's statement at Romans 11:25 that "a partial hardening has happened to Israel until *the fullness of Gentiles* has come in" *(NASB).* It is argued that the "times of Gentiles" are related to this "fullness of Gentiles" and refer to the times of Gentile mission. This understanding evidently implies that the "times of Gentiles" began with the conversion of Cornelius. (Acts 10:1–48) These times of Gentile mission, as well as the times of trampling on Jerusalem by Gentile nations, wil1 continue "until the fullness of Gentiles has come in."[78]

(6) Opportunities of possessing the privileges which the Jews had forfeited

This view is related to the previous one. Due to unfaithfulness the Jewish nation was judged and the privileges were taken away from the Jews and offered to the Gentiles. (Matthew 21:43) The period during which these privileges are made available to the Gentiles is regarded as the "times of Gentiles."

As may be seen, there are various possible interpretations of the phrase "times of Gentiles," even without the application of the "year- day principle" to the period. It must be recognized that the phrase itself is stated in Scripture without any specific accompanying qualification. To determine which view or views give greater evidence of validity would require a detailed and

77 For a recent exposition of this view, see Dr. John Nolland, *Luke 18:35–24:53.* Word Biblical Commentary 35c (Dallas: Word Books, 1993), pp. 1002–1003.

78 The note to Luke 21:24 in *The NIV Study Bible* reflects this view: "The Gentiles would have both spiritual opportunities (Mk 13:10; cf. Lk 20:16; Ro 11:25) and domination of Jerusalem, but these times will end when God's purpose for the Gentiles has been fulfilled." Compare also Darrell L. Bock, *Luke,* Vol. 2 (Grand Rapids, Michigan: Baker Books, 1996), pp. 1680–1681.

extensive discussion of each of the various alternatives. Such an analysis is beyond the scope of this work, the main purpose of which has been to examine the Watch Tower Society's interpretation of the "times of Gentiles" and to demonstrate why that interpretation is both historically and Biblically untenable. Any further discussion of the factors involved in the meaning of the phrase "times of Gentiles," therefore, will have to be reserved for another occasion.

7

ATTEMPTS TO OVERCOME THE EVIDENCE

AS RELATED in the *Introduction,* the original manuscript of this work was first presented to the Watch Tower Society in 1977. During the subsequent correspondence with the headquarters of that organization, additional lines of evidence were presented which were later included in the published edition of the work in 1983.

In possession of all this information, it might be expected that the Governing Body of Jehovah's Witnesses at the Brooklyn headquarters would have been prepared to reevaluate their Gentile times calculation in accord with their stated interest in biblical truth and historical facts. On the contrary, they chose to retain and defend the 607 B.C.E. date and the interpretations founded upon it.[1]

1 Several years before the treatise was sent to the Brooklyn headquarters, some members on the writing staff had begun to see the weakness of the prophetic interpretations attached to the 1914 date. These included Edward Dunlap, former Registrar of Gilead School, and Governing Body member Raymond Franz. These researchers, therefore, could agree with the conclusion that the 607 B.C.E. date for the destruction of Jerusalem is chronologically insupportable. Some others on the writing staff, too, who read the treatise, came to realize that the 607 B.C.E. date lacked support in history and began to feel serious doubts about the date. (The writing staff at that time included about 18 members.) Even Governing Body member Lyman Swingle expressed himself before the other Body members to the effect that the Watch Tower organization got their 1914 date (which depends on the 607 B.C.E. date) from the Second Adventists "lock, stock and barrel." However, the attempts by Raymond Franz and Lyman Swingle to bring up the evidence for discussion on the Governing Body met unfavorable response. The other members on the Body did not see fit to discuss the subject, but decided to continue to advocate the 1914 date.—See Raymond Franz, *Crisis of Conscience* (Atlanta: Commentary Press, 1983 and later editions), pp. 140–143, 214–216.

A. THE WATCH TOWER SOCIETY'S APPENDIX TO "LET YOUR KINGDOM COME"

The new defense of the 607 B.C.E. date appeared in a book published in 1981 entitled "*Let Your Kingdom Come*". In chapter 14 (pages 127–140) of the book another discussion of the Gentile times calculation is presented, which does not differ materially from previous discussions of the subject in the Watch Tower publications. But in a separate "Appendix to Chapter 14" at the end of the book, some of the lines of evidence weighing against the 607 B.C.E. date are now briefly discussed—and rejected.[2] The discussion, though, is seriously lacking in objectivity and proves to be nothing more than a weak attempt to conceal facts.

In the area of historical research an event is generally regarded as a "historical fact" if it is testified to by at least two independent witnesses. We recognize this rule from the Bible: "At the mouth of *two or three witnesses* every matter may be established." (Matthew 18:16) In Chapter 2 of the first edition of the present work *seven* historical "witnesses" against the 607 B.C.E. date were presented, at least four of which clearly qualify as independent witnesses. Most of the records giving this seven-fold testimony are found on documents preserved from the Neo-Babylonian era itself. These include royal inscriptions, business documents and the Apis stelae from the contemporary Egyptian Saite dynasty. Only the astronomical diaries, Berossus' Neo-Babylonian chronology and the king list of the Royal Canon ("Ptolemy's Canon") are found on later documents, but those records, too, were seen to be copied from earlier ones that—directly or indirectly—went back to the Neo-Babylonian era.

In Chapters 3 and 4 of the present updated edition of the work, the original seven lines of evidence are increased to *seventeen*. The added lines of evidence include prosopographical evidence, chronological interlocking joints, and an additional number of astronomical texts (three planetary tablets and five lunar eclipse texts). The evidence against the 607 B.C.E. date, therefore, is overwhelming, and very few reigns in ancient history may be

(continued on page 289)

2 *"Let Your Kingdom Come"* (New York: Watchtower Bible and Tract Society, 1981), pp. 186–189. The book was written by Governing Body member Lloyd Barry. The "Appendix to Chapter 14," however, was written by someone else, possibly Gene Smalley, a member of the writing staff. The "spadework" was probably done by John Albu, a scholarly Witness in New York. According to Raymond Franz, Albu has specialized in Neo-Babylonian chronology on behalf of the Watch Tower Society and did some research in connection with my treatise at the request of the Writing Department.

The Watch Tower Society's "Appendix to Chapter 14" in the book "Let your Kingdom Come" (1981), pages 186–189:

APPENDIX TO CHAPTER 14

Historians hold that Babylon fell to Cyrus' army in October 539 B.C.E. Nabonidus was then king, but his son Belshazzar was co-ruler of Babylon. Some scholars have worked out a list of the Neo-Babylonian kings and the length of their reigns, from the last year of Nabonidus back to Nebuchadnezzar's father Nabopolassar.

According to that Neo-Babylonian chronology, Crown-prince Nebuchadnezzar defeated the Egyptians at the battle of Carchemish in 605 B.C.E. (Jeremiah 46:1, 2) After Nabopolassar died Nebuchadnezzar returned to Babylon to assume the throne. His first regnal year began the following spring (604 B.C.E.).

The Bible reports that the Babylonians under Nebuchadnezzar destroyed Jerusalem in his 18th *regnal* year (19th when accession year is included). (Jeremiah 52:5, 12, 13, 29) Thus if one accepted the above Neo-Babylonian chronology, the desolation of Jerusalem would have been in the year 587/6 B.C.E. But on what is this secular chronology based and how does it compare with the chronology of the Bible?

Some major lines of evidence for this secular chronology are:

Ptolemy's Canon: Claudius Ptolemy was a Greek astronomer who lived in the second century C.E. His Canon, or list of kings, was connected with a work on astronomy that he produced. Most modern historians accept Ptolemy's information about the Neo-Babylonian kings and the length of their reigns (though Ptolemy does omit the reign of Labashi-Marduk). Evidently Ptolemy based his historical information on sources dating from the Seleucid period, which began more than 250 years after Cyrus captured Babylon. It thus is not surprising that Ptolemy's figures agree with those of Berossus, a Babylonian priest of the Seleucid period.

Nabonidus Harran Stele (NABON H 1, B): This contemporary stele, or pillar with an inscription, was discovered in 1956. It mentions the reigns of the Neo-Babylonian kings Nebuchadnezzar, Evil-Merodach, Neriglissar. The figures given for these three agree with those from Ptolemy's Canon.

VAT 4956: This is a cuneiform tablet that provides astronomical information datable to 568 B.C.E. It says that the observations were from Nebuchadnezzar's 37th year. This would correspond to the chronology that places his 18th regnal year in 587/6 B.C.E. However, this tablet is admittedly a copy made in the third century B.C.E. so it is possible that its historical information is simply that which was accepted in the Seleucid period.

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Business tablets: Thousands of contemporary Neo-Babylonian cuneiform tablets have been found that record simple business transactions, stating the year of the Babylonian king when the transaction occurred. Tablets of this sort have been found for all the years of reign for the known Neo-Babylonian kings in the accepted chronology of the period.

From a secular viewpoint, such lines of evidence might seem to establish the Neo-Babylonian chronology with Nebuchadnezzar's 18th year (and the destruction of Jerusalem) in 587/6 B.C.E. However, no historian can deny the possibility that the present picture of Babylonian history might be misleading or in error. It is known, for example, that ancient priests and kings sometimes altered records for their own purposes. Or, even if the discovered evidence is accurate, it might be misinterpreted by modern scholars or be incomplete so that yet undiscovered material could drastically alter the chronology of the period.

Evidently realizing such facts, Professor Edward F. Campbell, Jr., introduced a chart, which included Neo-Babylonian chronology, with the caution: "It goes without saying that these lists are provisional. The more one studies the intricacies of the chronological problems in the ancient Near East, the less he is inclined to think of any presentation as final. For this reason, the term *circa*]about] could be used even more liberally than it *is."—The Bible and the Ancient Near East* (1965 ed.), p. 281.

Christians who believe the Bible have time and again found that its words stand the test of much criticism and have been proved accurate and reliable. They recognize that as the inspired Word of God it can be used as a measuring rod in evaluating secular history and views. (2 Timothy 3:16, 17) For instance, though the Bible spoke of Belshazzar as ruler of Babylon, for centuries scholars were confused about him because no secular documents were available as to his existence, identity or position. Finally, however, archaeologists discovered secular records that confirmed the Bible. Yes, the Bible's internal harmony and the care exercised by its writers, even in matters of chronology, recommends it so strongly to the Christian that he places its authority above that of the ever-changing opinions of secular historians.

But how does the Bible help us to determine when Jerusalem was destroyed, and how does this compare to secular chronology?

The prophet Jeremiah predicted that the Babylonians would destroy Jerusalem and make the city and land a desolation. (Jeremiah 25:8, 9) He added: "And all this land must become a devastated place, an object of astonishment, and these nations

will have to serve the king of Babylon seventy years." (Jeremiah 25:11) The 70 years expired when Cyrus the Great, in his first year, released the Jews and they returned to their homeland. (2 Chronicles 36:17-23) We believe that the most direct reading of Jeremiah 25:11 and other texts is that the 70 years would date from when the Babylonians destroyed Jerusalem and left the land of Judah desolate.—Jeremiah 52:12-15, 24-27; 36:29-31.

Yet those who rely primarily on secular information for the chronology of that period realize that if Jerusalem were destroyed in 587/6 B.C.E. certainly it was not 70 years until Babylon was conquered and Cyrus let the Jews return to their homeland. In an attempt to harmonize matters, they claim that Jeremiah's prophecy began to be fulfilled in 605 B.C.E. Later writers quote Berossus as saying that after the battle of Carchemish Nebuchadnezzar extended Babylonian influence into all Syria-Palestine and, when returning to Babylon (in his accession year, 605 B.C.E.), he took Jewish captives into exile. Thus they figure the 70 years as a period of servitude to Babylon beginning in 605 B.C.E. That would mean that the 70-year period would expire in 535 B.C.E.

But there are a number of major problems with this interpretation:

Though Berossus claims that Nebuchadnezzar took Jewish captives in his accession year, there are no cuneiform documents supporting this. More significantly, Jeremiah 52:28-30 carefully reports that Nebuchadnezzar took Jews captive in his seventh year, his 18th year and his 23rd year, *not* his accession year. Also, Jewish historian Josephus states that in the year of the battle of Carchemish Nebuchadnezzar conquered all of Syria-Palestine "excepting Judea," thus contradicting Berossus and conflicting with the claim that 70 years of Jewish servitude began in Nebuchadnezzar's accession *year.*—*Antiquities of the Jews* X, vi, 1.

Furthermore, Josephus elsewhere describes the destruction of Jerusalem by the Babylonians and then says that "all Judea and Jerusalem, and the temple, continued to be a desert for seventy years." *(Antiquities of the Jews* X, ix, 7) He pointedly states that "our city was *desolate* during the interval of seventy years, until the days of Cyrus." *(Against Apion* I, 19) This agrees with 2 Chronicles 36:21 and Daniel 9:2 that the foretold 70 years were 70 years of full desolation for the land. Second-century (C.E.) writer Theophilus of Antioch also shows that the 70 years commenced with the destruction of the temple after Zedekiah had reigned 11 years.—See also 2 Kings 24:18-25:21.

But the Bible itself provides even more telling evidence against the claim that the 70 years began in 605 B.C.E. and that Jerusa-

lem was destroyed in 587/6 B.C.E. As mentioned, if we were to count from 605 B.C.E., the 70 years would reach down to 535 B.C.E. However, the inspired Bible writer Ezra reported that the 70 years *ran* until "the first year of Cyrus the king of Persia," who issued a decree allowing the Jews to return to their homeland. (Ezra 1:1-4; 2 Chronicles 36:21-23) Historians accept that Cyrus conquered Babylon in October 539 B.C.E. and that Cyrus' first regnal year began in the spring of 538 B.C.E. If Cyrus' decree came late in his first regnal year, the Jews could easily be back in their homeland by the seventh month (Tishri) as Ezra 3:1 says; this would be October 537 B.C.E.

However, there is *no reasonable way* of stretching Cyrus' first year from 538 down to 535 B.C.E. Some who have tried to explain away the problem have in a strained manner claimed that in speaking of "the first year of Cyrus" Ezra and Daniel were using some peculiar *Jewish* viewpoint that differed from the official count of Cyrus' reign. But that cannot be sustained, for both a non-Jewish governor and a document from the Persian archives agree that the decree occurred in Cyrus' first year, even as the Bible writers carefully and specifically reported.—Ezra 5:6, 13; 6:1-3; Daniel 1:21; 9:1-3.

Jehovah's "good word" is bound up with the foretold 70-year period, for God said:

"This is what Jehovah has said, 'In accord with the fulfilling of seventy years at Babylon I shall turn my attention to you people, and I will establish toward you my good word in bringing you back to this place.' " (Jeremiah 29:10)

Daniel relied on that word, trusting that the 70 years were not a 'round number' but an exact figure that could be counted on. (Daniel 9:1, 2) And that proved to be so.

Similarly, we are willing to be guided primarily by God's Word rather than by a chronology that is based principally on secular evidence or that disagrees with the Scriptures. It seems evident that the easiest and most direct understanding of the various Biblical statements is that the 70 years began with the complete desolation of Judah after Jerusalem was destroyed. (Jeremiah 25:8-11; 2 Chronicles 36:20-23; Daniel 9:2) Hence, counting back 70 years from when the Jews returned to their homeland in 537 B.C.E., we arrive at 607 B.C.E. for the date when Nebuchadnezzar, in his 18th regnal year, destroyed Jerusalem, removed Zedekiah from the throne and brought to an end the Judean line of kings on a throne in earthly Jerusalem.—Ezekiel 21:19-27.

established with such conclusiveness as the reign of Nebuchadnezzar II (604–562 B.C.E.).

A-1: Misrepresentations of historical evidence

The Watch Tower Society in its "Appendix to Chapter 14" briefly mentions *some* of the lines of evidence against the 607 B.C.E. date, including "Ptolemy's Canon" and the king list of Berossus, but *fails to mention* that both of these king lists are based on sources that originated in the Neo-Babylonian period itself. Instead, the Watch Tower publication alleges that the origin of their dates is to be found in the Seleucid era, that is, some three centuries later.[3]

Further, for the first time the Watch Tower Society mentions the *Nabonidus Harran Stele* (Nabon. H 1, B), a *contemporary* document establishing the length of the whole Neo-Babylonian era up to the ninth year of Nabonidus. But it *fails to mention another contemporary stele* from the reign of Nabonidus, *the Hillah stele,* that also establishes the length of the whole Neo-Babylonian era, *including* the reign of Nabonidus!

Thirdly, the astronomical diary VAT 4956 is mentioned. Referring to the fact that it is a copy of an original text from the reign of Nebuchadnezzar, claimed to be made during the Seleucid era, the Society repeats the theory that "it is possible that its historical information is simply that which was accepted in the Seleucid period."[4] This reasoning is completely fallacious, however, as it has been proven false by another astronomical diary, *B.M. 32312,* a fact the Society passes over in silence, although it is very well aware of it.[5]

Finally, the Society mentions the *business tablets,* admitting that these thousands of *contemporary* documents give the reigns of *all* the Neo-Babylonian kings, and that the lengths of reign given by these documents *agree with* all the other lines of evidence referred to—the Royal Canon, Berossus' chronology, Nabonidus' royal inscriptions, and the astronomical diaries.[6] It *fails to mention,* though, that such agreement refutes the notion that the information on VAT 4956 could have been concocted during the Seleucid period. Apart from the above-mentioned lines of evidence, another strong one against

3 *"Let Your Kingdom Came"* (New York: Watchtower Bible and Tract Society, 1981), p. 186.

4 *Ibid.,* p. 186.

5 The astronomical diary B.M. 32312 is discussed in Chapter 4, section A-2, of the present volume. In the first (1983) edition, the discussion is found on pp. 83–86.

6 *"Let Your Kingdom Come,"* p. 187.

the 607 B.C.E. date is completely ignored, too, namely, *the synchronisms to the contemporary and independently established Egyptian chronology.*

By omitting nearly half of the seven lines of evidence discussed in the first edition of the present work (the Hillah stele, the diary B.M. 32312, and the contemporary Egyptian documents) and misrepresenting some of the others, the real facts about the strength and validity of the established Neo-Babylonian chronology *are concealed.* From this basis Watch Tower scholars proceed to a critical appraisal of the limited evidence presented. They state:

> However, no historian can deny the possibility that the present picture of Babylonian history might be misleading or in error. It is known, for example, that ancient priests and kings sometimes altered records for their own purposes.[7]

Again, the facts are concealed. Though it is true that ancient scribes sometimes distorted history in order to glorify their kings and gods, scholars agree that, although such distortion is found in *Assyrian* royal inscriptions and other documents, *Neo-Babylonian scribes did not distort history in this way.* This was also pointed out in Chapter 3 (section B-1-b) of the present work, where A. K. Grayson, a well-known authority on Babylonian historical records, was quoted as saying:

> Unlike the Assyrian scribes the Babylonians neither fail to mention Babylonian defeats nor do they attempt to change them into victories.[8]

Of the Neo-Babylonian *chronicles* Grayson says that they "contain a reasonably reliable and representative record of important events in the period with which they are concerned," and "within the boundaries of their interest, the writers are quite objective and impartial."[9] Of the Babylonian *royal inscriptions* (such as the Nabonidus' stelae) Grayson remarks that they are "primarily records of building activity and on the whole seem to be reliable."[10]

The scribal distortion of history, then, refers to Assyrian, but not to Neo-Babylonian history, a fact which is *concealed* in the Watch Tower Society's "Appendix" to "*Let Your Kingdom Come*".

7 *Ibid.,* p. 187.
8 A. K. Grayson, "Assyria and Babylonia," *Orientalia,* Vol. 49:2, 1980, p. 171.
9 *Ibid.,* pp. 170, 171.
10 *Ibid.,* p. 175.

The next argument advanced by the Society in the "Appendix" is that, "even if the discovered evidence is accurate, it might be misinterpreted by modern scholars or be incomplete so that *yet undiscovered material could drastically alter the chronology of the period."*[11]

Evidently the Watch Tower scholars realize that as of now all the evidence discovered since the middle of the 19th century unanimously points to 587 B.C.E. instead of 607 as the eighteenth year of Nebuchadnezzar. Among the tens of thousands of discovered documents from the Neo-Babylonian era they have not been able to find the slightest support for their 607 B.C.E. date—hence, the reference to *"yet undiscovered material."* A chronology that has to be based on "yet *undiscovered* material," because it is demolished by the *discovered* material, is resting on a weak foundation indeed. If an idea, refuted by an overwhelming mass of *discovered* evidence, is to be retained because it is hoped that "yet undiscovered material" will support it, *all* ideas, however false, could be retained on the same principle. But it should be remembered that such a faith is not founded upon "the evident demonstration of realities though not beheld" (Hebrews 11:1); it is founded solely upon wishful thinking.

If it really were true that (1) "no historian can deny the possibility that the present picture of Babylonian history might be misleading or in error," that (2) "priests and kings sometimes altered" the Neo-Babylonian historical records, that (3) "even if the discovered evidence is accurate, it might be misinterpreted by modern scholars or be incomplete," and that (4) "yet undiscovered material could drastically alter the chronology of the period," what reason do we have for accepting *any* date from the Neo-Babylonian era established by historians—for example 539 B.C.E. as the date for the fall of Babylon? This date, too, has been established *solely* by the aid of secular documents of the same type as those which have established 587 B.C.E. as the eighteenth year of Nebuchadnezzar. And of the two dates, 587 has much better support than 539 B.C.E.![12]

If 587 B.C.E. is to be rejected for the above—mentioned reasons, the 539 B.C.E. date should also be rejected for the same, if not stronger, reasons. Yet the Watch Tower Society not only accepts the 539 B.C.E. date as reliable, but even puts so much trust

11 *"Let Your Kingdom Come,"* p. 187.
12 This was thoroughly demonstrated earlier in Chapter 2.

in it that it has made it *the very basis of its Bible chronology!*[13] If its reasons for rejecting the 587 B.C.E. date are valid, they are equally valid for the 539 B.C.E. date, too. To reject one date and retain the other is not only inconsistent; it is a sad example of scholastic dishonesty.

A-2: Misrepresentation of scholars

In support of their reasons for rejecting the Neo-Babylonian chronology established by historians, a well-known authority on ancient Near Eastern history is referred to.

"Evidently realizing such facts,"—that the present picture of Babylonian history might be in error, that ancient priests and kings might have altered the ancient Neo-Babylonian records, and that yet undiscovered material could drastically alter the chronology of the period:

> Professor Edward F. Campbell, Jr., introduced a chart, which included Neo-Babylonian chronology, with the caution: "It goes without saying that these lists are provisional. The more one studies the intricacies of the chronological problems in the ancient Near East, the less he is inclined to think of any presentation as final. For this reason, the term *circa* [about] could be used even more liberally than it is."[14]

This quotation is taken from a chapter written by Edward F. Campbell, Jr., which first appeared in *The Bible and the Ancient Near East (BANE),* a work edited by G. Ernest Wright and published by Routledge and Kegan Paul of London, in 1961. The Watch Tower Society did not mention, however, that the chart referred to in this work covers the chronologies of Egypt, Palestine, Syria, Asia Minor, Assyria and Babylon from *c. 3800 B.C.E. to the death of Alexander the Great in 323 B.C.E.,* and although the term *circa* is placed before many of the reigns given in the lists for this long period, *no circas are placed before any of the reigns given for the kings of the Neo-Babylonian period!*

13 As was pointed out above in Chapter 2, from 1955 up to about 1971 the date 539 was termed an "absolute date" in Watch Tower publications. When it was discovered that this date did not have the support that Watch Tower scholars imagined, they dropped this term. In *Aid to Bible Understanding,* page 333 (= *Insight on the Scriptures,* Vol. 1, p.459), 539 is called "a pivotal point." And in *'Let Your Kingdom Come" it* is stated only that "historians calculate," "hold," or "accept" that Babylon fell in October 539 B.C.E. (pp. 136, 186, 189). Yet the Society still anchors its whole "Bible chronology" to this date.

14 *"Let Your Kingdom Come,"* p. 187.

The question is: When Professor Campbell, in cooperation with Professor David N. Freedman, prepared the chronological lists in *The Bible and the Ancient Near East,* did he then feel that "the present picture of Babylonian history might be misleading or in error" when it comes to the *Neo-Babylonian* era? Did he think there was any possibility that "ancient priests and kings sometimes altered" the *Neo-Babylonian* records "for their own purposes"? Was he, for whatever reason, prepared to put the term *circa* before any of the reigns of the *Neo-Babylonian* kings? In other words, did the Watch Tower Society give a correct presentation of the views of Campbell and Freedman?

When these questions were put to Dr. Campbell, he wrote in reply:

> As perhaps you will have concluded, I am dismayed at the use made of Noel Freedman's and my chronological lists by the Watch Tower Society. I fear that some earnest folk will reach for any straw to support their already-arrived-at conclusions. This is most certainly a case of doing just that.
>
> Let me first explain that the division of responsibility for the chronological charts in *BANE* assigned the larger Near Eastern chronology to me and the Biblical dates to Professor David Noel Freedman, now of the University of Michigan. We did indeed talk about the *caveats* we placed before our charts, but there was absolutely no intent to suggest that there was leeway of as much as twenty years for the dates relating [to] Babylonia and Judah. I am fairly confident that Dr. Freedman makes explicit somewhere in the apparatus of the *BANE* chapter that the 587/6 date can be off by no more than one year, while the 597 date is one of the very few *secure* dates in our whole chronological repertoire. I know that he remains convinced of this, as do I. There is not a shred of evidence that I know of to suggest even the possibility that the dates in The Babylonian Chronicle have been altered by priests or kings for pious reasons. I am in hearty agreement with Grayson![15]

15 Letter received from Dr. Edward F. Campbell, Jr., dated August 9, 1981. The reason for uncertainty among scholars as to whether Jerusalem was desolated in 587 or 586 B.C.E. stems from the Bible, not extra-biblical sources. All scholars agree in dating Nebuchadnezzar's eighteenth regnal year to 587/86 B.C.E. (Nisan to Nisan). The Bible dates the desolation to Nebuchadnezzar's *nineteenth* regnal year at 2 Kings 25:8 and Jeremiah 52:12 (the latter passage being an almost literal repetition of the former), but to his *eighteenth* year at Jeremiah 52:29. This discrepancy may be solved if a nonaccession year system is postulated for the kings of Judah. (See the section, "Methods of reckoning regnal years," in the Appendix for Chapter 2 below). The 597 B.C.E. date for the earlier capture of Jerusalem and the deportation of Jehoiachin, says Dr. Campbell, is one of the very few secure historical dates recognized by scholars. The reason is the exact synchronism between the Bible and the Babylonian Chronicle at this point.—See the two sections, "The 'third year of Jehoiakim' (Daniel 1:1–2)" and "Chronological tables covering the seventy years," in the Appendix for Chapter 5 that follows.

Dr. Campbell forwarded the questions put to him to Dr. Freedman, to give the latter an opportunity to express his views. Freedman had the following to say on the matter:

> . . . I agree entirely with everything that Dr. Campbell has written to you. It is true that there are some uncertainties about biblical chronology for this period, but those uncertainties stem from confusing and perhaps conflicting data in the Bible, and have nothing to do with the chronological information and evidence for the Neo-Babylonian period from cuneiform inscriptions and other non-biblical sources. This is one of the best-known periods of the ancient world, and we can be very sure that the dates are correct to within a year or so, and many of the dates are accurate to the day and month. There is therefore absolutely no warrant for the comments or judgments made by the Watchtower Society based on a statement about our uncertainty. What I had specifically in mind was the disagreement among scholars as to whether the fall of Jerusalem should be dated in 587 or 586. Eminent scholars disagree on this point, and unfortunately we do not have the Babylonian chronicle for this episode as we do for the capture of Jerusalem in 597 (that date is now fixed exactly). But it is only a debate about one year at most (587 or 586), so it would have no bearing upon the views of the Jehovah's Witnesses who apparently want to rewrite the whole history of the time and change the dates rather dramatically. There is no warrant whatever for that.[16]

Thus the Watch Tower Society, in its attempt to find support for the 607 B.C.E. date, misrepresented the views of Dr. Campbell and Dr. Freedman. Neither of them believes that ancient priests or kings might have "altered records" from the Neo-Babylonian period, or that "yet undiscovered material could drastically alter the chronology of the period." And neither of them is prepared to put the term *circa* before any of the reigns given in their lists for the kings of the Neo-Babylonian era.

The only uncertainty they point to is whether the date for the desolation of Jerusalem should be set at 587 or 586 B.C.E., and this uncertainty does not come from any errors or obscurities in the extra-biblical sources, but from the seemingly conflicting figures given in the Bible, evidently its references to Jerusalem's destruction as taking place, in one case, in Nebuchadnezzar's eighteenth year, and, in another, in his nineteenth year.—Jeremiah 52:28, 29; 2 Kings 25:8.

16 Letter received from Dr. David N. Freedman, dated August 16, 1981.

A-3: Misrepresentation of ancient writers

The last two pages of the "Appendix" to "*Let Your Kingdom Come"* are devoted to a discussion of Jeremiah's prophecy of the seventy years.[17] All arguments in this section have been thoroughly refuted in Chapter 5 of the present work, "The Seventy Years for Babylon" (which corresponds to chapter 3 of the first edition), to which the reader is directed. Only a few points will be made here.

Against Berossus' statement that Nebuchadnezzar took Jewish captives in his accession year, shortly after the battle at Carchemish (see Chapter 5 above, section A-4), it is argued that "there are no cuneiform documents supporting this ."[18] But the Watch Tower Society *fails to mention that Berossus' statement is clearly supported by the most direct reading of Daniel 1:1–6.*[19]

Daniel reports that "in the third year of the kingship of Jehoiakim" (corresponding to the accession year of Nebuchadnezzar; see Jeremiah 25:1) Nebuchadnezzar took a tribute from Judah, consisting of utensils from the temple and also "some of the sons of Israel and of the royal offspring and of the nobles," and brought them to Babylonia. (Daniel 1:1–3, *NW*) It is true that the Babylonian Chronicle does not specifically mention these Jewish captives. It does mention, however, that Nebuchadnezzar, in his accession year, "marched about victoriously in Hattu," and that "*he took the vast booty of Hattu to Babylon."*[20] Most probably captives from the Hattu territory were included in this "vast booty," as is also pointed out by Professor Gerhard Larsson:

> It is certain that this "heavy tribute" consisted not only of treasure *but also of prisoners from the conquered countries.* To refrain from doing so would have been altogether too alien from the customs of the kings of Babylon and Assyria.[21]

Thus, although the Babylonian Chronicle does not specifically mention the (probably very small) Jewish deportation in the

17 *"Let Your Kingdom Come,"* pp. 188, 189.

18 *Ibid.,* p. 188.

19 See the section, "The 'third year of Jehoiakim' (Daniel 1:1–2)" in the Appendix for Chapter 5 below.

20 A. K. Grayson, *Assyrian and Babylonian Chronicles* (Locust Valley, New York: J. J. Augustin Publisher, 1975), p. 100.

21 Gerhard Larsson, "When did the Babylonian Captivity *Begin?," Journal of Theological Studies,* Vol. 18 (1967), p. 420.

accession year of Nebuchadnezzar, it strongly indicates this to have taken place, in agreement with the *direct* statements of Daniel and Berossus.

Further, it is to be noticed that the same Babylonian chronicle (BM 21946) speaks of the vast booty taken to Babylon in the *seventh* year of Nebuchadnezzar in similar laconic terms. Although it is known from the Bible (2 Kings 24:10–17; Jeremiah 52:28) that this booty included *thousands of Jewish captives,* the chronicle does not mention anything about this but just says:

> A king of his own choice he [Nebuchadnezzar] appointed in the city (and) *taking the vast tribute he brought it into Babylon.*[22]

If, therefore, the silence of the cuneiform documents about the deportation of Jewish captives in the *accession* year of Nebuchadnezzar indicates, as the "Appendix" of "*Let Your Kingdom Come"* implies, that it did not take place, the silence about the deportation in his *seventh* year would indicate that this one did not take place either. However, since the Bible mentions both deportations, the Babylonian chronicle evidently includes them in the "vast booty" or tribute taken to Babylon at both occasions.

The Society finds another argument against a deportation in the accession year of Nebuchadnezzar in Jeremiah 52:28–30:

> More significantly, Jeremiah 52:28–30 carefully reports that Nebuchadnezzar took Jews captive in his seventh year, in his 18th year and his 23rd year, *not* his accession year.[23]

This argument, however, presupposes that Jeremiah 52:28–30 contains a *complete* record of the deportations, which it clearly does not. The sum total of Jewish captives taken in the three deportations referred to in the passage is given in verse 30 as "four thousand and six hundred." However, 2 Kings 24:14 gives the number of those deported during *only one of these deportations* as "ten thousand" (and perhaps 8,000 more in verse 16, if these are not included in the first number)!

Different theories have been proposed to explain this discrepancy, none of which may be regarded as more than a guess.

22 A. K. Grayson, o*p. cit.,* p. 102. (Emphasis added.)
23 *"Let Your Kingdom Come,"* p. 188.

The Watch Tower Society's Bible dictionary *Insight on the Scriptures,* for instance, states that the figures at Jeremiah 52:28–30 "apparently refers to those of a certain rank, or to those who were family heads."[24] The *New Bible Dictionary* holds that "the difference in figures is doubtless due to different categories of captives being envisaged."[25] All agree that Jeremiah 52:28–30 does not give a complete number of those deported, and some commentators also suggest that not all deportations are mentioned in the text.[26]

At least the deportation in the accession year of Nebuchadnezzar described by Daniel is not mentioned by Jeremiah—which does not prove that it did not take place. The reason why it is not included among the deportations enumerated in Jeremiah 52:28–30 most probably is that it was a small deportation only, consisting of Jews chosen from among "the royal offspring and of the nobles" with the intention of using them as servants at the royal palace. (Daniel 1:3–4) The important thing is that Daniel, *independently of Berossus,* mentions this deportation in the accession year of Nebuchadnezzar.

Against the clear statements of both Daniel and Berossus, the Watch Tower Society refers to the Jewish historian Josephus, who claims that, in the year of the battle of Carchemish (during Nebuchadnezzar's accession year), Nebuchadnezzar conquered all of Syria-Palestine "excepting Judea."[27] The Watch Tower publication argues that this conflicts with the claim that the 70-year servitude began in that accession year Josephus wrote this more than 600 years after Daniel and almost 400 years after Berossus. Even if he were right, this would not contradict the conclusion that the *servitude* of the nations surrounding Judah began in the accession year of Nebuchadnezzar. Jeremiah's prophecy clearly applies the servitude, not to the Jews, but to "these nations" (Jeremiah 25:11), that is, the nations surrounding Judah. (See Chapter 5 above, section A-1.) In fact, Josephus even *supports* the conclusion that these nations became subservient to Nebuchadnezzar in his accession year, as he states that the king of

24 *Insight on the Scriptures, Vol.* 1 (1988), p. 415.
25 *New Bible Dictionary,* 2nd edition, ed. by J. D. Douglas *et al* (Leicester, England: Inter-Varsity Press, 1982), p. 630.
26 See Albertus Pieters' discussion in *From the Pyramids to Paul* (New York: Thomas Nelson and Sons, 1935), pp. 184–189.
27 "*Let Your Kingdom Come,"* p. 188, quoting from Josephus' *Antiquities of the Jews* X, vi,1.

Babylon at that time "*took all Syria, as far as Pelusium,* excepting Judea." Pelusium lay on the border of Egypt.

There is no reason, however, to believe that Josephus' statement is more trustworthy than the information given by Daniel and Berossus. Josephus here evidently presented a conclusion of his own, based on a misunderstanding of 2 Kings 24:1. Dr. E. W. Hengstenberg, in his thorough discussion of Daniel 1:1ff., gives the following comment on the expression "excepting Judea" in Josephus' *Antiquities* X, vi, 1:

> It should not be thought that Josephus got the *parex tes Ioudaias* [excepting Judea] from a source no longer available to us. What follows shows clearly that he just derived it from a misunderstanding of the passage at 2 Kings 24:1. As he erroneously understood the three years mentioned there as the interval between the two invasions, he thought that no invasion could be presumed before the 8th year of Jehoiakim.[28]

Josephus' statement thus carries little weight against the testimony of Berossus, who evidently, unlike Josephus, got his information from sources preserved from the Neo-Babylonian period itself, and the testimony of Daniel, as one personally involved in the deportation he himself describes.

The Watch Tower Society next quotes two passages from Josephus' works in which the seventy years are described as seventy years of *desolation (Antiquities* X, ix, 7, and *Against Apion,* I, 19).[29] But they conceal the fact that Josephus, in his last reference to the period of Jerusalem's desolation, states that *the desolation lasted for fifty years, not seventy!* The statement is found in *Against Apion* I, 21, where Josephus quotes Berossus' statement on the Neo-Babylonian reigns, and says:

> This statement is both correct and in accordance with our books [that is, the Holy Scriptures]. For in the latter it is recorded that Nabochodonosor in the eighteenth year of his reign devastated our temple, that for *fifty years it ceased to exist,* that in the

28 Ernst Wilhelm Hengstenberg, *Die Authentie des Daniels und die Integrität des Sacharjah* (Berlin, 1831), p. 57. Translated from the German.

29 Josephus mentions the seventy years five times in his works, viz., at *Antiquities* X, 7, 3; X, 9, 7; XI, 1, 1; XX, 10, 2; and *Against Apion* I, 19. In these passages the seventy years are alternatingly referred to as a period of slavery, captivity, or desolation, extending from the destruction of Jerusalem until the first year of Cyrus.

> second year of Cyrus the foundations were laid, and lastly that in the second year of the reign of Darius it was completed.[30]

In support of this statement Josephus quotes, not only the figures of Berossus, but also the records of the Phoenicians, which give the same length for this period. Thus in this passage Josephus contradicts and refutes his earlier statements on the length of the period of desolation. Is it really honest to quote Josephus in support of the idea that the desolation lasted for seventy years, but conceal the fact that he in his latest statement on the length of the period argues that it lasted for fifty years? It is quite possible, even probable, that in this last passage he *corrected* his earlier statements about the length of the period.

The translator of Josephus, William Whiston, wrote a special dissertation on Josephus' chronology, entitled "Upon the Chronology of Josephus," which he included in his publication of

30 Josephus' *Against Apion* I, 21 is here quoted from the translation of H. St. J. Thackeray, published in the *Loeb Classical Library* (Cambridge, Massachusetts, and London, England: Harvard University Press, 1993 reprint of the 1926 edition), pp. 224–225. Some defenders of the watch Tower Society's chronology claim that there is a textual problem with the "fifty years," pointing out that some manuscripts have "seven years" instead of "fifty" at I, 21, which some earlier scholars felt could be a corruption for "seventy" Modern textual critics, however, have demonstrated that this conclusion is wrong. It has been shown that all extant Greek manuscripts of *Against Apion* are later copies of a Greek manuscript from the twelfth century CE., *Laurentianus 69, 22.* That the figure "seven" in these manuscripts is corrupt is agreed upon by all modern scholars. Further, it is universally held by all modem textual critics that the best and most reliable witnesses to the original text of *Against Apion* are found in the quotations by the church fathers, especially by Eusebius, who quotes extensively and usually literally and faithfully from Josephus' works. *Against Apion* I, 21 is quoted in two of Eusebius' works: (1) in his *Preparation for the Gospel,* I, 550, 18–22, and (2) in his *Chronicle* (preserved only in an Armenian version), 24, 29–25, 5. Both of these works have "50 years" at I, 21. The most important of the two works is the first, of which a number of manuscripts have been preserved from the tenth century C.E. onwards.

All modern critical editions of the Greek text of *Against Apion* have "fifty" (Greek, *pentêkonta)* at *Against Apion 1*, 21, including those of B. Niese (1889), S. A. Naber (1896), H. St. J. Thackeray (1926), and T. Reinach & L. Blum (1930). Niese' s critical edition of the Greek text of *Against Apion* is still regarded as the standard edition, and all later editions are based on—and improvements of—his text. A new critical textual edition of all the works of Josephus is presently being prepared by Dr. Heintz Schreckenberg, but it will probably take many years still before it is ready for publication.

Finally, it should be observed that Josephus' statement about the "fifty years" at *Against Apion* I, 21 is preceded by his presentation of Berossus' figures for the reigns of the Neo-Babylonian kings, and these figures show there was a period *of fifty years, not seventy,* from the 18th year of Nebuchadnezzar to the second year of Cyrus. Josephus himself emphasizes that Berossus' figures are "both correct and in accordance with our books." Thus the context, too, *requires* the "fifty years" at *Against Apion* I, 21.

Josephus' complete works as *Appendix V*.[31] In this careful study Whiston points out that often in the later parts of his works, Josephus attempted to *correct* his earlier figures. Thus he demonstrates that Josephus first gives the length of the period from the Exodus to the building of the temple as 592 years, which figure he later changed to 612.[32] The next period, from the building of the temple to its destruction, he first gives as 466 years, which he later "corrected" to 470.[33]

Of the seventy years, which Josephus first reckons from the destruction of the temple to the return of the Jewish exiles in the first year of Cyrus, Whiston says that "it is certainly Josephus' own calculation," and that the 50 years for this period given in *Against Apion* I, 21, "may probably be his own correction in his old age."[34]

If this is the case, Josephus might even be quoted as an argument *against* the application of the seventy years made by the Watch Tower Society. In any case, it seems obvious that his statements on the seventy years cannot be used as an argument against Berossus in the way the Society does. Josephus' last figure for the length of the desolation period *is in complete agreement with Berossus' chronology, and Josephus even emphasizes this agreement!*[35]

In addition to Josephus, the Watch Tower Society also refers to *Theophilus of Antioch,* who wrote a defense of Christianity towards the end of the second century C.E. As the Society points out, he commenced the seventy years with the destruction of the temple.[36] But the Watch Tower writers conceal the fact that Theophilus was confused about the *end* of the period , as he first places this in the "second year" of Cyrus (537/36 B.C.E.) and then in the "second year . . . of Darius" (520/19 B.C.E.).[37]

Some other early writers, including Theophilus' contemporary, *Clement of Alexandria* (c. 150–215 C.E.), also ended the seventy

31 *Josephus' Complete Works,* translated by William Whiston (Grand Rapids: Kregel Publications, 1978), pp. 678–708. Whiston's translation was originally published in 1737.
32 *1bid.,* p. 684, § 14.
33 *Ibid.,* p. 686, § 19.
34 *Ibid.,* pp. 688, 689, § 23.
35 *Against Apion* I, 20–21.
36 "*Let Your Kingdom Come,"* p.188.
37 On Theophilus' application of the seventy years, see A. Roberts and J. Donaldson, eds., *The Ante-Nicene Fathers,* Vol. 2 (Grand Rapids: Wm. Eerdmans Publishing Co., reprinted 1979), p. 119. Theophilus probably based his terminal date of the seventy years on Ezra 4:24, confusing Darius Hystaspes with "Darius the Mede" of Daniel 5:31 and 9:1–2.

years "in the second year of Darius Hystaspes" (520/19 B.C.E.), which would place the desolation of Jerusalem about 590/89 B.C.E.[38]

Eusebius in his chronicle (published c. 303 C.E.) adopted Clement's view, but also tries another application, starting with the year in which Jeremiah began his activity, forty years prior to the desolation of Jerusalem, and he ends the seventy years in the first year of Cyrus, which he sets at c. 560 B.C.E. *Julius Africanus,* in c. 221 C.E., applies the seventy years to the period of Jerusalem's desolation, the end of which he, like Eusebius later, erroneously dates to c. 560 B.C.E. It is very obvious that these early Christian writers did not have access to sources that could have helped them to establish an exact chronology for this ancient period.

The Watch Tower Society's use of ancient writers then, is demonstrably very selective. They quote Josephus on the seventy years of desolation, at the same time concealing the fact that he finally gives fifty years for the period. Their reference to Theophilus reflects the same methods: He is quoted, not because he really presents evidence that supports them, but because his calculation to some extent agrees with theirs. Other contemporary Christian writers, whose calculations differ from theirs, are ignored. This procedure is a clear misrepresentation of the full body of evidence from the various ancient writers who discussed the matter at hand.

A-4: Misrepresentation of the Biblical evidence

In its further discussion of the seventy years , the Watch Tower Society attempts to show that, even if the historical evidence is against their application of the period, the Bible is on their side. First, at the top of page 188 of '*Let Your Kingdom Come,"* they state, categorically, that "we believe that the most direct reading of Jeremiah 25:11 and other texts is that the 70 years would date from when the Babylonians destroyed Jerusalem and left the land of Judah desolate."

The simple truth is, however, that the Society bluntly refuses to accept the most natural understanding of Jeremiah 25:11 and a

38 *Ibid.,* p. 329. This application of the seventy years may have been influenced by Rabbinic views. Referring to the Rabbinic chronicle *Seder Olam Rabbah* (SOR), Dr. Jeremy Hughes points out that "later Jewish tradition reckoned 52 years for the Babylonian exile *(SOR* 27) and 70 years as the interval between the destruction of the first temple and the foundation of the second temple, with this event dated in the second year of *Darius (SOR* 28; cf. Zc 1.12)." The 70 year-period was "divided into 52 years of exile and 18 years from the return to the foundation of the second temple *(SOR* 29)."—Jeremy Hughes, *Secrets of the Times* (Sheffield: JSOT Press, 1990), pp. 41 and 257.

number of other texts related to this subject.[39] As was discussed in Chapter 5, the most direct reading of Jeremiah 25:11 shows the seventy years to be a period of *servitude, not desolation:* "These nations shall *serve* the king of Babylon seventy years." *(NASB)* It was further pointed out that the other text in Jeremiah referring to the seventy years, Jeremiah 29:10, confirms this understanding. The most direct reading of the best and most literal translation of this text shows those "seventy years" to be a reference to the Babylonian rule: "When seventy years have been completed *for Babylon." (NASB)* Both texts clearly refer to Babylon, not Jerusalem.

If the seventy years refer to *the Babylonian rule,* as these verses show, this period ended with the fall of Babylon in 539 B.C.E.; and this is directly stated at Jeremiah 25:12: "Then after seventy years are completed, I will punish the king of Babylon and that nation." *(NRSV)* As this punishment took place in 539 B.C.E., the end of the seventy years cannot be extended beyond that date, either to 537 B.C.E. or any other date, as that would be in conflict with a direct reading of Jeremiah 25:12.[40]

There cannot be any doubt whatsoever about the matter: The most direct reading of Jeremiah's prophecy (Jeremiah 25:11–12 and 29:10) is in clear conflict with the application that the Watch Tower Society gives to the seventy years. In spite of this, it boldly declares:

> But the Bible itself provides even more telling evidence against the claim that the 70 years began in 605 B.C.E. and that Jerusalem was destroyed in 587/6 B.C.E.[41]

What "telling evidence"? This:

> As mentioned, if we were to count from 605 B.C.E., the 70 years would reach down to 535 B.C.E. However, the inspired Bible writer Ezra reported that the 70 years ran until "the first year of Cyrus the king of Persia," who issued a decree allowing the Jews to return to their homeland.[42]

But did Ezra really report that? As was shown in the discussion of 2 Chronicles 36:21–23 in Chapter 5, Ezra *does not* clearly indicate

39 As is shown in the Appendix for Chapter 5, "The 'third year of Jehoiakim' (Daniel 1:12)," these texts also include Daniel 1:1–2 and 2:1.

40 For a full discussion of the texts dealing with the seventy years, see Chapter 5 of the present work.

41 "*Let Your Kingdom Come,"* pp. 188–189.

42 *Ibid.,* p. 189.

that the seventy years ended "in the first year of Cyrus," or in 537, as the Watch Tower Society holds. On the contrary, such an understanding of his words would be in direct conflict with Jeremiah 25:12, where the seventy years are ended in 539 B.C.E.! This scripture provides the most telling evidence *against* the claim that the seventy years ended in 537 B.C.E. or in any other year after 539.

It is true that in the original manuscript of *The Gentile Times Reconsidered* (sent to the Society in 1977), one of the possible applications of the seventy years considered was that they could be counted from 605 to 536/35 B.C.E. But this application was presented as a less likely alternative. In the published editions of the work this suggestion has been omitted because, like the application of the period advocated by the Watch Tower Society, it was found to be in clear conflict with Jeremiah's prophecy. In discussing this application, the Society argues that "there is no reasonable way of stretching Cyrus' first year from 538 down to 535 B.C.E."[43] As the application discussed did not imply this, and as I am not aware of any other modem commentator that attempts to stretch Cyrus' first year "down to 535 B.C.E.," this statement seems to be nothing but a "straw man" created by the Watch Tower Society itself. Although an argument directed against such a fabricated "straw man" may easily knock it down, the argument completely misses the real target.[44]

Finally, the Watch Tower Society claims,

> . . . we are willing to be guided primarily by God's Word rather than by a chronology that is based principally on secular evidence or that disagrees with the Scriptures. It seems evident that the easiest and most direct understanding of the various Biblical statements is that the 70 years began with the complete desolation of Judah after Jerusalem was destroyed.[45]

Again, these statements tend to give the impression that there is a conflict between the Bible and the secular evidence on the

43 *Ibid.*

44 Most commentators end the seventy years either with the fall of Babylon in 539 B.C.E., with Cyrus' decree in 538, with the return of the first Jewish remnant to Palestine in 538 or 537 (Ezra 3:1–2), or with the commencing of the reconstruction of the temple in 536 (Ezra 3:8–10). (Cf. Professor J. Barton *Payne, Encyclopedia of Biblical Prophecy,* Grand Rapids: Baker Books, the 1980 reprint of the 1973 edition, p. 339.) Curiously, these alternatives (except for the Watch Tower Society's own 537 B.C.E. date) are not even mentioned in the "Appendix" to *"Let Your Kingdom Come"!*

45 *"Let Your Kingdom Came,"* p. 189.

seventy years, and that the Watch Tower Society faithfully stands for the Bible against secular evidence. But nothing could be further from the truth. On the contrary, biblical and historical data are in good agreement on the period under discussion. Here, historical and archaeological discoveries, as in so many other cases, *uphold and confirm* biblical statements. On the other hand the interpretation of the seventy-year period given by the Watch Tower Society *does* conflict with facts established by secular evidence. As has been clearly demonstrated above and in Chapter 5, it is also in flagrant conflict with the "easiest and most direct understanding of the various Biblical statements" on the seventy years, such as Jeremiah 25: 11–12; 29:10; Daniel 1:16; 2:1; and Zechariah 1:7,12, and 7:1–5.

The *real* conflict, therefore, is not between the Bible and secular evidence, but between the Bible and secular evidence on the one hand, and the Watch Tower Society on the other. As its application of the seventy years is in conflict both with the Bible and the historical facts, it has nothing to do with reality *and merits rejection by all sincere truth-seekers.*

SUMMARY

It has been amply demonstrated above that the Watch Tower Society in its "Appendix" to "*Let your Kingdom Come"* does not give a fair presentation of the evidence against their 607 B.C.E. date:

(1) Its writers misrepresent *historical evidence* by omitting from their discussion nearly half of the evidence presented in the first edition of this work (the Hillah stele, the diary BM 32312, and contemporary Egyptian documents) and by giving some of the other lines of evidence only a biased and distorted presentation. They erroneously indicate that priests and kings might have altered historical documents (chronicles, royal inscriptions, etc.) from the Neo-Babylonian era, in spite of the fact that all available evidence shows the opposite to be true.

(2) They misrepresent *authorities on ancient historiography* by quoting them out of context and attributing to them views and doubts they do not have.

(3) They misrepresent *ancient writers* by concealing the fact that Berossus is supported by the most direct reading of Daniel 1:1–6, by quoting Josephus when he talks of seventy years of desolation without mentioning that in his last work he changed the length of the period *to fifty* years, and by referring to the opinion of the

second century bishop, Theophilus, without mentioning that he ends the seventy years, not only in the second year of Cyrus, but also in the second year of Darius Hystaspes (as did his contemporary Clement of Alexandria and others), thus confusing the two kings.

Finally, (4) they misrepresent *biblical evidence* by concealing the fact that the most direct understanding of the passages dealing with the seventy years shows them to be the period of Neo-Babylonian rule, not the period of Jerusalem's desolation. This understanding is in good agreement with the historical evidence, but in glaring conflict with the application given to it by the Watch Tower Society. It is truly distressing to discover that individuals, upon whose spiritual guidance millions rely, deal so carelessly and dishonestly with facts. Their "Appendix" to "*Let Your Kingdom Come"* in defence of their chronology is nothing but yet one more nefarious exercise in the art of concealing truth.

It may be asked why the leaders of an organization that constantly emphasizes its interest in "the Truth" in reality find it necessary to suppress the truth and even oppose it?

The obvious reason is that they have no other choice, *as long as they insist that their organization was appointed in the year 1919 as God's sole channel and mouthpiece on earth.* If the 607 B.C.E.–1914 C.E. calculation is abandoned, this claim will fall. Then these leaders will have to admit, at least tacitly, that their organization for the past hundred years has appeared on the world scene in a false role with a false message.

When occasionally the questioning of the 607 B.C.E. date has been commented upon in the Watch Tower publications in recent years, the sole defense has been a reference to the "Appendix" of 1981. In *The Watchtower* of November 1, 1986, for example, it is claimed that "in 1981 Jehovah's Witnesses published *convincing evidence* in support of the 607 B.C.E. date." Then the reader is referred to the book "*Let Your Kingdom Come,"* pages 127–40 and 186–89.[46]

As the Society's "Appendix" only contains a series of failed attempts to undermine the evidence *against* the 607 B.C.E. date, and as the only "convincing evidence" presented *in support of* the date is a reference to "yet undiscovered material," the Watch Tower writers evidently trust that the majority of the Witnesses are completely unaware of the actual facts. And the leaders of the

46 *The Watchtower,* November 1,1986, p. 6. (Emphasis added.) A similar reference to the "Appendix" is found in the *Watchtower* of March 15, 1989, p. 22.

When Did the "Seven Times" Really End?

Some people argue that even if the "seven times" are prophetic and even if they last 2,520 years, Jehovah's Witnesses are still mistaken about the significance of 1914 because they use the wrong starting point. Jerusalem, they claim, was destroyed in 587/6 B.C.E., not in 607 B.C.E. If true, this would shift the start of "the time of the end" by some 20 years. However, in 1981 Jehovah's Witnesses published convincing evidence in support of the 607 B.C.E. date. *("Let Your Kingdom Come," pages* 127-40, 186-9) Besides, can those trying to rob 1914 of its Biblical significance prove that 1934—or any other year for that matter—has had a more profound, more dramatic, and more spectacular impact upon world history than 1914 did?

From *The Watchtower* of November 1, 1986, page 6.

Watch Tower Society want to keep it that way. This is clear from the warnings repeatedly published in the Watch Tower publications against reading literature by former Witnesses who know the facts about their chronology. The leaders of the Watch Tower Society evidently fear that if Witnesses are allowed to be exposed to these facts, they might discover that the basis of the prophetic claims of the movement is nothing but a groundless, unbiblical and unhistorical chronological speculation.

Thus, although the Watch Tower organization probably uses the word "Truth" more often than most other organizations on earth, the fact is that truth has become an enemy of the movement. Therefore it has to be resisted and concealed.

Anybody, of course, be it an individual or an organization, is fully entitled to believe whatever he/she/it prefers to believe, as

long as it does not hurt other people—that flying saucers exist, that the earth is flat, or, in this case, that Jerusalem, contrary to all the evidence, was desolated in 607 B.C.E., and that, somewhere, there may be "yet undiscovered material" to support such views.

If, however, such "believers" are not willing to concede to others the right to disagree with their theories, and instead classify those who no longer are able to embrace their views as godless apostates, condemn them to Gehenna if they do not change their minds, force their friends and relatives to regard them as wicked ungodly criminals that must be avoided, shunned and even hated, explaining that God will shortly exterminate them forever together with the rest of mankind—then it is high time for such "believers" to be held responsible for their views, attitudes and deeds. Any faith leading to such grave consequences for other people must first clearly be shown to be securely rooted in actual reality, not just in untenable speculations that can be supported only by "yet undiscovered material."

B. UNOFFICIAL DEFENSES WRITTEN BY SCHOLARLY WITNESSES

The "Appendix" of 1981 is so far the only official attempt by the Watch Tower Society to overcome the lines of evidence against the 607 B.C.E. date presented in *The Gentile Times Reconsidered.* Evidently realizing that the Society's defense is hopelessly inadequate, some scholarly Jehovah's Witnesses and members of other Bible Student groups have on their own initiative set about to work out papers in defense of the Gentile times chronology. About half a dozen of such papers have come to my attention. Most of them have been sent to me by Jehovah's Witnesses who have read them and wanted to know my opinion about them.

A common feature of these papers is their lack of objectivity. They all start with a preconceived idea that has to be defended at all costs. Another common feature is that the papers time and again reflect inadequate research, often resulting in serious mistakes. Unfortunately, some of the papers also repeatedly resort to defaming language. In scholarly publications authors usually treat each other with respect, and critical papers are regarded as constructive contributions to the ongoing debate. Should it not be expected that Christians, too, refrain from using disparaging and disgraceful language in referring to sincere critics? Classifying them as "detractors," "ridiculers," and so on, is the very opposite of the attitude recommended by the apostle Peter at 1 Peter 3:15.

As the most important arguments presented in the papers that have come to my attention have already been considered in their proper contexts in the present work, there is no need to deal with them again here. A brief description of the papers composed by two of the most qualified defenders of the Watch Tower Society's chronology may be of interest to readers and is given below.[47]

Rolf Furuli is a Jehovah's Witness who lives in Oslo, Norway. He is a former district overseer and is regarded by Norwegian Witnesses as the leading apologist of Watch Tower teachings in that country, and Witnesses often turn to him with their doctrinal problems. It is not to be wondered at, therefore, that he has seen it as an important task to "refute" my work on the Watch Tower Society's Gentile times chronology.

Furuli's first attempt of that sort, a paper of more than one hundred pages called "*Den nybabyloniske kronologi og Bibelen*" ("The Neo-Babylonian Chronology and the Bible"), was sent to me by Witnesses in Norway in 1987. Like the Watch Tower Society in its "Appendix," Furuli attempted to undermine the reliability of the historical sources for the Neo-Babylonian chronology presented in my work. To meet the wishes of the Norwegian Witnesses (who had contacted me in secret), I decided to write a reply to Furuli's paper.

The first 31 pages of my reply (which in all finally amounted to 93 pages) were sent in the spring of 1987 to the Norwegian Witnesses, who soon provided Rolf Furuli with a copy, too. Furuli quickly realized that his discussion had been shown to be untenable, and if he continued to circulate his paper, my reply would be circulated, too. To prevent this, he wrote me a letter, dated April 23, 1987, in which he described his paper as just "private notes" which "not in all details" represented his "present views" but was solely an expression of the information available to him at the time it was written. He asked me to destroy my copy of his paper and never quote from it again.[48]

47 According to the information I have, John Albu in New York is probably the Watch Tower chronologist who was most deeply read in Neo-Babylonian history. Some years ago I was told that he has prepared some material in defense of the 607 B.C.E. date, but up till now nothing of it has come to my attention. Albu died in 2004.

48 As I later found out that Furuli continued to share his paper with Witnesses who had begun to question the Society's chronology, I saw no reason to stop the circulation of my reply to it.
A main point in Furuli's argumentation was that the dates on some cuneiform documents from the Neo-Babylonian era create "overlaps" of a few *months* between some of the reigns, which he regarded as proof that extra years must be added to these reigns. These "overlaps" are discussed in the Appendix for chapter 3 of the present work.

Three years later Furuli had prepared a second paper aimed at overthrowing the evidence presented in my work. For some time Furuli had been studying Hebrew at the university in Oslo, and in his new paper of 36 pages (dated February 1, 1990) he tried to argue that my discussion of the seventy years "for Babylon" was in conflict with the original Hebrew text.

It was evident, though, that Furuli's knowledge of Hebrew at that time was very imperfect. Having consulted with a number of leading Scandinavian Hebraists, I wrote a reply of 69 pages, demonstrating in detail that his arguments throughout were based on a misunderstanding of the Hebrew language. As Furuli in his discussion had questioned the reliability of the Hebrew Masoretic text (MT) of the book of Jeremiah, my reply also included a defense of this text against the Greek Septuagint text (LXX) of the book.

In 2003 Furuli published a book of 250 pages on the *Persian* chronology, which is basically a defence of the erroneous Watch Tower dating of the reign of Artaxerxes I. Also included is a section of 18 pages containing another linguistically untenable discussion of the Biblical 70-year passages.[49]

Philip Couture, a Jehovah's Witness who resides in California, USA, has been a member of the Watch Tower movement since 1947. He has for years been doing research on Neo-Babylonian history and chronology, evidently in order to find some support for the 607 B.C.E. date.

In the autumn of 1989 a friend in New Jersey, U.S.A., sent me a copy of a treatise of 72 pages (which included a section with pages copied from various works) entitled *A Study of Watchtower Neo-Babylonian Chronology in the Light of Ancient Sources.* It was written by an anonymous Watch Tower apologist, and I did not notice until much later that my friend had enclosed a slip of paper stating that the author was Philip Couture.[50]

Although Couture carefully avoids mention of my work, he repeatedly quotes from it or alludes to its contents. The reason is, quite evidently, that he is not supposed to have read what in the Watch Tower publications is classified as "apostate literature." The only critic that Couture mentions by name is a Seventh-Day

49 Rolf Furuli, *Persian Chronology and the Length of the Babylonian Exile of the Jews* (Oslo: R. Furuli A/S, 2003). For a review of the book, see the Appendix.

50 This was also confirmed to me by Professor John A. Brinkman at the University of Chicago, a letter from whom to Couture had been included in the treatise (with the name of the addressee removed).

Adventist, William MacCarty, who wrote a booklet on the Watch Tower Society's Gentile times calculation back in 1975.[51]

Like Furuli's first paper, Couture's treatise is an attempt to undermine the reliability of the historical sources for the Neo-Babylonian chronology. Despite his efforts, however, he fails to come up with even one tenable argument that can move the burden of evidence against the 607 B.C.E. date. The reason for this simply is that, however skilful and capable a person may be, it will in the end be impossible for him to find any real and valid support for an idea that is false and therefore impossible to defend.

About half of Couture's treatise deals with *astronomy* and its relation to Neo-Babylonian chronology. Unfortunately, this is an area that Couture was not quite familiar with. Thus, although a separate section of his paper contains a "word of caution" regarding "the use and abuse of eclipses," he himself repeatedly falls into the very pitfalls against which he warns.[52]

As this and other important points brought up by Couture have been dealt with in various sections of the present work, no further comments on his treatise are given here.[53] I do not know if Couture is still prepared to defend his position.

Some of the other papers sent to me present discussions of the Biblical passages on the seventy years, but ignore the historical evidence against the 607 B.C.E. date.[54] Such a discussion is not, as the author of the paper may intimate, an attempt to defend the

51 William MacCarty, *1914 and Christ's Second Coming* (Washington, D.C.: Review and Herald Publishing Association, 1975).

52 One example of this is his discussion of the lunar eclipse on Ululu 13 of the second year of Nabonidus, described in the royal inscription Nabon. No. 18, which modern astronomers have identified with the one that took place on September 26, 554 B.C.E. (This eclipse is discussed in Chapter 3 of the present work, section B-1-c.) On page 11 of his treatise, Couture claims that "within a few years either direction there are a number of other *lunar* eclipses which are just as possible." But at *none* of the six alternative eclipses presented by Couture (dating from 563 to 543 B.C.E.) did the moon set heliacally, as is explicitly stated in the inscription, and three of them were *not even visible* in Babylonia! Such errors reveal that Couture did not know how to calculate and identify ancient lunar eclipses.

53 For readers who have read Couture's treatise and are interested in my response to it, a separate, detailed refutation is available at a charge to cover copying costs and postage.

54 One example of this is a book of 136 pages written by Charles F. Redeker, *The Biblical 70 Years. A Look at the Exile and Desolation Periods* (Southfield, Michigan: Zion's Tower of the Morning, 1993). Redeker is a member of the Dawn Bible Students, a conservative Bible Student offshoot of the Watchtower organization formed in the early 1930's in reaction to the many changes of Russell's teachings introduced by the Watch Tower Society's second president, Joseph F. Rutherford.

Bible against attacks founded upon secular sources. Rather, it is an attempt to force the meaning of the Biblical texts to adapt them to *a theory* that is in glaring conflict with all historical sources from the Neo-Babylonian period. The choice in such discussions is not really between the Bible and secular sources; it is between the rantings of over-exalted minds and the historical evidence. As long as the historical reality is ignored, such discussions amount to little more than futile exercises in escapism or wishful thinking.

It is to be expected that the attempts to overcome the historical evidence against the 607 B.C.E. date presented in this work will continue. New discussions, prepared by the Watch Tower Society and/or other defenders of the 607 B.C.E.–1914 C.E. calculation will probably appear in the future. If, at least on the surface, some arguments presented in such discussions appear to have some strength, they will have to be critically examined and evaluated. If it turns out to be necessary, a running commentary on such discussions will be made available on the Internet.

APPENDIX

For Chapter One:

ADDITIONAL NOTES ON THE SECOND ADVENT MOVEMENT

As noted on page 43, along with intense interest in time prophecies, the Second Advent movement was also characterized by a number of other distinctive factors.

Many of the Second Adventist splinter groups that branched off from the original Millerites rejected the immortal soul and hell doctrines (and even the trinity doctrine). This was due largely to the articles and tracts published in the 1820's, 1830's, and 1840's by a former Baptist pastor, *Henry Grew* of Hartford, Connecticut and later of Philadelphia, Pennsylvania.[1]

The doctrine of "conditional immortality" was first introduced among the Millerites by George Storrs. It was the reading of one of Grew's tracts in 1837 that turned Storrs against the immortal soul and hell doctrines, and he was later to become the leading champion in the United States of conditionalism.

Typical of many Second Adventist periodicals, the *World's Crisis* advocated *conditionalism,* the doctrine of the conditional—not inherent—immortality of the human soul, with its corollary tenet that the ultimate destiny of those who are rejected by God is destruction or annihilation, not conscious torment. The *World's Crisis* had advocated the date of 1854 for Christ's second coming and when, like all the preceding dates, this date failed, the "immortality question" came strongly to the fore and caused a second major division within the original movement.

1 LeRoy Edwin Froom, *The Conditionalist Faith of Our Fathers,* Washington D.C.: Review and Herald, 1965, pp. 300–315. Grew's anti-trinitarian position, too, was adopted by a majority of the Second Adventists, including the three major Adventist groups that branched off from the "original" Adventists: 1) the Seventh-Day Adventists, 2) the Advent Christians, and 3) the "age to come" Adventists. In 1898 the SDA Church, on the authority of Ellen G. White, the "prophetess" of this movement, changed its position on the question. (Erwin Roy Gane, *The Arian or Anti-Trinitarian Views Presented in Seventh-Day Adventist Literature and the Ellen G. White Answer,* unpublished M.A. thesis, Andrews University, June 1963, pp. 1–110) Some decades later, the Advent Christian Church, too, began to reconsider its anti-trinitarian position.—See David Arnold Dean, *Echoes of the Midnight Cry: The Millerite Heritage in the Apologetics of the Advent Christian Denomination, 1860–1960* (unpublished Th.D. dissertation, Westminster Theological Seminary, 1976) pp. 406–416.

Although the doctrine of conditional immortality eventually was adopted by a majority of the Second Adventists, it was never accepted by the *leadership* of the original movement, which increasingly began to condemn it as a heresy in their periodical, the *Advent Herald.* Finally, in 1858, the original Second Adventists, or the "Evangelical Adventists," as they now called themselves, openly broke with the "conditionalist" Adventists and formed a separate organization, *The American Evangelical Advent Conference.* The Evangelical Adventists, however, soon became a minority, as their members in increasing numbers sided with the "conditionalist" Adventists. The association finally died out in the early years of the 20th century.[2]

After the break with the Evangelical Adventists, the supporters of the *World's Crisis,* too, formed a separate denomination in 1860, *The Advent Christian Association* (later "The Advent Christian Church"), today the most important Adventist denomination aside from the Seventh-Day Adventists and Jehovah's Witnesses.[3]

Many "conditionalist" Adventists did not join this association, however, partly because they were strongly opposed to all forms of structured church organization and would accept no names of their church but the "Church of God," and partly also because of their distinctive "age to come" views, that is, that the Jews would be restored to Palestine before the coming of Christ, that his coming would usher in the millenium, and that the saints would reign with Christ for a thousand years, during which period his kingdom

2 David Tallmadge Arthur, "*Come out of Babylon": A Study of Millerite Separatism and Denominationalism, 1840–1865* (unpublished Ph.D. dissertation, University of Rochester, 1970), pp. 291–306; Isaac C. Wellcome, *History of the Second Advent Message* (Yarmouth [Maine], Boston, New York, London, 1874), pp. 597–600, 609, 610. See also the excellent overview by D. A. Dean, *op. cit.,* pp. 122–129. Even *Joshua V. Himes,* editor of *the Advent Herald* and the most influential leader of the original movement after the death of Miller in 1849, adopted the "conditionalist" position in 1862 and left the Evangelical Adventists.

3 Numerically, the membership of this church has remained at about 30,000–50,000 throughout its history. The two most influential leaders and writers at the formation of the association were H. L. Hastings and Miles Grant, the latter being editor of the *World's Crisis* from 1856 to 1876. Hastings left the association in 1865 and remained independent of all associations for the rest of his life, although he continued to advocate conditionalism and other teachings of the Advent Christian denomination. (See Dean, *op. cit.,* pp. 133–135, 142, 210–294.)

would be set up on earth. By the early 1860's, these Adventists had been separated from the Advent Christians.[4]

In 1863 another group of "conditionalist" Adventists, headed by Rufus Wendell, George Storrs, R. E. Ladd, W. S. Campbell, and others, broke with the Advent Christian Association and formed a new denomination, *The Life and Advent Union.* This group promulgated the view that only the righteous would be resurrected at Christ's coming. The wicked dead would remain in their graves forever. They also denied the personality of the holy spirit and even of the devil. For the promotion of these teachings, they started a new paper, *Herald of Life and of the Coming Kingdom,* with Storrs as editor.[5] Storrs later changed his view of the resurrection and left the group in 1871, resuming the publishing of his earlier *Bible Examiner* magazine.

For Chapter Two:

METHODS OF RECKONING REGNAL YEARS

The accession and nonaccession year systems

Babylon, and later Medo-Persia, applied the *accession year system,* in which the year during which a king came to power was reckoned as his accession year, and the next year beginning on Nisan 1 (spring), was reckoned as his first year.

In Egypt the opposite method was applied: the year in which a king came to power was counted as his first year. There is evidence to show that the latter method, the *nonaccession year system,* was also applied in the kingdom of Judah. The evidence is as follows:

1. The battle of Carchemish in 605 B.C.E., when the army of Pharaoh Neco of Egypt was defeated by Nebuchadnezzar, is stated at Jeremiah 46:2 as having occurred "in the *fourth* year of Jehoiakim

4 The leading advocate of these views was *Joseph Marsh* in Rochester, N.Y., editor of the *Advent Harbinger and Bible Advocate* (in 1854 changed to *Prophetic Expositor and Bible Advocate).* See also D. T. Arthur, *op. cit.,* pp. 224–227, 352–371. Henry Grew as well as Bible translator Benjamin Wilson both associated with this group. *(Historical Waymarks of the Church of God,* Oregon, Illinois: Church of God General Conference, 1976, pp. 51–53) Due to their opposition to all church organization, the "age to come" Adventists were very loosely associated. A more stable organization was not formed until 1921, when the *Church of God of the Abrahamic Faith* was organized with headquarters in Oregon, Illinois. — D. T. Arthur, *op. cit.,* p. 371.

5 D. A. Dean, *op. cit.,* pp. 135–138; D. T. Arthur, *op. cit .,* pp.349–351. The Life and Advent Union lived on until 1964, when it merged again with the Advent Christian Church.

the son of Josiah, king of Judah." According to Jeremiah 25:1 "the fourth year of Jehoiakim . . . was the *first* year of Nebuchadnezzar." But the Neo-Babylonian *Chronicle 5* (B.M. 21946) clearly states that this battle took place in Nebuchadnezzar's *accession year,* not in his first year.[6] The reason why Jeremiah reckons Nebuchadnezzar's accession year as his first year seems to be that Judah did not apply the accession year system. Jeremiah, therefore, applied the Jewish non-accession year system not only to Jehoiakim, but also to Nebuchadnezzar.

2. In 2 Kings 24:12; 25:8, and Jeremiah 52:12 Jehoiachin's deportation and the destruction of Jerusalem are said to have taken place in Nebuchadnezzar's *eighth* and *nineteenth* regnal years, while Jeremiah 52:28–30 seems to put these events in Nebuchadnezzar's *seventh* and *eighteenth* years, respectively. The difference in both cases is one year. The Neo-Babylonian *Chronicle 5* is in agreement with Jeremiah 52:28 in stating that Nebuchadnezzar seized Jerusalem and captured Jehoiachin in his seventh year.

There is evidence to show that the last chapter of Jeremiah, chapter 52, was not authored by Jeremiah himself. This is clearly indicated by the concluding statement of the preceding chapter (Jeremiah 51:64): "Thus far are the words of Jeremiah." Chapter 52, in fact, is almost word for word taken from 2 Kings 24:18–25:30, *the only exception being Jeremiah 52:28–30,* the verses containing the divergence of one year in the reference to Nebuchadnezzar's regnal years.[7] Professor Albertus Pieters in all probability gives the correct explanation of this difference when he states:

> This difference is perfectly explained if we assume that the section in question was added to the prophecies of Jeremiah by someone in Babylon who had access to an official report or record, in which the date would, of course, be set down according to the Babylonian reckoning.[8]

6 The Neo-Babylonian chronicles are discussed in Chapter Three, section B-1.

7 It cannot be determined whether chapter 52 was added by Jeremiah himself, his scribe Baruch, or some other person. The reason why this section from 2 Kings was included may have been "to show how Jeremiah's prophecies were fulfilled."—Dr. J. A. Thompson, *The Book of Jeremiah* (Grand Rapids: Wm. B. Eerdman's Publishing Co., 1980), pp. 773, 774.

8 Albertus Pieters, "The Third Year of Jehoiakim," in *From the Pyramids to Paul,* ed. by Lewis Gaston Leary (New York: Thomas Nelson and Sons, 1935), p. 186. That the information in Jeremiah 52:28–30 may have been added to the book of Jeremiah *in Babylonia* is also supported by the fact that the Greek *Septuagint (LXX)* version of Jeremiah, which was produced *in Egypt* (perhaps from a manuscript preserved by the Jews in that country), does not include these verses.

The compiler of Jeremiah 52, then, faithfully reproduced the dates found in his two sources, even if those sources reflected two different ways of reckoning regnal years: the accession year system used by the Babylonians, and the nonaccession year system used by the Jews.

The last four verses of chapter 52 of Jeremiah (verses 31–34), although taken verbatim from 2 Kings 25:27–30, also reflects the accession year system, which may be explained by the fact that the passage reproduces information that originally must have been received from Babylonia. As stated in this passage, Evil-merodach (Awel-Marduk), "in the year of his becoming king," released the Judean king Jehoiachin from prison in the 37th year of his exile. According to Professor Pieters the clause "in the year of his becoming king" (Jeremiah 52:31) "is the technically correct term for the year of the monarch's accession,"[9] the Babylonian documents using a similar expression when referring to the accession year.

That the writer of the passage in Jeremiah 52:28–34 used the accession year system is thus the conclusion of a number of modern Biblical scholars.[10]

3. The accession year system is most probably also employed by the prophet Daniel at Daniel 1:1, where he dates the first deportation of Jewish exiles to the "*third* year" of Jehoiakim. This deportation, however, must have followed upon the battle of Carchemish, the victory there paving the way for Nebuchadnezzar's invasion and conquest of the countries in the west, including Judah.

As noted above, this battle is dated at Jeremiah 46:2 to the '*fourth* year" of Jehoiakim, not to his third. Most commentators, therefore, choose to regard the "third year" of Daniel 1:1 as a historical blunder by the author of the book, and as indicating that he was not contemporary with the event, but was writing hundreds of years afterwards. Some, including the Watch Tower Society, argue that the deportation mentioned in the text was identical with the one that occurred eight years later, after the end of Jehoiakim's 11th year of reign, when his son and successor Jehoiachin was exiled to Babylon.[11]

9 Pieters, *op. cit.,* p. 184.

10 See, for example, John Bright, *The Anchor Bible: Jeremiah* (N.Y.: Doubleday, 1965), p. 369; J. A. Thompson, *op. cit.,* p.782, and J. Philip Hyatt, "New Light on Nebuchadnezzar and Judean History," *Journal of Biblical Literature,* Vol. 75 (1956), p. 278.

11 *Insight an the Scriptures,* Vol. 1 (Brooklyn, New York: Watchtower Bible and Tract Society of New York, Inc., 1988), p. 1269. A detailed examination of this theory is presented in the Appendix for Chapter Five: "The 'third year of Jehoiakim' (Daniel 1:1, 2)."

However, if it is accepted that Daniel was living in Babylon in the Neo-Babylonian period and was occupying a high rank in its administration, it would have been natural for him to apply the Babylonian calendar and their system of reckoning regnal years, and to do this as well when referring to the reigns of non-Babylonian kings, including Jehoiakim, just as Jeremiah, living in Judea, conversely applied the Jewish nonaccession year system in referring to Nebuchadnezzar's reign.

4. The Babylonian calendar was also used (alongside the Egyptian civil calendar) by the Jewish colony at Elephantine in s. Egypt from the 5th century onward, as has been established by Dr. Bezalel Porten and others. Dr. Sacha Stern concludes that, "Non-Jewish or 'official' calendars were routinely used by Diaspora Jews throughout the whole of Antiquity."[12]

Several difficult problems in Biblical chronology are easily solved if the accession and nonaccession year systems are taken into consideration. A study of the chronological tables in the final section of this Appendix ("Chronological tables covering the seventy years") will make this clear.

Nisan and Tishri years

It is well established that the Assyrian, Babylonian and Persian calendar started on Nisan 1 (the first day of the month Nisan in the spring), which was also the beginning of the regnal years. The Jews, in later times, had two beginnings of their calendar years: Nisan 1 in the spring and Tishri 1 six months later in the autumn—Tishri 1 being the older new-year day.[13] Although Nisan was the beginning of the *sacred* calendar year, and the months were always numbered from it,[14] Tishri was retained as the beginning of the *secular* calendar year.

The problem is: Did the kings of Judah follow the custom of Babylon and other countries in reckoning the regnal years from Nisan 1, or did they reckon them from Tishri, the beginning of their secular year? Although scholars disagree on this, there is evidence to show that the kings of Judah reckoned their regnal years on a Tishri-to-Tishri basis.

12 Sacha Stern, "The Babylonian Calendar at Elephantine," *Zeitschrift far Papyrologie and Epigraphik,* Band 130 (2000), p. 159.

13 J. D. Douglas, ed., *New Bible Dictionary,* 2nd ed. (Leicester, England : Inter-Varsity Press, 1982), p. 159; compare *Insight on the Scriptures,* Vol. 1, p. 391.

14 "In the Hebrew Scriptures the months are numbered from Nisan, regardless of whether the reckoning of the year was from spring or fall." — Edwin R. Thiele, *The Mysterious Numbers of the Hebrew Kings,* revised edition (Grand Rapids: Zondervan Publishing House, 1983), p. 52. In footnote 11 on the same page he gives many examples of this.

1. Jeremiah 1:3 states that the inhabitants of Jerusalem, after the desolation of the city, "went into exile in the *fifth* month," which is also in agreement with the record in 2 Kings 25:8–12. Yet this fifth month is said to have been at "the *end* of the eleventh year of Zedekiah."[15] Only if the regnal years were reckoned as beginning from Tishri (the seventh month) could the fifth month be said to be at "the end of" Zedekiah's eleventh regnal year, which then ended with the next month, Elul, the sixth month.

2. According to 2 Kings 22:3–10 King Josiah of Judah, in his *eighteenth* year, began repairs on the temple of Jerusalem. During these repairs High Priest Hilkiah found "the book of the law" in the temple.[16] This discovery resulted in an extensive campaign against idolatry throughout the whole land. After that Josiah reinstituted the passover on Nisan 14, two weeks after the beginning of the new year according to the sacred calendar. Very interestingly, this passover is said to have been celebrated "in the *eighteenth* year of King Josiah." (2 Kings 23:21–23) As the repairs of the temple, the cleansing of the land from idolatry and many other things recorded in 2 Kings 22:3–23:23 could not reasonably have occurred within just two weeks, it seems obvious that Josiah's eighteenth regnal year was not counted from Nisan 1, but from Tishri 1.

3. Another indication of a Tishri reckoning of regnal years in Judah is given in Jeremiah 36. In "the *fourth* year of Jehoiakim" (verse 1), Yahweh told Jeremiah to write in a book all the words he had spoken to him against Israel, Judah, and all the nations (verse 2). This Jeremiah did through Baruch, his secretary (verse 4). When Baruch had finished the work, Jeremiah asked him to "go, and from the scroll you wrote at my dictation, read all the words of Yahweh to the people in his Temple on the day of the fast." (Jeremiah 36:5, 6, *JB).* Which fast?

This was evidently a special fast proclaimed for some unspecified reason. Most probably the reason was the battle of Carchemish in May–June that same year, "in the *fourth* year of Jehoiakim" (Jeremiah 46:2), and the subsequent events, including the siege laid against Jerusalem in the same year according to

15 KIV, ASV, NASB, and other versions. The *New World Translation* (NW) uses the word "completion": "until the *completion* of the eleventh year of Zedekiah the son of Josiah, the king of Judah, until Jerusalem went into exile in the *fifth* month "

16 As argued by many commentators, the "book of the law" probably was the book of Deuteronomy, which may have been lost for some time, but was now rediscovered. Cf. Professor Donald J. Wiseman, *1 and 2 Kings* (Leicester: Inter-Varsity Press, 1993), pp. 294–296.

Daniel 1:1. Though Nebuchadnezzar by now, due to the death of his father, had returned to Babylon (as recorded in the Neo-Babylonian *Chronicle 5),* the Jews had good reasons for fearing that he soon would return and continue his operations in Judah and the surrounding areas. Against this background, a "summons to a fast in the presence of Yahweh for the whole population of Jerusalem and for all the people who could come to Jerusalem from the towns of Judah" (Jeremiah 36:9, *JB)* is quite understandable. Very interestingly, this fast, at which Baruch was to read aloud from the scroll he had written, took place "in the *fifth* year of Jehoiakim the son of Josiah, the king of Judah, *in the ninth month,"* according to the same verse.

If Jehoiakim's regnal years were counted from Nisan, the first month, Baruch began to write down Jeremiah's prophecies about a year prior to this fast. Besides, it seems to have been *proclaimed* already in the fourth year of Jehoiakim (verses 1, 6), and thus about nine months before it was held. All this seems very improbable. But if Jehoiakim's regnal years were counted from Tishri, the seventh month, his fourth year ended with Elul, the sixth month (corresponding to parts of August–September, 605 B.C.E.), and the fast in the ninth month (parts of November–December, 605 B.C.E.) took place a little more than two months after the beginning of Jehoiakim's fifth year.

Baruch's writing down of Jeremiah's prophecies, then, took only a few months, which is more probable, and the fast could have been proclaimed only two months before it was held, and not long after the battle of Carchemish and the subsequent Babylonian operations in Syria and Palestine in the summer and autumn of 605 B.C.E.[17]

4. There is evidence, too, that Jewish writers, when referring to foreign kings, at least sometimes reckoned their regnal years according to the Tishri year. This is done by Nehemiah for example. In Nehemiah 1:1 he refers to the month Chislev

17 According to the Neo-Babylonian *Chronicle 5* Nebuchadnezzar was enthroned in Babylon "on the first day of the month Elul," corresponding to September 7, 605 B.C.E., Julian calendar. After that, and still in his accession year, "Nebuchadnezzar returned to Hattu [the Syro-Palestinian area in the west]. Until the month Shebat [parts of January–February, 604 B.C.E.] he marched about victorious in Hattu." — A. K. Grayson, *Assyrian and Babylonian Chronicles,* (Locust Valley, New York: JJ. Augustin Publisher, 1975), p. 100. Thus Nebuchadnezzar may already have returned to the Hattu area at the time of the fast in November or December, 605 B.C.E. The danger of another invasion of Judah, therefore, seemed impending.

(November–December) in the *twentieth* year of Artaxerxes. But the month of Nisan of the next year is still referred to as in Artaxerxes' *twentieth* year of rule. (Nehemiah 2:1) If Nehemiah reckoned Artaxerxes' regnal years from Nisan 1, he should have written *twenty-first* year at chapter 2, verse 1. Nehemiah, therefore, obviously reckoned the regnal years of the Persian king Artaxerxes according to the Jewish Tishri-to-Tishri calendar, not according to the Persian Nisan-to-Nisan count. This is also supported in the Watch Tower Society's Bible dictionary, *Insight on the Scriptures,* Vol. 2 (1988), pages 487, 488.[18]

That Judah followed a Tishri-to-Tishri reckoning of the regnal years, at least in this period of its history, is the conclusion of some of the best scholars and students of Bible chronology, for example, Sigmund Mowinckel, Julian Morgenstein, Friedrich Karl Kienitz, Abraham Malamat, and Edwin R. Thiele.[19] Although this way of reckoning regnal years makes the synchronisms between Judah and Babylon somewhat more complicated, it clears up many problems when applied. In the chronological tables on pages 350–352 of this book, both kinds of regnal years are paralleled with our modern calendar.

18 Few scholars seem to hold that Judah in the seventh and sixth centuries B.C.E. employed this combination of *both* the nonaccession year system *and* the Tishri-to-Tishri count of the regnal years, as advocated in this work. Those who opt for the nonaccession year system usually hold that Judah applied the Nisan-to-Nisan reckoning, and those who argue that Tishri-to-Tishri regnal years were used generally believe that the accession year system was employed.

19 See for example J. Morgenstein's review of Parker and Dubberstein's *Babylonian Chronology 626 B.C.–A.D. 45* in the *Journal of Near Eastern Studies,* Vol. 2 (1943), pp. 125–130, and Dr. A. Malamat's article, "The Twilight of Judah: In the Egyptian-Babylonian Maelstrom," in *Supplements to Vetus Testamentum,* Vol. XXVII (Leiden: E.J. Brill, 1975), p. 124, including note 2; also K. S. Freedy and D. B. Redford, "The Dates in Ezekiel in Relation to Biblical, Babylonian and Egyptian Sources," *Journal of the American Oriental Society,* Vol. 90 (1970), pp. 464, 465. Dr. Edwin R. Thiele, however, assumes that while the books of Kings reckon the regnal years from Tishri, Jeremiah and Ezekiel both reckon them from Nisan. (E. R. Thiele, *The Mysterious Numbers of the Hebrew Kings,* Grand Rapids: Zondervan Publishing House, 1983, pp. 51–53, 182–191.) This seems a rather far-fetched speculation, and there is no need for it, if we allow for both Tishri regnal years and the nonaccession year system for this period.

For Chapter Three:

SOME COMMENTS ON COPYING, READING, AND SCRIBAL ERRORS IN CUNEIFORM TABLETS

If twenty years are to be added to the Neo-Babylonian era, *considerable numbers* of texts dated to *each* of these years should have been found. It would never do to come up with one or two oddly dated documents from the era. Like modern clerks, secretaries, and bookkeepers, the Babylonian scribes now and then made errors in writing. As the writing had to be done while the clay tablet was soft, some of the errors could be corrected before the tablet dried out. Many tablets bear traces of crossings-out and corrections. Usually, the errors found on the tablets concern minor details, repetitions, omissions, etc. Although the errors sometimes also concern the date, it is remarkable that most of the odd dates found in modern catalogues of Babylonian tablets turn out to be *modern* reading, copying, or printing errors, including misreading or misprinting of royal names.

In their attempts at defending the Watch Tower Society's chronology, some Witnesses, both in the United States and Norway, have exploited not only such copying, reading, and scribal errors in cuneiform texts, but also the dates on some documents that seem to create overlaps of a few weeks or months between the reigns of some of the Neo-Babylonian rulers. For this reason it seems necessary to take a closer look at these problems.

Modern copying and reading errors

As Mr. C. B. F. Walker at the British Museum points out, "modern readers frequently incorrectly read numbers and month names on Babylonian tablets."[20] Royal names, too, are sometimes misread by modern scholars. Since dating within the Babylonian period is based on *regnal years* (rather than an *era* dating) the name of the king involved is obviously crucial.

Thus on one published text the translation referred to Babylonian ruler "*Labashi-Marduk's 4th year.*"[21] Later scholars

20 Letter Walker-Jonsson, October 1, 1987. This is also reflected in the CBT catalogues on the Sippar collection at the British Museum, referred to in chapter 3, note 60, which list some 40,000 texts. Quite a number of the odd dates are just printing errors, while many others on collation turn out to be reading errors. A list with corrections and additions is kept at the museum by Mr. Walker.

21 R. Campbell Thompson, *A Catalogue of the Late Babylonian Tablets in the Bodleian Library, Oxford IV* (London: Luzac and Co., 1927), tablet no. A 83.

realized that the text actually referred to Assyrian king *Shamash-shum-ukin.*[22] (There is a wide difference in our *alphabetical* spelling of the two names, but one must remember these were written in *cuneiform signs* which, in this case, were much more easily mistakable.) A similar error in reading another tablet resulted in reference to the 21st year of Sin-shar-ishkun, the next to the last Assyrian king.[23] Later reexamination of this damaged section led to the conclusion the reference was more probably to Babylonian king Nabu-apla-usur (Nabopolassar).[24]

Scribal errors

Not all the odd dates are modem errors, however. It is well established that the Persian king *Cambyses,* the son of Cyrus, ruled for eight years (529/28–522/21 B.C.E.). Yet one text from his reign (BM 30650) seemed to be dated to Cambyses' "*11th year*". At first the text caused much discussion among scholars, but it was finally concluded that it refers to Cambyses' *first* year. The number "1" had been written over an original "10," which the scribe had not been able to completely erase, resulting in a number that easily could be misread as "11".[25]

Another document was dated to the "*10th year*" *of Cyrus,* although it is known from all ancient sources that Cyrus ruled for nine years only. The problem was soon resolved. In the period

22 Letter Dr. D. J. Wiseman-Jonsson, June 19, 1987.

23 G. Contenau in *Textes Cuneiformes, Tome XII, Contrats Néo-Babyloniens, I* (Paris: Librarie Orientaliste, 1927), p. 2 + P1. X, tablet no. 16; *Archiv für Orientforschung,* Vol. 16, 1952–53, p. 308; *Journal of Cuneiform Studies,* Vol. 35:1–2, 1983, p.59.

24 Letter from Dr. Béatrice André of the Louvre Museum to C. O. Jonsson, March 20, 1990. As Nabopolassar, the father of Nebuchadnezzar, ruled for 21 years, this reading of the royal name creates no problem. — In the early days of Assyriology the reading of royal names was an even more arduous task. In 1877, for example, Wt. St. Chad Boscawen found two tablets in the archive of the Babylonian Egibi banking house, which seemed to mention two previously unknown Neo-Babylonian kings: *Marduk-shar-uzur* and *La-khab-ba-si-kudur.* Later, however, it turned out that the two names were misreadings for *Nergal-shar-uzur* [Neriglissar] and *Labashi-Marduk.* According to the banker Bosanquet, who financially supported Boscawen's work on the tablets, there was also a tablet in the Egibi archive dated to the 11th year of Nergal-shar-uzur. However, no such tablet has since been found in the collection at the British Museum. It was most probably another misreading, and Bosanquet himself did not refer to it again when he later presented his own speculative and wholly untenable chronology of the Neo-Babylonian era.— *Transactions of the Society of Biblical Archaeology,* Vol.6 (London 1878), pp. 11, 78, 92, 93, 108–111, 262, 263; S. M. Evers, "George Smith and the Egibi Tablets," *Iraq,* Vol. LV, 1993, p. 110.

25 F. H. Weissbach in *Zeitschrift der Deutschen Morgenländischen Gesellschaft,* Vol. LV, 1901, pp. 209, 210, with references.

involved, the scribes commonly made duplicate copies of an agreement, one for each party. Numbers of such duplicates have been found, including one for this text. But instead of being dated to the *tenth year* of Cyrus, this copy is dated to the "*2nd year"* of Cyrus. The first copy evidently contained a scribal error.[26]

The two above-mentioned examples are from the Persian era. What about the Neo-Babylonian period?

A few documents from this era with unusual dates have been found that create some problems. It is remarkable, however, that the problems have to do with *month numbers only, not with year numbers*. Some defenders of Watch Tower chronology in their extreme efforts to find at least some support for their position have illogically sought to transform these overlaps of *months* into evidence for differences involving *years*. As the evidence will show, none of the documents can be used in a valid way to question the chronology of the period.

Overlap Nebuchadnezzar/Awel-Marduk?

Two of the tablets containing problematic dates are from the accession-year of Awel-Marduk, the son and successor of Nebuchadnezzar.

The latest document from the reign of Nebuchadnezzar is dated VI/26/43 (month 6, day 26, year 43, corresponding to Oct. 8, 562 B.C.E.). According to Parker & Dubberstein's *Babylonian Chronology,* published in 1956, the first text from the reign of his son and successor, Awel-Marduk, is dated VI/26/acc. (month 6, day 26, accession year), that is, *on the same day*.[27]

Since 1956, however, a couple of tablets from Sippar have been found that are dated to Awel-Marduk's accession-year *one month earlier,* that is in the *fifth month*. On one tablet (BM 58872) the day number is damaged and illegible, but the other tablet (BM 75322) is

26 Weissbach, *ibid.,* p. 210.

27 R. A. Parker and W. H. Dubberstein, *Babylonian Chronology: 626 B.C.–AD. 75* (Providence: Brown University Press, 1956), p. 12.

28 A translation of the first text (BM 58872) was published by R. H. Sack in 1972 (no. 79 in Ronald H. Sack, *Amel-Marduk 562–560 B.C.,* Neukirchen-Vluyn: Neukirchener Verlag, 1972, pp. 3, 106). For the second text (BM 75322), see *CBT* (cf. p. 321, note 20), Vol. VIII, p.31. Two other texts published by Sack (numbered 56 and 70 in his work) seem to be dated to the "*4th* month" of Awel-Marduk's accession-year, which would imply an overlap of *two* months with the reign of his father. However, Mr. Walker, who collated the two texts in 1990, confirmed that no.56 (=BM 80920) is dated to the "*7th* month", as shown also in *CRT* VIII, p.245. In Sack no. 70 (BM 65270), the month name is difficult to read, and "it is perhaps most likely that the month is 7 rather than 4" —Letter Walker-Jonsson, November 13, 1990. Cf. also D. J. Wiseman, *Nebuchadrezzar and Babylon* (Oxford: Oxford University Press, 1985), pp. 113, 114.

clearly dated V/20/acc.[28] These texts, then, indicate that there was an *overlap* of over one month between the reigns of the two kings:

Nebuchadnezzar's 43nd year: _____ last text: VI/26/43
Months: | *month 4* | *month 5* | *month 6* | *month 7* |
Awel-Marduk's accession-year: first text: V/20/acc

An explanation for this overlap maybe that Nebuchadnezzar died earlier than October (the sixth month of the Babylonian calendar year included part of October) and that some scribes continued to date documents to his reign for a few weeks until it was fully clear who his successor would be. Berossus states that his son and successor Awel-Marduk "managed the affairs in a lawless and outrageous fashion," and therefore "was plotted against and killed by Neriglisaros [Neriglissar], his sister's husband," after only two years of reign.[29] As argued by the Polish Assyriologist Stefan Zawadzki, the wicked character of Awel-Marduk was probably evident already before his becoming king, which may have provoked opposition to his succession to the throne in some influential quarters. This may have been the reason why some scribes for a few weeks continued to date their documents to the reign of his deceased father.[30] (It has been pointed out earlier that Nabonidus evidently viewed Awel-Marduk as an usurper.)

In order to add some years to the Neo-Babylonian period, someone might argue, as did one Norwegian source, that the dates above, rather than indicating an overlap, show that Nebuchadnezzar's forty-third year was not the same as Awel-

29 Stanley Mayer Burstein, *The Babyloniaca of Berossus. Sources from the Ancient Near East,* Vol. 1, fascicle 5 (Malibu, Calif.: Undena Publications, 1978), p. 28.

30 Stefan Zawadzki, "Political Situation in Babylonia During Amel-Marduk's Reign," in J. Zablocka and S. Zawadzki (eds.), *Shulmu IV: Everyday Life in Ancient Near East: Papers Presented at the International Conference, Poznan, 19–22 September, 1989* (Poznan: Adam Mickiewicz University Press, 1993), pp. 309–317. That Nebuchadnezzar probably had died before the sixth month of the 43rd year is also supported by a Neo-Babylonian text from Uruk, YBC 4071, dated to the 15th of Abu (the fifth month), 43rd year of "The Lady of Uruk, King of Babylon" (the "Lady of Uruk" being Ishtar, the goddess of war and love, a great temple of whom was located in Uruk). Dr. David B. Weisberg, who published this text in 1980, concludes that Nebuchadnezzar evidently was dead at this time, although "cautious scribes continued to date to him even after his death, waiting prudently to see who his successor would be. One, however, may have tipped his hand and opted for a dating to The Lady-of-Uruk, 'King' of Babylon." —D. B. Weisberg, *Texts from the Time of Nebuchadnezzar,* Yale Oriental Series, Vol. XVII (New Haven and London: Yale University Press, 1980), p. xix. Cf. Zawadzki, *op. cit.,* p. 312.

Marduk's accession-year, and that either Nebuchadnezzar ruled for more than forty-three years or there was another, unknown king between them.

Such assumptions, however, are disproved by the Bible itself. A comparison of 2 Kings 24:12 and 2 Chronicles 36:10 with Jeremiah 52:28 shows that Jehoiachin's exile began toward the end of Nebuchadnezzar's seventh regnal year. This would mean that at the death of Nebuchadnezzar in his forty-third year Jehoiachin had spent almost thirty-six years in exile (43-7=36), and that the *thirty-seventh* year of exile began later in that same year, in the accession-year of Awel-Marduk (Evil-Merodach). And this is *exactly* what we are told in Jeremiah 52:31:

> But in the thirty-seventh year of the exile of Jehoiachin king of Judah, in the twelfth month, on the twenty-fifth day of the month, Evil-merodach king of Babylon, in the year he came to the throne, pardoned Jehoiachin king of Judah and released him from prison.—*Jerusalem Bible.* (Compare 2 Kings 25:27.)

Clearly, the Bible does not allow for any additional years between the forty-third year of Nebuchadnezzar and the accession-year of Awel-Marduk.

Overlap Awel-Marduk/Neriglissar?

Before the publication of the *CBT* catalogues in 1986–88 (see p. 321, note 20), the *latest tablet* known from the reign of Awel-Marduk was dated V/17/2 (Aug. 7, 560 B.C.E.), while the *first tablet* from the reign of his successor Neriglissar was dated V/21/acc. (Aug. 11, 560 B.C.E.). Only four days, then, separated the latest tablet from Awel-Marduk's reign from the first tablet dated to Neriglissar.[31]

In the CBT catalogues, however, there are two texts that seem to create a considerable overlap between the reigns of Awel-Marduk and Neriglissar. The first (BM 61325) is from the reign of Awel-Marduk and is dated to the *tenth* month of his second regnal year (X/19/2), or about five *months later* than the latest tablet previously known from his reign.[32]

This overlap of five months with the reign of Neriglissar is further extended by the second text, BM 75489, which is dated to

31 Ronald H. Sack, "Nergal-sharra-usur, King of Babylon as seen in the Cuneiform, Greek, Latin and Hebrew Sources ," *Zeitschrift für Assyriologie,* Vol. 68 (Berlin, 1978), p. 132.

32 *CBT* VII, p.36. The catalogue has day "17", which is corrected to "19" in Walker's list.

the *second* month of Neriglissar's accession-year (II/4/acc.), or about *three months and a half earlier* than the earliest tablet previously known from his reign.[33] Together, these two texts seem to create an overlap of eight and a half months:

Awel-Marduk's 2nd year: _____ last text: X/19/2
Months: | *month 1* | *month 2* | *months 3–9* | *month 10* |
Neriglissar's accession-year: first text: II/4/acc

How can this overlap be explained? Again, someone might argue that the dates above, rather than showing an overlap, indicate that Awel-Marduk's second year was *not* the same as Neriglissar's accession-year, and that either he ruled for *more* than two years or that there was *another, unknown ruler* between the two.

Any evidence, however, in support of such assumptions is completely lacking. It should be kept in mind that each of their *known* regnal years are covered by numerous dated tablets, both published and unpublished. If Awel-Marduk ruled for more than two years, we would have a large number of tablets, economic and other types, dated to each of those additional years.

It is of considerable interest in this connection that the *Uruk King List* (discussed in chapter 3, section B-1b) specifies the reign of Neriglissar as "'3' (years) 8 months". As Neriglissar's reign ended in the first month (Nisanu) of his fourth year (see below), he acceded to the throne in the fifth month (Abu) three years and eight months earlier, according to this kinglist. *This is the same month as that established earlier for his accession, before the two odd dates mentioned above were discovered.*

There are good reasons to believe that the information given in the Uruk King List was based upon sources that go back to the Neo-Babylonian period itself, including the chronicles. The preserved figures are all in good agreement with those established by the contemporary documents. This seems to be true even when—in two cases—the number of *months* is given.

Thus the Uruk King List gives Labashi-Marduk a reign of only three months, and the contracts from Uruk dated to his reign also show that he was recognized in that city as king for (parts of) three

33 *CBT* VIII, p. 35. Walker, who collated both tablets on several occasions, points out that "the months are very clearly written in both cases." — Letter Walker-Jonsson, October 26, 1990.

months. When the same kinglist, therefore, indicates that Neriglissar acceded to the throne in the month of Abu, this, too, may very well be correct. At this point of time he had firmly established his rule and was recognized as king in most parts of Babylonia.[34]

If the two odd dates referred to earlier are not simply scribal errors, the reason for the overlap they create at the end of Awel-Marduk's reign may be the same as that suggested above for the overlap at the *beginning* of his reign, namely, the prevailing opposition against his rule, which culminated with Neriglissar's seizure of power through a *coup d'état.* This explanation has recently been argued in some detail by R. H. Sack in his book *Neriglissar-King of Babylon.*[35]

Overlap Neriglissar/Labashi-Marduk?

The two last tablets known from the reign of Neriglissar are dated 1/2/4 (April 12, 556 B.C.E.) and I?/6/4 (April 16). The first tablet known from the reign of his son and successor, Labashi-Marduk, is dated I/23/acc. (May 3, 556 B.C.E.), that is, twenty-one, or possibly only seventeen days later. These dates create no overlap between the two.

Overlap Labashi-Marduk/Nabonidus?

The latest tablet known from the reign of Labashi-Marduk is dated III/12/acc. (June 20, 556 B.CE.), while the first tablet known from the reign of his successor, Nabonidus, is dated one month earlier, II/15/acc. (May 25, 556 B.CE.). This overlap of somewhat less than a month is a real one.

It may be easily accounted for, however, by the *circumstances* that brought Nabonidus to the throne. As explained by Berossus, Labashi-Marduk was "only a child" at the time of Neriglissar's death.

34 Documents from Uruk show that Labashi-Marduk was recognized as king in that city in the months of Nisanu, Ayyaru, and Simanu.— Paul-Alain Beaulieu, *The Reign of Nabonidus, King of Babylon 556–539 B.C.* (New Haven and London: Yale University Press, 1989), pp. 86–88. The critical comments on the Uruk King List by Ronald H. Sack on page 3 of his work, *Neriglissar—King of Babylon (= Alter Orient and Altes Testament,* Band 236, Neukirchen-vluyn: Neukirchener Verlag, 1994), are mistaken, as they are based on an inadequate presentation of the list, which also disagrees with the sources referred to in his footnote.

35 R. H. Sack, *op. cit.,* pp. 25–31. There is some evidence that Neriglissar, before his seizure of power, held the highest office *(qipu)* at the Ebabbara temple in Sippar, and that his revolt started in that city. This would explain why the earliest texts dated to his reign are from Sippar, indicating he was first recognized in that area while Awel-Marduk was still recognized elsewhere for several months.—S. Zawadzki, *op. cit.* (note 30 above), also J. MacGinnis in *Journal of the American Oriental Society,* Vol. 120:I (2000), p. 64.

"Because his wickedness became apparent in many ways he was plotted against and brutally killed by his friends. After he had been killed, the plotters met and jointly conferred the kingdom on Nabonnedus [Nabonidus], a Babylonian and a member of the conspiracy:"[36] This account agrees with the Hillah-stele, where Nabonidus gives a similar description of Labashi-Marduk's character and of his own enthronement.[37]

The evidence is that the rebellion that brought Nabonidus to power broke out almost immediately after Labashi-Marduk's accession, and that both of them ruled simultaneously for a few weeks, *but at different places*. It should be noted that all tablets known from the reign of Labashi-Marduk are from three cities only, Babylon, Uruk, and Sippar, and that there was no overlap between the two reigns at any of these cities:

	Nippur	Babylon	Uruk	Sippar
Labashi-Marduk, latest tablet:	—	May 24	June 19	*June 20*
Nabonidus, earliest tablet:	*May 25*	July 14?	July 1	June 26

Dr. Paul-Alain Beaulieu discusses the available data at some length, concluding that, "In consideration of all this evidence the usual reconstruction of Nabonidus' accession seems correct. He was probably recognized as king as early as May 25 in central Babylonia (Babylon and Nippur), but outlaying regions would have recognized Labâshi-Marduk until the end of June."[38]

Thus, there is a well-founded explanation for the brief overlap between the reigns of Labashi-Marduk and Nabonidus. The accession of the young and—at least in some influential circles—unpopular Labashi-Marduk caused a rebellion and Nabonidus, strongly supported by leading strata in Babylonia, seized power and established a rival kingship. For a brief period there was a double kingship, although in different parts of the kingdom, until Labashi-Marduk finally was murdered and Nabonidus could be officially crowned as king.

In conclusion, the odd dates on a few tablets from the Neo-Babylonian period create no major problems. None of them add any *years* to the period, as the "overlaps" created by the odd dates

36 Burstein, *op. cit.,* p. 28.

37 *Ancient Near Eastern Texts Relating to the Old Testament* [ANET], ed. by James B. Pritchard (Princeton, New Jersey: Princeton University Press, 1950), p. 309. For additional details, see chapter 3 above, section B-4-e.

38 Paul-Alain Beaulieu, *op. cit.* (note 34 above), pp. 86–88. Cf. also W. Röllig in *Reallexikon der Assyriologie and vorderasiatischen Archäologie,* ed. D. G. Edzard, Vol. VI (Berlin and New York: Walter de Gruyter, 1980), p. 409.

concern *months only, not years.* And as has been shown above, it is possible to find reasonable explanations for all the three overlaps without giving oneself up to farfetched and demonstrably untenable theories about extra years and extra kings during the period.[39]

ADDITIONAL COMMENTS ON THE ROYAL INSCRIPTIONS

The Hillah stele (Nabon. No. 8)

According to the Hillah stele, fifty-four years had passed from the desolation of the temple Éhulhul in Harran in the six,teenth year of Nabopolassar (610/609 B.C.E.) until the accession-year of Nabonidus (556/555 B.C.E.).

In an attempt to undermine the confidence in the information on this stele, at least one of the defenders of the Watch Tower Society's chronology has claimed that the fifty-four years referred to the period of *desolation* of the Éhulhul temple, and that Nabonidus states it was rebuilt immediately after the end of this period. As the rebuilding of the temple was not actually completed until several years after the Hillah stele had been inscribed, the fifty-four year period is claimed to be a fiction.

Such an interpretation of the stele is a gross distortion of the matter. Although it is true that the temple had lain desolate for fifty-four years when Nabonidus, in his accession-year, concluded that the gods had commanded him to rebuild it, he does not say

39 If defenders of the Watch Tower Society's chronology insist that such an "overlap" of some months between two Neo-Babylonian rulers indicates there were more years or maybe even an extra king between the two, they should—for the sake of consistence—give the same explanation to similar "overlaps" found between rulers of the *Persian* era. For example, the latest tablet from the reign of Cyrus is dated VIII/20/9 (December 5, 530 B.C.E.), while the earliest text from the reign of his successor, Cambyses, is dated VI/12/acc. (August 31, 530 B.C.E.). This would mean there was an overlap between the two rulers of over three months! (Jerome Peat, "Cyrus 'king of lands,' Cambyses 'king of Babylon': the disputed co-regency," *Journal of Cuneiform Studies,* Vol. 41/2, Autumn 1989, p. 210; M. A. Dandamayev, *Iranians in Achaemenid Babylonia,* Cosa Mesa, Califomia and New York: Mazda Publishers, 1992, pp. 92, 93.) As the Watch Tower Society dates the fall of Babylon to 539 B.C.E. *by counting backwards from the reign of Cambyses,* they would certainly not like to have any additional years inserted between Cyrus and Cambyses, as that would move the date for the fall of Babylon as many years backwards in time! (See *Insight an the Scriptures,* Vol. 1, 1988, p. 453.) Dandamayev *(op. cit.,* 1992, p.93) gives the following very plausible explanation of the overlap: "It seems that Cyrus appointed Cambyses as joint ruler before his expedition against the Massagetae" This is in agreement with Herodotus' statement (VII, 3) that it was the custom of Persian kings to appoint their successors to the throne before they went out to war, in case they would be killed in the battles.

that it was rebuilt *immediately*. As indicated by a number of texts the restoration of the temple was evidently a drawn-out process that lasted for several years, perhaps until the thirteenth year of Nabonidus.

The fifty-four years, on the other hand, clearly ended in the accession-year of Nabonidus, when, according to the Adad-guppi' inscription, "the wrath of his [Sin's] heart calmed. Towards E-hul-hul the temple of Sin which (is) in Harran, the abode of his heart's delight, he was reconciled, he had regard. Sin, king of the gods, looked upon me and Nabu-na'id (my) only son, the issue of my womb, to the kingship he called. "[40]

The statement on the Hillah stele that Sin at this time "returned to his place" should not be taken to mean that the temple was rebuilt at this time. Rather, it may mean that Sin, the moon god, "returned to his place" *in the sky,* as suggested by Tadmor. The Babylonians not only knew that lunar phenomena such as eclipses often recurred after a period of eighteen years (the so-called "Saros cycle"), but that they also, and with a much higher degree of reliability, recurred after a period *of fifty-four* years (three "Saros cycles"). The Babylonian astronomers even used these and other cycles for predicting lunar eclipses. At the time Nabonidus acceded to the throne a complete cycle of the moon had passed since the destruction of the moon temple at Harran, and Nabonidus may have seen this as a remarkable coincidence and a favorable omen. As Sin had now "returned to his place" in the sky, had not the time arrived for him to return also to his earthly abode in Harran? So Nabonidus concluded that the temple had to be rebuilt.[41]

The Adad-guppi' inscription (Nabon. No. 24)

It is well known that the Adad-guppi' inscription at one point contains *an error of calculation.* As defenders of the Watch Tower Society's chronology have emphasized this error in an attempt to undermine the value of the inscription, a few comments on the problem seem necessary.

40 C. J. Gadd, "The Hamat Inscriptions of Nabonidus," *Anatolian Studies,* Vol. VIII, 1958, pp. 47–49.

41 Hayim Tadmor, "The Inscriptions of Nabunaid: Historical Arrangement," in *Studies in Honor of Benno Landsberger on his Seventy-fifth Birthday [Assyriological Studies,* No. 16], ed. H. Güterbock & T. Jacobsen (Chicago: The Chicago University Press, 1965), p. 355.—For the superiority of the 54-year cycle, see Dr. W. Hartner, "Eclipse Periods and Thales' Prediction of a Solar Eclipse. Historical Truth and Modern Myth," in *Centaurus,* Vol. 14, 1969, pp. 60–71.

Ashurbanipal is generally believed to have begun his reign in Assyria in 668 B.C.E. His twentieth year, therefore, is dated to 649/48 B.C.E. If Adad-guppi' was born in that year, and if she lived on until the beginning of Nabonidus' ninth year, 547 B.C.E., she would have been 101 or 102 years old at her death, not 104 years as stated in the inscription. Scholars who have examined the inscription, therefore, have concluded that the stele contains a miscount of about two years. "All agree on this point," say scholars P. Garelli and V. Nikiprowetsky.[42]

Further, the inscription seems to give the Assyrian king Assur-etil-ili a reign of three years, which has been regarded as a problem as there is a contract tablet dated to the fourth year of this king.[43] Since C. J. Gadd published his translation of the text, other scholars have examined these problems. Dr. Joan Oates offers a solution which has been accepted by other scholars as most probably the correct one:[44]

As is evident from the inscription, Adad-guppi' first lived in Assyrian territory (perhaps in Harran) serving under Assyrian kings until the third year of Assur-etil-ili, when she moved to Babylon, serving under Babylonian kings from that time on. As Oates explains, this does not mean that Assur-etil-ili's third year was his last. If Assur-etil-ili began his rule in Assyria after his father's death in 627 B.C.E., his third year was 624/23 B.C.E. His second and third regnal years in Assyria, then, overlapped the first and second years of Nabopolassar in Babylon (625/24 and 624/23 B.C.E.). In calculating the age of Adad-guppi', Nabonidus (or the scribe who made the inscription) simply summed up the regnal years without taking into account this overlapping of Assur-etil-ili's reign with that of Nabopolassar.[45]

Oates' solution was supported in 1983 by Erle Leichty. Discussing a new inscription from Assur-etil-ili's reign, he pointed out its agreement with Oates' conclusion that "the third year of Assur-etilli-ilani is the same as the second year of Nabopolassar,"

42 P. Garelli and V. Nikiprowetsky, *Le Proche-Orient Asiatique* (Paris: Presses Universitaires de France, 1974), p. 241. One exception is M. Gerber in ZA 88:1 (1998), pp. 72–93.

43 C. J. Gadd, *op. cit.,* pp. 70ff.

44 Joan Oates, "Assyrian Chronology, 631–612 B.C.," *Iraq,* Vol. 27, 1965, pp. 135–159.

45 Evidently Dr. Paul-Alain Beaulieu, in his discussion of these problems, was not aware of Oates' solution. His comments, therefore, are confusing, and his questioning of the accuracy of the chronological data of the stele clearly is unwarranted.—Paul-Alain Beaulieu, *The Reign of Nabonidus, King of Babylon 556–539 B.C.* (New Haven and London: Yale University Press, 1989), pp. 139, 140.

adding, "I believe that the Oates chronology will probably turn out to be the correct one, but final judgement must await the rest of the evidence."[46]

Whatever the case, the error in the inscription is a minor problem that does not affect the reigns of the *Neo-Babylonian* kings as given in the Adad-guppi' inscription. It arose in the attempt to establish Adad-guppi's age, which had to be *calculated,* because, as pointed out by Rykle Borger, the Babylonians (like Jehovah's Witnesses today!) "never celebrated their birthdays, and hardly knew how old they were themselves:"[47]

For Chapter Four:

1. ASTROLOGY AS A MOTIVE FOR BABYLONIAN ASTRONOMY

In order to depreciate the value of the astronomical texts, some defenders of the Watch Tower chronology have emphasized that the Babylonians' interest in the celestial phenomena was *astrologically motivated.* Although it is true that this was an important object of their study of the sky, it actually contributed to the exactness of the observations.

In the great collection of ancient omens called *Enuma Anu Enlil* (the final form of which dates from the Neo-Assyrian period) the observer is given this instruction:

> When the Moon is eclipsed *you shall observe exactly month, day, night-watch, wind, course, and position of the stars in whose realm the eclipse takes place.* The omens relative to its month, its day, its night-watch, its wind, its course, and its stars you shall indicate.

For the Babylonian "astrologers" eclipses played the most prominent role, and all details, therefore, were highly important. Dr. A. Pannekoek concludes that "the astrological motive, by demanding greater attention in observing the moon, provided for better foundations in chronology.[48]

Further, it would be a mistake to think that "astrology" in the sense this word is used today was practiced in the Neo-Babylonian period or earlier. The idea that a man's fate is determined by the positions of the stars and planets at the date of birth or conception originated much later, during the Persian era. The oldest horoscope discovered dates to 410 B.C.E.[49] As pointed out by B. L. van der

46 Erie Leichty in the *Journal of the American Oriental Society,* Vol. 103, 1983, p.220, note 2.

47 Rykle Borger, "Mespotamien in den Jahren 629–621 v. Chr.," *Wiener Zeitschrift für die Kunde des Morgenlandes,* Vol. 55, 1959, p. 73.

48 A. Pannekoek, *A History of Astronomy* (London: George Allen & Unwin Ltd, 1961), pp. 43, 44.

49 A. J. Sachs, 'Babylonian horoscopes," *Journal of Cuneiform Studies,* Vol. 6(1952), p. 49.

Waerden, the earlier astrology "had a quite different character: it aimed at *short-range predictions of general public events,* such as wars and harvests, from *striking phenomena* such as eclipses, clouds, annual rising and setting of planets, whereas the [later] Hellenistic 'Chaldeans' predicted *individual fates* from *positions of planets and zodiacal signs* at the date of *birth or conception.*"[50]

Professor Otto Neugebauer, therefore, explains that "Mesopotamian 'astrology' can be much better compared with weather prediction from phenomena observed in the skies than with astrology in the modern sense of the word." He also emphasizes that the origin of astronomy was not astrology but calendaric problems: "Determination of the season, measurement of time, lunar festivals—these are the problems which shaped astronomical development for many centuries," and "even the last phase of Mesopotamian astronomy . . . was mainly devoted to problems of the lunar calendar."[51]

2. SOME COMMENTS ON ANCIENT LUNAR ECLIPSES

How reliable are modern identifications of lunar eclipses described in ancient Babylonian astronomical texts from the eighth century B.C.E. onward? Pointing out one of the pitfalls, the Watch Tower Society quotes *The Encyclopaedia Britannica* as saying that a particular town or city would, on the average, experience about forty lunar eclipses in fifty years.[52] Although this is true, the frequency of eclipses falling in a specific month is much lower. Other factors, too, set limits to the alternatives.

Even when a lunar eclipse recurs in the same month one year later, it will not occur *at exactly the same time* of the day or be of *the same magnitude.* If it occurs during the daylight hours it will, of course, be invisible from that part of the earth. As the Babylonian astronomers often give specific data on lunar eclipses, such as date (regnal year, month, day),[53] time of the onset relative to sunrise or

50 B. L. van der Waerden, "History of the Zodiak," *Archiv für Orientforschung,* Vol. 16 (1952/53), p. 224.

51 Otto Neugebauer, *Astronomy and History. Selected Essays* (New York: Springer-Verlag, 1983), p. 55.—For an extensive discussion of the nature of Babylonian astrology, see Francesca Rochberg-Halton, *Aspects of Babylonian Celestial Divination: The Lunar Eclipse Tablets of Enuma Anu Enlil (= Archiv für Orientforschung,* Beiheft 22), (Horn, Austria: Verlag Ferdinand Berger & Söhne Gesellschaft M.B.H., 1988), pp. 2–17.

52 *Insight on the Scriptures,* Vol. 1, p. 454.

53 The day number is often omitted in the texts, because, as each Babylonian month began at new moon, the full moon and therefore also any possible lunar eclipse always fell in or near to the middle of the month.

sunset, duration of partial and total phases, sometimes also magnitude and position relative to stars or constellations, the identification of the eclipses described in such texts usually creates no problems, provided that the texts are well preserved.

The Watchtower of March 15, 1969, pages 184 onward, refers to another factor, which, it is held, makes it difficult to identify ancient eclipses. It is pointed out that astronomers for a long time (for centuries, actually) have been aware of the fact that the tides produced by the moon and the sun in the oceans and body of the earth create a retardation of the earth's rotation, causing a gradual lengthening of the day. This, it is said in the article, affects the ancient records.

However, when it comes to identifying ancient lunar eclipses from the eighth century B.C.E. onward, this is not a major problem today. The great number of observations recorded on cuneiform tablets have, in fact, enabled modern astronomers to measure the exact rate of this change of the earth's rotation. It is known today that the length of the day increases at a rate of 1.7 milliseconds per century. The day in Late Babylonian time was thus about 43–44 milliseconds shorter than present.[54]

Today astronomers, of course, make allowance for the variation in the earth's rotation in their calculations of the dates of ancient eclipses. *The Watchtower* article discussed *solar* eclipses only. But as very few reliable observations of *solar* eclipses are preserved from ancient times, and as none of them are connected with the chronology of the Neo-Babylonian period, they are irrelevant to our discussion.

As I wanted to know how ancient records of *lunar* eclipses are affected by this increasing of the solar day, I wrote to Professor Robert R. Newton, who at that time (in 1981) was a leading authority on this problem.[55] I wanted to know how much the lengthening of the solar day has affected ancient records of lunar eclipses and if we can still rely upon the older tables of calculations of lunar eclipses published by Oppolzer in 1887 and Ginzel in 1899.

54 This most recent value is the result of the very careful research performed by Richard Stephenson of the University of Durham and Leslie Morrison, formerly of the Royal Greenwich Observatory in Cambridge.—See *New Scientist,* January 30, 1999, pp. 30–33.

55 Newton's research in this area has since been improved upon by other scholars. See, now, the exhaustive discussion by F. Richard Stephenson in *Historical Eclipses and Earth's Rotation* (Cambridge: Cambridge University Press, 1997).

Newton, in his answer said:

> I have not used Ginzel's canon much, and cannot speak specifically of the errors in it. However, I expect that his errors are about the same as those in Oppolzer's *Canon der Finsternisse,* which I have used extensively. The earliest lunar eclipse in his canon, for example, is that of —1206, April 21, which came at 20H 17M, Greenwich Mean Time, with a magnitude of 2.6 digits, according to his calculations. According to my calculations, it came on that date at 20H 32M, with a magnitude of 2.4 digits. *Thus it is perfectly safe to use Oppolzer's Canon in identifying ancient eclipses; his greatest errors are probably something like half an hour.*[56]

As far as *lunar* eclipses are concerned, then, the argument that the lengthening of the solar day caused by tides makes it difficult to identify ancient eclipses is not valid. In modern eclipse catalogues, of course, the errors in the canons of Oppolzer and Ginzel have been corrected.[57]

For Chapter Five:

THE "THIRD YEAR OF JEHOIAKIM" (DANIEL 1:1, 2)

Daniel 1:1f. dates the first deportation of Jewish prisoners by Nebuchadnezzar to the "third year of the reign of Jehoiakim. " As was shown in the appendix for chapter two ("Methods of reckoning regnal years"), in this passage Daniel seems to follow the Babylonian method of counting regnal years, employing an accession year even for kings outside Babylon, including Jehoiakim. This makes Jehoiakim's fourth year (Jeremiah 46:2) his third year in the accession-year system, and this third year of Jehoiakim in turn corresponds to Nebuchadnezzar's accession year.

Thus it is seen that this first deportation took place in the same year as the famous battle at Carchemish, and evidently shortly after that battle, in the year 605 B.C.E. Daniel 1:1f., therefore, strongly

56 Letter Newton—Jonsson, dated May 11, 1981. Other scholars agree. Jean Meeus & Hermann Mucke, for example, in their *Canon of Lunar Eclipses — 2002 to + 2526* (Wien: Astronomisches Büro, 1979), page XII, explain that Oppolzer's monumental work "is accurate enough for historical research." This, of course, refers to ancient lunar eclipses, not ancient *solar* eclipses, on which the *Canon* is far from correct. See, for instance, the comments by Willy Hartner in *Centaurus,* Vol. 14 (1969), p. 65.

57 See, for example, Bao-Lin Liu and Alan D. Fiala, *Canon of Lunar Eclipses 1500 B.C.–AD. 3000* (Richmond, Virginia: Willman-Bell, Inc., 1992).

supports the conclusion that Judah became a vassal to Babylon eighteen years before the destruction of Jerusalem in 587 B.C.E., in confirmation of the conclusion that the seventy years (Jeremiah 25:11; 29:10) should be understood as a period of *servitude,* not of desolation.

Reinterpretations of the "third year of Jehoiakim"

In order to undermine the strength of Daniel 1:1 several arguments have been advanced in the publications of the Watch Tower Society against a natural reading of this text. As early as 1896 Pastor Charles T. Russell, in writing in *Zion's Watch Tower* of May 15, page 106 *(Reprints,* pp. 1975–76) argued against those who quoted Daniel 1:1 in support of the secular dates for Nebuchadnezzar's reign:

> For instance, they adopt the uncertain secular date for the beginning of Nebuchadnezzar's reign; and then referring to Dan. 1:1, they *thus* fix the date of Jehoiakim's reign and alter other matters to suit. Then again, they apply the "seventy years" as years of *captivity* and begin them in the third year of Jehoiakim; whereas the Scriptures unequivocally declare, repeatedly, that those were years of "desolation of the land," "without an inhabitant." (Jer. 25:11, 12; 29:10; 2 Chron. 36:21; Dan. 9:2.)

Several years later two prominent members of Russell's movement, the Scottish brothers John and Morton Edgar, published the two-volume *Great Pyramid Passages.*[58] On page 31 of Volume II, they summarize their arguments against a natural reading of Daniel 1:1:

> [1] It cannot be admitted that the *70* years desolation of Jerusalem and the land began in the 3rd year of Jehoiakim, for according to the Scriptures "desolation" implies "without an inhabitant," and Jerusalem and the land were not without inhabitants until after the dethronement of Zedekiah. . . .
>
> [2] [A natural reading of Daniel 1:1] conflicts with Daniel 2:1. In reading over the 1st chapter of Daniel it would appear that the Hebrew children were taken captive by Nebuchadnezzar in the 3rd year of Jehoiakim. They were trained in the learning and tongue of the Chaldeans for three years (verses 4, 5), and yet, according to Dan. 2:1,25, they were brought into the presence of

58 John and Morton Edgar, *Great Pyramid Passages* (London: The Marshall Press, Ltd., 1923–24). The first edition was published in 1912 and 1913 and was distributed by the Watch Tower Society. It was reissued with some additions in 1923 and 1924 by Morton Edgar, who also added a Vol. III. (His brother John Edgar died in 1910.) The quotations here are from the 1924 edition of Vol. II.

> Nebuchadnezzar in or before his *second* year, though verse 18 of the 1st chapter shows that the three years had completely expired.

How, then, is Daniel 1:1 to be understood? The Edgar brothers pointed out that "a number of commentators suggest that the 3rd year of Jehoiakim in Daniel 1:1 should be understood as meaning the 3rd year of his vassalage to Nebuchadnezzar," which in effect was his eleventh and last regnal year.[59] In this way the deportation of Daniel and other Hebrew captives was made identical with the deportation of Jehoiachin in the *seventh year of Nebuchadnezzar.*

But this explanation did not negate the seeming conflict with Daniel 2:1, which dates the image dream of Nebuchadnezzar to his second year; in fact, that conflict was exacerbated. If Daniel was not deported to Babylon until the *seventh* year of Nebuchadnezzar, how could he be at his court interpreting his dreams in his *second* year, five years earlier?

So, in addition to the interpretation placed on Daniel 1:1 to explain its reference to the third year of Jehoiakim, there was also need for another interpretation of Daniel 2:1 to explain its reference to Nebuchadnezzar's second year. The Edgar brothers suggested that the number "2" is an error, which "has evidently risen out of the number 12."[60] Later these arguments were adopted by the Watch Tower Society. They were, for example, incorporated into the 1922 edition of the booklet *The Bible on Our Lord's Return,* pages 84–88.

But the explanation that Daniel 1:1 refers to Jehoiakim's third year of *vassalage* to Nebuchadnezzar, corresponding to Nebuchadnezzar's seventh regnal year, creates yet another problem.

If this vassalage ended in the seventh year of Nebuchadnezzar, it must have begun *three years earlier* according to 2 Kings 24:1, or in Nebuchadnezzar's *fourth* year, which was the eighth year of Jehoiakim. As is stated in 2 Kings 23:34–37, Jehoiakim was a tributary king *of Egypt* before he became a vassal to Babylon. If we

59 *Ibid.,* Vol. II, pp. 29 (ftn. 4) and 31. This "solution," found already in Josephus' *Ant.* X, 6:1–3, was adopted by a number of later writers. Dr. E. W. Hengstenberg refers to it in his work *Die Authentie des Daniel und die Integrität des Sacharjah* (Berlin,1831), p.*54.* Hengstenberg rejects the idea because (1) there is no evidence indicating that Jehoiakim's regnal years were counted in this curious way, (2) it is an unfounded hypothesis with no support in the Bible, or elsewhere, that Nebuchadnezzar's first siege of Jerusalem occurred in Jehoiakim's eighth year, and (3) the "solution" is in inextricable conflict with Daniel 2:1.

60 John and Morton Edgar, *op. cit.,* Vol. II, p. 32. This, too, is an old idea, suggested, for example, by Chrysostom in the fourth century. One ancient manuscript of the LXX version of Daniel (Papyrus 967), dating from the early third century CE., also reads "twelfth" at Dan. 2:1. The reading is best explained as a scribal "correction".—John J. Collins, *Daniel* (Minneapolis: Fortress Press, 1993), p. 154.

accept the Watch Tower explanation, this would mean that his vassalage to Egypt continued up to his eighth year. Yet both Jeremiah 46:2 and the Babylonian chronicle B.M. 21946 indicate that Jehoiakim's vassalage changed from Egypt to Babylon in the same year as the battle of Carchemish, or in *the fourth* year of Jehoiakim.

In the book *Equipped for Every Good Work,* published by the Watch Tower Society in 1946, the arguments against a natural reading of Daniel 1:1 are repeated on pages 225–227. But interestingly, the Egyptian vassalage is now discussed:

> Jehoiakim was put on the throne by Egyptian decree and was tributary to Egypt for several years, but *when Babylon defeated Egypt Jehoiakim came under Babylonian control and so remained for three years,* after which three-year period as tributary to Babylon the Judean king rebelled.[61]

Here it is admitted that Jehoiakim's vassalage changed from Egypt to Babylon *when Babylon defeated Egypt*. The real problem, however, is concealed, as it is not mentioned that Egypt was defeated in the *fourth* year of Jehoiakim (Jeremiah 46:2), and not in his *eighth* year as the Watch Tower explanation would require!

Another interesting change may also be noted in *Equipped for Every Good Work*. Instead of holding to the earlier guess that the "second year" in Daniel 2:1 originally read "twelfth year," the following interpretation is presented:

> The time of this dream and its interpretation is stated as the second year of Nebuchadnezzar's reign. . . . In the nineteenth year of his reign Nebuchadnezzar was used as God's executioner to destroy faithless Jerusalem and end Israel's history as an independent Theocratic nation. Then Nebuchadnezzar began reigning in a unique way, as the first of the world rulers of the Gentile times. In the second year of his reign *in this special capacity* the dream showing the end of Satan's organization and rule and the taking over of power by Christ's kingdom came to Nebuchadnezzar, as recorded at chapter 2.[62]

According to this explanation, the "second year" of Daniel 2:1, or the second year of the Gentile times, reckoned from 607 B.C.E., was actually Nebuchadnezzar's *twentieth* regnal year! Why would

61 *Equipped for Every Good Work* (Brooklyn, N.Y.: Watchtower Bible and Tract Society, 1946), pp. 225–226.

62 *Ibid.,* pp. 226–227. This, too, was an earlier idea, suggested already in the Jewish Talmud *(Seder 'Olam Rabbah;* see John J. Collins, *op. cit.,* p. 154). Hengstenberg *(op. cit.,* p. 54) rejects it because there is "not the slightest trace" of any such reckoning of Nebuchadnezzar's regnal years anywhere.

Daniel use this curious way of reckoning regnal years only in this passage of his book? No other arguments are proposed for this new position except this statement:

> Here again, as at Daniel 1:1, the peculiarity which the writer of this book has of making a secondary reckoning of the years of a king's reign is demonstrated. He reckons by counting from epochal events within the reign that put the king in a new relationship.[63]

There could hardly be a more obvious example of circular reasoning.

The date of Jehoiakim's rebellion

The latest discussion of these problems is found in the Watch Tower Society's Bible dictionary *Insight on the Scriptures,* Vol. 1 (1988), pages 1268–69. Daniel 1:1 is still interpreted as meaning the third year of Jehoiakim's *vassalage* to Babylon, beginning at the end of his eighth year of reign and ending in his eleventh and last year. On page 480 of Vol. 2 of the same work, an attempt is made to find support for this in the Babylonian chronicle B.M. 21946. After recording the battle of Carchemish in Nebuchadnezzar's accession year, this chronicle refers to several succeeding campaigns in the Hattu-area by Nebuchadnezzar, in his first, second, third and fourth years. Mentioning these campaigns, the Society's dictionary says that "evidently in the fourth year he made Judean King Jehoiakim his vassal. (2 Kings 24:1)"

This conclusion, however, is *not* supported by the Babylonian Chronicle. On the contrary, this chronicle indicates that Jehoiakim's vassalage to Babylon began in Nebuchadnezzar's accession-year, or possibly in his first year, and that in the fourth year Jehoiakim was already in open revolt against Babylon. To demonstrate this, it is necessary to quote important parts of the Babylonian Chronicle, from the accession year to the fourth year of Nebuchadnezzar:

> **Events from c. Sept./Oct. 605 to Jan./Feb. 604 B.C.E.:**
>
> "In (his) accession year Nebuchadnezzar (II) returned to Hattu. Until the month Shebat he marched about victoriously in Hattu. In the month Shebat he took the vast booty of Hattu to Babylon."
>
> **From May/June to Nov./Dec. 604:**
>
> "The first year of Nebuchadnezzar (II): In the month of Sivan he mustered his army and marched to Hattu. Until the month

63 *Equipped for Every Good Work,* p. 227.

Kislev he marched about victoriously in Hattu. All the kings of Hattu came into his presence and he received their vast tribute."

From April/May 603 onwards:

"The se[cond year]: In the month of Iyyar the king of Akkad strenghtened his large army and [*marched to Hattu*]. He encamped [. . .] . . . large siege towers he moved acr[oss … …from the month] Iyyar until the month [. . . *he marched about victoriously in Hattu*]."

In 602:

"[The third year: In the month . . ., on] the thirteenth [day] Nabu-shumu-lishir [. . .] [*In the month* . . . the king of Akkad mustered his army and [marched] to Hattu. [. . . . .] He brought the vast *[booty]* of Hattu into Akkad."

In 601 (march against Egypt in Kislev = Nov./Dec.):

"The fourth year: The king of Akkad mustered his army and marched to Hattu. [He marched about victoriously] in Hattu. In the month Kislev he took his army's lead and marched to Egypt. [When] the king of Egypt heard (the news) he *m*[*ustered*] his army. They fought one another in the battle-field and both sides suffered severe losses (literally, they inflicted a major defeat upon one another). The king of Akkad and his army [went back] to Babylon."[64]

From this chronicle it is seen that the *whole* Hattu-territory (primarily Syria-Lebanon but extending to Phoenicia and Palestine) became tributary to Nebuchadnezzar as of his accession year. And in Nebuchadnezzar's first year it is explicitly stated that "all the kings of Hattu" were tributary to him, which reasonably cannot have excepted Jehoiakim.

Many scholars conclude that Nebuchadnezzar's fourth year, in which *Insight on the Scriptures* supposes that Jehoiakim's Babylonian vassalage *began,* was probably the year in which Jehoiakim *revolted* against Nebuchadnezzar, because in that year Nebuchadnezzar battled with Egypt, and both seem to have suffered great losses. Nebuchadnezzar had to return to Babylon, where he remained in the fifth year and "refitted his numerous horses and chariotry."[65] This unsuccessful battle with Egypt may have encouraged

64 A. K. Grayson, *Assyrian and Babylonian Chronicles* (New York: J. J. Augustin Publisher, 1975), pp. 100–101. The square brackets indicate damages in the text.
65 *Ibid.,* p. 101.

Jehoiakim to throw off the Babylonian yoke, thus *ending* his three years of vassalage to Babylon.[66]

2 Kings 24:1–7 seems to support the above conclusion. Verse 1 states that "in his (Jehoiakim's) days Nebuchadnezzar the king of Babylon came up, and so Jehoiakim became his servant for three years. However, he turned back and rebelled against him." As a result, Jehovah (through Nebuchadnezzar) "began to send against him marauder bands of Chaldeans and marauder bands of Syrians and marauder bands of Moabites and marauder bands of the sons of Ammon, and he kept sending them against Judah to destroy it, according to Jehovah's word that he had spoken by means of his servants the prophets." — 2 Kings 24:1–2, *NW*.

The wording of this passage indicates that these marauder bands kept on raiding the territory of Judah for quite a time, evidently for some years. Jehovah "began" to send them, and, according to the *New World Translation,* "he *kept* sending them" against Judah. This was not one attack only, like that mentioned in Daniel 1:1, but it evidently came upon Judah in waves, time and again. Consequently, they could not have begun these attacks in the last year of Jehoiakim's reign, and this also calls for an earlier beginning of Jehoiakim's rebellion.

The three deportations to Babylon

Another line of evidence supporting a natural reading of Daniel 1:1, is that according to 2 Chronicles, chapter 36, verses 7, 10 and 18 the vessels of the temple were brought to Babylon in *three* successive installments:

(1) The first time, during *Jehoiakim's* reign, "*some"* of the vessels were brought to Babylon. (Verse 7)

(2) The second time, together with *Jehoiachin,* the "*desirable"* (NW) or "*valuable"* (NASB) vessels were brought to Babylon. (Verse 10)

(3) The third time, together with *Zedekiah, "all"* the vessels were brought to Babylon. (Verse 18)

66 "This battle," says J. P. Hyatt, "must lie back of Jehoiakim's change of allegiance, when he withheld tribute from Babylonia, probably making an alliance with Egypt." ("New Light on Nebuchadnezzar and Judean History," *Journal of Biblical Literature,* Vol. 75, 1956, p. 281.) It is also possible that this change of allegiance occurred *some time before* Nebuchadnezzar's war with Egypt. Nebuchadnezzar's decision to march to Egypt in 601 B.C.E. may have been *caused* by the alliance between the Egyptians and Jehoiakim. — See Mark K. Mercer, "Daniel 1:1 and Jehoiakim's three years of servitude," *Andrews University Seminary Studies,* Vol. 27:3 (Autumn 1989), pp. 188–191.

From these texts we learn that *some* of the vessels were brought to Babylon *during Jehoiakim's reign,* the *valuable* vessels were brought *at the deportation of Jehoiachin,* and *all the rest* of the vessels were taken to Babylon *at the end of Zedekiah's reign.* Of the three deportations of vessels, the first is clearly referred to at Daniel 1:1, 2, as this text states that during the third year of Jehoiakim "*some"* of the vessels were brought to Babylon.[67]

Again, this indicates that Daniel 1:1–2 refers to a deportation *different from and earlier than* that which took place at the end of Jehoiachin's short reign. This gives additional support to the conclusion that the phrase "the third year of the kingship of Jehoiakim" means what it says—Jehoiakim's third regnal year, not his eleventh.

Finally, if the deportation mentioned at Daniel 1:1–4 is equated with the one that took place at the end of Jehoiachin's three months of reign, why does Daniel state that "Jehovah gave into his hand *Jehoiakim,"* instead of *Jehoiachin?* (Daniel 1:2) When Jehoiachin was taken captive, Jehoiakim had been dead for over three months. (2 Kings 24:8–17; 2 Chronicles 36:9–10) There is even evidence to show that Jehoiakim was already dead when Nebuchadnezzar, in his seventh year, left Babylon for the siege of Jerusalem that ended up in Jehoiachin's deportation. The evidence is as follows:

Nebuchadnezzar's siege of Jerusalem during the reign of Jehoiachin is also described in the Babylonian chronicle B.M. 21946. For the seventh year of Nebuchadnezzar this chronicle says:

From Dec. 598 (or Jan. 597) to March 597 B.C.E.:

> "The seventh year: In the month Kislev the king of Akkad mustered his army and marched to Hattu. He encamped against the city of Judah and on the second day of the month Adar he captured the city (and) seized (its) king. A king of his own choice he appointed in the city (and) taking the vast tribute he brought it into Babylon."[68]

67 It is interesting to note that in this first deportation Nebuchadnezzar brought only "some" of the vessels from the temple in Jerusalem to Babylon, and these were not even the "valuable" vessels. This strongly supports the conclusion that the siege of Jerusalem at this time did not end up in the capture of the city. If it did, why did he not take the *valuable* vessels from the temple? If, on the other hand, the siege was raised because Jehoiakim capitulated and paid a tribute to Nebuchadnezzar, it is quite understandable that Jehoiakim did not include the most valuable vessels in the tribute.

68 A. K. Grayson, *op. cit.,* p. 102. The chronicle is in complete agreement with the description of this siege given in the Bible. (2 Kings 24:8–17; 2 Chronicles 36:9–10.)

Nebuchadnezzar's army left Babylon "in the month of Kislev," which was the *ninth* month, and seized Jehoiachin "on the second day of the month Adar," that is, the *twelfth* month.[69] This means that even if the army left Babylon in the *beginning* of Kislev (which this year began on December 18, 598 B.C.E., Julian calendar), the interval between the day it left Babylon until the city was captured and its king (Jehoiachin) seized, on the second Adar (which corresponded to March 16, 597), was *three months at the most.*[70]

As Jehoiachin ruled for "three months and ten days" (2 Chronicles 36:9), he evidently had been ruling for some days *already when Nebuchadnezzar left Babylon in the month of Kislev!* If the siege of Jerusalem described at Daniel 1:1f. referred to this siege during the reign of Jehoiachin, how could it be said that it took place *during the reign of Jehoiakim* (Daniel 1:1), that Nebuchadnezzar came up "against *him"* (2 Chronicles 36:6), and that "Jehovah gave into his hand *Jehoiakim"* (Daniel 1:2), when Jehoiakim was already dead when Nebuchadnezzar left Babylon?

Equating the siege described at Daniel 1:1f. with the one that took place during the reign of Jehoiachin (2 Kings 24:10–12; 2 Chronicles 36:10) is clearly impossible. Daniel and the Chronicler at 2 Chronicles 36:6 both obviously describe an *earlier* siege and an *earlier* deportation, during the reign of *Jehoiakim.* There is no reason to believe that the "third year" of Daniel 1:1 means anything else but his third year of reign. There is no evidence at all, either in the book of Daniel, in the other books in the Bible or in the contemporary Neo-Babylonian historical texts, that regnal years were reckoned from a king's vassalage, or from Nebuchadnezzar's rise to world dominion. Such theories are nothing more than unfounded guesses, adopted only in an attempt to defend an erroneous application of the seventy years of servitude predicted by Jeremiah.

69 The Babylonians had a second Ululu (an intercalary month) in the seventh year of Nebuchadnezzar, thus making Kislev and Adar the tenth and thirteenth months respectively that year, although they were normally the ninth and twelfth calendar months . This fact does not affect the discussion above.

70 If the Babylonian army left Babylon some time after Jehoiachin had ascended the throne, the siege was of very short duration, two months at most and probably less, as the time the army needed to march from Babylon to Jerusalem has to be subtracted from the three months from Kislev to Adar. Such a march took at least one month. It is possible, however, that a part of the army had left Babylon earlier, as 2 Kings 24:10–11 indicates that Nebuchadnezzar arrived at Jerusalem some time after the siege had begun. The reason for the short duration of the siege was Jehoiachin's surrender to Nebuchadnezzar on Adar 2 or March 16, 597 B.C.E., Julian calendar. (2 Kings 24:12) For an excellent discussion of this siege, see William H. Shea, "Nebuchadnezzar's Chronicle and the Date of the Destruction of Lachish III," in *Palestine Exploration Quarterly,* No. 111 (1979), pp. 113f.

The three years of training

But what about the three years of training referred to in Daniel 1:5, 18, which seem to conflict with a natural reading of Daniel 1:1 and 2:1? Is there no simpler way to solve this seeming conflict than to suppose that the prophet in Daniel 1:1 reckoned Jehoiakim's regnal years from the beginning of his *vassalage* to Babylon, and Nebuchadnezzar's regnal years in Daniel 2:1 from the year of his *rise to world dominion?* Why should Daniel reckon the regnal years of these two kings in such a confusing, abnormal manner when he knew that his readers no doubt would misunderstand him? And why does he not reckon the regnal years in this peculiar way *elsewhere* in his book, for instance in 7:1, 8:1, 9:1, and 10:1, where he follows the customary method of reckoning regnal years? Before such strained explanations are adopted, should not a simpler and more natural solution be sought?

It has already been demonstrated in the appendix for chapter two ("Methods of reckoning regnal years") that there is no real discrepancy between the *third* year of Jehoiakim in Daniel 1:1, and his *fourth* year in Jeremiah 25:1 and 46:2. When the existing accession and nonaccession year systems are taken into consideration, this difference of one year is easily understood.[71]

This solution also has bearing upon the seeming conflict between the three years of training and Daniel 2:1. If Daniel 1:1 refers to Nebuchadnezzar's accession year (in agreement with the Babylonian Chronicle), his "second year" at Daniel 2:1 may be regarded as the third year of the training of the Jewish captives. According to the Hebrew way of reckoning time periods, whereby fractions of time were reckoned as full units, this would make three years.[72] The three years are not necessarily three full years. Dr.

71 A brilliant discussion of this problem may be found in the article by Professor Albertus Pieters, "The Third Year of Jehoiakim," in *From the Pyramids to Paul,* a miscellany in honour of Dr. G. L. Robinson (New York: Thomas Nelson and Sons, 1935), pp. 180–193. Pieters concludes: "The 'third year' of Jehoiakim in Dan. 1:1 is the same as the 'fourth year' of Jehoiakim in Jer. 25:1 and 46:2, the former being reckoned according to the Babylonian and the latter according to the Palestinian method of computing the years of the king's reign."—*Ibid.,* p. 181.

72 This way of counting time periods is often termed "inclusive reckoning." The best example is the period of Jesus' death, from Friday afternoon to his resurrection on Sunday morning. Although, chronologically, this period was a little more than two nights and one day, Bible writers refer to it as "three days" (Matt. 27:63; Mark 10:34), even "three days and three nights." (Matt. 12:40) The Watch Tower Society correctly applies it to mean "a portion of each of three days." *(Insight on the Scriptures,* Vol. 1, p. 593) Another example is the period of the siege of Samaria, stated at 2 Kings 18:9–10 to have lasted from the seventh to the ninth year of Hoshea; yet the siege is said to have lasted for "three years." For additional examples, see Edwin R. Thiele, *The Mysterious Numbers of the Hebrew Kings,* new revised edition (Grand Rapids: Zondervan Publishing House, 1983), p. 52, ftn. 12.

Young presents the following table:[73]

Years of training:	*Nebuchadnezzar:*
First year	Year of accession
Second year	First year
Third year	Second year

Applying this simple and biblical method to the problem solves the seeming conflict without unfounded theories and strained explanations. Many modem Biblical scholars, who regard the book of Daniel as authentic, have adopted this simple solution. Gerhard F. Rasel, for one, says:

> It is no longer necessary to explain the difficulty between Dan. 2:1 and 1:1, 18 through textual emendation (H. Ewald, A. Kamphausen, J. D. Prince, K. Marti, and J. Jahn) or double reckoning (C. B. Michaelis, G. Behrmann). The practice of inclusive reckoning, together with the recognition of the Babylonian usage of the king's accession year as not being counted, removes all difficulties.[74]

CHRONOLOGICAL TABLES COVERING THE SEVENTY YEARS

The subsequent tables have been developed in order to facilitate an examination of the arguments set forth in this work. The Babylonian and Persian Nisan-to-Nisan regnal years and the Judean Tishri-to Tishri regnal years have been paralleled with our modem calendar. Also, the Babylonian accession years and the Judean nonaccession years have been duly considered. The guiding principle has been to take the biblical dates as they stand, if nothing else is indicated by the context. The tables intend to demonstrate how the different biblical dates may be brought into a natural harmony with each other, and also with the Babylonian chronicles. A few points require specia1 comments:

A. Josiah's death at Megiddo, summer 609 (2 Kings 23:29)

As related in Chapter 5 above (section G-2), the city of Harran, the last Assyrian stronghold, was captured and plundered by Babylonian and Median forces, either late in 610 or early in 609 B.C.E. Ashur-uballit, the last Assyrian king, fled. In the summer of

73 Edward J. Young, *The Prophecy of Daniel* (Grand Rapids: Wm. B. Eerdmans Publishing Co., 1949), pp. 55–56; cf. pp. 267–70.

74 Gerhard F. Hasel *in Andrews University Seminary Studies,* Vol. XV, No. 2, 1977, p. 167.

609 a large Egyptian force headed by Pharaoh Necho marched up to the Euphrates to help Ashur-uballit recapture Harran. For some unknown reason, the Judean king Josiah tried to stop the Egyptian forces at Megiddo, but was defeated and mortally wounded.—2 Kings 23:29–30; 2 Chronicles 35:20–25.

At one time it was debated whether Josiah's death took place in 609 or 608 B.C.E.[75] This question is now settled, since the Babylonian chronicle B.M. 22047 (first published by D. J. Wiseman, 1956) shows that the unsuccessful attempt to recapture Harran took place between Tammuz and Elul (c. July–September) in Nabopolassar's seventeenth regnal year (609/08).[76] As the Egyptian army needed almost a month to travel from Megiddo up to the Euphrates, the battle at Megiddo and Josiah's death took place early in the summer of 609 B.C.E.[77]

As may be seen from the tables, this date is in good agreement with a Judean Tishri-to-Tishri reckoning of regnal years.

B. Jehoahaz' three months of reign and Jehoiakim's succession

After the death of Josiah, the Jews made Jehoahaz the son of Josiah king in Jerusalem. (2 Chronicles 36:1) After only three months of reign, Pharaoh Necho, on his return from the Euphrates, removed Jehoahaz and put his brother Jehoiakim on the throne in Jerusalem. From then on Judah was a vassal to Egypt. As the failed Egyptian-Assyrian attempt to recapture Harran ended in Elul (August–September), and the Egyptian retreat from Harran to Jerusalem took almost a month, the removal of Jehoahaz and installation of Jehoiakim must have occurred in the next month, Tishri (September–October).

According to the Judean nonaccession year system, Jehoiakim's first regnal year, then, should be counted from Tishri 1, 609 B.C.E. Jehoahaz' three months of reign were evidently included in Josiah's reign of 31 years, instead of being counted as a separate regnal year. (Jehoiachin's three months of reign, which ended on March 16, 597

75 Edwin R. Thiele, *The Mysterious Numbers of the Hebrew Kings*. New revised edition (Grand Rapids, Michigan: The Zondervan Corporation, 1983), pp. 205–206.

76 D. J. Wiseman, *Chronicles of Chaldean Kings* (London: The Trustees of the British Museum, 1961; first published in 1956), pp. 63–67. See also Hayim Tadmor's article "Chronology of the Last Kings of Judah" in *Journal of Near Eastern Studies,* Vol. XV (1956), p. 228.

77 A. Malamat, "The Twilight of Judah: In the Egyptian-Babylonian Maelstrom" in *Supplements to Vetus Testamentum,* Vol. XXVIII (Leiden: E. J. Brill, 1975), p. 125, ftn. 5.

B.C.E., was evidently treated in a similar way, being a part of Zedekiah's first regnal year.)

C. Zedekiah's first year, 598/97 B.C.E.

As was shown in the first section of the Appendix for Chapter 5, "The 'third year of Jehoiakim' (Daniel 1:1–2)," the Babylonian chronicle B .M. 21946 dates Jehoiachin's removal from the throne to the second Adar of Nebuchadnezzar's seventh regnal year, corresponding to March 16, 597, Julian calendar, after which Zedekiah was appointed king. Following the nonaccession year system, Zedekiah's first year, then, was reckoned from Tishri, 598, to Tishri, 597 B.C.E. Zedekiah's first regnal year was the same as Jehoiachin's first year of *exile,* which is seen from a comparison of Ezekiel 24:1–2 (the dates in Ezekiel are those of Jehoiachin's exile) with 2 Kings 25:1.

This is quite natural, as Jehoiachin's three months of reign began after Tishri 598. His first regnal year, therefore, would have been reckoned from Tishri 1, 598, had he not been removed from the throne. Now his three months had to be included in Zedekiah's first regnal year.

D. Hananiah's "prophecy", July–August 594 B.C.E. (Jeremiah 28:1)

In Nebuchadnezzar's tenth year a rebellion broke out in his army from the month of Kislev to the month of Tebet (c. November 595–January 594 B.C.E.), according to the Babylonian Chronicle B.M. 21946.[78] If this rebellion caused the revolt plans among the Jewish exiles, which also spread to Judah as reflected in Jeremiah, chapters 27–29, these plans must have developed soon after the Babylonian rebellion. The "prophecy" of Hananiah, that the yoke of Babylon would be broken and the exiles brought back within two years, is dated to the *fifth* month of the *fourth* year of Zedekiah. (Jeremiah 28:1–4) This fifth month (Ab, corresponding to July–August), therefore, must have fallen in July–August, 594 B.C.E., a few months after Nebuchadnezzar had crushed the rebellion. A look at the table shows that the fifth month of Zedekiah's fourth year actually fell in July–August, 594 B.C.E., thus indicating that the chronological system presented in the tables is correct.

78 Wiseman, *op, cit.,* p. 73. Cf. A. K. Grayson, *Assyrian and Babylonian Chronicles* (Locust Valley, New York: J. J. Augustin Publisher, 1975), p. 102.

E. The siege of Jerusalem, 589–587 B.C.E.

It has been debated whether the siege lasted for eighteen months, or for about two-and-a-half years.[79] According to a Nisan-to-Nisan regnal year the siege lasted for eighteen months (2 Kings 25:1–4), but this conflicts with the statement in Ezekiel 33:21, which says that an escapee from the destruction of Jerusalem reached Ezekiel "in the *twelfth year,* in the tenth month, on the fifth day of the month." This would mean that the escapee reached Ezekiel with the message that the city had been taken about *one-and-a-half years after* the destruction of Jerusalem. This seems incredible.

Therefore, it is often argued that Ezekiel 33:21 originally read "*eleventh* year," which is supported by the Syriac Version, the Greek *Septuagint* Version, and a few Hebrew manuscripts.[80] But if a Tishri-to-Tishri regnal year is applied, the well-attested reading of "twelfth year" may be retained, with the escapee reaching Ezekiel about six months after the capture of Jerusalem, which seems more natural. Further, it is shown by this reckoning that the siege lasted for about two-and-a-half years, instead of eighteen months.

F. Jehoiachin's 37th year of exile, 562/61 B.C.E.

In 2 Kings 25:27 (=Jeremiah 52:31), Jehoiachin' s 37th year is equated with the accession year of Evil-Merodach. Here we have an excellent confirmation of the conclusion that the Judean kings applied a Tishrito-Tishri regnal year.

Evil-Merodach ascended to the throne in the autumn of 562 B.C.E., and his accession-year ran to Nisan, 561 B.C.E. Jehoiachin's release from prison took place in the *twelfth* month of Evil-Merodach's accession year (Jeremiah 52:31), on the twenty-fourth day. This corresponded to March 30, 561 B.C.E. (Julian calendar).

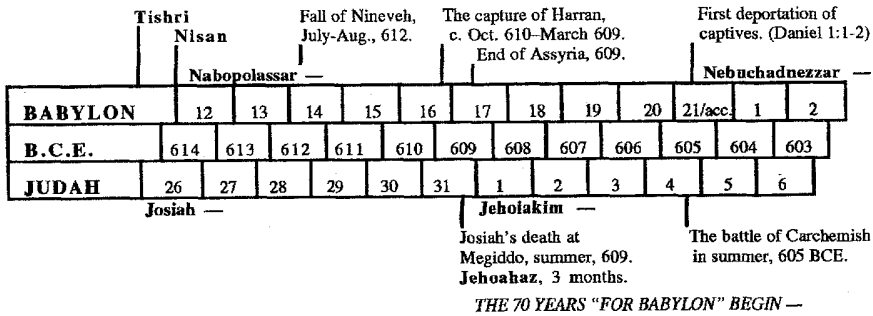
If Nisan-to-Nisan regnal years are applied to Jehoiachin's exile, his 37th year cannot be counted from Nisan, 561 B.C.E., as this month fell *after* his release from prison. But if his 37th year of exile is reckoned from Nisan, 562 B.C.E., in order to retain the synchronism to Evil-Merodach's accession year, his *first* year of exile has to be reckoned from Nisan, 598, to Nisan, 597 B.C.E. Is this likely?

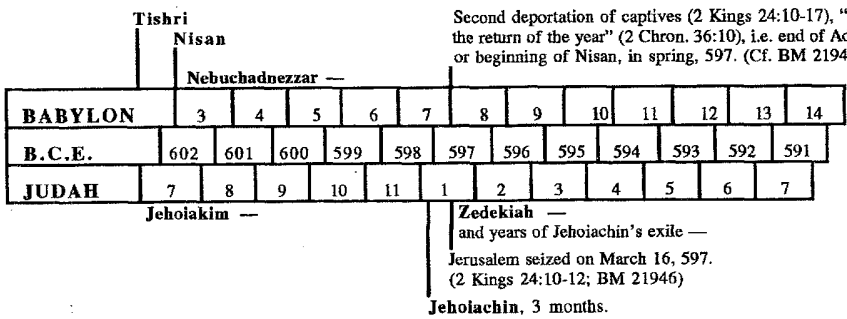
79 "*The Nations Shall Know that I Am Jehovah*"—*How?* (Brooklyn, N.Y.: Watchtower Bible and Tract Society, 1971), pp. 285–287, argues for a siege of eighteen months.

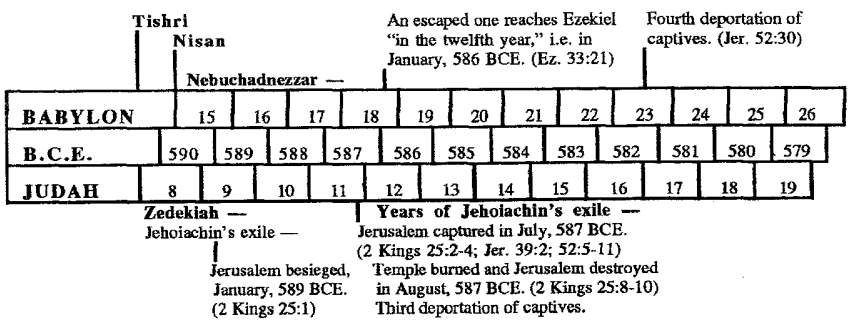
80 *Ibid.,* p. 286.

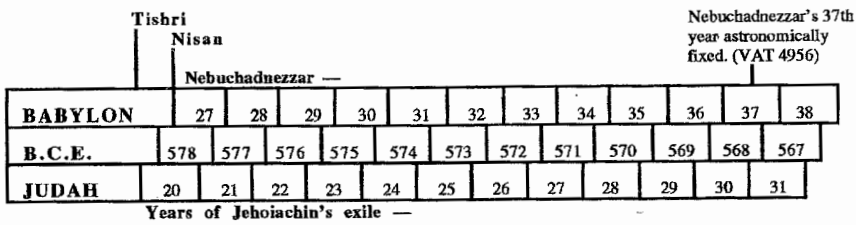
As his deportation took place around Nisan 1, 597 B.C.E. (2 Kings 24:10–17; 2 Chronicles 36:10, and the Babylonian Chronicle B.M. 21946:11–13), this would mean that his first year of exile fell nearly exactly one year before he was deported! As this is impossible, his years of exile must have been reckoned according to Tishri-to-Tishri years.

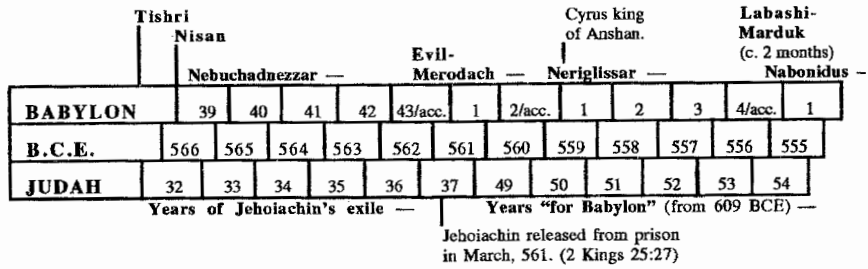
THE CHRONOLOGY OF THE SEVENTY YEARS

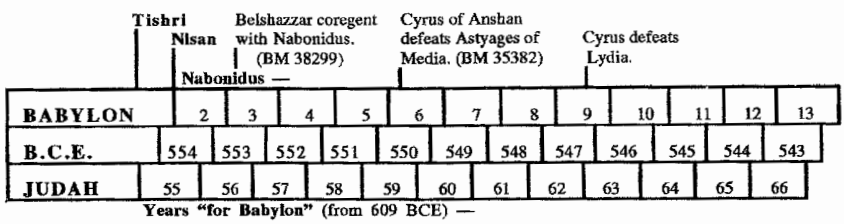


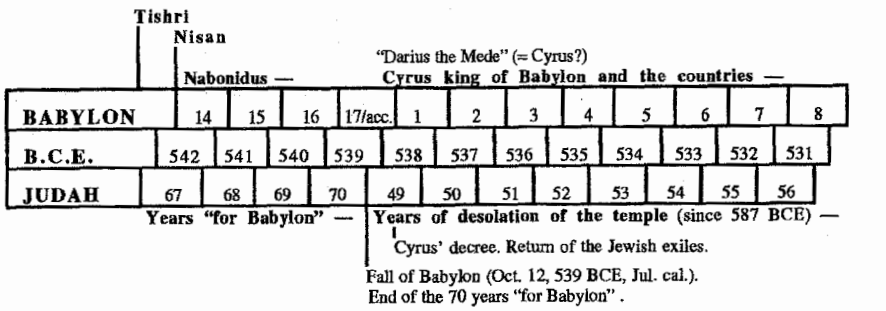


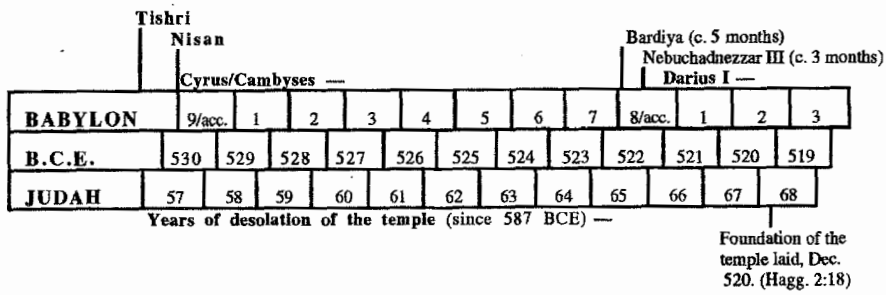


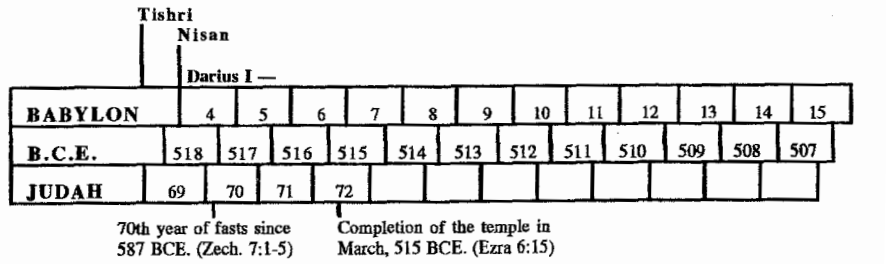

Tishri
Nisan
Nebuchadnezzar —
Nebuchadnezzar's 37th year astronomically fixed. (VAT 4956)
BABYLON 27 28 29 30 31 32 33 34 35 36 37 38
B.C.E. 578 577 576 575 574 573 572 571 570 569 568 567
JUDAH 20 21 22 23 24 25 26 27 28 29 30 31
Years of Jehoiachin's exile —


Tishri
Nisan
Nebuchadnezzar —
Evil-Merodach —
Cyrus king of Anshan.
Neriglissar —
Labashi-Marduk (c. 2 months)
Nabonidus —
BABYLON 39 40 41 42 43/acc. 1 2/acc. 1 2 3 4/acc. 1
B.C.E. 566 565 564 563 562 561 560 559 558 557 556 555
JUDAH 32 33 34 35 36 37 49 50 51 52 53 54
Years of Jehoiachin's exile —
Years "for Babylon" (from 609 BCE) —
Jehoiachin released from prison in March, 561. (2 Kings 25:27)


Tishri
Nisan
Belshazzar coregent with Nabonidus. (BM 38299)
Cyrus of Anshan defeats Astyages of Media. (BM 35382)
Cyrus defeats Lydia.
Nabonidus —
BABYLON 2 3 4 5 6 7 8 9 10 11 12 13
B.C.E. 554 553 552 551 550 549 548 547 546 545 544 543
JUDAH 55 56 57 58 59 60 61 62 63 64 65 66
Years "for Babylon" (from 609 BCE) —


Tishri
Nisan
"Darius the Mede" (= Cyrus?)
Nabonidus —
Cyrus king of Babylon and the countries —
BABYLON 14 15 16 17/acc. 1 2 3 4 5 6 7 8
B.C.E. 542 541 540 539 538 537 536 535 534 533 532 531
JUDAH 67 68 69 70 49 50 51 52 53 54 55 56
Years "for Babylon" —
Years of desolation of the temple (since 587 BCE) —
Cyrus' decree. Return of the Jewish exiles.
Fall of Babylon (Oct. 12, 539 BCE, Jul. cal.).
End of the 70 years "for Babylon".


Tishri
Nisan
Bardiya (c. 5 months)
Nebuchadnezzar III (c. 3 months)
Darius I —
Cyrus/Cambyses —
BABYLON 9/acc. 1 2 3 4 5 6 7 8/acc. 1 2 3
B.C.E. 530 529 528 527 526 525 524 523 522 521 520 519
JUDAH 57 58 59 60 61 62 63 64 65 66 67 68
Years of desolation of the temple (since 587 BCE) —
Foundation of the temple laid, Dec. 520. (Hagg. 2:18)


Tishri
Nisan
Darius I —
BABYLON 4 5 6 7 8 9 10 11 12 13 14 15
B.C.E. 518 517 516 515 514 513 512 511 510 509 508 507
JUDAH 69 70 71 72
70th year of fasts since 587 BCE. (Zech. 7:1-5)
Completion of the temple in March, 515 BCE. (Ezra 6:15)

For Chapter Seven:

A REVIEW OF:

ROLF FURULI, PERSIAN CHRONOLOGY AND THE LENGTH OF THE BABYLONIAN EXILE OF THE JEWS (OSLO: ROLF FURULI A/S, 2003)

Persian Chronology and the Length of the Babylonian Exile of the Jews is the first of two volumes in which Rolf Furuli attempts to revise the traditional chronology for the Neo-Babylonian and Persian periods. Furuli states that the reason for this venture is that this chronology is in conflict with the Bible. He insists that the Bible "unambiguously," "explicitly," and "definitely" shows that Jerusalem and the land of Judah were desolate for 70 years, until the Jewish exiles in Babylon returned to Judah as a result of the decree Cyrus issued in his first regnal year, 538/37 B.C.E. (pp. 17, 89, 91). This implies that the desolation of Jerusalem in Nebuchadnezzar's 18th regnal year took place 70 years earlier, in 607 B.C.E. As has been amply documented in the present work, this is contrary to modern historical research, which has fixed the 18th year of Nebuchadnezzar in 587/86 B.C.E. Furuli does not explicitly mention the 607 B.C.E. date in this volume, perhaps because a more detailed discussion of the Neo-Babylonian chronology is reserved for his not-yet-published second volume.

Most of the ten chapters in this first volume, therefore, contain a critical examination of the reigns of the Persian kings from Cyrus to Darius II. The principal claim of this discussion is that the first year of Artaxerxes I should be moved 10 years backward, from 464 to 474 B.C.E. Furuli does not mention that this is an old idea that can be traced back to the noted Jesuit theologian Denis Petau, better known as Dionysius Petavius, who first presented it in a work published in 1627. Petavius' revision had a theological basis, because, if the "seventy weeks [of years]," or 490 years, of Daniel 9:24–27 are to be counted from the 20th regnal year of Artaxerxes (Neh. 2:1ff.) to 36 C.E. (his date for the end of the period), Artaxerxes' 20th year must be moved from 445 back to 455 B.C.E. Furuli says nothing about this underlying motive for his proposed revision.

The hidden agenda

Furuli published this book at his own expense. On the back cover of the book he presents himself this way:

> Rolf Furuli is a lecturer in Semitic languages at the University of Oslo. He is working on a doctoral thesis which suggests a new understanding of the verbal system of Classical Hebrew. He has for many years worked with translation theory, and has published two books on Bible translation; he also has experience as a translator. The present volume is a result of his study of the chronology of the Ancient world for more than two decades.

Furuli does not mention that he is a Jehovah's Witness, and that for a long time he has produced apologetic texts defending Watchtower exegesis against criticism. His two books on Bible translation are nothing more than defenses of the Witnesses' *New World Translation* of the Bible. He fails to mention that for many years he has tried to defend Watchtower chronology and that his revised chronology is essentially a defense of the Watchtower Society's traditional chronology. (See above, pages 308, 309.) He describes his chronology as "a new chronology," which he calls "the Oslo Chronology," (p. 14) when in fact the 607 B.C.E. date for the destruction of Jerusalem is the chronological foundation for the claims and apocalyptic messages of the Watchtower organization, and the 455 B.C.E. date for the 20th year of Artaxerxes I is its traditional starting point for its calculation of the "seventy weeks" of Daniel 9:24–27.

Despite these facts, Furuli nowhere mentions the Watchtower Society or its chronology. Nor does he mention my detailed refutation of this chronology in various editions of the present work, *The Gentile Times Reconsidered* (GTR), first published in 1983, despite the fact that in circulated "organized collections of notes" he has tried to refute the conclusions presented in its earlier editions. Furuli's silence on GTR is noteworthy because he discusses R. E. Winkle's 1987 study of the Biblical 70-year period which presents mostly the same arguments and conclusions as are found in the first edition of GTR (1983). (See above, p. 235, note 57.) As a Jehovah's Witness, Furuli is forbidden to interact with former members of his organization. If this is the reason for his feigned ignorance of my study, he is acting as a loyal Witness — not as a scholar.

Clearly, Furuli has an agenda, and he is hiding it.

ATTEMPTS TO REVISE THE NEO-BABYLONIAN CRONOLOGY

Although Volume I of Furuli's work principally is an attempt at revising the Persian chronology, some parts of it also contain arguments for a lengthening of the Neo-Babylonian chronology:

(A) In chapter 6 Furuli claims there are dated business tablets from the 17th regnal year of Nabonidus that *overlap* Cyrus' reign, which, if they are correct, "suggest that Nabonid reigned longer" (p. 132).

(B) As the chronology of the Neo-Babylonian period is fixed by a number of astronomical tablets, Furuli devotes much space on trying to undermine the reliability of these tablets, including the astronomical diary VAT 4956 from the 37th year of Nebuchadnezzar. In Chapter 1 he claims there are only two principal astronomical sources for the chronology of the Neo-Babylonian and Persian periods. In the same chapter he describes nine "potential sources of error" in the Babylonian astronomical tablets.

(C) In Chapter 2 Furuli argues that the astronomical texts probably mainly contain, not actual observations, but backward calculations performed during the Seleucid era (after 312 B.C.E.).

(D) In Chapter 4, finally, Furuli discusses Jeremiah's prophecy of the 70 years, arguing that the writers of Daniel 9:2 and 2 Chronicles 36:21 "unambiguously" applied the 70 years to the period of the desolate state of Jerusalem.

In this review I will critically examine these claims one by one. As the Persian chronology is not the subject of the present work, Furuli's chronological revision of that period will not be examined here. A more detailed review of Furuli's book that includes comments on his revised Persian chronology is found on this site: http://user.tninet.se/~oof408u/fkf/english/furulirev.htm
This material has also been included at the end of this book.

For some works often referred to in the discussion below the following abbreviations are used:

ADT Abraham J. Sachs and Hermann Hunger, *Astronomical Diaries and Related Texts from Babylonia* (Wien: Verlag der Österreichischen Akademie der Wissenschaften. Vol. I — 1988, II — 1989, II1 — 1996, V — 2001).

CBT Erle Leichty et al, *Catalogue of the Babylonian Tablets in the British Museum,* Vols. 6, 7, and 8 (1986, 1987, and 1988). These volumes list the tablets from Sippar held at BM.

LBAT Abraham J. Sachs (ed.), *Late Babylonian Astronomical and. Related Texts. Copied by T G. Pinches and J. N Strassmaier* (Providence, Rhode Island: Brown University Press, 1955).

PD Richard A. Parker and Waldo H. Dubberstein, *Babylonian Chronology 626 B.C. – A.D. 75* (Providence, Rhode Island: Brown University Press, 1956).

(A) The supposed "overlap" between the reigns of Nabonidus and Cyrus

An argument repeatedly used by Furuli is that the existence of dated business documents showing chronological "overlaps" of some days, weeks, or months between a king and his successor proves that "something is wrong with our chronological scheme. In that case it is likely that the successor did not succeed the previous king in the year when he died. There may be one or more years in between, or there may even be another ruler between the two kings in question. This way to test a chronology is very important because there are discrepancies between all the kings of the New Babylonian Empire and several of the early kings of the Persian Empire." (p. 132)

This argument is critically examined and disproved in the Appendix of the present work, where the conceivable "overlaps" between the reigns of all the kings of the Neo-Babylonian period are examined in detail. (See above, pp. 321–329.) The only suggested "overlap" not discussed is that between the 17th year of Nabonidus and the accession-year of Cyrus. The reason for this is not just that there are no dated texts that show such an overlap between the two reigns, but also because there are a number of tablets that definitely prove that Cyrus succeeded Nabonidus in his 17th year. Five such texts are discussed in the present work on pages 135–139 above.

Nevertheless, Furuli claims that some business tablets show an overlap between Nabonidus' 17th year and Cyrus' accession-year. His "Table 18" on p. 132 shows that the earliest tablet extant from the reign of Cyrus (CT 57:717) is dated to day 19, month VII (Tishri) of his accession-year, i.e., three days after the fall of Babylon. This date is correct. But then Furuli goes on to list three tablets in his table that seem to be dated to Nabonidus *after* the earliest tablet dated to Cyrus, indicating an overlap of five months between the two kings:

Month-day-year:	King:
VII -- 19 — acc.	Cyrus
VIII -- 10 — 17	Nabonidus
IX -- xx — 17	Nabonidus
XII -- 19 — 17	Nabonidus

Furuli concludes:

> If one or more of the three tablets dated in months 8 and 12 of Nabonid are correct, this suggests that Nabonid reigned longer than 17 years. (p. 132)

But none of the three "overlapping dates" are real.

(A-1) Nabonidus "VIII —10 — 17" (BM 74972):

As Furuli explains, PD rejected this date because "the month sign is shaded" in *J.* N. Strassmaier's copy of the text published in 1889.[81] They had good reasons for doing this because F. H. Weissbach, who collated the tablet in 1908, explained that the month name was highly uncertain and "in any case not Arahsamnu" (month VIII).[82]

Actually, there is an even more serious error with the date. Back in 1990 I asked C. B. F. Walker at the British Museum to take another look at the date on the original tablet. He did this together with two other Assyriologists. They all agreed that the year is 16, not 17. Walker says:

> On the Nabonidus text no. 1054 mentioned by Parker and Dubberstein p. 13 and Kugler, SSB I1388, I have collated that tablet (BM 74972) and am satisfied that the year is 16, not 17. It has also been checked by Dr. G. Van Driel and Mr. Bongenaar, and they both agree with me.[83]

(A-2) Nabonidus "IX — xx —17" (No. 1055 in Strassmaier, Nabonidus):

This text does not give any day number, the date above just being given as "Kislimu [= month IX], year 17 of Nabonidus". The text, in fact, contains four different dates of this kind, in the following chronological disorder: Months IX, I, XII, and VI of "year 17 of Nabonidus". None of these dates refers to the time when the tablet was drawn up. Such a date is actually missing on

81 PD (Parker & Dubberstein's *Babylonian Chronology,* 1956), p. 13. The tablet is listed as No. 1054 in J. N. Strassmaier, *Inschriften von Nabonidus, König von Babylon* (Leipzig, 1889).

82 See F. X. Kugler, *Sternkunde und Sterndienst in Babel* [SSB], Vol. II:2 (1912), p. 388

83 Letter Walker to Jonsson, November 13, 1990.

the tablet. As F. X. Kugler explained, the tablet belongs to a category of texts containing installment dates or delivery dates *(mashshartum)*.[84] Such dates were given at least one month, and often several months in advance. That is why PD states (p. 14) that "this tablet is useless for dating purposes" As shown by its contents, No. 1055 is an administrative text giving the dates for deliveries of certain amounts of barley in year 17 of Nabonidus.[85]

(A-3) Nabonidus "XII -19 —17" (BM 55694):

This tablet was copied by T. G. Pinches in the 1890's and was finally published in 1982 as CT 57:168.[86] It is also listed in CBT 6, p. 184, where the date is given as "Nb(-) 19/12/13+" (= day 19, month 12, year 13+).[87] Evidently the royal name and the year number are both damaged and only partially legible. "Nb(-)" shows that the royal name begins with "Nabu-". This could refer to either Nabopolassar, Nebuchadnezzar, or Nabonidus. If it is Nabonidus, the damaged year number, "13+", may refer to any year between his 13th and 17th year. An examination of the original tablet might perhaps give some clues.

None of the three tablets listed by Furuli, then, can be used to prove that Nabonidus' 17th year overlapped the accession-year of Cyrus, suggesting that "Nabonid reigned longer than 17 years"

(B) Attempts at undermining the reliability of the astronomical tablets

(B-1) Only three principal sources for the chronology of the ancient world?

Furuli is well aware that the most damaging evidence against his so-called "Oslo Chronology" is provided by the astronomical cuneiform tablets. He therefore strives to belittle the importance of most of these tablets, stating that there are only two principal astronomical sources on which the chronology of the Neo-Babylonian and Persian periods can be based. (Pages 15, 24, 45) At least one of these, he claims, contradicts the third principal chronological source—the Bible:

84 F. X. Kugler, SSB II:2 (1912), pp. 388, 389.

85 P.-A. Beaulieu in the *Journal of Near Eastern Studies,* Vol. 52:4 (1993), pp. 256, 258.

86 CT 57:168 = *Cuneiform Texts from Babylonian Tablets in the British Museum,* Part 57 (1982), No. 168.

87 Erle Leichty, *Catalogue of the Babylonian Tablets in the British Museum* (CBT), Vol. 6 (1986), p. 184 (82-7-14, 51).

> There are three principal sources with information regarding the chronology of the New Babylonian and Persian kings, namely, *Stem Kambys 400, VAT 4956* and the Bible. The information in these three sources cannot be harmonized. (p. 21)

Furuli knows, of course, that for the fixing of the absolute date for the fall of Babylon to 539 B.C.E., at least one astronomical text is needed. As the diary *VAT 4956* is disastrous for his Oslo Chronology, he is forced to choose *Strm Kambys 400* for this purpose, claiming that this is "the tablet that is most important for Persian chronology" (p. 128) and "the only source on the basis of which an absolute chronology can be made regarding the year Cyrus conquered Babylon." (p. 134)

The poor quality of this tablet has already been pointed out in the present work. As was noticed already by F. X. Kugler in 1903, it is probably the least reliable of all astronomical tablets. (See above, pp. 84–88.) Modern scholars even question whether it contains any observations at all. Dr. John M. Steele, for example, explains:

> It is also unwise to base any conclusions concerning the Babylonian records on this tablet alone, since it does not fall into any of the common categories of text. In particular, it is not certain whether this text contains observations or calculations of the phenomena it records. At least some of the data must be calculated. For instance, the full run of lunar six timings for the 7th year of Cambyses cannot all have been measured; clouds would surely have prevented their observation on at least some occasions. The lunar six data must therefore have been either all calculated, as suggested by Kugler (1907: 61–72), or be a mixture of observation and calculation. There is also debate concerning whether the two lunar eclipses were observed or calculated.[88]

The fact is that the chronology of the Neo-Babylonian and Persian eras is fixed by nearly 50 astronomical observational tablets (diaries, eclipse texts, and planetary texts). Many of them are quite extensive and detailed and serve as principal sources for the absolute chronology of this period. Most of these tablets are

88 John M. Steele, *Observations and Predictions of Eclipse Times by Early Astronomers* (Dordrecht-Boston-London: Kluwer Academic Publishers, 2000), p. 98. C. B. F. Walker refers, for example, to the inaccurate magnitude reported for one the two eclipses in the text, "but," he adds, "the Cambyses text is now understood to contain a series of predictions rather than observations." — Walker in John Curtis (ed.), *Mesopotamia in the Persian Period* (London: The Trustees of the British Museum, 1997), p. 18.

published in volumes I and V of Sachs & Hunger's ADT.[89] For example, there are about 25 diaries from the reign of Artaxerxes II (404–358 BCE), 11 of which have the royal name and regnal dates preserved. Most, if not all, of these appear to be, not later copies, but original compilations from the 46-year reign of Artaxerxes II.[90] Therefore, to fix the absolute chronology of the reign of Artaxerxes II or any other Persian king, *Strm Kambys 400* is needless and irrelevant. Nor is it needed to fix the reigns of Cambyses and Cyrus, which can be more securely fixed by other texts.

(B-2) Potential "sources of errors" in the Babylonian astronomical tablets

Attempting to further weaken the reliability of the astronomical texts, Furuli, on pages 29–37, describes nine "potential sources of error" that might undermine the trustworthiness of tablets that conflict with his Oslo Chronology, such as *VAT 4956*. On closer inspection, however, the supposed "sources of error" turn out to be either (a) trivial and immaterial, (b) not applicable to the tablets used for fixing the Neo-Babylonian and Persian chronology and therefore irrelevant, or (c) mere figments of imagination. All of Furuli's "potential sources of errors" fall into one of these three categories. Some examples are given below.

(B-2a) Trivial and immaterial sources of error:

An example of (a) is Furuli's description of "the process of writing down the data." His discussion of this focuses on the astronomical diary VAT 4956, dated to the 37th year of the reign of Nebuchadnezzar. Furuli explains:

> The tablet itself is a copy made a long time after the original was made, but even the original was not made at the time the observations were made. The tablet covers a whole year, and because clay hardly can be kept moist for 12 months, the observations must have been written down on quite a lot of smaller tablets, which were copied when the original was made. (pp. 30, 31)

As far as the *copying* and *compilation* procedure is concerned, Furuli's description is correct and well known to Assyriologists. Copying errors do exist, but they usually create few problems in tablets that are fairly well preserved and detailed enough to be

89 ADT = *Astronomical Diaries and Related Texts from Babylonia.*
90 Communication H. Hunger to C. O. Jonsson, dated January 26, 2001.

useful for chronological purposes. As discussed in chapter 4 of the present work (p. 162 above), the dated lunar and planetary positions recorded in *VAT 4956* evidently contain a couple of scribal errors. These errors, however, are minor and easily detected by modem computations of the observations recorded.

Thus, on the obverse (front) side, line 3 has day "9", which already P. V. Neugebauer and E. F. Weidner pointed out is a scribal error for day "8".[91] Similarly, obverse, line 14, has day "5", which is obviously an error for day "4". The remaining legible records of observed lunar and planetary positions, about 30, are correct, as is demonstrated by modem calculations. In their recent examination of *VAT 4956,* Professor F. R. Stephenson and Dr. D. M. Willis conclude:

> The observations analyzed here are sufficiently diverse and accurate to enable the accepted date of the tablet i.e. 568–567 B.C.— *to be confidently confirmed.*[92]

(B-2b) Inapplicable and therefore irrelevant "sources of error":

An example of (b) is Furuli's reference to the gradual change in the speed of the earth's rotation. (p. 33) As is pointed out in the present work (p. 334 above), this is no problem for the period under discussion, as the rate of the decrease in the earth's rotation has been established back to, and even over a century beyond the Neo-Babylonian period. From the middle of the 8th century B.C.E. and on, therefore, we are on "safe ground" with respect to this source of error.

(B-2c) Imaginary "source of error", no. 1:

An example of (c) is Furuli's reference to the supposed "crudeness of observations" recorded on the astronomical tablets. On page 32 he claims:

> One problem is the crudeness of the observations. Because the tablets probably were made for astrological reasons, it was enough to know the zodiacal sign in which the moon or a certain planet was found at a particular point of time. This does not give particularly accurate observations.

By this statement Furuli creates a false impression that the lunar and planetary positions recorded on the Babylonian astronomical tablets are given ***only*** in relation to zodiacal signs of 30 degrees each.

91 A translation and discussion of the tablet by Neugebauer & Weidner was published in 1915. See above, p. 157, note 8.

92 F. R. Stephenson & D. M. Willis in J. M. Steele & A. Imhausen [eds.], *Under One Sky. Astronomy and Mathematics in the Ancient Near East* (Munster: Ugarit-Verlag, 2002), pp. 423–428. (Emphasis added)

He supports this by quoting a scholar, Curtis Wilson, who in a review of a book by R. R. Newton made such a claim, stating that, "The position of the planet is specified only within an interval of 30°."[93]

But anyone with even a cursory acquaintance with the Babylonian astronomical tablets knows that Wilson's claim — repeated by Furuli — is false. Although it is true that many positions recorded on the tablets are given with reference to constellations along the zodiacal belt, the great majority of the positions, even in the earliest diaries, are given with reference to stars or planets. The division of the zodiacal belt into signs of 30 degrees each took place later, during the Persian era, and it is not until "toward the end of the 3rd century B.C." that "diaries begin to record the dates when a planet moved from one zodiacal sign to another."[94] During the entire 800-year period from ca. 750 BCE to ca. 75 CE the Babylonian astronomers used a number of stars close to the ecliptic as reference points. As Professor Hermann Hunger explains in a work also used by Furuli:

> In order to give the position of the moon and the planets *a number of stars close to the ecliptic are used for reference.* These have been called "Normalsterne" *[Normal Stars]* by Epping, and the term has remained in use ever since. (ADT, Vol. I, p. 17; emphasis added.)

On pages 17–19 of the same work, Hunger lists 32 such *normal stars* known from the tablets. Noel Swerdlow states: "By far the most numerous observations of planets in the Diaries are of their distances 'above' or 'below' and 'in front of' or 'behind' normal stars and each other, measured in cubits and fingers.[95]

Such detailed observations are shown by *VAT 4956,* in which about two-thirds of the lunar and planetary positions recorded are given *in relation to normal stars and planets.* And, in contrast to positions related to constellations, where the moon or a planet usually is just said to be "in front of," "behind," "above," "below," or "in" a certain constellation, the records of positions related to normal stars also give the *distances* to these stars in "cubits" (of ca. 22.5 degrees each) and "fingers" (1/24 of the cubit), as Swerdlow points out. Although the measurements are demonstrably not

93 C. Wilson in *Journal of the History of Astronomy 15:1* (1984), p. 40.

94 H. Hunger in N. M. Swerdlow [ed.], *Ancient Astronomy and Celestial Divination* (London: The MIT Press, 1999), p. 77. Cf. B. L. Van der Waerden, "History of the Zodiak," *Archiv fur Orientforschung* 16 (1952/1953), pp. 216–230.

95 N. M. Swerdlow, *The Babylonian Theory of the Planets* (Princeton, New Jersey, 1998), p. 39.

mathematically exact, they are considerably more precise than positions related only to constellations.

By parsing all the astronomical diaries in the first two volumes of Sachs/Hunger's ADT, Professor Gerd Grasshoff "obtained descriptions of 3285 events, of which 2781 are complete without unreadable words or broken plates. Out of those are 1882 topographical events [i.e., positions related to stars and planets], 604 are lunar observations called *Lunar Six* . . . and 295 are locations of a celestial object in a constellation."[96] Thus, two-thirds of the positions are related to stars or planets, whereas only about 10 percent are related to constellations.

(B-2c) Imaginary "source of error", no. 2:

Another example of (c) is Furuli's claim that the 12,000-foot mountain range to the east of Babylon might prevent or preclude observations:

> To the east of Babylon there is a mountain range rising to about 12,000 feet above sea level, while the area to the west of the city is a flat desert. ... it is obvious that the high mountains to the east of Babylon would prevent some observations. (p. 29)

But the Zagros mountains to the east of Babylon create no serious problems. The higher parts of the range begin about 230 kilometers east of Babylon with *Kuh-e Varzarin* at about 9500 feet above sea level. Mountains "about 12,000 feet above sea level" lie considerably farther away. Due to the distance and the curvature of the earth, the Zagros mountains are not visible from Babylon, at least not from the ground, as can be testified by anyone who has been there. Professor Hermann Hunger, for example, says:

> I have been there [in Iraq], three years, of which two months were spent in Babylon. There are no mountains visible from Babylon.[97]

It is possible, of course, that an observer atop the 90-meter-high Etemenanki ziggurat in Babylon (if the observations could have been made from there) could have seen a very thin, irregular line of mountains far to the east, although this, too, is doubtful. This might have affected the *arcus visionis* to some degree (the smallest angular distance of the sun below the horizon at the first or last

96 Gerd Grasshoff, "Normal Stars in Late Astronomical Babylonian Diaries," in Noel M.Swerdlow [ed.], *Ancient Astronomy and Celestial Divination* (London: The MIT Press, 1999), p. 107.

97 Communication Hunger *to Jonsson* December 4, 2003.

visibility of a heavenly body above the horizon), which in turn could have changed the date of the first and last visibility of a heavenly body by a day or two.

It should be emphasized that this might possibly be a problem with astronomical texts that report only phenomena close to the horizon. Observations of lunar and planetary positions related to specific stars and constellations higher in the sky would not be affected, and it is usually these that are the most useful for chronological purposes. Most of the about 30 lunar and planetary positions recorded on the astronomical tablet *VAT 4956* belong to this category.

None of Furuli's "potential sources of error" weakens the reliability of VAT 4956. I am aware of only one scholar who has tried to overcome the evidence provided by this diary, namely, E. W. Faulstich, founder and director of the Chronology-History Research Institute in Spencer, Iowa, USA. Faulstich believes it is possible to establish an absolute Bible chronology without the aid of extra-Biblical sources, based solely on the cyclical phenomena of the Mosaic law (sabbath days, sabbath and jubilee years) and the cycle of the 24 sections of the levitical priesthood. One consequence of his theory is that the whole Neo-Babylonian period has to be moved backward one year. Because this conflicts with the absolute dating of the period based on the astronomical tablets, Faulstich argues that *VAT 4956* contains information from two separate years mixed into one. This idea, however, is based on serious mistakes. I have thoroughly refuted Faulstich's thesis in the unpublished article, "A critique of E. W. Faulstich's Neo-Babylonian chronology" (1999), available from me upon request.

(C) Are most astronomical positions calculated rather than observed?

The "most acute problem for making an absolute chronology based on astronomica1 tablets," Furuli claims, is that many, "perhaps most positions of the heavenly bodies on such tablets, are calculated rather than observed." (p. 15) Is this true?

As discussed in chapter 4 of the present work (pp. 154–156 above), Babylonian astronomers at an early stage were able to predict certain astronomical phenomena, such as the occurrences of lunar eclipses and certain planetary positions. These calculations presuppose that they had worked out theories for dating and locating such phenomena. In fact, about 300 texts have been found

containing lists of lunar and planetary positions at regular intervals. (See above, p. 156.) Such arithmetical tables were termed "ephemerides" by Professor Otto Neugebauer, who published all extant tablets of this kind in his three-volume work, *Astronomical Cuneiform Texts* (1955). All these tablets are late, almost all dating from the 3rd to the 1st centuries B.C.E.

Does this mean, then, that all or most of the phenomena recorded on the astronomical tablets might have been computed rather than observed, as Furuli claims? Were the Babylonian astronomers able to do this? Are there indications in the recorded data that they did just that?

(C-.1) Phenomena the Babylonian astronomers were unable to calculate

Although the Babylonian astronomers were able to calculate and predict certain astronomical events, the observational texts — diaries, planetary texts, and eclipse texts — contain reports of several phenomena and circumstances connected with the observations that could not have been calculated.

That the diaries usually record *real observations* is shown by their reports of climatological phenomena. For example, the scribes repeatedly report when bad weather *prevented* astronomical observations. We often find reports about "clouds and rain of various sorts, described in detail by numerous technical terms, as well as fog, mist, hail, thunder, lightning, winds from all directions, often cold, and frequent '*pisan dib',* of unknown meaning but always associated with rain."[98] Other recorded phenomena were rainbows, solar halos and river levels. None of these could have been retrocalculated much later. What, then, about the astronomical phenomena?

As discussed in chapter 4 of the present work (p. 185 above), there were a number of *planetary phenomena* recorded in the texts that the Babylonian astronomers were unable to calculate. These included conjunctions of planets with the moon and other planets, with their distances. *VAT 4956* records a number of such — for the Babylonian astronomers — unpredictable and incalculable phenomena.

With respect to *lunar eclipses,* the Babylonian astronomers were certainly able to predict and retrocalculate the *occurrences* of lunar

98 N. M. Swerdlow, *The Babylonian Theory of the Planets* (1998), p. 18.

eclipses, but they were unable to predict or calculate a number of important details about them. (See above, p. 185.) This has been discussed in detail by Dr. John M. Steele.[99] Commenting on the claim that the eclipse records on the lunar eclipse tablets might be retrocalculations by Babylonian astronomers in the Seleucid era, Steele explains:

> You were absolutely right when you argued that the Babylonians could not have retrocalculated the early eclipse records. The Saros cycle could have been used to determine the date of eclipses, even centuries earlier, but none of the Babylonian methods could have allowed them to calculate circumstances such as the direction of the eclipse shadow, the visibility of planets during the eclipse, . . .
>
> Although the Babylonians could calculate the time of the eclipses, they could not do so to the same level of accuracy as they could observe — there is a clear difference of accuracy between eclipses they said were observed and those they say were predicted (this is discussed in my book), which proves that the "observed" eclipses really were observed.[100]

(C-2) Most of the contents of the observational texts are observations

Although the observational texts, due to particular circumstances such as bad weather, occasionally contain calculated events , most of the entries are demonstrably based on actual observations. That this is the case with the Diaries is directly indicated by the Akkadian name engraved at the end and on the edges of these tablets: *natsaru sha ginê,* which means "regular watching." (ADT, Vol. I, p. 11)

Scholars who have examined these tablets in detail agree that they contain mostly genuine observations. Professor Hermann Hunger gives the following description of the various kinds of astronomical data recorded in the Diaries:

> Lunar Six [i.e., the time differences between the settings and risings of the sun and the moon just before and after conjunction and opposition]; planetary phases, like first and last visibility . . . conjunctions between planets and the so-called Normal Stars . . . eclipses; solstices and equinoxes; phenomena of Sirius. Toward the end of the 3rd century

99 John M. Steele, *Observations and Predictions of Eclipse Times by Early Astronomers* (Dortrecht-Boston-London: Kluwer Academic Publishers, 2000); also in his article, "Eclipse Prediction in Mesopotamia," *Archive for History of Exact Sciences,* Vol. 54 (2000), pp. 421–454.

100 Communication Steele to Jonsson, March 27, 2003.

B.C., Diaries begin to record the dates when a planet moved from one zodiacal sign into another. The rest of the Diaries' contents is non-astronomical.

Hunger adds:

Almost all of these items are observations. Exceptions are the solstices, equinoxes, and Sirius data, which were computed according to a scheme . . . furthermore, in many instances when Lunar Sixes, lunar or solar eclipses, or planetary phases could not be observed, a date or time is nevertheless given, marked as not observed. Expected passings of Normal Stars by the moon are sometimes recorded as missed because of bad weather, but never is a distance between moon and Normal Star given as computed.[101]

In summary, Furuli's claim that "perhaps most positions of the heavenly bodies on such tablets, are calculated rather than observed" is groundless. It is refuted by statements in the tablets themselves and by the fact that they contain data that the Babylonians were unable to calculate. These circumstances are diametrically opposed to the suggestion that the data in the astronomical diary *VAT 4956* might have been calculated later so that possibly "there never was an 'original tablet'." (Furuli, p. 30)

(C-3) A theory of desperation

If the entries on the observational tablets — diaries, and lunar and planetary tablets — record mostly demonstrably genuine observations, and if the Babylonian astronomers were unable to compute and retrocalculate many of the astronomical and other data reported, how, then, is it possible for anyone to wriggle out of the evidence provided by these tablets?

Because the tablets often contain so many detailed observations dated to specific regnal years that they can be safely fixed to particular Julian years, the only escape is to question the authenticity of the *regnal year numbers* found on the tablets.

This is what Furuli does. He imagines that "a scribe could sit down in the 2nd century and make a tablet partly of some phenomena covering many years, partly on the basis of theory (the three schemes) and partly on the basis of tablets from a library" that might show real observations. Then, upon discovery that the dates on the library tablets conflicted with the theoretical data, "these erroneous data could be used to 'correct' the correct data of

101 H. Hunger in Swerdlow (ed.), *Ancient Astronomy and Celestial Divination* (1999), pp. 77, 78. (Emphasis added)

his library tablet, to the effect that the tablet he was making would contain wrong data of regnal years:' (Furuli,p.41)

Furuli indicates that not only the dates on the lunar and planetary tablets but also the dates on the diaries might have been tampered with by the Seleucid scholars in the same way. Referring again to the fact that the earliest extant diaries are copies, he says:

> But what about the regnal year(s) of a king that are written on such tablets? Have they been calibrated to fit an incorrect theoretical chronological scheme, or have they been copied correctly? (Furuli, p. 42)

Furuli realizes, of course, that his Oslo Chronology is thoroughly contradicted by the Babylonian astronomical tablets. That is the reason he proposes, as a last frantic resort, the theory that these tablets might have been redated by Seleucid scholars to bring them into agreement with their own supposed theoretical chronology for earlier times. Is this scenario likely? What does it imply?

(C-4) The scale of the supposed Seleucid chronological revisions

To what extent does Furuli's Oslo Chronology differ from the traditional chronology? In a chronological table on pages 219–225 covering the 208 years of the Persian era (539–331 BCE), Furuli shows, reign by reign, the difference between his chronology and the traditional one. It turns out that the only agreement between the two is the dating of the reigns of Cyrus and Cambyses — the period from the fall of Babylon (539 BCE) to 522 BCE, a period of 17 years. By giving the usurper Bardiya one full year of reign after Cambyses, Furuli moves the whole 36-year reign of Darius I one year forward. Then he moves the reigns of Darius' successors Xerxes and Artaxerxes I 10 years backward by adding 10 years to the reign of the latter, creating a coregency of 11 years between Darius I and Xerxes.

But Furuli also assigns a one-year reign to the usurper Sogdianus between Artaxerxes I and his successor Darius II. The effect of this is that the remaining reigns up to 331 BCE are all moved one year forward. The end result is that Furuli's Oslo Chronology is at variance with the traditional chronology for the Persian era for 191 of its 208 years, or for 92 percent of the period.

But this is not all. As mentioned in the introduction, Furuli wants to add 20 extra years to the Neo-Babylonian period somewhere after the reign of Nebuchadnezzar — between 562 and 539 BCE. The effect of this — what Furuli calls the "domino

effect" — is that not only the reign of Nebuchadnezzar but all the reigns of his predecessors are moved backward 20 years.

Because the Babylonian astronomical archive starts with the reign of Nabonassar, 747–734 BCE, Furuli's Oslo Chronology is at variance with the traditional chronology for most, if not the whole, of the Babylonian era from 747 to 539 BCE. This means that the disagreement between the two runs to *more than 90 percent* of the 416-year period from 747 to 331 BCE. This also means that the Oslo Chronology is contradicted by more than 90 percent of the astronomical observational texts — diaries, eclipse texts, and planetary texts — dated to this period. Because these tablets record thousands of observations dated to particular regnal years, months, and days within this period, we begin to get some idea of the scale of the chronologica1 revisions the Seleucid scholars must have engaged in — according to Furuli's theory. Yet, this is only a fraction of the full scope of the necessary revisions.

(C-5) The scope of the original astronomical archive

It should be kept in mind that the extant archive of ca. 1300 nonmathematical and principally observational astronomical cuneiform tablets is only a fraction of the scope of the original archive available to the Seleucid scholars. In a lecture held at a conference in 1994, Professor Hunger explained:

> To give you an idea of how much was originally contained in that archive, and how much is still preserved, I made a few rough estimates. From well preserved Diaries, I found that in each month about 15 lunar and 5 planetary positions, both in relation to Normal Stars, are reported. Also, every month the so-called lunar Six are recorded. Each year will in addition contain 3 Sirius phases, 2 solstices and 2 equinoxes, at 1east 4 eclipse possibilities or eclipses, and about 25 planetary phases. Together, this results in about 350 astronomical observations per year. In 600 years, 210,000 observations are accumulated. Now I do not know whether the archive was ever complete to this extent. Sometimes copies of older Diaries indicate that things were missing in the original. *But on the whole, this is the order of magnitude.* By counting the number of reasonably (i.e., not completely, but more than half) preserved months, I arrived at ca. 400 months preserved in dated Diaries (undated fragments do not help for the purposes of this lecture). If we compare this to a duration of 600 years for the archive, we see that we *have preserved ca. 5% of the months in Diaries.*[102]

102 H. Hunger in Swerdlow *(ed.), Ancient Astronomy and Celestial Divination* (1999), p. 82. (Emphasis added)

If only five percent of the original Babylonian astronomical archive is preserved today, the scale of the chronological revisions Furuli thinks Seleucid copyists engaged in becomes apparent. To bring their whole archive into harmony with their supposed theoretical chronology, they would have had to redate thousands of tablets and tens of thousands of observations. Is it likely that they believed so strongly in a supposed theoretical chronology that they bothered to redate four centuries' worth of archives containing thousands of tablets? The idea is patently absurd, asinine.

We can also ask why the Seleucid scholars would work out a theoretical chronology for earlier centuries when a reliable chronology for the whole period back to the middle of the 8th century could easily be extracted from the extensive astronomical archive at their disposal. Is it not much more realistic to conclude that their chronology was exactly the one found in the inherited archive of tablets, an archive that had been studied and expanded by successive generations of scholars up to and including their own?

It should be noted that, to make any claims at all about dates in his Oslo chronology, Furuli must rely on the dating of the tablets that the Seleucids supposedly revised. But if one assumes that his chronology is valid, then so must be the dates recorded on the tablets — which destroys his claim that the Seleucids revised the tablets. Thus, Furuli's argument is internally inconsistent and cannot be correct.

Another problem is what became of the original pre-Seleucid tablets. A necessary consequence of Furuli's theory is that almost all extant tablets should reflect only the erroneous theoretical chronology of the Seleucid scholars, not what Furuli regards as the original and true chronology — the Oslo Chronology. In his view, therefore, all or almost all extant tablets can only be the late revised copies of the Seleucid scholars. Thus, on page 64, he claims:

> As in the case of the astronomica1 diaries on clay tablets, we do not have the autographs of the Biblical books, but only copies.

This is certainly true of the Biblical books, but is it true of the astronomical diaries? Is there any evidence to show that all the astronomical tablets preserved today are only copies from the Seleucid era?

(C-6) Are all extant tablets late copies from the Seleucid era?

It is certainly true that some of the earliest diaries, including *VAT 4956,* are later copies. As discussed in chapter 4 of the present work, they frequently reflect the struggle of the copyist to understand the ancient documents they were copying, some of which were broken or otherwise damaged. Twice in the text of *VAT 4956,* for example, the copyist added the comment "broken off," indicating he was unable to decipher some word in the original. Often the documents used archaic terminology that the copyists tried to modernize. What about diaries from later times?

As an example, there are about 25 diaries from the 46-year reign of Artaxerxes II (404–358 B.C.E.), 11 of which not only preserve the dates (year, month, day) but also the name of the king. (ADT, Vol. I, pp. 66–141) Some of them are extensive and contain numerous observations (e.g., nos. –372 and –366). None of these tablets show any of the above-mentioned signs of being later copies. Is it likely, then, that they, or at least some of them, are originals?

This question was sent to Professor Hunger a few years ago. He answered:

> In my opinion, the diaries from the time of Artaxerxes II can all be from his reign. You know that the larger diaries are all copies in the sense that they are collections of smaller tablets which covered shorter periods. But that does not mean that they were copied much later. To me it would make most sense if after every half a year the notes were copied into one nice exemplar. I had a quick look through the edition and did not find any remarks like 'broken" which are an indication that the scribe copied an older original. So I would answer your question "is it likely" by "Yes".[103]

These tablets, therefore, do not reflect any "theoretical chronology" supposedly invented by the later Seleucid scholars. The tablets might very well be original documents. We cannot take it for granted that they are late copies from the Seleucid era. And the same holds true, not only for the diaries from the reign of Artaxerxes II but for most of the observational tablets dating from before the Seleucid era. Even if some of the diaries and other tablets dated to the earliest centuries are later copies, it is usually not known how late these copies are, or whether they were copied in the Seleucid period or earlier.

103 Communication Hunger to Jonsson, January 26, 2001.

In conclusion, the theory that Seleucid scholars worked out an erroneous hypothetical chronology for earlier times that they systematically embodied into the astronomical tablets they were copying cannot be supported by the available facts. It is not based on historical reality and is a desperate attempt to save cherished but false dates.

(D) Unfounded claims about the Biblical 70 years

As is discussed in chapter 5 of the present work, the prophet Jeremiah directly applies the 70 years to *the length of Babylon's dominion over the nations,* not to the length of the desolation of Jerusalem and the Jewish exile:

> . . . these nations will serve the king of Babylon seventy years. (Jeremiah 25:11, NIV)
>
> When seventy years are completed for Babylon, I will come back to you and fulfill my gracious promise to bring you back to this place. (Jeremiah 29:10, NIV)

These texts clearly apply the 70-year period to Babylon, not to Jerusalem. Quoting the above NIV rendering of the two verses, Furuli even admits this, stating that "the text does not say explicitly that it refers to an exile for the Jewish nation. If we make a grammatical analysis in 25:11, we find that 'these nations' is the grammatical subject, and in 29:10, 'Babylon' is the patient, that is, the nation that should experience the period of 70 years." (p. 75)

(D-1) Is Furuli's view of the 70 years really supported by Daniel and the Chronicler?

Attempting to evade this undesirable conclusion, Furuli turns to the 70-year passages at Daniel 9:2 and 2 Chronicles 36:20, 21, stating that "the writers of Daniel and 2 Chronicles understood the words of Jeremiah to imply a 70-year exile for the Jewish nation." After quoting the NIV for these two texts, he claims:

> As the analysis below shows, the words of Daniel and the Chronicler are unambiguous. They show definitely that Daniel and the Chronicler understood Jeremiah to prophesy about a 70-year period for the Jewish people when the land was desolate. (p. 76)

The discussion of the two passages in chapter 5 above (pp. 215-225) shows this claim to be groundless. Both passages may easily be harmonized with the clear statements of Jeremiah.

Although Daniel links or ties the 70 years to the desolate state of Jerusalem, this does not mean that he *equated* the two periods. To *link* and to *equate* are two different things. This was noticed, for example, by Dr. C. F. Keil, who in his grammatical analysis of Daniel 9:2 concluded that Daniel connected and yet distinguished the two periods, just as is done in Jeremiah's prophecy. Only after the completion of the 70 years "for Babylon," JHWH would visit the Jewish exiles and bring them back to Jerusalem to end its period of desolation. This is what had been predicted at Jeremiah 29:10, and Daniel's statement fully agrees with this, according to Keil. (See above, p. 219, note 31.)[104]

In his discussion of 2 Chronicles 36:20, 21 Furuli ignores verse 20 and quotes only verse 21:

> to fulfill Jehovah's words by the mouth of Jeremiah, until the land had paid off its sabbaths. All the days of lying desolate it kept sabbath, to fulfill seventy years.

It may be noted that this verse starts with a subordinate clause and, more specifically, with a purpose clause: to fulfill . . . . Furuli quotes the verse out of context. To know what event would fulfill "Jehovah's words by the mouth of Jeremiah," it is necessary to examine the main or principal clause, which is found in verse 20. This verse says:

> Furthermore, he [Nebuchadnezzar] carried off those remaining from the sword captive to Babylon, and *they came to be servants to him and his sons until the royalty of Persia began to reign;*

The Chronicler states that the service to the kings of Babylon ended when "the royalty of Persia began to reign." This event took place, he goes on to say in the next verse (21), "to fulfill Jehovah's words by the mouth of Jeremiah, . . . to fulfill seventy years."

The obvious meaning is that the cessation of the servitude under Babylon by the Persian takeover in 539 BCE fulfilled the 70-year prophecy of Jeremiah. The Chronicler does not reinterpret Jeremiah's statements to mean 70 years of desolation for Jerusalem, as Furuli claims. On the contrary, he sticks very closely to Jeremiah's description of the 70 years as a period of servitude under Babylon, and he ends this period with the fall of Babylon,

104 The rather free Bible translation by Eugene H. Peterson well expresses the distinction made in Jeremiah 29:10 between the end of the two periods, the 70 years for Babylon and Jerusalem's period of desolation: "As soon as Babylon's seventy years are up and not a day before, I'll show up and take care of you as I have promised and bring you back home." *(The Message. The Prophets,* 2000, p. 230)

exactly as Jeremiah had predicted at Jeremiah 25:12 and 27:7. (See chapter 5 above, pp. 220, 221.)

(D-2) Jeremiah 25:9–12: 70 years of servitude — for whom?

Returning to Jeremiah's prophecy, Furuli first focuses on Jeremiah 25:11, which says:

> And all this land must become a devastated place, an object of astonishment, and *these nations will serve the king of Babylon seventy years.* (NIV)

As was pointed out earlier, Furuli starts his discussion of the 70-year prophecy by admitting that Jeremiah applies the 70 years to Babylon, not to Jerusalem. Having concluded (falsely, as has been shown above and in chapter 5) that Daniel 9:2 and 2 Chronicles 36:21 unambiguously state that Judah and Jerusalem lay desolate for 70 years, Furuli realizes that the meaning of Jeremiah 25:11 has to be changed to be brought into agreement with his conclusion.

The clause "these nations will serve the king of Babylon seventy years" is very clear in Hebrew:

> weâbdû haggôyîm hâêlleh et-melech bâbel shivîm shânâh
> and-will-serve-they the-nations these king [of] Babel seventy year[s]

As Furuli points out (p. 82), the particle *et* before *melech bâbel* ("king of Babel") is a marker indicating that *melech bâbel* is the object. The word order is typical in Hebrew: verb-subject-object. There are no grammatical problems with the clause. It simply and unambiguously says that "these nations will serve the king of Babel seventy years." Furuli, too, admits that "this is the most natural translation." (p. 84) How, then, can Furuli force it to say something else?

Furuli first claims that "the subject ('these nations') is vague and unspecified" Actually, it is not. It simply refers back to "all these nations round about" referred to in verse 9. Furuli goes on to state that the subject in the clause might not be "these nations" in verse 11 but "this land" (Judah) and "its inhabitants" in verse 9. Verse 11, therefore, really says that it is only the inhabitants of Judah, not "these nations," that will serve the king of Babylon 70 years. How, then, is the occurrence of "these nations" in the clause to be explained? Furuli suggests that they might be part of the object,

the king of Babel, who "would be a specification of" these nations. The clause could then be translated:

> and they will serve these nations, the king of Babel, seventy years (p. 84)

Furuli also suggests that the particle *et* might not here be used as an object marker but as a preposition with the meaning "with." Based on this explanation, the clause could even be translated:

> and they will serve these nations *together with* the king of Babel seventy years (p. 84)

These reconstructions are not supported by any Bible translations. Not only are they far-fetched, they are refuted by the wider context. The prediction that the nations surrounding Judah would serve the king of Babylon is repeated in Jeremiah 27:7 in a way that is impossible to misunderstand:

> And all the nations must serve him and his son and his grandson until the time even of his own land comes.

The immediate context of the verse proves conclusively that "the nations" referred to include all the non-Jewish nations in the Near East. Furuli's linguistic acrobatics, therefore, are unnecessary, mistaken, and a case of special pleading.

Furuli's far-fetched and forced reconstruction of the verse seems to be an attempt to bring it in agreement with the wording of the Septuagint version (LXX), to which he then refers in support. (p. 84) Some of the problems with the LXX version of Jeremiah are discussed in chapter 5 above, ftn. 8 on pp. 195, 196.

(D-3) Jeremiah 29:10: The meaning of the 70 years for Babylon

Jeremiah 29:10 is discussed in chapter 5 above, pp. 209–214. The verse explicitly states that the 70 years refer to Babylon, not Jerusalem:

> This is what the LORD says: 'When seventy years are completed *for Babylon [l'bâbel] I* will come to you and fulfill my gracious promise to bring you back to this place' [i.e., to Jerusalem]. (NIV)

Furuli notes that most Bible translations render the preposition *le* as "to" or "for" and that only a very few (usually older) translations render it as "at" or "in." (Furuli, p.85) Of the latter, he mentions six: NWT, KJV , Harkavy, Spurrell, Lamsa, and the Swedish Church Bible of 1917.

Alexander Harkavy's edition from 1939 contains the Hebrew text together with an English translation. Furuli does not seem to

have noticed that Harkavy states in the preface that the English text is that of the *Authorized Version,* that is, the KJV. George Lamsa's translation has been strongly criticized because of its heavy dependence on the KJV. Also in Jeremiah, chapter 29, he almost slavishly follows KJV. His "at Babylon," therefore, means nothing. I have not been able to check Helen Spurrell's translation. It was published in London in 1885, not 1985, as Furuli's Bibliography erroneously shows, so it is not a modem translation.

The Swedish Church Bible of 1917 has recently been "replaced" by two new translations, *Bibel-2000* and *Folkbibeln* (1998). Both have "for Babylon" at Jeremiah 29:10. In answer to my questions, the translators of both translations emphasized that *lᵉbâbel* at Jeremiah 29:10 means "for Babylon" not "at" or "in" Babylon. Remarkably, even the new revised Swedish edition of the *NWT* has changed the earlier "in Babylon" (Swedish "i Babylon") in the 1992 edition to "for Babylon" (Swedish: "för Babylon") in the 2003 edition. (See above, p. 211, ftn. 26)

Because the rendering "for Babylon" contradicts the theory that the 70 years refer to the period of Jerusalem's desolation, Furuli needs to defend the notably infrequent rendering "at" or "in" Babylon. He even claims that the preposition "for" gives the 70 years "a fuzzy meaning:"

> If "for" is chosen, the result is fuzziness, because the number 70 then loses all specific meaning. There is no particular event marking their beginning nor their end, and the focus is wrong as well, because it is on Babylon rather than on the Jews. (p. 86)

This is an incredible statement and another example of Furuli's special pleading. It is difficult to believe that Furuli is totally ignorant of the fact that both the beginning and the end of Babylon's supremacy in the Near East were marked by revolutionary events — the beginning by the final crushing of the Assyrian empire and the end by the fall of Babylon itself in 539 BCE. Surely he must know that, according to secular chronology, exactly 70 years passed between these two events. Modern authorities on the history of this period agree that the definite end of Assyria occurred in 610/609 BCE. In the box on page 234 of chapter 5 above, for example, four leading scholars are quoted to this effect: viz. Professor John Bright and three leading Assyriologists, Donald J. Wiseman, M. A. Dandamaev, and Stefan Zawadski. It would be easy to multiply the number. Another example is Professor Klas R.Veenhof. He describes how the last

king of Assyria, Assuruballit II, after the destruction of the capital Nineveh in 612 BCE, retreated to the provincia1 capital Harran, the last Assyrian stronghold, where he succeeded in holding out for another three years, supported by Egypt. Veenhof writes:

> It was to no advantage that Egypt supported Assyria; the Babylonian and Median armies took the city in 610 B.C., and in the following year [609] they warded off their last defensive attempt. Therewith a great empire was dissolved.[105]

The same historical information is given by Professor Jack Finegan on page 252 (§430) in the new revised edition of his well-known *Handbook of Biblical Chronology.* Quoting Jeremiah 29:10 he concludes:

> The "seventy years . . . for Babylon," of which Jeremiah speaks are therefore the seventy years of Babylonian rule, and the return of Judah from exile is contingent upon the end of that period. Since the final fall of the Assyrian empire was in 609 B.C. (§430), and the New Babylonian empire endured from then until Cyrus the Persian took Babylon in 539, the period of Babylonian domination was in fact seventy years (609 — 539 = 70).[106]

Certainly, no one acquainted with Neo-Babylonian history can honestly claim that the 70 years "for Babylon" have a "fuzzy meaning" because no particular events mark the beginning and end of the period.

(D-4) Jeremiah 29:10: The Septuagint and Vulgate versions

Furuli next points out that "the Septuagint has the dative form *babylôni"* but with "the most natural meaning being 'at Babylon'." The statement reveals a surprising ignorance of ancient Greek. As every Greek scholar will point out, the natural meaning of the dative form *babylôni* is "for Babylon." It is an exact, literal translation of the original Hebrew *l*^{e}*bâbel,* which definitely means "for Babel" in this text, as discussed on pp. 213, 214 above. True, at Jeremiah 29:22 (LXX 36:22) the dative form *babylôni* is used in the local sense, "in Babel," but it gets this sense only because of the preceding Greek preposition *en,* "in":

> And from them a malediction will certainly be taken on the part of the entire body of exiles of Judah that is in Babylon *(en babylôni)*

Furuli further refers to the rendering of the Latin Vulgate, *in Babylon,* which means, as he correctly explains, "in Babylon." This

105 Klas R. Veenhof, *Geschichte des Alten Orients bis zur Zeit Alexanders des Grossen* (Göttingen, 2001), pp. 275, 276. (Translated from German)

106 Jack Finegan, *Handbook of Biblical Chronology* (Peabody, Mass.: Hendrickson Publishers, 1998), p. 255.

translation most probably influenced the KJV of 1611, which in turn has influenced several other earlier translations. The point is that all translations derived from or influenced by the Vulgate, such as the KJV, are not independent sources.

(D-5) Jeremiah 29:10: The Hebrew preposition le (lamed)

The preposition *l*ᵉ is the most common preposition in the Hebrew Old Testament. According to a recent count, it occurs 20,725 times, 1352 of which are found in the book of Jeremiah.[107] What does it mean at Jeremiah 29:10? Since the first edition of the present work was published in 1983, this question has been asked of dozens of qualified Hebraists around the world. I contacted some and so did some of my correspondents. Although some of the Hebraists explained that *l*ᵉ in a few expressions has a local sense ("in, at"), in most cases it does not, and they unanimously reject this meaning at Jeremiah 29:10. Some of them are quoted in chapter 5 above, pp. 213, 214.

Furuli disagrees with their view. He believes that because *l*ᵉ is used in a local sense in some expressions at a few places it is likely used in this sense also in Jeremiah 29:10. He argues:

> Can it really be used in the local sense "at"? It certainly can, and *The Dictionary of Classical Hebrew* lists about 30 examples of this meaning, one of which is Numbers 11:10, "each man *at (le)* the entrance of his tent". So, in each case when *le* is used, it is the context that must decide its meaning. For example, in Jeremiah 51:2 the phrase *lebâbel* means "to Babylon", because the preceding verb is "to send". But *lirûshâlâm* [the letters *li* at the beginning of the word is a contraction of *le+yod]* in Jeremiah 3:17 in the clause, "all the nations will gather *in Jerusalem"* has the local meaning "*in Jerusalem",* and the same is true with the phrase *lîhûdâ* in Jeremiah 40:11 in the clause, "the king of Babylon had left a remnant *in Judah".* (p. 86)

Well and good, but do these examples allow *l*ᵉ*bâbel* at Jeremiah 29:10 to be translated "in" or "at Babylon"? Is this really a likely translation? Is it even a possible one? This question was sent to Professor Ernst Jenni in Basel, Switzerland, who is undoubtedly the leading authority today on Hebrew prepositions. So far, he has written three volumes on three of the most common Hebrew prepositions, *b*ᵉ (beth), *ke* (kaph), and *l*ᵉ (lamed). In the volume on

107 Ernst Jenni, *Die hebräischen Prepositionen. Band 3: Die Präposition Lamed* (Stuttgart, etc.: Verlag Kohlhammer, 2000), p. 17.

*l*ᵉ (lamed) he devotes 350 pages to the examination of this preposition.[108] His answer of October 1, 2003, quoted on page 214 above, is worth repeating here:

> My treatment of this passage is found in the Lamed-book p. 109 (heading 4363). The rendering in all modem commentaries and translations is "for Babel" (Babel as world power, not city or land); this is clear from the language as well as also from the context.
>
> By the "local meaning" a distinction is to be made between where? ("in, at") and where to? (local directional "to, towards"). The basic meaning of *l* is "with reference to", and with a following local specification it can be understood as local or local-directional *only in certain adverbial expressions* (e.g., Num. 11,10 [Clines DCH IV, 481b] "at the entrance", cf. *Lamed* pp. 256, 260, heading 8151). At Jer. 51,2 l is a personal dative ("and send to Babel [as personified world power] winnowers, who will winnow it and empty its land" *(Lamed* pp. 84f., 94)). On Jer. 3,17 "to Jerusalem" (local terminative), everything necessary is in *Lamed* pp. 256, 270 and ZAH 1, 1988, 107–111.
>
> On the translations: LXX has with *babylôni* unambiguously a dative ("for Babylon"). Only Vulgata has, to be sure, *in Babylon,* "in Babylon", thus King James Version "at Babylon", and so probably also the New World Translation.
>
> I hope to have served you with these informations and remain with kind regards,
>
> E. Jenni.
>
> [Translated from the German. Emphasis added.]

In view of this specific and authoritative information, Furuli's arguments for a local meaning of *l*ᵉ at Jeremiah 29:10 can be safely dismissed.

(D-6) What about the 70 years at Zechariah 1:12 and 7:5?

That the 70-year texts at Zechariah 1:12 and 7:5 refer to a period different from the one in Jeremiah, Daniel, and 2 Chronicles is demonstrated in detail in chapter 5 above, pp. 225–229. There is no need to repeat the argumentation here. Furuli's attempt to equate the 70 years in Zechariah with the 70 years of Jeremiah, Daniel, and the Chronicler evades the real problem.

According to Zechariah 1:12, Jerusalem and the cities of Judah had been denounced for "these seventy years." If this denunciation

108 Ernst Jenni, *ibid.*

ended when the Jews returned from the exile after the fall of Babylon, as Furuli holds, why does our text show that the cities still were being denounced in the second year of Darius, 520/519 BCE? Furuli has no explanation for this, and he prefers not to comment on the problem.

The same holds true of Zechariah 7:4,5. How can the 70 years of fasting have ended in 537 BCE, as Furuli claims, when our text clearly shows that these fasts were still being held in the fourth year of Darius, 518/517 BCE? Furuli again ignores the problem. He just refers to the fact that the Hebrew verbs for "denounce," "fast," and "mourn" are all in the Hebrew perfect, stating that, "There is nothing in the verbs themselves which demands that the 70 years were still continuing at speech time." (p. 88) True, but they do not demand the opposite, either. The verb forms in the passage prove nothing.

But the context does. It clearly shows that the cities were still being denounced "at speech time," in 519 BCE, and that the fasts were still being held "at speech time," in 517 BCE, about 70 years after the siege and destruction of Jerusalem in 589–587 BCE. That is why this question was raised in 519 BCE: Why is Jehovah *still* angry at Jerusalem and the cities? (Zechariah 1:7–12) And that is also why this question was raised in 517 BCE: Shall we *continue* to hold these fasts? (Zechariah 7:1–12) Furuli's interpretation (which echoes the Watchtower Society's) implies that the denunciation of the cities and the keeping of the fasts had been going on for about 90 — not 70 — years, directly contradicting the statements in the book of Zechariah.

Summary

In this review of Furuli's book, we have seen a number of insurmountable difficulties that his Oslo Chronology creates not only with respect to the extra-Biblical historical sources but also with the Bible itself.

The amount of evidence against Furuli's revised chronology provided by the cuneiform documents — in particular the astronomical tablets — is enormous. Furuli's attempts to explain away this evidence are of no avail. His idea that most, if not all, of the astronomical data recorded on the tablets might have been retrocalculated in a later period is demonstrably false. Furuli's final, desperate theory that the Seleucid astronomers — and there were many — systematically redated almost the whole astronomical archive inherited from earlier generations of scholars is divorced from reality.

With respect to the Biblical passages on the 70 years, we have seen to what extremes Furuli has been forced to go in his attempts to bring them in agreement with his theory. He has been unable to prove his repeated claim that the 70-year passages in Daniel and 2 Chronicles *unambiguously* state that Jerusalem was desolate for 70 years. His linguistic interpretation of 2 Chronicles 36:21 is misconstrued because he ignores the main clause in verse 20, which plainly makes the servitude end at the Persian conquest of Babylon in 539 BCE. Furuli's linguistic rerenderings of the passages in Jeremiah are no better. To reconcile Jeremiah 25:11 with his theory, he admits that he must discard "the most natural translation" of the verse. And to bring Jeremiah 29:10 into agreement with his theory, he must reject the near-universal rendering "for Babylon" in favor of the unsupportable "in Babylon" or "at Babylon" — translations rejected by all competent modern Hebraists.

Furuli's approach, then, is not Biblical as he claims, but *sectarian.* As a conservative Jehovah's Witness scholar, he is prepared to go to any length to force the Biblical passages and the historical sources into agreement with the Watchtower Society's Gentile times chronology — a chronology that is the foundation cornerstone of the movement's claim to God-given authority. As I have amply documented in this review, this sectarian agenda forces Furuli to fabulate more wildly than Sheherazade; the legendary Persian queen and storyteller of One Thousand and One Nights.

THE 20TH YEAR OF ARTAXERXES AND THE "SEVENTY WEEKS" OF DANIEL

The questions about the chronology of the reign of Artaxerxes I and its supposed relation to the 70 weeks of Daniel 9:24–27 would require a minor book to answer, and such a book is, in fact, what I have been planning to write for some years. I have been collecting material on the subject for many years, and in 1989 I even wrote a brief draft in Swedish. Other projects, however, have occupied my spare time since then, and I don't expect to be able to resume the work on the 70 weeks within the next few years. The following discussion is an examination of the arguments brought forth by the Watch Tower Bible & Tract Society in support of the idea that Artaxerxes I acceeded to the throne in 475 BC, not in 465 BC as is held by modern historians.

What follows is a brief summary of the Swedish paper on the chronology of Artaxerxes' reign.

1. Was Xerxes a coregent with his father Darius?

It is true that the Watch Tower Society attempts to solve the problems created by their prolongation of Artaxerxes' length reign from 41 to 51 years (his accession being dated to 475 instead of 465 BC) by abbreviating the reign of his predecessor Xerxes (485–465 BC) from 21 to 11 years, arguing that the first 10 years of Xerxes' rule was a co-rule with his father Darius.

There is not the slightest evidence in support of such a coregency. The Watch Tower Society's discussion on pages 614–616 of its Bible dictionary *Insight on the Scriptures*, volume 2 (1988), is a miserable distortion of the historical evidence. Thus, on page 615 they claim:

> There is solid evidence for a coregency of Xerxes with his father Darius. The Greek historian Herodotus (VII, 3) says: "Darius judged his [Xerxes'] plea [for kingship] to be just and declared him king. But to my thinking Xerxes would have been made king even without this advice." This indicates that Xerxes was made king during the reign of his father Darius.

If we look up Herodotus' statement, however, we will discover that he, in the very next few sentences, directly contradicts the Watch Tower Society's claim that there was a ten year long coregency of

Xerxes with Darius by stating that *Darius died one year after this appointment of Xerxes as his successor.* Herodotus says:

> Xerxes, then, was publicly proclaimed as next in succession to the crown, and Darius was free to turn his attention to the war. Death, however, cut him off before his preparations were complete; he died in the year following this incident and the Egyptian rebellion, after a reign of thirtysix years, and so was robbed of his chance to punish either Egypt or the Athenians. After his death the crown passed to his son Xerxes.

What we find, then, is that Darius appointed Xerxes his successor *one year (not ten!) before his own death.* Further, Herodotus does not say that Darius appointed Xerxes his *coregent,* but his *successor.* (Note, for instance, the wording of the passage quoted by the Watch Tower Society in Aubrey de Sélincourt's translation in the Penguin Books). In the preceding paragraphs, Herodotus explains that a common rule among Persian kings before they went out to war was to appoint their successors to the throne, in case they themselves would be killed in the battles. This custom, he says, was also followed by Darius.

The Watch Tower Society, then, quotes Herodotus completely out of context, leaving out the subsequent sentences that refute their claim. Incredibly, they introduce this forgery by terming it "solid evidence"!

Other "solid evidence" presented in their Bible dictionary in support of the coregency is of the same quality, for example the bas-reliefs found in Persepolis, which Herzfeld in 1932 felt indicated a coregency of Xerxes with Darius. (*Insight* 2, p. 615) This idea, however, is dismissed by modern scholars. The very fact that the crown prince is pictured as *standing behind* the throne shows that he is not a king and a coregent, but an appointed successor. Second, no names are found on the relief, and the conclusion that the man on the throne is Darius and the crown prince is Xerxes is nothing but a guess. J. M. Cook, in his work on the history of Persia, argues that the crown prince is Artobazanes, the oldest son of Darius. (Cook, *The Persian Empire*, New York 1983, p. 75) Other modern scholars, such as A. B. Tilia and von Gall, have argued that the king cannot be Darius but must be Xerxes, and that the crown prince, therefore, is the son of Xerxes! (Cook, p. 242, ftn. 24)

E As "evidence from Babylonian sources" for the claimed coregency the Watch Tower Society first refers to "a palace for Xerxes" that was built in Babylon in 498–496 BC. But there is no evidence to show that this palace was built "for Xerxes". J. M. Cook refers to Herodotus' statement that Xerxes was appointed successor to the throne as late as one year before Darius' death in 486 BC and adds:

> If Herodotus is correct in this, the residence constructed for the king's son in Babylon in the early 490s must have been intended for Artobazanes. (Cook, pp. 74, 75)

The palace, then, proves nothing about a coregency of Xerxes with Darius.

The final "evidence" for the claimed coregency consists of two clay tablets held to be dated in the accession year of Xerxes. According to the Watch Tower Society both tablets are dated *several months before* the last tablets dated in Darius' final regnal year. (*Insight* 2, p. 615) This "overlapping" of the two reigns, it is argued, indicates a coregency.

But either the Watch Tower Society conceals the real facts about these two tablets, or they have done very poor research on the matter. The first tablet, designated "A. 124" by Thompson in his *Catalogue* from 1927, is not dated in the *accession-year* of Xerxes (486/485), as Thompson indicated. This was a copying error by Thompson. The tablet is actually dated in *the first year* of Xerxes (485/484 BC). This was pointed out as far back as in 1941 by George G. Cameron in *The American Journal of Semitic Languages and Literature*, Vol. LVIII, p. 320, ftn. 33. Thus there was no "overlapping" of the two reigns.

The second tablet, "VAT 4397", published as No. 634 by M. San Nicolo and A. Ungnad in their work from 1934, was dated by them to the fifth month ("Ab"). It should be noted, however, that the authors put a question mark after the month name. The sign of the month on the tablet is damaged and may be reconstructed in several ways. In the more recent work by Parker and Dubberstein, *Babylonian Chronology*, published in 1956, where the same tablet is designated "VAS VI 177", the authors point out that the tablet "has the month sign damaged. It might be IX [9] but more probably is XII [12]." (Page 17) The original guess by Nicolo and Ungnad is

dropped altogether. As Darius died in the 7th month, a tablet dated to the 9th or 12th month in the accession-year of his successor is quite all right. There was no overlapping between the two reigns.

2. The flight of Themistocles

Much has been made in the Watch Tower publications of Themistocles' flight to Persia. This argument is an old one, originating with the Jesuit theologian Denis Petau (Petavius) and archbishop James Ussher in the seventeenth century. It was presented in great detail by E. W. Hengstenberg in his work *Christologie des Alten Testaments*, published in Berlin in 1832. According to the Greek historians Thycudides and Charon of Lampsacus,

Artaxerxes was the king that Themistocles spoke with after his arrival in Persia. The Watch Tower Society argues that Themistocles died about 471/70 BC. Artaxerxes, therefore, must have began his rule before that date and not as late as in 465 BC. (*Insight* 2, p. 614) These arguments have a superficial strength, only because the Watch Tower Society leaves out some very important information. In proof of their claim that Themistocles met Artaxerxes after his arrival in Persia, they quote Plutarch's information that "Thucydides and Charon of Lampsacus relate that Xerxes was dead, and that it was his son Artaxerxes with whom Themistocles had his interview". But they left out the second part of Plutarch's statement, which says:

> . . . but Ephorus and Dinon and Clitarchus and Heracleides and yet more besides have it that it was Xerxes to whom he came. With the chronological data Thucydides seems to me more in accord, although these are by no means securely established.

The Watch Tower Society, then, conceals that Plutarch goes on to say that a number of ancient historians had written about this event, and that most of them stated that Xerxes, not Artaxerxes, was on the throne when Themistocles came to Persia. Although Plutarch (c 46–120 A.D.) felt that Thucydides was more reliable, he stresses that the chronological data were by no means securely established. One fact that usually seems to be ignored is that Thucydides wrote his story about Themistocles' flight some time after 406 BC, or about two generations after the event. He

contradicts himself several times in this narrative, which shows that his information on the subject cannot be trusted. (On this, see the *Cambridge Ancient History*, V, 1992, p. 14.)

But even if Themistocles really may have met Artaxerxes, there is nothing to show that this occurred in the 470's. There is no evidence whatsoever in support of the claim that Themistocles died in 471/70 BC. None of the sources referred to by the Society says so, and some of them, *including Plutarch,* clearly show that he died much later, in about 459 BC. (*Plutarch's Lives*, XXXI:2–5) A considerable time passed after the attempt to defame Themistocles in Athens in the archonship of Praxiergus (471/70 BC) until his interview with Artaxerxes (or Xerxes). It took several attempts before the enemies of Themistocles succeeded and forced him to flee, first from Athens and finally from Greece. *Cambridge Ancient History* (Vol. 5, pp. 62ff.) dates this flight to 569 BC. He first fled to some friends in Asia Minor, where he stayed for some time. The Society quotes Diodorus Siculus in support of the 471/70 date for the beginning of the defamation of Themistocles, but avoids to mention Diodorus' statement that, on Themistocles' arrival in Asia Minor, Xerxes was still on the throne in Persia! (*Diodorus Siculus*, XI:54–59) This, of course, conflicts with Thucydides' statement that Themistocles' letter from Asia Minor was sent to Artaxerxes.

After some time, evidently after some years, in Asia Minor, Themistocles finally went to Persia. There he first spent one year studying the language before his meeting with the king. This meeting may have occured toward the end of 465 BC or early in 464 BC. As historian A. T. Olmstead argues, Xerxes may very well have been on the throne when Themistocles arrived in Persia, but may have died shortly afterwards, so that Themistocles, after his year of learning the language, met Artaxerxes. In this way the conflicting statements by the ancient historians may at least partially be harmonized.

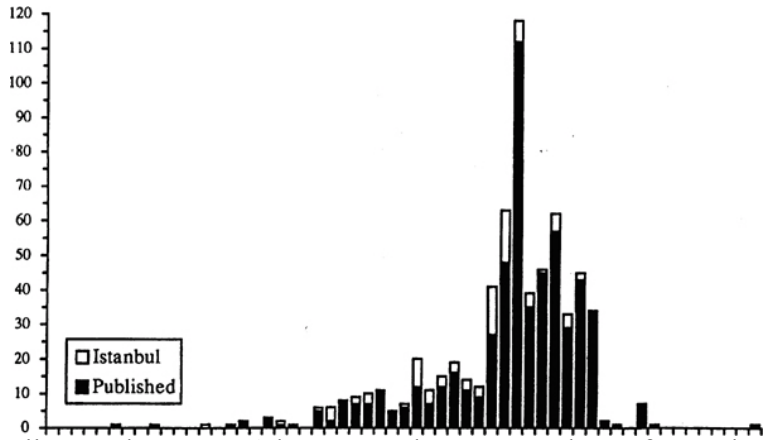
After his meeting with the Persian king, Themistocles settled in the city of Magnesia, where he lived on for some years before he died. (*Plutarch's Lives*, XXXI:2–5) It is completely impossible, therefore, to date his death to 471/70 BC, as done by the Watch Tower Society.

3. The two tablets dated to years "50" and "51" of Artaxerxes

In support of the claim that Artaxerxes ruled for 51 years instead of 41, the Watch Tower Society refers to two tablets dated to his "50th" year and "51st" year, respectively. The first tablet, listed as BM 65494 in E. Leichty and A.K. Grayson, *Catalogue of the Babylonian Tablets in the British Museum,* Vol. VII (London, 1987), is still unpublished. The second tablet, CBM 12803 (= BE 8/1, 127), on the other hand, was published in 1908 by Albert T. Clay in *The Babylonian Expedition of the University of Pennsylvania, Series A: Cuneiform Texts,* Vol. VIII, text 127. All authorities on Achaemenid history agree that both of these cuneiform tablets contain scribal errors.

As the Watch Tower Society points out, the tablet published by Albert Clay is double-dated. The date on the tablet is given as, "51st year, accession year, 12th month, day 20, Darius, king of lands." (*Insight,* p. 616) This text, then, seems to equate the 51st year (evidently of Artaxerxes I; the name is not given in the text) with the accession-year of his successor Darius II.

But once again, the Watch Tower Society does not tell the whole truth. The reason is, that the whole truth changes the picture completely. Many dated tablets are extant from the end of Artaxerxes' reign, thanks to the discovery of a cuneiform archive from the Murashu firm. In *Istanbul Murashu Texts* (Istanbul, 1997), V. Donbaz and M. W. Stolper explain that the Murashu archive is "the largest available documentary source for Achaemenid Babylonia in the years between Xerxes and Alexander." (Page 4) Nearly all of the tablets are dated to the reigns of Artaxerxes I and his successor Darius II. The number culminates in the last two years of the reign of Artaxerxes and the first seven years of the reign of Darius II, as shown by the graph below, published by Donbaz and Stolper on page 6 of the work quoted above. The archive includes over 60 texts from the 41st year of Artaxerxes and the accession year of Darius II, and culminates with about 120 texts dated to the 1st year of Darius II!



All Murashu texts with preserved years; numbers of texts by year.

As shown by the ancient Greek historians, the months following upon the death of Artaxerxes was a chaotic period. His son and successor Xerxes II was murdered by his brother Sogdianus after only a few weeks of reign. The usurper Sogdianus then held the throne for about seven months, after which he was killed by Darius II in February, 423 BC. But as Sogdianus was never acknowledged as the legitimate king, the scribes continued to date their texts to the reign of Artaxerxes for some months after his death. It is even possible that Artaxerxes died toward the end of his 40th year, as some scholars argue, so that the scribes had to extend his reign artificially to include a 41st year. This is still a question debated among scholars.

Not until Darius II ascended to the throne in the 11th Babylonian month (corresponding to parts of February and March, 423 BCE) did the scribes begin to date the texts to his reign also. But to avoid any confusion, the scribes usually double-dated the texts, mentioning both the 41st year [of Artaxerxes] and the accession-year of Darius II. They did this, because it was important for them to keep an exact chronological count of the reigns, as this was their calendar and the "era" by which they dated various events, such as political events, astronomical observations, and economic transactions.

A number of such double-dated tablets have been discovered. F. X. Kugler, on page 396 of his *Sternkunde und Stemdienst in Babel,* II. Buch, II. Teil, Heft 2 (Munster 1924), presented the chronological information on four of these tablets. Other tablets of this kind

have been found since. Ten such double-dated tablets are now known, of which all except one equate "year 41", evidently of Artaxerxes I, with the "accession-year of Darius." The exception is CBM 12803, the text that has year "51" instead of "41". And all except one (BM 33342) of these ten texts belong to the Murashu archive. The nine texts double-dated to "year 41, accession-year of Darius" are:

BM 54557: (= Zawadzki JEOL 34:45f.) Text from Sippar [?]. Although dated only to the accession-year of Darius II (month IX[?], day 29), the body of the text refers to a span of time "from month V year 41 of Ar(takshatsu ...) to the end of month XII, year 41, accession of Darius." (Information on this text was received from Prof. Matthew W. Stolper, the leading expert on the Murashu archive, in a letter dated January 29, 1999).

Bertin 2889: Text from Babylon dated to "day 26, month XI, year 41, accession-year of Darius." The text is not published, but information on the date was received by Jean-Frédéric Brunet from Dr. Francis Joannès on July 3rd, 2003. (Mail Brunet-Jonsson, December 22, 2003)

BM 33342: Text from Babylon dated to "month Shabatu [month XI]; day 29; year 41, accession-year, Darius, King of Lands." (Matthew W. Stolper in AMI, Vol. 16, 1983, pp. 231–236) This text does not belong to the Murashu archive.

BE 10 no. 4: (= TuM 2/3, 216) Text from Nippur dated to day 14, month XII, year 41, accession-year of Darius II, king of the lands.

BE 10 no. 5: Text from Nippur dated to day 17, month XII, accession-year of Darius, king of the lands. The first line says "until the end of Adar (month XII) of year 41, accession-year of Darius, king of the lands."

BE 10 no. 6: Text from Nippur dated to the accession-year of Darius. Month and day are illegible, but lines 2f. mention the whole year "from the first month of year 41 to the end of month XII of the accession-year of Darius."

PBS 2/1 no. 1: Text from Nippur dated to day 22, month XII, year 41, accession-year of Darius II.

BE 10 no. 7: (= TuM 2/3, 181) Text from Nippur dated to month I, day 2, year 1, of Darius II. Line 6 mentions receipt for produce for, "year 41, accession-year of Darius."

PBS 2/1 no. 3: Text from Nippur dated to month I, day 5, year 1, of Darius II. Lines 2–3 refers to taxes for the period "up to the end of month XII, year (4)1, (ac)cession year of Darius." Line 13 says: "until the end of Adar [month XII], year 41."

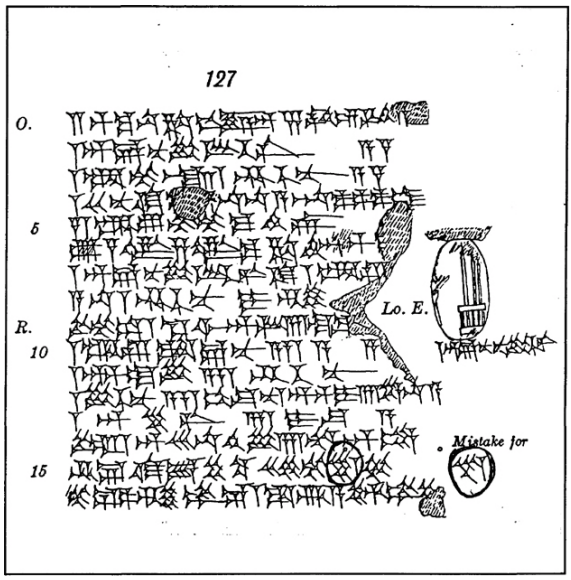
Explanation of abbreviations used in the list:

AMI:	Archaologische Mitteilungen aus Iran.
BE:	The Babylonian Expedition of the University of Pennsylvania, Series A: Cuneiform Texts, ed. by H. V. Hilprecht (Philadelphia, 1893–1914). Vols. 1–6 edited by Albert T. Clay in 1904.
Bertin:	G. Bertin, *Corpus of Babylonian Terra-Cotta Tablets. Principally Contracts*, Vols. I–VI (London, 1883). Unpublished.
BM:	British Museum.
JEOL:	Jaarbericht van het Vooraziatisch-Egyptisch Genootschap "Ex Oriente Lux".
PBS:	Pennsylvania. University. University Museum. Publications of the Babylonian Section (Philadelphia, 1911 –). The first two volumes were edited by Albert T. Clay.
TuM:	Texte und Materialien der Frau Professor Hilprecht Collection of Babylonian Antiquities im Eigentum der Universität Jena (Leipzig).

All these nine texts agree in showing that Darius II acceded to the throne in the 41st year of his predecessor. The tablets clearly show that Artaxerxes I cannot have ruled for more than 41 years. As stated above, the text published by Albert Clay in 1908, the only one quoted by the Watch Tower Society, belongs to the same category of doubled-dated texts as those quoted above, the only difference being that it gives the predecessor of Darius a reign of 51 years instead of 41. It is quite clear that the number "51" on that tablet contains a scribal error. This is the only reasonable conclusion to draw, as the only alternative is to claim that the figure "41" on all the other nine tablets listed above are errors.

It is difficult to believe that the Watch Tower Society's writers were completely ignorant of the existence of several double-dated tablets from the accession-year of Darius. To quote only the two tablets with scribal errors (years "50" and "51") and keep silent about all the double-dated texts that equate Darius' accession-year with year "41" of his predecessor is far from honest.

Albert T. Clay, who published the tablet with the erroneous figure "51" on it, was well aware that it was a scribal error. To the right of the erroneous figure in his published copy of the text he pointed out that "51" was a "mistake for 41":



Tablet "CBM 12803", published by Albert T. Clay as No. 127 in *The Babylonian Expedition of the University of Pennsylvania, Series A: Cuneiform Texts*, Vol. VIII (Philadelphia, 1908), P1. 57.

Such an error was easy to make, as the difference between ”41” and ”51” in cuneiform is just a small wedge—one touch with the stylus. Such errors are not unusual. The text with the figure ”50” instead of ”40” is just another example of the same kind of error. Professor Matthew W. Stolper explains:

Yes, it is quite an easy error. As you may know, the sign that indicates ”year” before the numeral ends with four closely spaced angle-wedges. The digit ”40” in ”41” is represented by four more closely spaced angle-wedges, in slightly different configuration. It would take a simple slip of the stylus to add the extra wedge. – Letter Stolper-Jonsson, January 29, 1999.

Artaxerxes' reign astronomically fixed

The decisive evidence for the length of Artaxerxes' rule is the astronomical information found on a number of tablets dated to his reign. One such text is the astronomical "diary" "VAT 5047", clearly dated to the 11th year of Artaxerxes. Although the text is damaged, it preserves information about two lunar positions relative to planets and the positions of Mercury, Jupiter, Venus and Saturn. This information suffices to identify the date of the text as 454 B.C. As this was the 11th year of Artaxerxes, the preceding year, 455 BC, cannot have been his 20th year as the Watch Tower Society claims, but his 10th year. His 20th year, then,must have been 445/44 BC. (See Sachs/Hunger, *Astronomical Diaries and Related Texts from Babylonia*, Vol. 1, Wien 1988, pp. 56–59.)

There are also some tablets dated to the 21st and last year of Xerxes. One of them, BM 32234, which is dated to day 14 or 18 of the 5th month of Xerxes' 21st year, belongs to the group of astronomical texts called "18-year texts" or "Saros texts". The astronomical information preserved on this tablet fixes it to the year 465 BC. The text includes the following interesting information: "Month V 14 (+x) *Xerxes was murdered by his son."* This text alone not only shows that Xerxes ruled for 21 year, but also that his last year was 465 BC, not 475 as the Society holds!

There are several "Saros texts" of this type covering the reigns of Xerxes and Artaxerxes. The many detailed and dated descriptions of lunar eclipses from different years of their reigns establish the chronology of this period as an absolute chronology.

Two other astronomical tablets from the reigns of Xerxes and Artaxerxes, BM 45674 and BM 32299, contain dated observations of the planet Venus. Again, these observations establish the chronology of this period as an absolute chronology.

Thus we have numerous astronomical observations dated to different parts of the reigns of Xerxes and Axtaxerxes preserved on cuneiform tablets. In many cases, only one or two of these observations would suffice to establish the beginning and end of their reigns. The total number of astronomical observations dated to their reigns, however, are about 40 or more. *It is impossible, therefore, to change their reigns even one year!* The Society's dating of Artaxerxes' 20th year to 455 BC is demonstrably wrong. This, of course, also proves that their interpretation of the 70 weeks of Daniel is wrong.

The seventy weeks of Daniel

A number of applications of the 70 weeks of Daniel have appeared throughout the centuries. Some of them, including that of the Watch Tower Society, have to be discarded at once, as they can be shown to be in direct conflict with historically established dates. They have nothing to do with reality.

If Artaxerxes' 20th year was 445/44 instead of 455, it is still possible to start from that year, provided that we use a "prophetical year" of 360 days instead of the solar year of 365,2422 days. This was demonstrated by Sir Robert Anderson in his book *The Coming Prince* (first published in 1895). His application has recently been improved upon by H. W. Hoehner in his book *Chronological Aspects of the Life of Christ* (1977), pages 135ff. These authors show that the 476 years from Artaxerxes' 20th year, 445/44 BC, to the death of Christ (if set at 33 A.D.) correspond to 483 years of 360 days. (476x365,2422 is 173.855 days, and if this number is divided by 360 we get 483 years.) This is just one example of an application that at least has the advantage of a historically established date at its start.

There is, of course, much more that can and should be said about this subject. On the preceding pages I have just tried to summarize a few of the more important observations. Now and then members of Jehovah's Witnesses and others have written to me about this problem, and maybe this summary can be of some benefit to others, too, who are asking about the matter. In the future I hope to find time for writing a more detailed discussion on the subject.

PROFESSOR ROBERT R. NEWTON, "PTOLEMY'S CANON," AND "THE CRIME OF CLAUDIUS PTOLEMY"

The following material is adapted from the discussion on pages 44–48 of the first and second editions of my book, *The Gentile Times Reconsidered* (published in 1983 and 1986), with some updates and additions.

PROFESSOR ROBERT R. NEWTON (who died in 1991) was a noted physicist who has published a series of outstanding works on the secular accelerations of the moon and the earth. He examined in detail hundreds of astronomical observations dating all the way from the present back to about 700 BC, in order to determine the rate of the slowly changing of the length of the day during this period. The best information on his research in this area is found in his book, *The Moon's Acceleration and Its Physical Origins*, vol. 1, published in 1979. His results have more recently been further refined by other scholars, in particular by F. Richard Stephenson. (*Historical Eclipses and Earth's Rotation*, Cambridge: Cambridge University Press, 1997)

Accusations against Claudius Ptolemy not new

The claim that Claudius Ptolemy "deliberately fabricated" many of his observations is not new. Astronomers have questioned Ptolemy's observations for centuries. As early as 1008 AD ibn Yunis concluded that they contained serious errors, and by about 1800 astronomers had recognized that almost all of Ptolemy's observations were in error. In 1817, Delambre asked: "Did Ptolemy do any observing? Are not the observations that he claims to have made merely computations from his tables, and examples to help in explaining his theories?" – J.B.J. Delambre, *Histoire de l'Astronomie Ancienne*, Paris 1817, Vol. II, p. XXV; as quoted by Robert R. Newton in *The Moon's Acceleration and Its Physical Origins* [MAPO], Vol. I, (Baltimore and London: The Johns Hopkins University Press, 1979), p. 43.

Two years later (in 1819) Delambre also concluded that Ptolemy fabricated some of his solar observations and demonstrated how the fabrication was made. (Newton, MAPO I, p. 44) More recently, other astronomers have re-examined Ptolemy's observations and arrived at similar results. One of them is Professor Robert R. Newton. In his book, *The Crime of Claudius Ptolemy* (Baltimore and London: The Johns Hopkins University Press, 1977), Newton claims that Ptolemy fudged, not only a large body of the

observations he says he had made himself, but also a number of the observations Ptolemy attributes to other astronomers, including some he quotes from Babylonian sources. These include the three oldest observations recorded in Ptolemy's *Almagest* dating from the first and second years of the Babylonian king Merodach-baladan (called Mardokempados in *Almagest*), corresponding to 721 and 720 BC.

Scholars disagreeing with R.R. Newton

In the ensuing debate a number of scholars have repudiated Newton's conclusions. They have argued that Newton's arguments "are marred by all manner of distortions" (Bernard R. Goldstein of the University of Pittsburgh in *Science*, February 24, 1978, p. 872), and that his case collapses because "it is based on faulty statistical analysis and a disregard for the methods of early astronomy" (scholars Noel M. Swerdlow of the University of Chicago, Victor E. Thoren of Indiana University, and Owen J. Gingerich of Harvard University, in *Scientific American*, March 1979, p. 93, American edition). Similar comments are made by Noel M. Swerdlow, "Ptolemy on Trial, " in *The American Scholar*, Autumn 1979, pp. 523–531, and by Julia Neuffer, "´Ptolemy's Canon´ Debunked?" in *Andrews University Seminary Studies*, Vol. XVII, No. 1, 1979, pp. 39–46. An article by Owen J. Gingerich with a rebuttal by R.R. Newton is found in the *Quarterly Journal of the Royal Astronomical Society*, Vol. 21, 1980, pp. 253–266, 388–399, with a final response by Gingerich in Vol. 22, 1981, pp. 40–44.

Scholarly support for R.R. Newton

Most of these critics, though, are historians without particular expertise in the field of Greek astronomy. Some reviews written by well-informed astronomers have been favorable to Newton's conclusions. One historian who is also well acquainted with Greek astronomy, K.P. Moesgaard, agrees that Ptolemy fabricated his astronomical data, though he feels it was done for some honest reason. (K.P. Moesgaard, "Ptolemy's Failings," *Journal for the History of Astronomy*, Vol. XI, 1980, pp. 133–135) Rolf Brahde, too, wrote a favorable review of Newton's book in *Astronomisk Tidskrift*, 1979, No. 1, pp. 42,43.

B.L. van der Waerden, Professor of Mathematics and an expert on Greek astronomy, discusses Newton's claims in his book, *Die Astronomie der Griechen* (Darmstadt: Wissenschaftliche Buchgesellschaft, 1988). Although he would not go as far as

Newton in his attack on Ptolemy, he agrees that Ptolemy falsified his observations, stating: "That Ptolemy systematically and intentionally has falsified his observations in order to bring his observational results in agreement with his theory have been convincingly demonstrated by Delambre and Newton." (p. 253)

Recent criticism of R.R. Newton

G.J. Toomer, the well-known translator of *Ptolemy's Almagest* (London: Gerald Duckworth & Co., 1984), discusses Newton's claim in an article published in 1988 ("Hipparchus and Babylonian Astronomy," in *A Scientific Humanist. Studies in Memory of Abraham Sachs*, eds. E. Leichty, M. DeJ. Ellis, & P. Gerardi, Philadelphia, 1988, pp. 353–362), in which he convincingly argues that all the observations from *earlier* periods recorded by Ptolemy were taken over from the Greek mathematician Hipparchus (2nd century BC).

In 1990, Dr. Gerd Grasshoff included a lengthy section on the accusations against Claudius Ptolemy in his work, *The History of Ptolemy's Star Catalogue* (London, Paris, Tokyo, Hong Kong: Springer-Verlag, 1990, pp. 79–91). He concludes that Newton's arguments against Ptolemy are "superficial" and "unjustified".

More recently, Oscar Sheynin has discussed Newton's accusations at some length, arguing that the reason why Ptolemy's observations so well agree with his theory is, not that he fabricated them, but that he *selected* the observations that best fitted his theory. Although such selectivity is not allowed in science today, it was quite common in ancient times. For this reason Sheynin states that Ptolemy cannot be regarded a fraud. – O. Sheynin, "The Treatment of Observations in Early Astronomy," in C. Truesdell (ed.), *Archive for History of Exact Sciences*, Vol. 46:2, 1993, pp. 153–192.

In summary, there seems to be at least some evidence in support of the claims that Claudius Ptolemy was "fraudulent" in the way he handled his observations, either by "trimming" the values or by selecting those who best fitted his theory. However, few scholars would go as far as R. R. Newton, who dismisses Ptolemy altogether as a fraud. As Dr. James Evans notes, "very few historians of astronomy have accepted Newton's conclusions in their entirety." – *Journal for the History of Astronomy*, Vol. 24, Parts ½, February/May, 1993, pp. 145–146.

R.R. Newton and "Ptolemy's Canon"

In a review of Newton's book, *The Crime of Claudius Ptolemy*, published in *Scientific American* of October 1977, pp. 79–81, it was

stated that "Ptolemy's forgery may have extended to inventing the length of reigns of Babylonian kings." This was a reference to the so-called "Ptolemy's Canon", which Newton at that time erroneously believed had been composed by Claudius Ptolemy himself and thus may have been affected by his "forgery". The statement was quickly picked up and published in *The Watchtower* magazine (December 15, 1977, p. 747). On page 375 of his *The Crime of Claudius Ptolemy*, Newton also wrote: "It follows that Ptolemy's king list is useless in the study of chronology, and that it must be ignored. What is worse, much Babylonian chronology is based upon Ptolemy's king list. All relevant chronology must now be reviewed and all dependence upon Ptolemy's list must be removed."

Newton was unaware of the fact that "Ptolemy's Canon" was not composed by Claudius Ptolemy. He was not an historian and he was not an expert on Babylonian chronology. He also admits in his work that he has not studied sources other than Ptolemy for the years prior to Nebuchadnezzar. (*The Crime of Claudius Ptolemy*, p. 375) He explains that his thoughts on the relations between chronology and the work of Claudius Ptolemy were influenced by a Mr. *Philip G. Couture* of Santee, California. In the Preface of his book he states: "I thank Mr. Philip G. Couture of Santee, California for correspondence which led me to understand some of the relations between chronology and the work of Ptolemy." (*The Crime of Claudius Ptolemy*, p. XIV) The same Mr. Couture also induced Dr. Newton to reject the Assyrian eponym canon in his work, *The Moon's Acceleration and Its Physical Origins*. (See Vol. 1, 1979, p. 189)

What Newton probably did not know was that *Mr. Couture was and still is one of Jehovah's Witnesses*, and that some of the chronological arguments he passed on to Newton were taken from the Watch Tower Society's Bible dictionary, *Aid to Bible Understanding*. These arguments were not only aimed at supporting the chronology of the Watch Tower Society, but they are also demonstrably untenable!

Correspondence with R. R. Newton

In 1978, the year after *The Crime of Claudius Ptolemy* had been published, I had some correspondence with Professor Newton. In a letter dated June 27, 1978, I sent him a shorter study I had prepared in which the so-called "Ptolemy's Canon" was compared with earlier cuneiform sources. This study briefly demostrated that

all the reigns of the Babylonian kings given in the Canon, from Nabonassar (747–734 BC) to Nabonidus (555–539 BC), were in complete agreement with these older sources. (This study was later expanded and published in a British journal for interdisciplinarty studies, the British forum for the discussion of the catastrophe theories of Immanuel Velikovsky and others: *Chronology & Catastrophism Review*, Vol. IX, 1987, pp. 14–23.) I asked Professor Newton: "How is it possible that Ptolemy's astronomical data are wrong, and yet the king list, to which they are attached, is correct?"

In his answer, dated August 11, 1978, Newton said: "I am not ready to be convinced that Ptolemy's king list is accurate before Nabopolassar [= before 625 BC], although I have high confidence that it is rather accurate for Nabopolassar and later kings." He also pointed out: "The basic point is that Ptolemy calculated the circumstances of the eclipses in the Syntaxis from his theories, and he then pretended that his calculated values were values that had been observed in Babylon. *His theories are accurate enough to give the correct day of an eclipse, but he missed the hour and the magnitude*."

Thus Ptolemy's "adjustments" of the eclipse observations were too small to affect the year, the month, and the day of an eclipse. Only the hour and the magnitude were affected. Ptolemy's supposed "adjustments" of the records of the ancient Babylonian eclipses, then, didn't change the BCE dates that had been established for these observations. *They did not change the chronology!* Further, Professor Newton was convinced that the king list was accurate from Nabopolassar and onwards. In other words, *he was convinced that the whole Neo-Babylonian chronology from Nabopolassar through Nabonidus (625–539 BC) was accurate!* Why?

The reason was that Newton had made a very thorough study of some of the ancient Babylonian astronomical records that were independent of "Ptolemy's Canon", including the two astronomical cuneiform texts designated VAT 4956 and Strm. Kambys. 400. From his examination of these two records, he had established that the first text referred to the year 568/67 BC and the second one to 523 BC. He concluded: "Thus we have quite strong confirmation that Ptolemy's list is correct for Nebuchadrezzar, and reasonable confirmation for Kambyses." (*The Crime of Claudius Ptolemy*, 1977, p. 375) These findings were further emphasized in his next work, *The Moon's Acceleration and Its Physical Origins*, vol. 1, published in 1979, where he concludes on page 49: "Nebuchadrezzar's first year

therefore began in –603 [= 604 BC], and this agrees with Ptolemy's list."

Therefore, to quote some statements by R. R. Newton in an attempt to undermine the chronology established for the Neo-Babylonian era would be to quote him out of context. It would be to misrepresent his views and conceal his conclusions. It would be fraudulent. Yet, this has been repeatedly done by the Watch Tower Society and some defenders of its chronology. But Newton's findings refute their chronology and prove it to be false.

Summary

Whether Ptolemy falsified his observations, perhaps also some of those of earlier astronomers, *is irrelevant for the study of the Neo-Babylonian chronology*. Today, this chronology is *not* based upon the observations recorded by Ptolemy in his *Almagest*.

Further, the claim that Ptolemy may have "invented" the lengths of reign in "Ptolemy's Canon" is based upon the erroneous view that this king list was composed by Claudius Ptolemy. As is demonstrated on pages 94–96 of the third edition of *The Gentile Times Reconsidered* (and also briefly in the second edition), the designation "Ptolemy's Canon" is *"a misnomer*" (Otto Neugebauer), as this king list according to Eduard Meyer, Franz X. Kugler and others had been in use among Alexandrian astronomers for centuries before the time of Claudius Ptolemy, and had been inherited and brought up-to-date from one generation of scholars to next.

Finally, the claim that this king list today is *the basis of or principal source for* the Neo-Babylonian chronology, is false. Those who make such a claim are either ignorant or dishonest. The plain truth is that the king list is not needed today for fixing the chronology of this era, although its figures for the reigns of the Neo-Babylonian kings are upheld by at least 14 lines of independent evidence based on cuneiform documents, as is demonstrated in *The Gentile Times Reconsided.*

Addition in 2003:

Modern scholars who have examined the so-called Ptolemy's Canon (more correctly called the "Royal Canon") in detail agree that the kinglist has proved to be reliable from beginning to end. This is emphasized, for example, by Dr Leo Depuydt in his article, "More Valuable than all Gold: Ptolemy's Royal Canon and Babylonian Chronology," published in *Journal of Cuneiform Studies*,

Vol. 47, 1995, pp. 97–117. Quite recently, Leo Depuydt has written another article in which he discusses the reliability of Ptolemy's Canon, "The Shifting Foundation of Ancient Chronology," soon to be published in *Acts of European Association of Archaeologists, Meeting VIII.*

A REVIEW OF:

ROLF FURULI: *PERSIAN CHRONOLOGY AND THE LENGTH OF THE BABYLONIAN EXILE OF THE JEWS*

(OSLO: ROLF FURULI A/S, 2003)

Persian Chronology and the Length of the Babylonian Exile of the Jews is the first of two volumes in which Rolf Furuli attempts to revise the traditional chronology for the Neo-Babylonian and Persian periods. Furuli states that the reason for this venture is that this chronology is in conflict with the Bible. He insists that the Bible "unambiguously," "explicitly," and "definitely" shows that Jerusalem and the land of Judah were desolate for 70 years, until the Jewish exiles in Babylon returned to Judah as a result of the decree Cyrus issued in his first regnal year, 538/37 BCE (pp. 17, 89, 91). This implies that the desolation of Jerusalem in Nebuchadnezzar's 18th regnal year took place 70 years earlier, in 607 BCE, contrary to modern historical research, which has fixed the 18th year of Nebuchadnezzar in 587/86 BCE, a date that also agrees with the chronology of the ancient kinglist known as "Ptolemy's Canon." Furuli does not explicitly mention the 607 BCE date in this volume, perhaps because a more detailed discussion of the Neo-Babylonian chronology is reserved for his not-yet-published second volume.

Most chapters in this first volume, therefore, contain a critical examination of the reigns of the Persian kings from Cyrus to Darius II. The principal claim of this discussion is that the first year of Artaxerxes I should be moved 10 years backward, from 464 to 474 BCE. Furuli does not mention that this is an old idea that can be traced back to the noted Jesuit theologian Denis Petau, better known as Dionysius Petavius, who first presented it in a work published in 1627. Petavius' revision had a theological basis, because, if the "seventy weeks [of years]," or 490 years, of Daniel 9:24-27 are to be counted from the 20th regnal year of Artaxerxes (Neh. 2:1ff.) to 36 CE (his date for the end of the period), Artaxerxes' 20th year must be moved from 445 back to 455 BCE. Furuli says nothing about this underlying motive for his proposed revision.

Introduction:

The hidden agenda

Furuli published this book at his own expense. Who is he? On the back cover of the book he presents himself this way:

Rolf Furuli is a lecturer in Semitic languages at the University of Oslo. He is working on a doctoral thesis which suggests a new understanding of the verbal system of Classical Hebrew. He has for many years worked with translation theory, and has published two books on Bible translation; he also has experience as a translator. The present volume is a result of his study of the

chronology of the Ancient world for more than two decades.

What Furuli does not mention is that he is a Jehovah's Witness, and that for a long time he has produced apologetic texts defending Watchtower exegesis against criticism. His two books on Bible translation are nothing more than defenses of the Witnesses' *New World Translation* of the Bible. He fraudulently fails to mention that for decades he has tried to defend Watchtower chronology and that his revised chronology is essentially a defense of the Watchtower Society's traditional chronology. He describes his chronology as "a new chronology," which he calls "the Oslo Chronology," (p. 14) when in fact the 607 BCE date for the destruction of Jerusalem is *the* chronological foundation for the claims and apocalyptic messages of the Watchtower organization, and the 455 BCE date for the 20th year of Artaxerxes I is its traditional starting point for its calculation of the "seventy weeks" of Daniel 9:24-27.

Despite these facts, Furuli nowhere mentions the Watchtower Society or its chronology. Nor does he mention my detailed refutation of this chronology in various editions of my book *The Gentile Times Reconsidered* (GTR; 3rd edition, Atlanta: Commentary Press, 1998; 1st ed. published in 1983), despite the fact that in circulated "organized collections of notes" he has tried to refute the conclusions presented in its earlier editions. (A fourth revised and updated edition of GTR has been prepared and will be published in 2004.) Furuli's silence on GTR is noteworthy because he discusses R. E. Winkle's 1987 study which presents mostly the same arguments and conclusions as are found in the first edition of GTR (1983). As a Jehovah's Witness, Furuli is forbidden to interact with former members of his organization. If this is the reason for his feigned ignorance of my study, he is acting as a loyal Witness—not as a scholar.

Clearly, Furuli has an agenda, and he is hiding it.

The contents of the first four chapters

Chapter 1: Pages 17-37:

In Chapter 1, Furuli claims that the Bible and the astronomical tablets VAT 4956 and Strm Kambys 400 "contradict each other" (pp. 17-28), and he therefore questions the reliability of astronomical tablets by describing nine "potential sources of error." (pp. 28-37)

Chapter 2: Pages 38-46:

In Chapter 2, Furuli claims that the "most acute problem for making an absolute chronology based on astronomical tablets" is that many, "perhaps most positions of the heavenly bodies on such tablets, are calculated rather than observed." (p. 15)

Chapter 3: Pages 47-65:

In Chapter 3, Furuli makes some general comments on the Sumerian, Akkadian, and Hebrew languages and describes some "pitfalls" in reading and translating the ancient documents.

Chapter 4: Pages 66-92:

In Chapter 4, Furuli presents his views on "the chronological accounts of Claudius Ptolemy" and of those of some other ancient authors (pp. 66-74), then discusses the 70-year prophecy of Jeremiah. (pp. 75-92)

In the material that follows (Part One of this review; Parts Two and Three will be published at a later date), I critically examine the argumentation of these four chapters.

Acknowledgements are made to a number of scholars and knowledgeable colleagues for their assistance in preparing this review. I choose not to mention any names, as some of them, for various reasons, need to remain anonymous. I am indebted to all of them for their observations, suggestions, criticism, and, in particular, for the professional help given by two of them with proof-reading and polishing my English and grammar.

For some works often referred to in the discussion below the following abbreviations are used:

ADT Abraham J. Sachs and Hermann Hunger, *Astronomical Diaries and Related Texts from Babylonia* (Wien: Verlag der Österreichischen Akademie der Wissenschaften. Vol. I – 1988, II – 1989, III – 1996, V – 2001).

CBT Erle Leichty et al, *Catalogue of the Babylonian Tablets in the British Museum*, Vols. 6, 7, and 8 (1986, 1987, and 1988). These volumes list the tablets from Sippar held at BM.

GTR4 Carl Olof Jonsson, *The Gentile Times Reconsidered*, 4th ed. (Atlanta: Commentary Press, 2004).

LBAT Abraham J. Sachs (ed.), *Late Babylonian Astronomical and Related Texts. Copied by T. G. Pinches and J. N. Strassmaier* (Providence, Rhode Island: Brown University Press, 1955).

PD Richard A. Parker and Waldo H. Dubberstein, *Babylonian Chronology 626 B.C.—A.D. 75* (Providence, Rhode Island: Brown University Press, 1956).

Chapter I - "Fundamental Chronological Considerations"

Only "three principal sources" for the Neo-Babylonian and Persian chronology?

One of Furuli's main goals appears to be to convince his readers that there are only three principal sources on which the chronology of the Neo-Babylonian and Persian periods can be based. These three, he claims, "contradict each other":

> "There are three principal sources with information regarding the chronology of the New Babylonian and Persian kings, namely, *Strm Kambys 400*, *VAT 4956* and the Bible. The information in these three sources cannot be harmonized." (p. 21; cf. also pp. 15, 45)

And further:

> "It will be shown in the course of the book that there exist just two such independent sources which can give *absolute* dates for the New Babylonian chronology, namely, *VAT 4956* and *Strm Kambys 400* which already have been mentioned. … the chronology that is based on these two diaries cannot be harmonized with the Bible, and this means that at least one of the three sources must give erroneous information." (p. 24)

These statements reveal a remarkable ignorance of a subject that Furuli claims to have studied "for more than two decades." The absolute chronology of the Neo-Babylonian and Persian eras is fixed by *about 50* astronomical observational tablets (diaries, eclipse texts, and planetary texts). Almost all these tablets have been published in ADT volumes I and V**.** *And the least reliable of them is probably Strm Kambys 400*. (GTR[4], ch. 2, last section). For example, there are about 25 diaries from the reign of Artaxerxes II (404-358 BCE), 11 of which have the royal name and regnal dates preserved. Most, if not all, of these appear to be, not later copies, but original compilations from Artaxerxes' reign. (Letter H. Hunger to C. O. Jonsson, dated January 26, 2001) Therefore, to fix the absolute chronology of the reign of Artaxerxes II or any other Persian king, *Strm Kambys 400* is needless and irrelevant. Nor is it needed to fix the reign of Cambyses, which can be more securely fixed by other texts.

Additional comments about *Strm Kambys 400* and the claim that some astronomical tablets contradict the Bible are discussed in Part Two of this review.

Are scholars reluctant to publish oddly dated texts?

Furuli argues against the validity of the so-called Canon of Ptolemy and traditional chronology by using certain oddly dated cuneiform texts that seemingly conflict with them. However, he admits that a few errors in the ancient texts cannot be used to overthrow a chronology that is substantiated by

many other texts:

> "One or two contradictory finds do not necessarily destroy a chronology that has been substantiated by hundreds of independent finds." (p. 22)

On the same page he gives three examples:

(1) A tablet that, in 1878, T. G. Pinches said "would overthrow the perfect agreement of Mr. Boscawen's list with the Canon of Ptolemy," adding that "*I did not intend to publish it at all."* But Furuli fails to mention that this is a tablet that at first seemed to be dated to "year 11" of Cambyses—which contradicts not only the Canon of Ptolemy but also Furuli's Oslo Chronology. That is why Furuli, too, finds it necessary to reject it.

As it happened, the odd date soon found an explanation. On the tablet, the figure for 1 had been written over the figure for 10. It was pointed out by A. Wiedemann (*Geschichte Aegyptens*, Leipzig, 1880, pp. 225f.) that this seemed to be a scribal correction of a mistaken "year 10," which the scribe had tried to change to "year 1," thus creating a date sign that easily could be misread as "year 11." This simple and natural explanation was subsequently accepted by all scholars. (See my *Supplement to The Gentile Times Reconsidered,* Danville: Odeon Books, 1989, page 8.) The date, then, was not odd after all.

(2) A tablet that "did not fit" PD's "chronological scheme" and was rejected because "the month sign is shaded, and in view of known facts this date cannot be accepted." But Furuli does not inform the reader that this tablet is Nabon. No. 1054 (BM 74972), which is dated in PD to Nbn VIII/10/17 (month VIII, day 10, year 17)—nearly one month after the fall of Babylon on VII/16/17.

In 1990, I asked Christopher Walker at the British Museum to take another look at the date on this tablet. His collation, confirmed by other scholars, revealed that the year number had been misread. It was actually 16, not 17. The date of the tablet, then, was not in conflict with the chronology established for the reign of Nabonidus. Walker says:

"On the Nabonidus text no. 1054 mentioned by Parker and Dubberstein p. 13 and Kugler, SSB II 388, I have collated that tablet (BM 74972) and am satisfied that the year is 16, not 17. It has also been checked by Dr. G. Van Driel and Mr. Bongenaar, and they both agree with me." (Letter Walker to Jonsson, Nov. 13, 1990)

Thus, Furuli's first two tablets cannot be used as examples of "contradictory finds" that conflict with the established chronology. This cannot be said of his third tablet, however, which clearly contains a scribal error.

(3) BM 65494 dates itself to "Artaxerxes VI.4.50" (month VI, day 4, year 50), a date that all scholars, for strong reasons, have concluded is an error for VI.4.40. Walker, too, points this out (which Furuli acknowledges but gives no source reference) in an unpublished list titled "Corrections and Additions to CBT 6-8." This list has been worked out and kept up-to-date by Walker at the British Museum. It has been sent to correspondents in answer to questions asked about the dates on the tablets listed in the CBT 6-8 catalogues. (My two

versions of the list are dated in 1990 and 1996.)

On page 27, Furuli mentions another example of an oddly dated tablet—a double-dated text from the accession year of Artaxerxes' successor, Darius II. The tablet dates itself to "year 51, month XII, day 20, accession year of Darius, king of lands." Furuli refers to this and the earlier text dated to Artaxerxes' year 50 as examples of how scholars "*have been reluctant to publish tablets that seemed to contradict the traditional chronology.*"

But the very opposite is true. The above-mentioned reluctance of T. G. Pinches to publish the text dated to Cambyses' 11th year was an exception. The typical scholarly reaction to dates that conflict with the traditional chronology is interest and attention, not suppression and reluctance to publish. When then-unpublished lunar eclipse tablets dated to the reign of Nebuchadnezzar II were brought up in an interview in 1968, Professor Abraham J. Sachs indicated how scholars would react to such oddly dated texts (they are now published in ADT V). Pointing out that these eclipse tablets all confirm the traditional chronology, he said:

> "I mean *if they didn't fit it would be worth publishing immediately.* I mean dropping everything and saying this whole thing is a mess and there's something wrong here. But they do fit." (Transcript, p. 12, of an interview held with Professor A. J. Sachs at the Brown University, Providence, R. I., on June 24, 1968, by R. V. Franz and C. Ploeger, at that time members of the Watchtower headquarters' Writing Department in Brooklyn, New York; emphasis added.)

The tablet dated to year 50 of Artaxerxes I is listed by E. Leichty and A. K. Grayson in CBT VII, p. 153, and the tablet dated to his year 51 was published back in 1908 by A. T. Clay, in both cases evidently without any reluctance. As noted above, the latter text is doubled-dated. There are, in fact, 10 such texts with double dates, nine of which show that the accession year of Darius II corresponded to Artaxerxes' year 41. That year 51 on the above-mentioned text is an error for year 41, therefore, cannot be seriously questioned.

On pages 27 and 28, Furuli argues that, because there were three (actually four!) Persian kings named Artaxerxes, it is often difficult to know whether a tablet refers to king number I, II, or III. He claims that scholars, in trying to get the dates to tally with the traditional chronology, tend to give themselves up to circular reasoning.

This situation, though, is not as bad as Furuli paints it. This is shown in Part Three of this review, in which I discuss in detail the reign of Artaxerxes I.

Potential "sources of errors" in the Babylonian astronomical tablets:

Furuli is well aware that the most damaging evidence against his Oslo Chronology is provided by the astronomical cuneiform tablets. For this reason, it is important that he tries to weaken the reliability of these texts. Thus, on pages 29-37, he describes nine "potential sources of error" that might undermine the trustworthiness of the astronomical tablets. Unfortunately, Furuli fails to draw a clear conclusion about these sources of error. Although it is true that errors exist with respect to various aspects of ancient tablets, Furuli

fails to explain how these errors affect the accuracy of traditional Neo-Babylonian and Persian chronology as a whole. He simply leaves the reader vaguely to conclude that, in some unspecified way, the possibility of errors invalidates the whole of the chronology. This is akin to someone stating, "Scientists make errors," then implying but not actually stating that "all science is invalid because there are sources of error." Thus, even though a particular astronomical tablet might contain enough errors to be useless for chronological purposes, it does not follow that *all* astronomical tablets are useless.

But this is how Furuli generally argues. He uses errors in *some* tablets to cast aspersions on the reliability of tablets he does not like, such as *VAT 4956*. Inconsistently, he uses the tablet *Strm Kambys 400* as a basis for his Oslo Chronology—obviously because the Watchtower Society uses it.

A good example of Furuli's false implication is his using the demonstrated errors in the ancient astronomical tablet known as the "Venus Tablet of Ammisaduqa" to imply that the tablet *VAT 4956* is riddled with errors. Parts of the discussion on pages 29-37 of his book are based on an article by John D. Weir, "The Venus Tablets: A Fresh Approach," in *Journal for the History of Astronomy*, Vol. 13:1, 1982, pp. 23-49. What are these Venus Tablets?

The Venus Tablet of Ammisaduqa

Weir's article discusses the well-known and much-discussed Venus Tablet of Ammisaduqa. This tablet belongs to a particular series of some 70 tablets about celestial omens called *Enuma Anu Enlil* (EAE). The Venus Tablet is no. 63 in this series. It contains records of observations of the first and last visibilities of Venus made in the reign of Ammisaduqa, the penultimate king of the first dynasty of Babylon. This king probably reigned at least 1000 years before the Neo-Babylonian era. The fragmentary copies of the Venus tablet, found in Ashurbanipal's library in Nineveh (Kouyunjik), are very late. The earliest pieces date from the reign of Sargon II (721-705 BCE). (H. Hunger & D. Pingree, *Astral Sciences in Mesopotamia*, Leiden, etc.: Brill, 1999, p. 32)

During the past hundred years, many attempts have been made to date the first dynasty of Babylon with the aid of the Venus Tablet, but no consensus has been formed. The reign of Ammisaduqa has been variously placed all the way from the late 3rd millennium down to the 7th century BCE. In 1929 and 1941, Professor Otto Neugebauer "demonstrated the impossibility of using the Venus Tablet to date the First Dynasty of Babylon." (Hunger & Pingree, *op. cit.,* pp. 37, 38) One reason this is impossible is that the extant copies bristle with copying errors. "The data set is the worst I ever have encountered as a statistician," said Professor Peter Huber, explaining that "at least 20% to 40% of the dates must be grossly wrong." (Peter Huber et al, *Astronomical Dating of Babylon I and Ur III* [= *Monographic Journals of the Near East, Occ. Papers* 1/4], Malibu, 1982, p. 14)

Weir points to several sources of error connected with the attempts to date the fragmentary pieces of the Venus Tablet. But it would not be fair to presuppose that the same sources of error also apply to *VAT 4956* and other important tablets on which the absolute chronology of the Neo-Babylonian and

Persian eras is based. These later tablets belong to the archive of about 1300 astronomical observational texts found in the city of Babylon, texts that contain thousands of observations recorded from the period ca. 750 BCE—75 CE.

In the discussion below, the subtitles are taken from Furuli's summary of the nine supposed "sources for potential errors" listed in his Table 1 on page 37.

12,000-foot mountain range might preclude observations

According to Furuli, one problem for the ancient Babylonian astronomers was the mountain range to the east of Babylon:

> "To the east of Babylon there is a mountain range rising to about 12,000 feet above sea level, while the area to the west of the city is a flat desert. … it is obvious that the high mountains to the east of Babylon would prevent some observations." (p. 29)

Furuli then quotes Weir's discussion of the change of the *arcus visionis* caused by "hills, mountains, trees and so on." But the Zagros Mountains to the east of Babylon create no serious problems. The higher parts of the range begin about 230 kilometers east of Babylon with *Kuh-e Varzarin* at about 9500 feet above sea level. Mountains "about 12,000 feet above sea level" lie considerably farther away. Due to the distance and the curvature of the earth, they are not visible from Babylon, at least not from the ground, as can be testified by anyone who has been there. Professor Hermann Hunger, for example, says:

> "I have been there [in Iraq], three years, of which two months were spent in Babylon. There are no mountains visible from Babylon." (Communication Hunger to Jonsson dated December 4, 2003)

It is possible, of course, that an observer atop the 90-meter-high Etemenanki ziggurat in Babylon (if the observations could have been made from there) could have seen a very thin, irregular line of mountains far to the east, although this, too, is doubtful. This might have affected the *arcus visionis* to some degree (the smallest angular distance of the sun below the horizon at the first or last visibility of a heavenly body above the horizon), which in turn could have changed the date of the first and last visibility of a heavenly body by a day or two. Parker and Dubberstein were well aware of this uncertainty, stating that "it is possible that a certain number of dates in our tables may be wrong by one day, *but as they are purely for historical purposes, this uncertainty is unimportant*." (PD, p. 25; emphasis added) PD's tables were based on Schoch's calculated values for the *arcus visionis* which, by an examination of 100 Venus observations dating from 462 to 74 BCE, Professor Peter Huber found to be "surprisingly accurate." (Weir, *op. cit.,* pp. 25, 29)

Furthermore, this is a problem with astronomical texts that report only phenomena close to the horizon, as does the Venus Tablet. (Weir, pp. 25-47) Observations of lunar and planetary positions related to specific stars and constellations would not be affected. And it is these observations, which are usually higher in the sky and not in the horizon, that are the most useful for chronological purposes. As noted in GTR[4], ch. 4, A-1, the astronomical tablet

VAT 4956 records about 30 such lunar and planetary positions, dated to various days and months in the 37th year of Nebuchadnezzar, thus fixing that year as 568/67 BCE with absolute certainty.

Another problem Furuli mentions is related to the place of observation. He states that it "is assumed that the observations … were made in Babylon; if they were made in another locality this may influence the interpretation of the observations." (p. 32) He then quotes from Weir's discussion of the observations on the Venus Tablet of Ammisaduqa, which according to his calculations might have been made at "a latitude of 1½ degree north of Babylon." This would be about 170 kilometers north of Babylon.

Again, this problem applies to the Venus Tablet, the fragmentary copies of which were found in the ruins of Nineveh, but it does not apply to the archive of ca.1300 astronomical observational texts found in the city of Babylon. As shown by modern calculations, these observations must have been made in, or in the near vicinity of, Babylon. (Cf. Professor A. Aaboe, "Babylonian Mathematics, Astrology, and Astronomy," *The Cambridge Ancient History*, Vol. III:2, Cambridge: Cambridge University Press, 1991, pp. 276-292)

The crudeness of observations: Each zodiacal sign covers 30 degrees

On page 32 Furuli mentions another potential source of error:

> "One problem is the crudeness of the observations. Because the tablets probably were made for astrological reasons, it was enough to know the zodiacal sign in which the moon or a certain planet was found at a particular point of time. This does not give particularly accurate observations."

By this statement Furuli creates a false impression that the lunar and planetary positions recorded on the Babylonian astronomical tablets are given *only* in relation to zodiacal signs of 30 degrees each. He supports this by quoting a scholar, Curtis Wilson, who in a review of a book by R. R. Newton made such a claim, stating that, "The position of the planet is specified only within an interval of 30°." (C. Wilson in *Journal of the History of Astronomy* 15:1, 1984, p. 40)

Wilson further claims that this was the reason why Ptolemy, "when in need of earlier observations of these planets turns not to Babylonian observations but to those of the Alexandrians of the third century B.C., which give the planets' positions in relation to stars." (C. Wilson, "The Sources of Ptolemy's Parameters," *Journal for the History of Astronomy*, Vol. 15:1, 1984, pp. 40, 41)

But anyone with even a cursory acquaintance with the Babylonian astronomical tablets knows that Wilson's claim—repeated by Furuli—is false. Although it is true that many positions recorded on the tablets are given with reference to constellations along the zodiacal belt, the great majority of the positions, even in the earliest diaries, are given with reference to stars or planets. The division of the zodiacal belt into signs of 30 degrees each took place later, during the Persian era, and it is not until "toward the end of the 3rd century B.C." that "diaries begin to record the dates when a planet moved from one zodiacal sign to another." (H. Hunger in N. M. Swerdlow [ed.], *Ancient Astronomy and Celestial Divination*, London: The MIT Press, 1999, p. 77. Cf. B. L.

Van der Waerden, "History of the Zodiak," *Archiv für Orientforschung* 16, 1952/1953, pp. 216-230) During the entire 800-year period from ca. 750 BCE to ca. 75 CE, the Babylonian astronomers used a number of stars close to the ecliptic as reference points. As Professor Hermann Hunger explains in a work also used by Furuli:

> "In order to give the position of the moon and the planets *a number of stars close to the ecliptic are used for reference.* These have been called 'Normalsterne' [*Normal Stars*] by Epping, and the term has remained in use ever since." (H. Hunger in ADT, Vol. I, p. 17; emphasis added)

On pages 17-19, Hunger lists 32 such *normal stars* known from the tablets. Noel Swerdlow states: "By far the most numerous observations of planets in the Diaries are of their distances 'above' or 'below' and 'in front of' or 'behind' normal stars and each other, measured in cubits and fingers." (N. M. Swerdlow, *The Babylonian Theory of the Planets*, Princeton, New Jersey, 1998, p. 39)

Such detailed observations are shown by *VAT 4956*, in which about two-thirds of the lunar and planetary positions recorded are given *in relation to normal stars and planets.* And, in contrast to positions related to constellations, where the moon or a planet usually is just said to be "in front of," "behind," "above," "below," or "in" a certain constellation, the records of positions related to normal stars also give the *distances* to these stars in "cubits" (ca. 2–2.5 degrees) and "fingers" (1/24 of the cubit), as Swerdlow points out. Although the measurements are demonstrably not mathematically exact, they are considerably more precise than positions related only to constellations. As Swerdlow suggests, the measurements "may have been made with something as simple as a graduated rod held at arm's length." (Swerdlow, *op. cit.* p. 40)

By parsing all the astronomical diaries in the first two volumes of Sachs/Hunger's ADT, Professor Gerd Grasshoff "obtained descriptions of 3285 events, of which 2781 are complete without unreadable words or broken plates. Out of those are 1882 topographical events [i.e., positions related to stars and planets], 604 are lunar observations called *Lunar Six* … and 295 are locations of a celestial object in a constellation." (Gerd Grasshoff, "Normal Stars in Late Astronomical Babylonian Diaries," in Noel M. Swerdlow [ed.], *Ancient Astronomy and Celestial Divination*, London: The MIT Press, 1999, p. 107) Thus, two-thirds of the positions are related to stars or planets, whereas only about 10 percent are related to constellations.

In further support of his claim about the "crudeness of the observations" recorded on the Babylonian tablets, Furuli gives a lengthy quotation from B. L. van der Waerden. Unfortunately, Furuli has grossly misinterpreted van der Waerden's statements.

Van der Warden is discussing, not the crudeness of the *observations*, as Furuli claims, but the crudeness of the *calculations* that the Babylonian astrologers performed for the position of the moon at a point of time when the zodiacal sign in which the moon stood *could not be determined by observation*, either because of bad weather or because it was in daytime, when the stars are not seen. These calculated positions had to be deduced from observed lunar positions near such

a point of time. The observation that van der Waerden quotes from *VAT 4956* to show what was required for such calculations is exactly a lunar position *related to a normal star*, not just to a zodiacal sign:

> "At the beginning of the night of the 5th the moon overtook by 1 cubit eastwards *the northern star at the foot of the Lion* [= Beta Virginis]." (B. L. van der Waerden, *Science Awakening* II, 1974, p. 185)

Furuli, then, has totally misunderstood van der Waerden's discussion, because (1) he is speaking about the crudeness of (astrological) *calculations*, not about observations, and (2) the kind of *observations* needed for such calculations (which he shows by reference to *VAT 4956*) is detailed because the lunar position is given *in relation to a star, with both distance and direction specified.* Although van der Waerden's example happens to contain a scribal error (see below under I-B-4), the information given is definitely not crude. It is specific and precise.

The writing of the original tablet on the basis of observational notes

A further source of error, according to Furuli, is "the process of writing down the data." His discussion of this focuses on the astronomical tablet *VAT 4956*, the "diary" dated to the 37th year of the reign of Nebuchadnezzar. Furuli explains:

> "The tablet itself is a copy made a long time after the original was made, but even the original was not made at the time the observations were made. The tablet covers a whole year, and because clay hardly can be kept moist for 12 months, the observations must have been written down on quite a lot of smaller tablets, which were copied when the original was made." (pp. 30, 31)

Furuli describes the procedure correctly, and it is well known to Assyriologists. But Furuli adds in parentheses, "(provided that the data were not later calculated and there never was an 'original tablet'.)" This theory—that Babylonian scholars at a later time calculated the information recorded on the astronomical diary *VAT 4956* and dated it to the 37th year of Nebuchadnezzar—is false because many of the phenomena reported on the tablet were impossible to retrocalculate.

Because Furuli repeats and elaborates this theory in Chapter 2, I will refute his claims in connection with my comments on that chapter. It is sufficient to point out that scholars agree that *VAT 4956* is a faithful copy of the original, which is proven by modern computations of the positions recorded on the tablet. The copying errors are few and trivial, as pointed out in GTR[4], ch. 4, A-1. (See further below under I-B-4.)

I am aware of only one scholar who has tried to overcome the evidence provided by *VAT 4956,* namely, E. W. Faulstich, founder and director of the Chronology-History Research Institute in Spencer, Iowa, USA. Faulstich believes it is possible to establish an absolute Bible chronology without the aid of extra-Biblical sources, based solely on the cyclical phenomena of the Mosaic law (sabbath days, sabbath and jubilee years) and the cycle of the 24 sections of the levitical priesthood. One consequence of his theory is that the whole Neo-Babylonian period has to be moved backward one year. Because this conflicts

with the absolute dating of the period based on the astronomical tablets, Faulstich argues that *VAT 4956* contains information from two separate years mixed into one. This idea, however, is based on serious mistakes. I have thoroughly refuted Faulstich's thesis in the unpublished article, "A critique of E.W. Faulstich's Neo-Babylonian chronology" (1999), available from me upon request.

The copying and redaction of the original tablet

This "source of error" is related to the previous one. As Furuli points out, *VAT 4956* is a later copy in which the copyist tried to modernize the archaic terminology of the original tablet. This procedure, Furuli states, "may very well cause errors."

Copying errors do exist, but they usually create few problems in tablets that are fairly well preserved and detailed enough to be useful for chronological purposes. As discussed in GTR[4], ch. 4, A-1, the dated lunar and planetary positions recorded in *VAT 4956* evidently contain a couple of scribal errors. These errors, however, are minor and easily detected by modern computations based on the recorded observations.

Thus, on the obverse (front) side, line 3 has day 9, which P.V. Neugebauer and E. F. Weidner pointed out in 1915 is a scribal error for day 8. Similarly, obverse, line 14 (the line quoted by van der Waerden above), has day 5, which is obviously an error for day 4. The remaining legible records of observed lunar and planetary positions, about 30, are correct, as is demonstrated by modern calculations. In their recent examination of *VAT 4956,* Professor F. R. Stephenson and Dr. D. M. Willis conclude:

> "The observations analyzed here are sufficiently diverse and accurate to enable the accepted date of the tablet—i.e. 568-567 B.C.— *to be confidently confirmed*." (F. R. Stephenson & D. M. Willis in J. M. Steele & A. Imhausen (eds.), *Under One Sky. Astronomy and Mathematics in the Ancient Near East*, Munster: Ugarit-Verlag, 2002, pp. 423-428; emphasis added)

Unknown length of the month—29 or 30 days

The next source of error in Furuli's list is "the unknown length of the month" in the Babylonian calendar:

> "In some instances we do know which months of a particular year in the reign of a particular king had 30 and which had 29 days, in most cases we do not know this. … our Babylonian calculation can be up to one day wrong according to the Julian calendar." (p. 33)

As I pointed out earlier under I-B-1, this is unimportant for chronological purposes. Parker and Dubberstein were there quoted as stating that "it is possible that a certain number of dates in our tables may be wrong by one day, but as they are purely for historical purposes, this uncertainly is unimportant." (PD, p. 25)

Often, when there is an uncertainty of one day, the corresponding Julian day for a dated Babylonian position of the moon or an inner planet can be

determined exactly by modern computations. This is particularly true of the moon because it moves 13 degrees a day along the ecliptic, which means that its position in the sky changes considerably in one day.

Further, as Professor Peter Huber points out, "the Late Babylonian astronomical texts consistently indicate the month-length by stating whether the moon became visible on 'day 30' or on 'day 1'." *This practice of indicating whether the previous month had 30 or 29 days is also consistently used in* VAT 4956. (P. J. Huber et al, *Astronomical Dating of Babylon I and Ur III. Monographic Journals of the Near East, Occasional Papers 1/4*, June 1982, p. 7)

Contradicting Furuli's claim, Gerd Grasshoff, after his careful analysis of the 2781 well-preserved observation reports in the diaries published in ADT, Vols. I and II (see above under I-B-2), concluded:

> "After having completed the successful interpretation of the observation reports, the analysis shows that 90% of the beginnings of the months are correctly predicted with an *arcus visionis* model, the rest differs only by one day." (G. Grasshoff, *op. cit.,* p. 109)

A shift in the speed of the earth's rotation

Another source of error, according to Furuli, is the gradual change in the speed of the earth's rotation. On page 33, he again quotes from Weir's article about the Old Babylonian Venus Tablet of Ammisaduqa. Weir, in turn, quotes Huber, who explains that extrapolating the known rotation rates from the Neo-Babylonian period to the present, back to the preceding 1000-year period, is "beyond safe ground."

But Furuli's quotation is irrelevant because Weir and Huber are discussing the 1000-year period that *preceded* Neo-Babylonian times. Weir and Huber both know that the change in the speed of the earth's rotation has been established back to, and even somewhat beyond, the Neo-Babylonian period. This deviation (called Delta-T) has been known for a long time, although the value has been gradually refined. The best and most up-to-date examination of the deviation, based on hundreds of dated observations of lunar eclipses all the way back to the 8th century BCE, is that of Professor F. Richard Stephenson in *Historical Eclipses and Earth's Rotation* (Cambridge: Cambridge University Press, 1997). (See also GTR[4], appendix for chapter 4, section 2.)

The rate of increase of the length of a day due to slowing down of the earth's rotation, back to the 8th century BCE, has been fixed at an average of 1.7 milliseconds per century (1.7 ms/c; Stephenson, *op cit.* pp. 513, 514; cf. *New Scientist*, 30 January 1999, pp. 30-33). For this period, therefore, we are on "safe ground." Furuli can hardly be unaware of this. Today, the gradual change in the rate of the earth's rotation is definitely not a significant source of error when using astronomical tablets from the Neo-Babylonian and Persian eras to calculate the chronology of these periods.

The interpolation of intercalary months to compensate for the difference between the solar and the lunar year

Arguing that the interpolation of intercalary months in the Babylonian luni-solar calendar might be another potential source of error, Furuli (p. 34) quotes Drs. Ben Zion Wacholder and David B. Weisberg, who say:

> "As Professor Abraham Sachs pointed out in a communication to us, some of the readings of the intercalary months recorded in Parker and Dubberstein's tables may not be quite reliable, while a handful are admittedly hypothetical. But even assuming the essential correctness of Parker and Dubberstein's tables, Professor Sachs maintains, the supposition of a 19-year cycle prior to 386 B.C.E. may be reading into the evidence something which possibly is not there." (Ben Zion Wacholder, *Essay on Jewish Chronology and Chronography*, New York, 1976, p. 67)

Nothing in this statement is not also admitted by Parker and Dubberstein, as can be seen in *Babylonian Chronology 626 B.C.—A.D. 75 (1956)*, pp. 1-9. As Wacholder and Weisberg further demonstrate in their work, the development of the 19-year standard scheme of intercalary months was a gradual process begun in the 7th century. The final stage took place in the 5th and early 4th centuries, when the seven intercalary months of the 19-year cycle were fixed in years 3, 6, 8, 11, 14, 17, and 19. This process is also clear in PD.

Furuli concludes: "This means that calculations based on the Julian calendar can be wrong as much as 44 days or even more if the intercalary months were not added regularly." (p. 35) This conclusion is based on the unlikely supposition that sometimes four years could pass before an intercalary month was added. But the weight of evidence, based on the economic and the astronomical texts, shows that this never happened after 564 BCE. (See the updated tables of documented intercalary months presented by Professor John P. Britton in J. M. Steele & A. Imhausen (eds.), *Under One Sky*, Münster: Ugarit-Verlag, 2002, pp. 34-35.)

On page 35, Furuli again uses Weir's discussion of the Venus Tablet of Ammisaduqa, this time as a basis for his claim that "a 'best fit' scheme is accepted." This is undoubtedly true of scholars who have used the Venus Tablet of Ammisaduqa in their attempts to date the Hammurapi dynasty, but to imply that such a best fit scheme is also used to fix the absolute chronology of the Neo-Babylonian and Persian periods by means of *VAT 4956* and other astronomical tablets—as if this were a last resort—is dishonest because it is simply not true.

Different calendars used at different times

Furuli notes that different calendars were used in antiquity by different peoples at different times. This, of course, is true. But because the use of the Babylonian luni-solar calendar in the Neo-Babylonian and Persian eras is well known, it is difficult to see how these other calendars can be "sources of potential error" in the examination of the Babylonian astronomical tablets. Furuli's argument is a straw man.

Furuli mentions that the Egyptians "may have used two calendars" and states that this might be a problem in "connection with the Aramaic Elephantine Papyri." (p. 36) These papyri are not astronomical texts. But, interestingly, some of them are double-dated in the sense that dates are given both in the Babylonian calendar and the Egyptian civil calendar. Because these texts are dated to the reigns of Persian kings in the 5th century BCE, they are useful to determine the chronology of the period and are discussed in a later part of this review.

The human factor—and modern researchers

Furuli mentions "the human factor" that might cause "the misreading of a tablet due to lack of capacity." (p. 37) This is clearly a potential source of error. Many odd dates found in works about the tablets published during the past 120 years are due to this factor. It is important, therefore, when such odd dates are encountered in modern works, to have the original tablet collated afresh. Strangely, Furuli uses many such dates *uncritically* and *without* collation. Some examples of this have already been given above under I-A-2 and others are presented in later parts of this review.

Chapter II - "The Litmus Test of the Absolute Chronology"

Using astronomical tablets for establishing absolute dates

In this chapter, Furuli discusses using astronomical tablets to establish an absolute chronology. In view of the varied quality and state of preservation of the Babylonian astronomical tablets, not all are usable for chronological purposes. Accordingly, Furuli states that each tablet must meet "two fundamental requirements." What are they?

Furuli's criteria for the chronological use of astronomical tablets

The first requirement is the following:

> "A. The positions of the heavenly bodies must be observed by the eye of a scribe and written down at the same time; and they must not only represent backward calculations made at a much later time."

This criterion is quite in order. The value of the next requirement, however, is dubious:

> "B. The name of the ruling king must have been written on the tablet at the time when the observations were made."

One problem with this criterion is that it is unrealistic. Furuli admits that:

> "because clay hardly can be kept moist for 12 months, the observations must have been written down on quite a lot of smaller tablets, which were copied when the original was made." (p. 30)

Modern scholars who take notes on paper face a similar task of collating their notes. Suppose a scholar is reviewing a book, and on page one of his notes he records the name of the book. Then he scribbles various comments on items of interest. The notes run to many pages, but he does not record the title of the book on every page. When he is finished reading, perhaps months later, he collates and condenses the scribbled notes and writes a neat summary. Does the fact that he failed to write the book's title on every single page of the notes invalidate the summary? Of course not. In like manner, if the name of a ruling king is not written down on "smaller tablets, which were copied when the original was made," it certainly does not invalidate the observations transferred to the final tablet, which is subsequently viewed as the original. Furuli's criterion B, then, is absurd.

It is transparently obvious that Furuli invented criterion B to disqualify tablets that could otherwise be used to invalidate his Oslo Chronology. Usually, the royal name is given only at the beginning of each tablet. But if a tablet is damaged and the beginning part is missing, the date connected with each observation recorded is given as the regnal year, the month, the day, and perhaps the part of the night, with no royal name. However, the observations might well be so detailed that the observed events can still be identified and dated to particular Julian years. This is often enough to identify the ruler, even if his name is missing. A couple of examples serve to illustrate this.

The planetary tablets No. 54 and No. 56

Two tablets that do not meet Furuli's second requirement (B) are LBAT 1393 and LBAT 1387+1486+1388, published as Nos. 54 and 56 in Hunger's ADT, Vol. V. Both are planetary texts that unequivocally overthrow Furuli's alternative reigns for Darius I and Artaxerxes I. Furuli gratuitously dismisses both tablets (pp. 37, 118, 211, and 227) for erroneous, specious, and illusory reasons. I examine his statements in detail later in this review.

Text No. 54 records observations of Jupiter dated to several regnal years of a king whose name is not preserved. The preserved regnal year numbers are 23 on the obverse side and 8, 19, 20, 31, and 32 on the reverse side. The ruler whose reign is treated on the reverse side must have had a long reign because the last preserved regnal year is 32. The observations recorded for these five years can be safely dated to years 514, 503, 502, 491, and 490 BCE. The observations on the obverse side dated to year 23, however, are too badly damaged to be usable.

The second text, No. 56, records about 80 preserved positions of Venus, half of which are related to Normal Stars. The data are arranged in 8-year-groups and 8 columns. The positions are dated to about 20 different regnal years (most of them fully legible or identifiable as part of the overall arrangement) that can be fixed to specific Julian years within the 70-year period from 463/2 to 393/2 BCE. The first king in this period must have had a very long reign because the highest preserved regnal year for him is 39. The observations recorded for this year can be dated to 426/5 BCE. The reason the royal names are missing in both texts is that these parts of the tablets are broken.

How tablets 54 and 56 make mincemeat of Furuli's Persian chronology

All Julian dates pointed to by tablets 54 and 56 fall within the reigns of Darius I, Artaxerxes I, Darius II, and Artaxerxes II, not only according to the traditional chronology but *also according to Furuli's Oslo Chronology*. These tablets, therefore, can be used to challenge his alternative chronology for these reigns. It turns out that Furuli's attempts to push the reign of Darius I one year forward and the reign of Artaxerxes I 10 years backward are effectively blocked by these two tablets. The Jupiter observations dated in year 32, for example, clearly belong to year 490 BCE, not year 489 as required by Furuli's revised chronology. In fact, none of the observations dated to specific months and days in the Babylonian luni-solar calendar can be moved forward or backward in the way Furuli's revisions require.

Jupiter's period of revolution is close to 12 years, which means that *on average* its position among the stars changes about 30 degrees a year. However, the apparent movement among the stars displays stationary points and even reversals of motion. Tablet 54 illustrates this by saying that in year 31, month VI, on day 28, Jupiter "became stationary in [the constellation of] Gemini." This was exactly the position it held on October 4, 491 BCE, so this date corresponds to day 28 of month VI in the Babylonian calendar. A year later, Jupiter had moved about 30 degrees to a new position between the constellations Leo and Cancer. The recorded position, then, does not allow the 31st year of Darius I to be moved one year forward. The Jupiter phenomena do not repeat themselves *at the same date within the lunar month* for another 71 years, the fact of which the Babylonian astronomers were fully aware. Therefore, tablet 54 cannot be assigned to any reign other than that of Darius I. The Jupiter positions in tablet 54 dated to the other four regnal years just as inexorably block any attempt to change the absolute chronology established for Darius' 36-year reign.

Venus, with a period of revolution of only 224.7 days, returns to its position in relation to various stars and constellations in less than a year. However, it does not return to the same position *at the same time of the year—not after one year or after 10 years*. Such returns occur at 8-year intervals, after 13 revolutions (8x365.2422 = 13x224.7). The observations on tablet 56, then, which are dated to specific regnal years, months and days, cannot be fitted into a chronology for the reign of Artaxerxes I that is moved *10* years backward.

It might be argued that the observations on the two tablets could belong to kings whose reigns fell in entirely different centuries. But such alternatives are limited to kings whose reigns lasted at least 32 years (the highest preserved regnal year in the Jupiter text No. 54) and 39 years (the highest preserved regnal year in the Venus text No. 56).

Within the period to which all extant Babylonian observational astronomical cuneiform texts belong (except for the Venus tablet of Ammisaduqa)—i.e., from the middle of the 8th century BCE to the 1st century CE—only five kings are known to have ruled that long or longer: the Assyrian king Ashurbanipal (42 years), the Babylonian king Nebuchadnezzar (43 years), and the Persian

kings Darius I (36 years), Artaxerxes I (41 years), and Artaxerxes II (46 years). Another possibility is that the regnal years could refer to years in the Seleucid era (counted from 312/11 BCE).

By using a modern astro-program (Chris Marriott's SkyMap Pro 10), I have checked all the alternatives to the reigns of Darius I and Artaxerxes I—and also the alternative chronologies for these reigns suggested by Furuli's Oslo Chronology—and found them all to be impossible. The planetary observations combined with the regnal years and the dates in the Babylonian luni-solar calendar fit only the traditional chronologies established for the reigns of Darius I and Artaxerxes I.

Attempts to invalidate tablets 54 and 56

Tablets 54 and 56 do not meet Furuli's second requirement (B), but he attempts to undermine the strength of their evidence in other ways.

On page 37, Furuli refers to tablet No. 54 (LBAT 1393) and states that there "may be different factors, which contribute to the misreading of a tablet due to lack of capacity." He quotes a statement about tablet 54 by Hunger:

> "The following reconstruction of the tablet was proposed by C.B.F. Walker, who notes that any discrepancies between the years attested on this tablet and the dates reported by A. Sachs in LBAT, p. xxix are to be explained by the fact that the tablet was not baked and cleaned until 1978." (ADT, Vol. V, p. 158)

Isolated from context, this seems to indicate that the translation of the tablet was a mere proposed reconstruction and that it might have been misread "due to lack of capacity." This seeming indication is wrong.

Walker's reconstruction is not an attempted translation of the preserved part of the tablet. It is a suggested reconstruction of the *chronological scheme* of the original, undamaged tablet, which might have covered all the 48 regnal years from 536/5 to 489/8 BCE arranged as a series of 12-year cycles. The reconstruction is shown in a table on page 159 of ADT V. The actual transliteration and translation of the tablet, with its preserved dates, observations, etc., follows on pages 160-165, *after* the table.

The regnal years that Sachs had read on the tablet (LBAT, 1955, p. xxix) before it was baked and cleaned in 1978 were not misreadings that conflict with the dates read after the cleaning. The "discrepancies" referred to are additional dates that became legible after the cleaning, dates that increase the chronological value of the tablet. The way Furuli refers to this tablet is thoroughly misleading.

Furuli mentions tablet No. 56 in three places in his book, on pages 118, 211, and 227. One reason for this spread seems to be that the tablet consists of three pieces, LBAT 1387, 1388, and 1486 (also listed by Hunger as A, B, and C), which Furuli tends to deal with separately and in different places in his book. The first two pieces (A + B) contain much information, so much in fact, that Hunger's translation of them covers 10 large pages in ADT, Vol. V. Almost all the observations preserved on the two pieces are dated to various regnal years

of Artaxerxes I, the only exception being one dated to year 6 of his successor, Darius II. Piece C, on the other hand, is a very small fragment, and Hunger's translation of it covers only half a page. No regnal year numbers are preserved on it. Hunger writes (ADT , p. 172) that the observations recorded on it probably refer to years 5 and 12 of Artaxerxes II (400 and 393 BCE).

Furuli focuses exclusively on piece C in his description of tablet 56 on page 211, implying that Hunger's description of this little fragment applies to the whole text:

> "The planetary text consisting of the three pieces LBAT 1387, 1486 and *1388 is supposed to list Venus data between -462/61 and -392/91. This text is quite fragmentary. One scholar made this comment: 'of C, the obverse probably refers to Artaxerxes II year 5, the reverse to year 12. The astronomical information preserved fits this date, especially a close encounter of Venus and *a* Leonis in month III of Art II year 5.'

These words are rather cautious, indicated by the adverb 'probably.' As a matter of fact, neither Venus nor any other planet is mentioned on C, Obv. and Rev. An interpreter may feel there are clues for identifying Venus, but none are mentioned. So there are problems with this text in connection with the making of an absolute chronology."

Furuli does not talk about the extensive information in pieces A and B, leaving the reader with the impression that the entire Venus tablet is as fragmentary and problematic as piece C. In a discussion on page 118, he makes some comments about piece A (1387) but these, too, are aimed at undermining the strength of the text. He erroneously claims that on this tablet "years 15, 27, 35 are clearly visible, but no other years," whereas in fact eight regnal years are visible on the text, namely, years 7, 15, 23, 27, 31, 35, 39 (of Artaxerxes I), and year 6 (of his successor Darius II). For example, Furuli points out that in T. G. Pinches' copy of the tablet published by Sachs in 1955, "the number '7' is shaded and not clearly seen." But as Sachs explains (LBAT, p. vii), Pinches copied from tablets that usually had not been oven-fired, and that "it is to be expected that improved readings will result from oven firing." Hunger's translation indicates that number 7 is now clearly seen on the tablet, which may be a result of this. The observations recorded for year 7 in months I, II, III, IV, V, and VI all fit the 7th year of Artaxerxes I, 458 BCE. Further, Furuli fails to mention that number 7 is required by the arrangement of the data in 8-year-groups. It is followed horizontally in the next columns by year numbers 15, 23, 31, 39, and year 6. The 8-year intervals, of course, refer to the periodicity of Venus positions.

About the same number of years (in the reign of Artaxerxes I) paired at 8-year intervals are visible in piece B (1388)—years 4, 5, 12, 13, 20, 21, 28 and 2[9]. On page 227, Furuli says that piece B is in conflict with the Oslo Chronology, but his only explanation is that "the regnal years written by the scribe need not be correct." This desperate theory is discussed in section II-C below.

Tablets 54 and 56 are disastrous for Furuli's revised Persian chronology, and he knows it. That is why he wants to get rid of them by every possible

expedient. And that is also why he wants to undermine the trustworthiness of the astronomical tablets in general by indicating that *they probably mainly contain calculations, not actual observations.*

Are most astronomical positions calculated rather than observed?

The "most acute problem for making an absolute chronology based on astronomical tablets," Furuli claims, is that many, "perhaps most positions of the heavenly bodies on such tablets, are calculated rather than observed." (p. 15)

Is it possible that the Babylonian astronomers could retrocalculate all or most of the phenomena recorded on astronomical tablets? Are there indications in the recorded data that they did just that?

As discussed in GTR[4], Ch. 4, Babylonian astronomers recognized the various cycles of the sun, the moon, and the five planets visible to the naked eye. It is clear that at an early stage they were able to predict or retrocalculate certain phenomena, such as the occurrences of lunar eclipses and certain planetary positions. Does this mean, then, that all or most of the phenomena recorded on the astronomical tablets might have been computed rather than observed, as Furuli claims?

Phenomena that Babylonian astronomers were able to calculate

In support of the idea that most of the recorded positions of the heavenly bodies on the astronomical tablets might have been calculated rather than observed, Furuli presents on page 39 three isolated quotations. All but the first of the references and footnotes are confused, incomplete, or wrong.

The first quotation, taken from Bertel L. van der Waerden's work, *Science Awakening* (Vol. II, 1974, pp. 281, 282), deals with the ability of the Babylonian astronomers to calculate the time that a planet entered a certain zodiacal sign or the position it held when it could not be observed because of clouds or because it was too near to the sun. These calculations presuppose that Babylonian astronomers had worked out theories for dating and locating certain recurring planetary phenomena and had tables at hand that listed planetary positions at regular intervals. Such lists, which were termed "ephemerides" by Professor Otto Neugebauer, are called "cardinal tables" by van der Waerden. All extant tables of this kind are late, almost all dating from the 3rd to the 1st centuries BCE.

The next quotation, erroneously ascribed to van der Waerden, is actually from Otto Neugebauer's three-volume work, *Astronomical Cuneiform Texts* (1955, Vol. II, p. 281). Neugebauer's work does not deal with the *observational* tablets but is exclusively devoted to the *arithmetical* astronomical texts (mainly the tables of *ephemerides* mentioned above) from the last few centuries BCE. It is in his discussion of such texts that Neugebauer points to "the minute role played by direct observation in the computation of the ephemerides," a statement that Furuli greatly stresses by repeating it in extra bold type in a box on the page. What does Neugebauer really mean?

To be able to work out theories about the regular occurrence of planetary phenomena, the Babylonians needed numerous observations of the planets over long periods. Such observations were provided by the astronomical archives available since the middle of the 8th century BCE. When planetary theories were finally worked out, planetary tables could be used for calculating planetary positions when direct observations were not possible. Astronomical observational tablets, therefore, such as diaries and planetary texts, contain observations as well as occasional calculations. This is pointed out by van der Waerden in Furuli's 3rd quotation.

In this quotation, van der Waerden speaks of the difficulty of deciding "whether text data were observed or calculated." Furuli does not explain that van der Waerden is discussing a text that Furuli, on page 128, claims to be "the tablet which is most important for Persian chronology, *Strm Kambys 400*." Van der Waerden's statement is particularly applicable to this text, which seems to contain mainly calculations. Some scholars even question whether it records *any* observations.

It is clear that Babylonian astronomers could calculate a number of astronomical phenomena. At an early stage, they were using the Saros cycle for calculating and predicting the occurrences of lunar eclipses. As shown by the later ephemeride tables, they also learned how to calculate and predict the occurrences of certain periodic planetary phenomena such as first and last visibilities, stationary points, and retrogradations. But does this mean that they were able to calculate or predict *all* the different astronomical phenomena reported on the observational tablets?

Phenomena the Babylonian astronomers were unable to calculate

Although the Babylonian astronomers were able to calculate and predict certain astronomical events, the observational texts—diaries, planetary texts, and eclipse texts—contain reports of several phenomena and circumstances connected with the observations that could not have been calculated.

That the diaries usually record *real observations* is shown by their reports of climatological phenomena. For example, the scribes repeatedly report when bad weather *prevented* astronomical observations. We often find reports about "clouds and rain of various sorts, described in detail by numerous technical terms, as well as fog, mist, hail, thunder, lightning, winds from all directions, often cold, and frequent 'pisan dib', of unknown meaning but always associated with rain." (Professor N. M. Swerdlow, *The Babylonian Theory of the Planets*, Princeton University Press, 1998, p. 18) Other recorded phenomena were rainbows, solar halos and river levels. None of these could have been retrocalculated much later. What, then, about the astronomical phenomena?

Discussing the various planetary phenomena recorded in the texts, Swerdlow observes:

> "Conjunctions of planets with the moon and other planets, with their distances, could neither be calculated by the ephemerides nor predicted by periodicities." (Swerdlow, *op. cit.*, p. 23)

Swerdlow further explains:

> "The distances of planets from normal stars could be predicted," but "there was no way of predicting distances of the moon from planets or of planets from each other." (*ibid*., p. 173)

Note that *VAT 4956* records a number of such— for the Babylonian astronomers— unpredictable and incalculable phenomena.

What about the lunar eclipse reports? Could they have been computed at a later date? In referring to the 18-year texts (the "Saros cycle texts"), Furuli uses the term "Saros tablets," but he does not make it clear whether he is referring to all extant 18-year tablets (about a dozen) or to a particular group of such texts. On page 40, he mentions two sets of tablets that use the 18-year Saros scheme. The first, he says, covers the period from 747 to 315 BCE. His footnote 51 shows that the set consists of lunar eclipse tablets LBAT 1413–1417 and 1419 (= Nos. 1–4 in Hunger, ADT, Vol. V). The other "set" he mentions is actually just one tablet that scholars generally refer to as the "Saros Tablet," BM 34576 (= No. 34 in ADT, Vol. V). It covers the 468-year period from 567 to 99 BCE.

But Furuli does not explain that the first of his two "sets" is a series of *observational* texts that record both observed and predicted lunar eclipses at 18-year intervals, whereas the Saros Tablet belongs to a small group of five *theoretical* texts that do not record any lunar eclipse observations at 18-year intervals but contain only tables of royal names and dates at 18-year intervals. (See John M. Steele in ADT, Vol. V, pp. 390-393.) The Saros Tablet does show some traces of a possible eclipse report, but this appears at the bottom of the reverse side *after* the 18-year table. It is written at right angles to the main text and is clearly separated from it.

Despite this basic difference between the *observational* and *theoretical* 18-year tablets, Furuli seems to regard all of them as "hypothetical tablets," which is incorrect. In addition, his use of the plural term "Saros tablets" is confusing, as he does not clearly explain which 18-year texts he is referring to apart from the Saros Tablet, BM 34576.

With respect to the eclipse observations reported on the lunar eclipse tablets, including the Saros cycle tablets (discussed in GTR[4], Ch. 4, C), the Babylonian astronomers were certainly able to predict and retrocalculate the *occurrences* of lunar eclipses, but they were unable to predict or calculate a number of important details about them. This is discussed by Dr. John M. Steele in his work, *Observations and Predictions of Eclipse Times by Early Astronomers* (Dordrecht, Boston, and London: Kluwer Academic Publishers, 2000) and in the article, "Eclipse Prediction in Mesopotamia." (*Archive for History of Exact Sciences*, Vol. 54, 2000, pp. 421-454)

Commenting on the claim that the eclipse records on the lunar eclipse tablets might be retrocalculations by Babylonian astronomers in the Seleucid era, Steele explains:

> "You were absolutely right when you argued that the Babylonians could not have retrocalculated the early eclipse records. The Saros cycle

could have been used to determine the date of eclipses, even centuries earlier, but none of the Babylonian methods could have allowed them to calculate circumstances such as the direction of the eclipse shadow, the visibility of planets during the eclipse, and certainly not the direction of the wind during the eclipse, which we find in early reports (e.g. Text No 3 in Hunger's latest book states that the eclipse shadow crossed the moon's surface in a southerly direction during the eclipse in Bel-ibni's 1st year [Obv, I, 2-5], and Obv II, 1-7 says that the west wind blew during the eclipse of BC 686 Oct 15). Although the Babylonians could calculate the time of the eclipses, they could not do so to the same level of accuracy as they could observe—there is a clear difference of accuracy between eclipses they said were observed and those they say were predicted (this is discussed in my book), which proves that the 'observed' eclipses really were observed.

It is true that the Saros Canon texts published most recently by Aaboe et al in 1991 are retrocalculated—but they are theoretical texts and should be considered separately from the observational material of the Diaries and the eclipse texts in Hunger's book. The observational material alone is enough to confirm Parker & Dubberstein's chronology, with only very minor, and non-cumulative, corrections." (Communication Steele to Jonsson, March 27, 2003)

Most of the contents of the observational texts are observations

Although the observational texts, due to particular circumstances such as bad weather, occasionally contain calculated events, most of the entries are demonstrably based on actual observations. That this is the case with the Diaries is directly indicated by the Akkadian name engraved at the end and on the edges of these tablets: *natsaru sha ginê*, which means "regular watching." (Sachs/Hunger, ADT, Vol. I, p. 11)

Scholars who have examined these tablets in detail agree that they contain mostly genuine observations. Professor Hermann Hunger gives the following description of the various kinds of astronomical data recorded in the Diaries:

"Lunar Six [i.e., the time differences between the settings and risings of the sun and the moon just before and after opposition]; planetary phases, like first and last visibility … conjunctions between planets and the so-called Normal Stars … eclipses; solstices and equinoxes; phenomena of Sirius. Toward the end of the 3rd century B.C., Diaries begin to record the dates when a planet moved from one zodiacal sign into another. The rest of the Diaries' contents is non-astronomical."

Hunger adds:

"*Almost all of these items are observations.* Exceptions are the solstices, equinoxes, and Sirius data, which were computed according to a scheme ... furthermore, in many instances when Lunar Sixes, lunar or solar eclipses, or planetary phases could not be observed, a date or time is nevertheless given, marked as not observed. Expected passings of Normal Stars by the moon are sometimes recorded as missed because of bad weather, but never is a distance between moon and Normal Star

given as computed." (Hermann Hunger in N. M. Swerdlow (ed.), *Ancient Astronomy and Celestial Divination,* London: The MIT Press, 1999, pp. 77, 78; emphasis added)

Steele similarly concludes:

"*Most of the contents of the Diaries represent observations;* however, where observations were unavailable, for example because of bad weather or because an event was expected to occur at a moment when the heavenly body was below the horizon, then predictions were entered in their place. In addition, some data recorded in the Diaries, such as solstices and equinoxes, were always predicted." (John M. Steele, "Eclipse Prediction in Mesopotamia," *Archive for History of Exact Sciences*, Vol. 54, 2000, p. 429; emphasis added)

Whether an entry is based on observation or calculation is often directly stated in the text itself. In the eclipse reports, this is usually indicated by the terminology. Steele explains:

"As a general rule, eclipse predictions can be distinguished from observations by the terminology used: *sin* AN-KU$_{10}$ denotes an observed eclipse of the moon, whereas the opposite order, AN-KU$_{10}$ *sin,* refers to a predicted lunar eclipse (for solar eclipses *sin* is replaced by *šamáš*). Furthermore, predicted eclipses are usually described as being *šá* DIB meaning that they would be omitted when the luminary was below the horizon, or *ki* PAP NU IGI meaning 'watched for, but not seen' when the anticipated eclipse failed to appear." (*ibid*., p. 429)

In summary, Furuli's claim that "perhaps most positions of the heavenly bodies on such tablets, are calculated rather than observed" is groundless. It is refuted by statements in the tablets themselves and by the fact that they contain data that the Babylonians were unable to calculate. These circumstances are diametrically opposed to the suggestion that the data in the astronomical diary *VAT 4956* might have been calculated later so that possibly "there never was an 'original tablet'." (Furuli, p. 30)

Furuli elaborates on this mistaken idea on page 40. Pointing out that *VAT 4956* and *Strm Kambys 400* "have the characteristics of being copies," he then goes on to consider "possible ways that such copies could be made by a scribe in the 2nd century B.C.E." He imagines that a scribe could make up such tablets by using "three different schemes that were at his disposition:" 1) a scheme of 18-year Saros cycles; 2) a scheme of regnal years of consecutive kings going backward in time, and 3) a scheme of intercalary months. Then he states: "By a combination of these three schemes, no observation was necessary, but a sophisticated chronology could be made for hundreds of years backward in time."

As was demonstrated above, the theory that *VAT 4956* and other observational texts could have been made up at a much later time is nothing but a wild imagining. The idea is just wishful thinking based on insufficient knowledge of the astronomical tablets.

A theory of desperation

If the entries on the observational tablets—diaries, and lunar and planetary tablets—record mostly demonstrably genuine observations, and if the Babylonian astronomers were unable to compute and retrocalculate many of the astronomical and other data reported, how, then, is it possible for anyone to wriggle out of the evidence provided by these tablets?

Because the tablets often contain so many detailed observations dated to specific regnal years that they can be safely fixed to particular Julian years, the only escape is to question the authenticity of the *regnal year numbers* found on the tablets.

This is what Furuli does. He imagines that "a scribe could sit down in the 2nd century and make a tablet partly of some phenomena covering many years, partly on the basis of theory (the three schemes) and partly on the basis of tablets from a library" that might show real observations. Then, upon discovery that the dates on the library tablets conflicted with the theoretical data, "these erroneous data could be used to 'correct' the correct data of his library tablet, to the effect that the tablet he was making would contain wrong data of regnal years." (Furuli, p. 41)

Furuli indicates that not only the dates on the lunar and planetary tablets but also the dates on the diaries might have been tampered with by the Seleucid scholars in the same way. Referring again to the fact that the earliest extant diaries are copies, he says:

> "But what about the regnal year(s) of a king that are written on such tablets? Have they been calibrated to fit an incorrect theoretical chronological scheme, or have they been copied correctly?" (Furuli, p. 42)

Furuli realizes, of course, that his Oslo Chronology is thoroughly contradicted by the Babylonian astronomical tablets. That is the reason he proposes, as a last resort, the theory that these tablets might have been redated by Seleucid scholars to bring them into agreement with their own supposed theoretical chronology for earlier times. Is this scenario likely? What does it imply?

The scale of the supposed Seleucid chronological revisions

To what extent does Furuli's Oslo Chronology differ from the traditional chronology? In a chronological table on pages 219-225 covering the 208 years of the Persian era (539–331 BCE), Furuli shows, reign by reign, the difference between his chronology and the traditional one. It turns out that the only agreement between the two are the dating of the reigns of Cyrus and Cambyses—the period from the fall of Babylon (539 BCE) to 523/2 BCE, a period of 17 years. By giving Bardiya one full year of reign after Cambyses, Furuli moves the whole 36-year reign of Darius I one year forward, as mentioned earlier. Then he moves the reigns of Darius' successors Xerxes and Artaxerxes I 10 years backward by adding 10 years to the reign of the latter, creating a coregency of 11 years between Darius I and Xerxes.

But Furuli also assigns a one-year reign to the usurper Sogdianus between Artaxerxes I and Darius II. The effect of this is that the remaining reigns up to 331 BCE are all moved one year forward. The end result is that Furuli's Oslo Chronology is at variance with the traditional chronology for the Persian era for 191 of its 208 years, or for 92 percent of the period.

But this is not all. As mentioned in the introduction, Furuli wants to add 20 extra years to the Neo-Babylonian period somewhere after the reign of Nebuchadnezzar—between 562 and 539 BCE. The effect of this—what Furuli calls the "domino effect"—is that not only the reign of Nebuchadnezzar but all the reigns of his predecessors are moved backward 20 years.

Because the Babylonian astronomical archive starts with the reign of Nabonassar, 747-734 BCE, Furuli's Oslo Chronology is at variance with the traditional chronology for most, if not the whole, of the Babylonian era from 747 to 539 BCE. This means that the disagreement between the two runs to *more than 90 percent* of the 416-year period from 747 to 331 BCE. This also means that the Oslo Chronology is contradicted by more than 90 percent of the astronomical observational texts—diaries, eclipse texts, and planetary texts—dated to this period. Because these tablets record thousands of observations dated to particular regnal years, months, and days within this period, we begin to get some idea of the scale of the chronological revisions the Seleucid scholars must have engaged in—according to Furuli's theory. Yet, this is only a fraction of the full scope of the necessary revisions.

The scope of the original astronomical archive

It should be kept in mind that the archive of ca. 1300 nonmathematical and principally observational astronomical cuneiform tablets is only a fraction of the scope of the original archive available to the Seleucid scholars. In a lecture held at a conference in 1994, Professor Hunger explained:

> "To give you an idea of how much was originally contained in that archive, and how much is still preserved, I made a few rough estimates. From well preserved Diaries, I found that in each month about 15 lunar and 5 planetary positions, both in relation to Normal Stars, are reported. Also, every month the so-called lunar Six are recorded. Each year will in addition contain 3 Sirius phases, 2 solstices and 2 equinoxes, at least 4 eclipse possibilities or eclipses, and about 25 planetary phases. Together, this results in about 350 astronomical observations per year. In 600 years, 210,000 observations are accumulated. Now I do not know whether the archive was ever complete to this extent. Sometimes copies of older Diaries indicate that things were missing in the original. *But on the whole, this is the order of magnitude.* By counting the number of reasonably (i.e., not completely, but more than half) preserved months, I arrived at ca. 400 months preserved in dated Diaries (undated fragments do not help for the purposes of this lecture). If we compare this to a duration of 600 years for the archive, we see that *we have preserved ca. 5% of the months in Diaries.*" (H. Hunger, "Non-Mathematical Astronomical Texts and Their Relationships," in N. M. Swerdlow (ed.), *Ancient*

Astronomy and Celestial Divination, London: The MIT Press, 1999, p. 82; emphasis added)

If only five percent of the original Babylonian astronomical archive is preserved today, the scale of the chronological revisions Furuli thinks Seleucid copyists engaged in becomes apparent. To bring their whole archive into harmony with their supposed theoretical chronology, they would have had to redate thousands of tablets and tens of thousands of observations. Is it likely that they believed so strongly in a supposed theoretical chronology that they bothered to redate four centuries' worth of archives containing thousands of tablets? The idea is absurd.

We can also ask why the Seleucid scholars would work out a theoretical chronology for earlier centuries when a reliable chronology for the whole period back to the middle of the 8th century could easily be extracted from the extensive astronomical archive at their disposal. Is it not much more realistic to conclude that their chronology was exactly the one found in the inherited archive of tablets, an archive that had been studied and expanded by successive generations of scholars up to and including their own?

It should be noted that, to make any claims at all about dates in his Oslo chronology, Furuli must rely on the dating of the tablets that the Seleucids supposedly revised. But if one assumes that his chronology is valid, then so must be the dates recorded on the tablets—which destroys his claim that the Seleucids revised the tablets. Thus, Furuli's argument is internally inconsistent and cannot be correct.

Another problem is what became of the original pre-Seleucid tablets. A necessary consequence of Furuli's theory is that almost all extant tablets should reflect only the erroneous theoretical chronology of the Seleucid scholars, not what Furuli regards as the original and true chronology—the Oslo Chronology. In his view, therefore, all or almost all extant tablets can only be the late revised copies of the Seleucid scholars. Thus, on page 64, he claims: "As in the case of the astronomical diaries on clay tablets, we do not have the autographs of the Biblical books, but only copies." This is certainly true of the Biblical books, but is it true of the astronomical diaries? Is there any evidence to show that all the astronomical tablets preserved today are only copies from the Seleucid era?

Are all extant tablets late copies from the Seleucid era?

It is certainly true that some of the earliest diaries, including *VAT 4956,* are later copies. They frequently reflect the struggle of the copyist to understand the ancient documents they were copying, some of which were broken or otherwise damaged. Twice in the text of *VAT 4956,* for example, the copyist added the comment "broken off," indicating he was unable to decipher some word in the original. Often the documents used archaic terminology that the copyists tried to modernize. What about diaries from later times?

As an example, there are about 25 diaries from the reign of Artaxerxes II (404-358 BCE), 11 of which not only preserve the dates (year, month, day) but also the name of the king. (Sachs/Hunger, ADT, Vol. I, pp. 66-141) Some of

them are extensive and contain numerous observations (e.g., nos. –372 and –366). None of these tablets show any of the above-mentioned signs of being later copies. Is it likely, then, that they, or at least some of them, are originals?

This question was sent to Professor Hunger a few years ago. He answered:

> "In my opinion, the diaries from the time of Artaxerxes II can all be from his reign. You know that the larger diaries are all copies in the sense that they are collections of smaller tablets which covered shorter periods. But that does not mean that they were copied much later. To me it would make most sense if after every half a year the notes were copied into one nice exemplar. I had a quick look through the edition and did not find any remarks like 'broken' which are an indication that the scribe copied an older original. So I would answer your question 'is it likely' by 'Yes'." (Hunger to Jonsson, January 26, 2001)

These tablets, therefore, do not reflect any "theoretical chronology" supposedly invented by the later Seleucid scholars. The tablets might very well be original documents. We cannot take it for granted that they are late copies from the Seleucid era. And the same holds true, not only for the diaries from the reign of Artaxerxes II but for most of the observational tablets dating from before the Seleucid era.

Even if some of the diaries and other tablets dated to the earliest centuries are later copies, it is not known how late these copies are, or whether they were copied in the Seleucid period or earlier. One interesting example is the lunar eclipse tablet LBAT 1420 (No. 6 in Hunger's ADT, Vol. V). This tablet contains annual records of lunar eclipses dated to the first 29 years of Nebuchadnezzar. (See GTR[4], Ch. 4, C-3) Steele says of it that "this text was probably compiled not long after its final entry in –575 [= 576 BCE]." (*Archive for History of Exact Sciences*, Vol. 54, 2000, p. 432) But even if the compilation was made in the mid-6th century BCE, the question still is whether the tablet is a copy or not. If it is a copy, how late is it? Steele explains:

> "In answer to your question, there is nothing conclusive in the text that points to a date of composition as the mid-sixth century. However, some of the terminology points to an early date, for example, the inclusion of US '(time-)degrees' after the timings is rare in late texts (the unit is usually just implied by the context), and the facts that the predicted eclipses have no times and the general lack of many details of the observed eclipses are also suggestive of an early date. There is no evidence for the modernizing of terminology, but because the observations are quite brief there are not many occasions where modernizing could have taken place (it is easier to spot in things like star names and the ways in which the moon and planets are said to be near certain stars, neither of which appear in this text). For these and other reasons, the text feels to me like it is contemporary with the material it contains.
>
> Now that all refers to the date on which the text was composed, not the date of the tablet. We have no idea whether this is an original text or one copied in the Seleucid period. (The appearance of a 'variant' time in

> Obv. I, 4', which I failed to mention in my book, does not necessarily imply the text has been copied–it could just be that the scribe who compiled the text had reports of this eclipse from 2 different observers.) If it is a copy, then I think it is a straight copy, with no attempt to change or modify the text.
>
> Because almost none of the diaries and other observational texts have colophons, we can never be sure whether texts are copies or originals."

In conclusion, the theory that Seleucid scholars worked out an erroneous hypothetical chronology for earlier times that they systematically embodied into the astronomical tablets they were copying cannot be supported by the available facts. It is not based on historical reality and is a desperate attempt to save cherished but false dates.

Chapter III - "The languages and script of the original documents"

Linguistic pitfalls

In this chapter, Furuli says little about chronology. He starts by describing some of the basic features of the Akkadian, Aramaic, Hebrew, and Sumerian languages, with a view to discussing "to which extent the signs and peculiarities of a language may be the cause of some of the contradictory chronological evidence that we find." (p. 47) He gives Akkadian the most space and gives the other three languages just a few paragraphs.

On pages 49-56, Furuli provides general information about Akkadian signs for words, syllables, and numbers. In the middle of this discussion, on pages 52-54, he attempts to identify Marduk, the chief god of Babylon, as a deification of Nimrod. This is an old theory suggested by Julius Wellhausen in the late 19th century and subsequently picked up by many others, including Alexander Hislop in *The Two Babylons* (1916, 2nd ed. 1959, footnote on p. 44). It was adopted for some time by the Watchtower Society, which presented it in the book "*Babylon the Great Has Fallen!" God's Kingdom Rules!* (1963, pp. 33, 34) with arguments similar to those Furuli quotes from *The International Standard Bible Encyclopaedia*, *The Encyclopaedia Britannica*, *The Jewish Encyclopedia*, and *The Two Babylons*. The theory was included in the Watchtower Society's Bible dictionary *Aid to Bible Understanding* (1971, p. 668) but was dropped in the revised 1988 edition, *Insight on the Scriptures* (Vol. 2, p. 974). It was still briefly mentioned in *The Watchtower* magazine of April 1, 1999, on page 11.

On the modern reading and understanding of Akkadian, Furuli feels that, although, generally speaking, "we can have confidence in the translations of cuneiform tablets that have been published in English, German, French and other languages … it is important to be aware of the pitfalls" (p. 56). The pitfalls Furuli lists are: (1) the difficulty of piecing together broken tablets, (2) the reconstruction of only partially legible signs, (3) the changed meaning of some signs through time, (4) the confusion of similar signs, and (5) the difficulty of correctly reading very small single signs. (p. 58)

Modern Akkadian scholars who have spent decades examining cuneiform tablets are aware of these and other pitfalls, but Furuli's experience in this area seems to be limited. Although he says that he is "able to read and work with original documents in Hebrew, Aramaic, Greek and Akkadian" (p. 14), he seems to have examined the majority of the tablets he discusses or refers to only second or third hand, by consulting published copies, transcriptions, transliterations, and translations in works written by other scholars—some of which date from the late 19th century. That is evidently why, in the Introduction, Furuli says he is "interested to be informed about tablets where collation indicate [sic] errors in the published transliterations or transcriptions." (p. 14, ftn. 5; cf. also p. 58, ftn. 67) If such tablets are used in a scholarly work in support of a revised chronology, the collations should precede, not follow, publication. This stipulation is particularly important for a work that the author claims is aimed at replacing Parker and Dubberstein's classical study from 1956 on *Babylonian Chronology*.

For many years, I have asked modern Akkadian scholars to collate original tablets with odd dates in published translations, including a number of those used by Furuli and his coreligionists in support of their alternative chronology, often with disastrous results for the suggested revisions. Therefore, when Furuli claims that "scores of tablets have been published with anomalous dates, particularly in the New Babylonian Empire" (p. 58), it would be interesting to know which tablets he is referring to and to what extent he has had their dates collated afresh.

The mysterious Marduk-shar-usur

As one example of "possible reading errors," Furuli refers on page 60 to a Neo-Babylonian tablet that Chad W. St. Boscawen found in 1877 among the Egibi tablets that had just arrived at the British Museum from Iraq. The tablet was dated to day 23, month 9 (Kislev), year 3 of a Neo-Babylonian king, whose name Boscawen first read as Marduk-sar-uzur.

Boscawen placed the name in a separate Addenda of a paper that was read before The Society of Biblical Archaeology in London on June 5, 1877. At a discussion held the following month (not the next year, as Furuli writes), on July 3, 1877, Boscawen stated that, on further examination, he had arrived at the conclusion that Marduk-sar-uzur "is a variant name for Nergal-sar-uzur" (i.e., Neriglissar). He explained:

> "When we have some 2,000 tablets to go through, and to read names, which, as everyone who has studied Assyrian knows, is the most difficult part, because it is not easy always to recognize the same name, as it may be written four or five different ways, you may judge it is an arduous task. I have copied two apparently different names; but afterwards found them to be variants of the same name." (*Transactions of the Society of Biblical Archaeology (TSBA)*, Vol. VI, 1878, p. 78 and pp. 108-111)

Attempting to extend the Neo-Babylonian period (as required by the Watchtower Society's chronology), Furuli had argued in an earlier paper that Marduk-shar-usur must have been an extra, unknown king who ruled for at least three years during the Neo-Babylonian period. I discussed this idea at

length in *Supplement to The Gentile Times Reconsidered* (1989), pp. 20-24. (See also the comments on Marduk-shar-usur in GTR[4], App. for Ch. 3, ftn. 24.) Because Boscawen did not give the BM number of the tablet, it could not be identified and collated at that time. But in his new book, Furuli identifies the tablet as BM 30599, a transliteration and translation of which is published as No. 83 in Ronald H. Sack's *Neriglissar—King of Babylon* (Neukirchen-Vluyn: Neukirchener Verlag, 1994, pp. 224, 225). Furuli's identification seems convincing: The date on BM 30599 is the same as that given by Boscawen, "month Kislev, 23rd day, in the third year." Boscawen further adds that "the contracting parties are Idina-Marduk son of Basa, son of Nursin; and among the witnesses, Dayan-Marduk son of Musezib." (TSBA VI, p. 78) The same individuals also appear on BM 30599 (the latter not as a witness but as an ancestor of the scribe). Sack, however, reads the royal name on the tablet *not as Marduk-shar-usur but as Nergal-šarra-usur* (transliterated ^{d}U+GUR-LUGAL-SHESH).

But Furuli seems unwilling to give up the idea that an unknown Neo-Babylonian king named Marduk-shar-usur might have existed. Not only does he argue that the cuneiform signs for Nergal and Marduk can be confused but also that this "can work both ways," so that "it is possible that Boscawen's reading was correct after all" and also that it cannot be excluded that some of the tablets ascribed to Nergal-shar-usur should have been read as Marduk-shar-usur. (p. 62)

To determine whether such confusion is possible, I sent an email message to C. B. F. Walker at the British Museum and asked him to collate the original tablet (BM 30599). In his answer, he states:

> "I have just taken BM 30599 out to check it, and I do not see how anyone could read the name as anything other than ^{d}U+GUR-LUGAL-SHESH. A reading Marduk-shar-usur would seem to be completely excluded. Our records show that the tablet was baked (and cleaned?) in 1961, but it had been published by T G Pinches in the 5th volume of Rawlinson's *Cuneiform Inscriptions of Western Asia*, plate 67 no. 4 in a copy which clearly shows ^{d}U+GUR. It was also published by Strassmaier in 1885 (*Die babylonischen Inschriften im Museum zu Liverpool*: Brill, Leiden, 1885) no. 123, again clearly with ^{d}U+GUR. So the reading cannot be put down to our cleansing the tablet in 1961, if we did." (Walker to Jonsson, October 15, 2003)

An anonymous Jehovah's Witness scholar from South America, who has been investigating this subject, has since written to a number of Assyriologists around the world about the matter. None of the 11 scholars who responded agree with Furuli's suppositions. One of them, Dr. Cornelia Wunsch in London, who also personally collated the original tablet, pointed out that "the tablet is in good condition" and that there is "no doubt about Nergal, as published in 5R 64,4 by Pinches. More than 100 years ago he already corrected the misreading by Boscawen." She also explains that "Boscawen was not a great scholar. He relied heavily on the notes that G. Smith had taken when he first saw the tablets in Baghdad." (Cf. GTR[4], Ch. 3, B-3a, ftn. 67)

Clearly, Furuli has been trying to make too much of Boscawen's misreading of this tablet, partly because he had not collated, or asked anyone to collate, the original tablet before he published his book and evidently also, as shown by his comments, because his knowledge of Akkadian is insufficient.

A second witness to a Neo-Babylonian king Marduk-shar-usur?

In further support of the possible existence of a king named Marduk-shar-usur, Furuli refers to "another tablet from New Babylonian times (BM 56709) dated on the 12th day, month x, in the 1st year of a king whose name starts with Marduk, but where the rest is broken. This king is unknown." (p. 61) This text is listed in the *Catalogue of the Babylonian Tablets in the British Museum* (CBT), Vol. 6 (London: The Trustees of the British Museum, 1986, p. 215). In an unpublished list of "Corrections and additions to CBT 6-8" (Mon, Mar 18, 1996), which Walker keeps at the British Museum, Walker gives the following comments on the text:

"56709 Marduk-[…] 12/–/1 Dated at Borsippa. CT 55, 92 (not CT 56, 356).

The tablet is probably early Neo-Babylonian."

Note the word "probably" and the words "early Neo-Babylonian." This is a suggestion. Furthermore, scholars often use the term "Neo-Babylonian" to describe a more extended period than 625-539 BCE. *The Assyrian Dictionary*, for example, starts the period at about 1150 BCE and ends it in the 4th century BCE. (see GTR[4], Ch. 3, ftn. 1) Maybe this is how Walker uses the term here. The names of about a dozen Babylonian kings between ca. 1150 and 625 BCE begin with Marduk-, including Marduk-apla-iddina II (the Biblical Merodach-Baladan, Isa. 39:1, who ruled in Babylon twice, 721-710 and 703 BCE), and Marduk-zakir-shumi II (703). Thus, as the royal name is only partially legible and we don't know exactly to which period the tablet belongs, it is useless for chronological purposes.

The examples above show how important it is to have the original tablets collated before using seemingly odd dates or royal names found in published translations to support chronological revisions. They also show that such readings should be done by experienced scholars who are linguistically competent.

Chapter IV - "Old chronological accounts of the New Babylonian kings"

Chapter 4 consists of two parts. In the first part, pp. 66-75, which I will call part A, Furuli reviews some of the ancient secondary and tertiary sources that contain information about Neo-Babylonian kings and their reigns. In the second part, pp. 75-92, which I will call part B, he discusses six of the Biblical passages that mention a period of 70 years, claiming that they all refer to the same period—namely, a period of complete desolation of Judah and Jerusalem during the Jewish exile in Babylonia. This accords with the view of the Watchtower Society.

Secondary and tertiary sources

Furuli's presentation of the secondary and tertiary sources for the Neo-Babylonian chronology seems to be based mainly on the surveys of R. P. Dougherty in *Nabonidus and Belshazzar* (New Haven: Yale University Press, 1929, pp. 7-10) and Ronald. H. Sack in *Neriglissar—King of Babylon* (Neukirchen–Vluyn: Neukirchener Verlag, 1994, pp. 1-22). Most of the ancient authors that Furuli mentions lived hundreds of years after the Neo-Babylonian era, and their writings, which are preserved only in very late copies, often give distorted royal names and regnal years. Most of these sources, therefore, are useless for chronological purposes. (See GTR[4], Ch. 3, A). This can be seen in Furuli's table on page 74, in which he lists the concordant chronology for the Neo-Babylonian era given by Berossus (3rd century BCE) and Ptolemy's Royal Canon, together with the conflicting figures of Polyhistor (1st century BCE), Josephus (1st century CE), the Talmud (5th century CE), Syncellus (c. 800 CE), and, strangely, a totally corrupt kinglist from 1498 CE. Putting such distorted sources in the same table with Berossus and the Ptolemaic Canon—the two most reliable chronological sources for the Neo-Babylonian era next to the cuneiform documents themselves—suggests that the sources are equally unreliable and should not be trusted. That this is the purpose of the table is obvious from Furuli's comments on its conflicting figures:

> "The spread of numbers in the table shows that different chronologies regarding the New Babylonian kings *existed from old times,*" and "that *there were many different traditions* describing the New Babylonian chronology." (pp. 74, 75; emphasis added)

But this is not really what Furuli's table shows. Rather, it demonstrates to what extent figures can change through time and can be distorted by being quoted and copied time and again by various authors and copyists over a period of nearly 2000 years.

Furuli starts by stating that "the modern model of the New Babylonian and Persian chronology was not constructed on the basis of Babylonian sources, but rather on the basis of secondary or tertiary sources from other places." (p. 66) But this statement is a distortion because it suggests that the new foundation of chronology is the same as the old one. Furuli should have added that, in the latter half of the 19th century, the thousands of Babylonian cuneiform documents found in Mesopotamia that became available to scholars enabled them to construct a new foundation for Neo-Babylonian chronology directly on *primary* sources. Furuli has committed the fallacy known as "suppressed evidence" because his argument fails to consider relevant facts.

Berossus on the Neo-Babylonian reigns

Berossus' Neo-Babylonian chronology, says Sack, "most closely corresponds to that of the cuneiform documents." (Sack, *op. cit.,* p. 7) Furuli quotes this statement on page 67, but on the next page he mentions some of the mythological material and errors in Berossus' discussion of earlier Babylonian periods. The obvious purpose of this is to call into question Berossus' statements about Neo-Babylonian chronology. This is a form of *ad hominem* argument called "poisoning the well," in which someone presents

unfavorable information (true or false) about an opponent to suggest that any claim he makes is probably false. In other words, it is an attempt to bias the audience.

The only difference between Berossus' writings and contemporary Neo-Babylonian cuneiform sources is that Berossus assigns Labashi-Marduk a reign of nine months instead of two or three. Referring to this difference, Furuli quotes Sack's statement that "it is hardly likely (in view of his overall accuracy) that Berossus could have been incorrect in his figures for the reign of this latter monarch." Sack does not mean that Berossus' figure of nine months is correct but that, in view of Berossus' overall accuracy, his original figure for Labashi-Marduk must have been correct. He holds that the figure nine is most likely a scribal error arising during manuscript transmission. He concurs with the explanation of Parker and Dubberstein that the Greek letter *theta* (used for number 9) is most likely a mistake for an original letter *beta* (used for number 2). These two letters are rather similar and could easily be confused in ancient handwritten manuscripts. Sack states:

> "This position seems all the more sensible since the earliest text from the reign of Nabonidus (May 25, 556 BC) is clearly dated nearly a full month prior to the latest document bearing the name of Labashi-Marduk (June 20, 556 BC)." (R. H. Sack, *op. cit.,* 1994, p. 7)

Furuli fails to inform the reader of Sack's clarifications.

In a further attempt to undermine confidence in Berossus' information about the Neo-Babylonian reigns, Furuli quotes Berossus' English translator Stanley Mayer Burstein, who points out that "the *Babyloniaca* contains a number of errors of simple fact of which, certainly, the most flagrant is the statement that Nabopolassar ruled Egypt." (p. 67) But is this error really that flagrant? Berossus does not say that Nabopolassar *conquered* Egypt after Necho's defeat at Harran; instead he describes the Pharaoh as a rebellious satrap "who had been posted to Egypt, Coele-Syria, and Phoenicia." Posted [or placed, *tetagménos*] how?

Assyria controlled Egypt in the 7th century BCE, and Ashurbanipal installed Psammetichus I (664-610 BCE) as a vassal ruler in Memphis. Under Psammetichus' long rule, Egypt gradually gained independence and finally became an ally of Assyria against Babylon. After the Babylonians finally crushed the Assyrian empire in 609 BCE (despite Egypt's assistance), the Babylonians regarded former Assyrian territories as their inheritance, even though some territories immediately started to fight for independence. From the Babylonian point of view, then, the defeated Pharaoh Necho would be regarded as a rebellious satrap because, on retreating from Harran in 609 BCE, Necho appropriated the Hattu area (Syria-Palestine) in the west. The Jewish historian Dr. Menahem Stern gives the following comments about Berossus' statement:

> "From the point of view of those who regarded the neo-Babylonian empire as a continuation of the Assyrian, the conquest of Coele-Syria and Phoenicia by the Egyptian ruler might be interpreted as the rape of Babylonian territory." (M. Stern, *Greek and Latin Authors on Jews and Judaism*, Vol. I, Jerusalem: Jerusalem Academic Press, 1974, p. 59)

Flavius Josephus' conflicting statements

Furuli's discussion of Flavius Josephus' information about the Neo-Babylonian chronology is not reliable because it is partially based on an obsolete text of Josephus' works. He starts by quoting Josephus' distorted figures for the Neo-Babylonian reigns at *Antiquities* X,xi,1-2:

> "Nabopolassar 29 years, Nebuchadnezzar 43 years, Amel-Marduk 18 years, Neriglissar 40 years." (p. 69)

Furuli got these figures from William Whiston's antiquated translation of 1737, which was based on a text that is no longer accepted as the best textual witness. Had he consulted a modern translation of Josephus' *Antiquities*, he would have discovered that Nabopolassar, at least, is correctly given 21—not 29—years. (See, for example, Ralph Marcus' translation in the *Loeb Classical Library*.)

Furuli believes that Josephus mentions the wrong figure elsewhere. Still following Whiston's obsolete translation, he states in footnote 90 on page 69:

> "In *Against Apion*, sect. 17 [error for I,19], Nabopolassar is ascribed 29 years, but this is a quote from Berossus. Josephus does not mention Nabopolassar and the length of his reign elsewhere."

This statement, too, is wrong. *Against Apion* I,19, like *Antiquities* X,xi,1, assigns Nabopolassar 21 years, according to all modern textual editions of *Against Apion*.*

* *Excursion*: The best textual editions of Josephus' *Against Apion* are those of Benedictus Niese in *Flavii Iosephi Opera*, Vol. V (Berlin: Weidmann, 1889), Samuel Adrianus Naber in *Flavii Iosephi Opera Omnia*, Vol. VI (Leipzig: B. G. Teubner, 1896), H. St. J. Thackeray in *Josephus* (= Vol. 38:1 in the Loeb Classical Library, London: William Heinemann, and New York: G. P. Putnamn's Sons, 1926), and Théodore Reinach & Léon Blum, *Flavius Josèphe Contre Apion* (Paris: Société d'Èdition "Les Belles Lettres," 1930). William Whiston's translation was based on manuscripts that go back to one from the 12th century preserved in Florenz, *Codex Laurentianus plut. lxix 22*, usually referred to as L. Although this is the oldest preserved Greek manuscript of *Against Apion*, the best textual witness of Josephus' excerpts from Berossus in I,19 is Eusebius' quotations from Josephus' *Against Apion* in his *Preparation for the Gospel*, Book IX, Chapter XL, and also in the Armenian version of his *Chronicle*, 24,29 and 25,5. Both works give Nabopolassar 21 years. This figure is further supported by the Latin translation ("Lat.") of *Against Apion* made in the 6th century. (C. Boysen, *Flavii Iosephi Opera ex Versione Latina Antiqua* VI:II [= Vol. XXXVII in the Vienna *Corpus Scriptorum Ecclesiasticorum Latinorum*], 1898, p. 30. See also the comments on the textual witnesses by Alfred von Gutschmid in his "Vorlesungen über Josephus' Bücher," published in *Kleine Schriften* [ed. by Franz Rühl], Band 4, Leipzig, 1893, pp. 500, 501). Josephus' *Antiquities* X,xi,1 clearly gives Nabopolassar a reign of 21 years. The figure 29 given in Codex Laurentianus (L) from the 12th century (on which all later manuscripts are based) is, therefore, demonstrably a late distortion that is corrected in all modern textual editions of *Against Apion* and *Antiquities*. (See also the comments by Thackeray, *op. cit.*, pp. xviii, xix.)

At the end of page 69, Furuli quotes two widely separated sections from *Against Apion*. The first is taken from *Against Apion* I,19 (§§ 131,132), in which Josephus is referred to as saying that, according to Berossus,

> " [Nabopolassar] sent his son Nabuchodonosor with a large army to Egypt and to our country, on hearing that these people had revolted, and how he defeated them all, burnt the temple at Jerusalem, dislodged and transported our entire population to Babylon, with the result that the city lay desolate for seventy years until the time of Cyrus, king of Persia."

The remarkable thing about this statement is that it places the burning of the temple in the reign of Nabopolassar. But it actually took place 18 years later during the 18th year of his son and successor Nebuchadnezzar. The result is that Josephus, who here regards the 70 years as a period of desolation, starts the period in the last year of Nabopolassar (i.e., in 605 BCE). Furuli is quoting from Thackeray's translation in the *Loeb Classical Library* and, in a footnote at the bottom of the page, quotes Thackeray: "The burning of the temple, not mentioned in the extract which follows, is presumably interpolated by Josephus, and erroneously placed in the reign of Nabopolassar." Clearly, Josephus' application of the 70 years in this passage is based on a serious distortion of his sources. He seems to have confused events concerning Jerusalem in the last year of Nabopolassar's reign with events in the 18th year of Nebuchadnezzar's reign.

Furuli's next quotation, which he places directly after the first, is taken from *Against Apion* I,21 (§ 154), and begins:

> "This statement is both correct and in accordance with our books."

This might give a reader the impression that Josephus is still speaking of the 70-year-long desolate state of Jerusalem in Furuli's preceding quotation. But, as stated above, the two quotations are from widely separated sections. Josephus is referring to his lengthy quotation from Berossus in the immediately preceding section (I,20, §§ 146-153), in which Berossus gives the length of all the Neo-Babylonian kings from Nebuchadnezzar to Nabonidus: Nebuchadnezzar 43 years, Awel-Marduk 2 years, Neriglissar 4 years, Labashi-Marduk 9 months, and Nabonidus 17 years. It is this chronology Josephus refers to when he immediately goes on to say that it "is both correct and in accordance with our books." (*Against Apion* I,21, § 154) He then explains *why* it is correct:

> "For in the latter [the Scriptures] it is recorded that Nabuchodonosor in the eighteenth year of his reign devastated our temple, that for fifty years it ceased to exist, that in the second year of the reign of Cyrus the foundations were laid, and lastly that in the second year of the reign of Darius it was completed."

According to Berossus' figures, there were ca. 49 years from Nebuchadnezzar's 18th year until the end of Nabonidus' reign. Because the foundation of the temple was laid in the 2nd year of Cyrus (Ezra 3:8), Josephus' statement that the temple had been desolate for "fifty years" is in agreement with Berossus' chronology. (For the textual evidence supporting the figure 50 in *Against Apion*, see GTR[4], Ch. 7, A-3, ftn. 30.)

It is obvious that Josephus, in his works, repeatedly presents confusing and erroneous statements about the Neo-Babylonian reigns and conflicting explanations of the period of Jerusalem's desolation. It is only in his latest discussion, in which he quotes Berossus' figures, that his statements can be shown to roughly agree with reliable historical sources.

The chronology of Ptolemy's Canon—centuries older than Ptolemy

How important are the writings of Claudius Ptolemy (2nd century CE) for the chronology established for the Neo-Babylonian era? Furuli assigns them a decisive role:

> "One of the most important sources for the present New Babylonian chronology is *Claudius Ptolemy* (2nd century C.E.). As one author expressed it: 'The data from the Almagest provide the backbone for all modern chronology of antiquity'." (p. 70)

The author quoted is Professor Otto Neugebauer, who until his death in 1990 was a leading authority on the astronomical cuneiform tablets. What did he mean? Did he mean that the ancient astronomical observations that Claudius Ptolemy presented in *Almagest* still are the principal or perhaps even the sole basis for the absolute chronology scholars have established for the Neo-Babylonian and Persian periods? As will be demonstrated below, definitely not.

Recurring themes in Furuli's book are (1) that the Neo-Babylonian and Persian chronology builds on the writings of Claudius Ptolemy, (2) that Claudius Ptolemy was a fraud who falsified the ancient observations he used, and (3) that, therefore, the chronology established for those ancient periods is false. As early as page 13, Furuli claims:

> "The modern view of the chronology of the old world builds on the writings of Claudius Ptolemy. Twenty-five years ago the geophysicist R. R. Newton argued that Ptolemy was a fraud because he claimed he made observations when instead he made calculations backwards in time."

But Furuli's thesis is a straw man, an argument without substance. No informed scholar today holds that the writings of Claudius Ptolemy are now the basis of the chronology established for the Ancient Near East. True, Parker and Dubberstein stated half a century ago that they had used the Ptolemaic Canon and some other classical sources as a general basis for their Babylonian chronology. But they went on to explain that they checked, confirmed, and improved this chronology by using Babylonian cuneiform texts such as chronicles, kinglists, economic texts, and astronomical tablets. (PD, 1956, p. 10)

Furthermore, Claudius Ptolemy did not originally create the Ptolemaic Canon—he merely *reproduced* an existing list of kings. As Professor Neugebauer (the author quoted by Furuli) once pointed out, the common name of the kinglist, "Ptolemy's Canon," is *a misnomer*. This has been known for a long time. F. X. Kugler and Eduard Meyer, for example, pointed out long ago that the list had been in use for centuries before Ptolemy. (For additional details and documentation about this, see GTR[4], Ch. 3, A-2.)

Strangely, but apparently unknowingly, Furuli accepts this, in contradiction to his strawman arguments. In the Introduction, he notes that the Ptolemaic scheme "fits perfectly with the theoretical eclipse scheme of Saros cycles and intercalary months" (pp. 13, 14), that is, the chronology of the cuneiform tablets from the Seleucid era (312-64 BCE) that list dates at 18-year intervals for earlier periods. In a later discussion of a group of such Saros texts, Furuli points out (p. 97) that the group of tablets he refers to gives an unbroken series of dates at 18-year intervals from year 31 of Darius I (491 BCE) down into the Seleucid era. He notes that the chronology of these tablets, if correct, would rule out his Oslo Chronology (with its Darius/Xerxes co-regency and its 51-year reign of Artaxerxes I). The chronology of the 18-year texts, Furuli admits, is the same as that of Ptolemy's Canon:

> "It is quite clear that Ptolemy did not invent his chronology of kings, but that he built on an already accepted chronology. This chronology was evidently the one the scribe(s) of the Saros tablets used." (p. 98)

The question, then, is: Because the chronology of Ptolemy's Canon for the Neo-Babylonian and Persian eras existed hundreds of years before Claudius Ptolemy, how can Furuli claim that "the modern view of the chronology of the old world builds on the writings of Claudius Ptolemy"? This claim is not true today, and Furuli knows it. Obviously, Ptolemy inherited his chronology from earlier generations of scholars, although he might have added to it by updating it to his own time, as scholars had done before him and as others continued to do after him. (GTR[4], p. 94, note 12 with reference) Of course, this fact makes Furuli's attempt to bias his readers against Ptolemy's Canon irrelevant to the the question of chronology.

When Furuli speaks of "the writings of Claudius Ptolemy" as the basis of the chronology of the old world, he reveals a remarkable ignorance of the contents of these writings. Of Ptolemy's greatest and best known work, for example, Furuli says,

> "his work *Almagest* (*Ptolemy's canon*) has tables showing Assyrian, Babylonian, Persian and Greek kings together with the years of their reigns." (p. 70)

Almagest contains no such things. Strangely, Furuli seems to believe that *Almagest* is identical to *Ptolemy's Canon*. In *Almagest*, a work originally published in 13 volumes, Ptolemy summed up all the astronomical and mathematical knowledge of his time. How Furuli can confuse *Almagest* with Ptolemy's Canon, a chronological table covering about a page (GTR[4], Ch. 3, A-2), is puzzling.

True, the dates of events and ancient observations found in *Almagest* agree with the chronology of the Canon and, like the Canon, it dates events from the beginning of the so-called "Nabonassar Era" (747 BCE). *But Almagest never contained the Ptolemaic Canon with its chronological tables.* This kinglist was included in another work by Claudius Ptolemy known as the *Handy Tables.*

Furuli discusses at length (pp. 70-73) Professor Robert R. Newton's claim that Claudius Ptolemy was a fraud, concluding that this is a problem because "researchers since the Middle ages … have viewed Ptolemy's historical and

chronological statements as truth and nothing but the truth. This is the reason why Ptolemy's statements are the very backbone of the modern New Babylonian chronology." (p. 73) But Furuli admits that the chronology of Ptolemy's Canon existed hundreds of years before Ptolemy, so how can accusations against Ptolemy be a problem? *Whether he was a fraud or not is irrelevant to the evaluation of the reliability of the Ptolemaic Canon,* which also, and more correctly, is called the Royal Canon. (See GTR[4], Ch. 3, A-2, ftn. 21.)

Ptolemy's Canon—the foundation of ancient chronology?

So what about Neugebauer's statement that "the data from the Almagest provide the backbone for all modern chronology of antiquity?" The answer is that Furuli quotes it out of context. It appears in Neugebauer's work, *A History of Ancient Mathematical Astronomy*, Part Three (Berlin/Heidelberg,/New York: Springer-Verlag, 1975, p. 1071), in a section in which Neugebauer describes "The Foundations of Historical Chronology." In this section, he uses the word "modern" in the broader sense (i.e., the period since the breakthrough of modern astronomy in the 16th century). In the very next sentence, Neugebauer mentions the "modern scholars" who he says used Ptolemy's dates as a basis for their chronology: Copernicus (1473-1543), Scaliger (1540-1609), Kepler (1571-1630), and Newton (1643-1727).

Neugebauer's statement, then, refers to the situation that has prevailed during the past 400 years. But he further explains that, more recently, securely established chronological data of ancient observations have been obtained from the "great wealth of observational records assembled in Babylonia during the last three or four centuries B.C." These data have enabled scholars to check the Canon and confirm its reliability. (Neugebauer, pp. 1072, 1073)

Some years earlier, in a review of A. J. Sachs (ed.), *Late Babylonian Astronomical and Related Texts* (LBAT) (1955), Neugebauer emphasized the importance of the Babylonian astronomical texts for the Mesopotamian chronology. Of their value for establishing the chronology of the Seleucid era, for example, he explained:

> "Since planetary and lunar data of such variety and abundance define the date of a text with absolute accuracy—lunar positions with respect to fixed stars do not even allow 24 hours of uncertainty which is otherwise involved in lunar dates—we have here records of Seleucid history which are far more reliable than any other historical source material at our disposal." (*Orientalistische Literaturzeitung*, Vol. 52, Berlin, 1957, p. 133)

A similar confirmation of the Ptolemaic chronology has been established for earlier periods. The editor of the above-mentioned work, Professor Abraham J. Sachs, who was a leading authority on the astronomical texts and also a close friend and colleague of Neugebauer, explains how the cuneiform sources have provided an independent confirmation of Ptolemy's kinglist back to its very beginning, thus establishing the absolute chronology of the Babylonian, Persian, and Seleucid eras. In the statement quoted below, Sachs speaks of Ptolemy's kinglist as "Theon's royal list" because it has traditionally been held that the mathematician Theon (4th century CE) included the kinglist in his revision of Ptolemy's *Handy Tablets*. This view has recently been questioned, so

"Theon's royal list" could be as much a misnomer as is "Ptolemy's Canon." (Cf. Dr. Leo Depuydt in the *Journal of Cuneiform Studies*, Vol. 47, 1995, p. 104) Apart from this detail, Sachs makes the following comparison between the kinglist and the cuneiform sources:

> "The absolute chronology of the Babylonian first group of kings is easy to establish because, as has been mentioned, Ptolemy quotes the report of an eclipse in the time of king Mardokempados. Even more important, this absolute chronology has been independently confirmed by cuneiform texts from Babylon which contain astronomical observations. These number more than 1000 pieces of day-to-day astronomical observations of positions and phases of the Moon, Mercury, Venus, Mars, Jupiter and Saturn, beginning around 650 B.C. and continuing, in increasingly dense numbers, into the first century before the beginning of our era. *Thanks to these astronomical diaries, numerous overlaps with the royal list in Theon's Handy Tables have been established, always in agreement.* In other cases, the lengths of the reigns of individual kings in Theon's royal list can be confirmed by the careful study of the dates given in contemporaneous economic and administrative texts found in Babylonia; this is possible because for parts of the period covered by the royal list, we have so many of these texts that they average out to one every few days. In this way – namely, by using Theon's royal list, Babylonian astronomical diaries, and Babylonian dated tablets—*one is able to establish with confidence the absolute chronology back to the middle of the eighth century B.C.*, i.e. the reign of king Nabonassar of Babylon." (A. J. Sachs, "Absolute dating from Mesopotamian records," *Philosophical Transactions of the Royal Society of London*, Ser. A, Vol. 26, 1971, p. 20; emphasis added)

As Professor Sachs points out in this statement, the Royal Canon has been gradually replaced in recent times as the foundation of ancient chronology by the many native sources from Babylonia, in particular by the great number of astronomical cuneiform documents, which provide "numerous overlaps" with the Royal Canon, "always in agreement," thereby replacing it at these many points. The earlier role of the Royal Canon as the foundation of ancient chronology has dwindled to a fraction of the period it covers. At some points, it is still needed as a trusted complement because of its proven reliability. Depuydt, a renowned Egyptologist and specialist on ancient chronology who has been examining the history and reliability of the Royal Canon for a long time, aptly describes the shifting foundation of the chronology of antiquity:

> "To the extant that the Canon's veracity is proven as the foundation of first millennium B.C.E. chronology, to that extent the Canon will also become superfluous as a foundation. And even more remarkably, to the extent that its veracity is not proven, for those parts it remains fundamental to first millennium B.C.E. chronology." (Leo Depuydt, "The Shifting Foundation of Ancient Chronology," forthcoming in *Acts of European Association of Archaeologists, Meeting VIII*)

It is a remarkable fact that Ptolemy's kinglist has never been shown to be wrong. Depuydt emphasizes this in the article quoted above:

> "Is there any chance that the Canon is false? For four centuries now, the Canon has been put through countless contacts with countless individual sources. To my knowledge, no one has ever found any serious reason to suspect that the Canon is not true. A kind of common sense about the Canon's veracity has therefore grown over the centuries. This common sense guarantees, in my opinion, that the Canon will remain fundamental to ancient chronology."

Furuli's "summary" of the secondary and tertiary sources

On page 92, Furuli gives a summary of the secondary and tertiary sources he has presented:

> "In opposition to the Bible, Berossus, Polyhistor, Ptolemy and Syncellus II make room for only about 50 years of exile with the country laying desolate, while Josephus, the Talmud, Syncellus I, and Antiquitatum all agree on 70 years."

This is a strange summary. True, the chronologies of Berossus and Ptolemy both indicate that Jerusalem lay desolate for 48 years, whereas the figures of Syncellus II indicate 50 years. But the figures of Polyhistor indicate a desolation period of 58 years. And the claim that "Josephus, the Talmud, Syncellus I, and *Antiquitatum* all agree on 70 years" is almost totally wrong:

(1) Josephus' figures in *Antiquities*. X.xi.1-2 imply that Jerusalem lay desolate for 100 years. True, at some other places Josephus assigns 70 years to the period, but in one of them, as we saw, he dates the desolation of Jerusalem to the 21st year of Nabopolassar. And, in his final statement about the period, he says that the desolation lasted for 50 years.

(2) The Talmud does not support Furuli. The figures he quotes from it—45 regnal years for Nebuchadnezzar, 23 for Amel-Marduk, and no figures for the remaining kings—do not indicate any 70-year period. The chronological treatise in the Talmud known as *Seder Olam*, in fact, states that Judah lay desolate for only 52 years. This treatise is one of the oldest parts of the Talmud, supposedly written by Rabbi Yose in the 3rd century CE. (C. Milikowsky, *Seder Olam*, Vol. 2, University Microfilm International, Ann Arbor, Michigan, 1981, pp. 535, 543)

(3) The figures that Furuli quotes from the late kinglist *Antiquitatum* assign 30 years of reign to Nebuchadnezzar, 3 to Amel-Marduk, 6 to Nergal-shar-ussur, and none to Labashi-Marduk and Nabonidus. These figures do not point to any 70-year period, either.

(4) The figures of Syncellus I indicate a 67-year period of desolation.

Furuli's statement that these four sources "all agree on 70 years," then, is demonstrably false.

The Biblical 70 years

Furuli begins this section by stating that "the one who connects a particular number with the exile, is the prophet Jeremiah." (p. 75) Earlier, on page 15, Furuli claimed that "some of the texts unambiguously say that Jerusalem was a desolate waste during these 70 years." And on page 17 he stated that "the Bible … says unambiguously that Jerusalem and the land of Judah *were a desolate waste without inhabitants* for a full 70 years."

But this is not what Jeremiah says. The prophet directly applies the 70 years to *the length of Babylon's dominion over the nations*, not to the length of the desolation of Jerusalem and the Jewish exile. This is in remarkable agreement with the established facts of history. Babylon's supremacy in the Near East began with the final shattering of Assyrian power in 610/609 BCE and ended with the fall of Babylon 70 years later in 539 BCE, exactly as Jeremiah had stated:

> "these nations will serve the king of Babylon seventy years."—Jeremiah 25:11 (NIV)

> "When seventy years are completed for Babylon, I will come back to you and fulfill my gracious promise to bring you back to this place."—Jeremiah 29:10 (NIV)

These texts clearly apply the 70-year period to Babylon, not to Jerusalem. Furuli even admits this, stating that "the text does not say explicitly that it refers to an exile for the Jewish nation. If we make a grammatical analysis in 25:11, we find that 'these nations' is the grammatical subject, and in 29:10, 'Babylon' is the patient, that is, the nation that should experience the period of 70 years." (p. 75)

Attempting to evade this undesirable conclusion, Furuli turns to the 70-year passages at Daniel 9:2 and 2 Chronicles 36:20, 21, stating that "the writers of Daniel and 2 Chronicles understood the words of Jeremiah to imply a 70-year exile for the Jewish nation." After quoting the *New International Version* (NIV) for these two texts, he claims:

> "As the analysis below shows, the words of Daniel and the Chronicler are unambiguous. They show definitely that Daniel and the Chronicler understood Jeremiah to prophesy about a 70-year period for the Jewish people when the land was desolate." (p. 76)

Because Daniel and the Chronicler lived after the end of the exile, they knew its real length and "could interpret Jeremiah's words correctly," Furuli argues. Then he states:

> "A fundamental principle of interpretation which is universally accepted, is to interpret an ambiguous passage in the light of an unambiguous passage. In our case we have two unambiguous passages, namely, Daniel 9:2 and 2 Chronicles 36:21, which apply the 70 years of the desolate condition to Jerusalem. To start with the seemingly ambiguous words of Jeremiah 25:10 is to turn the matter upside down, because the mentioned principle is abandoned." (p. 76)

The principle of interpretation Furuli refers to is correct. But does Furuli correctly use it? Is it really true that the passages at Daniel 9:2 and 2 Chronicles 36:21 are *unambiguous*, whereas the statements of Jeremiah are *ambiguous*? A critical examination of Furuli's linguistic analyses of the passages reveals that the opposite is true. To start with the brief references to Jeremiah in Daniel and 2 Chronicles, as Furuli does, is really to "turn the matter upside down" and abandon "the mentioned principle." This will be shown in the following discussion.

The 70 years at Daniel 9:2

In his discussion of Daniel 9:2, Furuli first presents a transliteration of the text, accompanied by a word-for-word translation. It is followed by a fluent translation, which turns out to be the Watchtower Society's *New World Translation* (NWT, Vol. V, 1960; the rendering is the same in the revised 1984 edition). According to this version, Daniel "discerned by the books the number of years concerning which the word of Jehovah had occurred to Jeremiah the prophet, for fulfilling the devastations of Jerusalem, [namely,] 70 years."

This rendering might have been changed in a new, not-yet-published, revised edition of the NWT. In the revised Swedish edition of the NWT published in 2003, the text has been changed to say that Daniel "discerned in the books the number of years which according to the word of Jehovah, that had come to Jeremiah the prophet, would be completed concerning the desolate state of Jerusalem, namely, seventy years."

Note in particular that the phrase "for fulfilling the devastations of Jerusalem" has been changed to read "be completed concerning the desolate state of Jerusalem." This brings the rendering of the text in close agreement with that of the Danish linguist quoted below.

Although Furuli repeatedly claims that Daniel unambiguously states that Jerusalem would be desolate for 70 years, he feels the statement needs to be explained. He says:

> "A paraphrase of the central part of Daniel 9:2 could be: 'God gave Jerusalem as a devastated city 70 years to fill.' There is no ambiguity in the Hebrew words." (p. 77)

But if Daniel's statement is as clear and unambiguous as Furuli claims, why does he feel it needs an exposition in the form of a paraphrase? Furuli's paraphrase, in fact, gives the text a meaning that neither follows from his grammatical analysis nor is obvious in the translation he quoted.

The fact is that neither Jeremiah nor Daniel say that God "gave Jerusalem … 70 years to fill," nor does Daniel say that "the desolation of Jerusalem *would last* 70 years," as NIV renders the clause. Both examples are paraphrases (cf. GTR[4], Ch. 5, C-3) aimed at giving the text a specific interpretation. Another paraphrase, based on a careful grammatical analysis of the text, points to a different understanding. The well-known Hebrew scholar and Bible commentator Dr. Edward J. Young translates the last part of the passage as "to complete with respect to the desolations of Jerusalem seventy years," adding:

> "The thought may be paraphrased: 'With respect to the desolation of Jerusalem, 70 years must be completed'." (E. J. Young, *The Prophecy of Daniel*, Grand Rapids: Wm. B. Eerdmans Publ. Co., 1949, pp. 183, 184)

In view of Daniel's reference to and dependence on the statements of Jeremiah (25:12; 29:10-12), the text could as well be understood to mean that, with respect to the desolate state of Jerusalem, the predicted 70 years of Babylonian dominion must be completed before the exiles could return to Jerusalem to bring its desolation to an end. The grammar clearly allows this meaning. There is no reason to believe that Daniel *reinterpreted* the clear statements of Jeremiah, as is required by Furuli's interpretation of the text.

It is obvious that Daniel links the 70 years to the desolate state of Jerusalem. The whole discussion in GTR[4], Ch. 5, C is based on this. But the fact that Daniel *links* or *ties* the one period to the other is not the same as *equating* or *identifying* the one with the other. To *link* and to *equate* are two different things.

In GTR[4], Ch. 5, C-3, ftn. 33, the following literal translation of Daniel 9:2 is quoted, based on a detailed grammatical analysis of the text by a Danish colleague of mine, who is a professional linguistic scholar with an intimate knowledge of Biblical Hebrew:

> "In his [Darius'] first regnal year, I, Daniel, ascertained, in the writings, that the number of years, which according to the word of JHWH to Jeremiah the prophet would be completely fulfilled, with respect to the desolate state of Jerusalem, were seventy years."

The linguist ended his analysis of Daniel's statement by making the following precise distinction:

> "This statement in no way proves that Jerusalem itself would lay desolate for 70 years, only that this time period would be fulfilled before the city could be freed and rebuilt."

Other knowledgeable and careful Hebraists have made the same distinction. In a lengthy comment about Daniel 9:2, Professor Carl F. Keil pointed to the dependence of the wording of Daniel 9:2 on Jeremiah 25:9-12 and explained:

> "With *lᵉmal'ot (to fulfil)* the contents of the words of Jehovah, as given by Jeremiah, are introduced. *lᵉchorbot* does not stand for the accusative: to cause to be complete the desolation of Jerusalem (Hitzig), but *lᵉ* signifies in respect of, with regard to. This expression does not lean on Jer. xxix. 10 (Kran.), but on Jer. xxv. 12 ('when seventy years are accomplished'). *charabôt*, properly, *desolated places*, ruins, here *a desolated condition. Jerusalem did not certainly lie in ruins for seventy years; the word is not thus to be interpreted, but is chosen partly with reference to the words of Jer. xxv. 9, 11.* Yet the desolation began with the first taking of Jerusalem, and the deportation of Daniel and his companions and a part of the sacred vessels of the temple, in the fourth year of Jehoiakim (606 [error for 605] B.C.).
>
> *Consequently, in the first year of the reign of Darius the Mede over the kingdom of the Chaldeans the seventy years prophesied of by Jeremiah were now full, the period of the desolation of Jerusalem determined by God was almost expired.*" (C. F. Keil, *Commentary on the Old Testament*, Vol. IX, pp. 321-322; emphasis added)

Keil, one of the greatest Hebrew scholars of the 19th century, regarded this as a fully possible understanding of the text and quite in harmony with the grammar of Daniel 9:2. The explanation presented in GTR[4] is, in fact, almost identical to Keil's.

Thus, Furuli's repeated claim that Daniel unambiguously states that Jerusalem was desolate for 70 years does not follow from his own grammatical analysis. Nor does it agree with the observations of careful Hebraists and linguistic scholars.

2 Chronicles 36:20, 21: Which event fulfilled the 70 years?

Furuli begins by presenting a transliteration of 2 Chronicles 36:21, accompanied by a word-for-word translation and followed by the NWT rendering of the text:

> "21 to fulfill Jehovah's words by the mouth of Jeremiah, until the land had paid off its sabbaths. All the days of lying desolate it kept sabbath, to fulfill seventy years."

Note that this verse starts with a subordinate clause and, more specifically, with a purpose clause: "to fulfill ...". What event would fulfill "Jehovah's words by the mouth of Jeremiah?" To know this it is necessary to examine the main or principal clause. But Furuli ignores the main clause, which is found in verse 20. This verse says:

> "20 Furthermore, he [Nebuchadnezzar] carried off those remaining from the sword captive to Babylon, and *they came to be servants to him and his sons until the royalty of Persia began to reign*;"

The verse reflects the prophecies of Jeremiah about the servitude. The writer of Chronicles clearly has the prediction at Jeremiah 27:7 in mind:

> "And all the nations shall serve him, and his son, and his grandson, until the time of his own land comes."

After the fall of Assyria in 610/609 BCE, all the nations in the Near East were destined to serve the Babylonian king, his son, and his grandson as vassals. As Jeremiah explains in the next verse (27:8), the nation that refused to serve the king of Babylon was to be destroyed. The Bible as well as secular history show that after the battle at Carchemish in 605 BCE Nebuchadnezzar subjugated the nations of the Hattu area (Syria-Palestine) and forced them to become tribute-paying vassals.

But the kings of Judah revolted and threw off the Babylonian yoke, which finally, two decades after the initial conquest, brought about the predicted destruction of their land and capital. The Jewish servitude, therefore, came to mean *less than 20 years of vassal service* interrupted by repeated rebellions. The rest of their servitude, about 49 years, had to be spent in exile in Babylonia.

In his allusion to Jeremiah 27:7, the Chronicler does not mention "all the nations" but focuses only on the Jewish remnant that had been brought captive to Babylon after the desolation of Jerusalem. Until when would they have to serve the king of Babylon? As Jeremiah had said, "until the time of his own

land comes," which the Chronicler, who wrote after the fulfillment, could make specific—"until the royalty of Persia began to reign"—that is, *until 539 BCE*. The Persian conquest of Babylon brought the 70 years of servitude to an end, in fulfillment of Jeremiah's prophecy, as the Chronicler goes on to point out in the next verse—the verse quoted and discussed by Furuli out of context:

> "21 to fulfill Jehovah's words by the mouth of Jeremiah, until the land had paid off its sabbaths. All the days of lying desolate it kept sabbath, to fulfill seventy years."

Which of "Jehovah's words by the mouth of Jeremiah" were fulfilled by the termination of the servitude through the Persian takeover in 539 BCE? It cannot have been the words in the middle of the verse—"until the land had paid off its sabbaths. All the days of lying desolate it kept sabbath"—because these statements are found nowhere in the book of Jeremiah. They are actually references to Leviticus 26:34, 35. If, for a moment, we disregard these interposed statements, the Chronicler's explanation of Jeremiah's 70-year prophecy becomes clear:

> "they came to be servants to him and his sons until the royalty of Persia began to reign; to fulfill (*lᵉmallôt*) Jehovah's words by the mouth of Jeremiah, … to fulfill (*lᵉmallôt*) seventy years."

The obvious meaning is that the cessation of the servitude under Babylon by the Persian takeover in 539 BCE fulfilled the 70-year prophecy of Jeremiah. The Chronicler does not reinterpret Jeremiah's statements to mean 70 years of desolation for Jerusalem, as Furuli claims. On the contrary, he sticks very closely to Jeremiah's description of the 70 years as a period of servitude under Babylon, and he ends this period with the fall of Babylon, exactly as Jeremiah had predicted at Jeremiah 25:12 and 27:7.

2 Chronicles 36:20, 21: What about the sabbath rest of the land?

Why, then, did the Chronicler insert the statements from Leviticus 26:34, 35 about the sabbath rest of the land? Evidently because they explained why the land of the Jews finally had been depopulated and left completely desolated. According to Leviticus 26, this would be the ultimate punishment for their impenitent transgressions of the law, including the statute about the sabbath rest of the land. Jehovah said he would "lay the land desolate" and let the Jews be scattered "among the nations." (Leviticus 26:32, 33) This would make it possible for the land to enjoy its sabbaths:

> "Then the land will enjoy its sabbaths all the days of the desolation, *while you are in your enemies' land*; then the land will rest and enjoy its sabbaths."—Leviticus 26:34, *NASB*.

The Chronicler's statement that the Jewish remnant in Babylon (in their "enemies' land") came to be servants to the kings of Babylon "until (*ad*) the royalty of Persia began to reign," then, also implied that they served these Babylonian kings "until (*ad*) the land had paid off its sabbaths. All the days of lying desolate it kept sabbath." (2 Chronicles 36:21) As noted above, the desolation of Judah and Jerusalem and the final deportation of "those

remaining from the sword captive to Babylon" (v. 20) occurred about two decades after the servitude of "all the nations" had begun. The desolated state of the land, therefore, did not last 70 years but somewhat less than 50 years.

Strictly speaking, the desolation of the land did not cease until the exiles had returned to Judah in the late summer or early autumn (Ezra 3:1) of (most likely) *538 BCE* (GTR[4], Ch. 3, note 2). So we must conclude that either the exiles in some way continued to serve the king of Babylon until 538 or that the sabbath rest of the land ended in 539 BCE.

The first option seems impossible to defend. How could the exiles have continued to serve the king of Babylon for another year after the fall of the empire and the dethronement of the king in 539 BCE? Is it possible, then, that the sabbath rest of the land ended in 539 BCE?

It is quite possible that the Chronicler did not regard the year of the return (538 BCE) as the last year of the sabbath rest of the land. It is important to observe that, according to the directions at Leviticus 25:4, 5, the land should have *complete* rest during a sabbatical year:

> "You shall not sow your field or prune your vineyard. You shall not reap the aftergrowth of your harvest or gather the grapes of your untrimmed vines."

The sabbatical years were reckoned on a Tishri-to-Tishri basis. (Leviticus 25:9) The Jewish remnant that returned in 538 BCE arrived late in the summer or early in the autumn, well before the month of Tishri (as is clearly indicated at Ezra 3:1), which began on September 16/17 that year (PD, p. 29). Because they needed food for the winter, it seems likely that they immediately started making preparations to obtain food. They could harvest olives and fruits such as grapes from untrimmed vines. Grapes were valuable food because they were dried as raisins and used as winter food. Thus, if it is correct that they harvested food upon their return (which seems likely), the last year of sabbath (complete) rest for the land cannot have been 538 but must have been the year that had ended immediately before Tishri 1 of 539 BCE. This could explain why the Chronicler ends the sabbath rest of the land and the servitude of the exiles at the same time (i.e., when the Persian kingdom came to power in the autumn of 539 BCE).

2 Chronicles 36:20, 21: The Hebrew preposition *ad*—while or until?

Furuli, of course, disagrees with the discussion above. His thesis is that the period of the desolation and sabbath rest of the land were identical to the 70-year period of Jeremiah. In his analysis, he is trying to force the Chronicler's statements to conform to this theory.

This seems to be the reason why he argues that the Hebrew preposition *ad* in the clause, "until (*ad*) the land had paid off its sabbaths" ... "is better rendered *while* than as *until*." (p. 79) This allows him to reconstruct the verse as two parallels that say:

"in order to fill the words spoken by Jeremiah, while the land kept sabbath.

in order to fill seventy years, it kept sabbath while it was desolate."

Furuli adds:

> "As a linguist I know by experience that language is ambiguous. But the words of Daniel 9:2 and 2 Chronicles 36:21 are remarkably clear and unambiguous."

It is difficult to see how this is true even of Furuli's retranslation and reconstruction of the verse. As stated earlier, his analysis of verse 21 ignores the contextual connection with verse 20, in which we find the same preposition *ad* used in the clause "until (*ad*) the royalty of Persia began to reign." Because both clauses with *ad* are aimed at explaining when the servitude ended, the translation of *ad* as "until" is the most natural in both verses. To render *ad* as "while" in verse 20, for example, would make it say that the Jewish remnant became servants of the king of Babylon "while the royalty of Persia began to reign," a statement that is not only historically false but nonsensical.

Most translations, therefore, render the preposition *ad* as "until" in both clauses. There are none, as far as I know, that render it "while" in the passage. The reason is not only that this is excluded by the context but also by the fact that *ad* seldom takes the meaning "while." (*The New Brown-Driver-Briggs-Gesenius Hebrew and English Lexicon*,1978, p. 725)

Furuli's attempt to assign the meaning "while" to *ad* is a case of the fallacies of argumentation known as "special pleading" and "assuming the conclusion." For his argument to work, he needs *ad* to mean "while;" otherwise his entire Oslo chronology falls apart.

Jeremiah 25:9-12: 70 years of servitude—for whom?

In his discussion of Jeremiah 25:9-12, Furuli focuses on verse 11, which says:

> "And all this land must become a devastated place, an object of astonishment, and *these nations will serve the king of Babylon seventy years*."—Jer. 25:11 (NIV)

As was pointed out earlier, Furuli starts his discussion of the 70-year prophecy by admitting that Jeremiah applies the 70 years to Babylon, not to Jerusalem. As he states on page 75:

> "If we make a grammatical analysis in 25:11, we find that 'these nations' is the grammatical subject, and in 29:10, 'Babylon' is the patient, that is, the nation that should experience the period of 70 years."

Having concluded (falsely, as has been shown above) that Daniel 9:2 and 2 Chronicles 36:21 unambiguously state that Judah and Jerusalem lay desolate for 70 years, Furuli realizes that the meaning of Jeremiah 25:11 has to be changed to be brought into agreement with his conclusion.

The clause "these nations will serve the king of Babylon seventy years" is very clear in Hebrew:

weâbdû haggôyîm hâêlleh et-melech bâbel šivîm šânâh

and-will-serve-they the-nations these king [of] Babel seventy year

As Furuli points out (p. 82), the particle *et* before *melech bâbel* ("king of Babel") is a marker indicating that *melech bâbel* is the object. The word order is typical in Hebrew: verb-subject-object. There are no grammatical problems with the clause. It simply and unambiguously says that "these nations will serve the king of Babel seventy years." Furuli, too, admits that "this is the most natural translation." (p. 84) How, then, can Furuli force it to say something else?

Furuli first claims that "the subject ('these nations') is vague and unspecified." Actually, it is not. It simply refers back to "all these nations round about" referred to in verse 9. Furuli goes on to state that the subject in the clause might not be "these nations" in verse 11 but "this land" (Judah) and "its inhabitants" in verse 9. Verse 11, therefore, really says that it is only the inhabitants of Judah, not "these nations," that will serve the king of Babylon 70 years. How, then, is the occurrence of "these nations" in the clause to be explained? Furuli suggests that they might be part of the object, the king of Babel, who "would be a specification of" these nations. The clause could then be translated:

"and they will serve these nations, the king of Babel, seventy years" (p. 84)

Furuli also suggests that the particle *et* might not here be used as an object marker but as a preposition with the meaning "with." Based on this explanation, the clause could even be translated:

> "and they will serve these nations *together with* the king of Babel seventy years" (p. 84)

These reconstructions are not supported by any Bible translations. Not only are they far-fetched, they are refuted by the wider context. The prediction that the nations surrounding Judah would serve the king of Babylon is repeated in Jeremiah 27:7 in a way that is impossible to misunderstand:

> "And all the nations must serve him and his son and his grandson until the time even of his own land comes."

The immediate context of the verse proves conclusively that "the nations" referred to include all the non-Jewish nations in the Near East. Furuli's linguistic acrobatics, therefore, are unnecessary, mistaken, and another case of special pleading.

Jeremiah 25:9-12: Is the Septuagint version to be preferred?

Furuli attempts to marshal support from the Septuagint version (LXX), stating that "we know that the Septuagint translators who worked with the book of Jeremiah in the third or second century B.C.E. used a different *Vorlage* than that of the Masoretic text [MT], perhaps a shortened form of the book." (Furuli, p. 84)

But this is not something "we know." It is a theory suggested by some scholars, but there is no consensus about it. It has become popular because it is supposedly supported by a very fragmentary piece of a Hebrew scroll found among the Dead Sea Scrolls (DSS), 4QJer^{b}. The fragment contains parts of Jeremiah 9:22-10:21; 43:3-9, and 50:4-6. It partially follows LXX only at Jeremiah 10 by omitting verses 6-8 and inserting verse 9 in the middle of verse 5. It also contains several MT readings and also some unique readings. For these reasons, it cannot be said that this fragment reflects the *Vorlage* of LXX—if there ever was such a thing. As argued by M. Margaliot ("Jeremiah X 1-16: a re-examination," *Vetus Testamentum*, Vol. XXX, Fasc. 3, 1980, pp. 295-308), there are strong reasons to believe that the LXX variations at chapter 10 are secondary and that MT here has the superior and authentic text.

Interestingly, the five fragments of Jeremiah found among the Dead Sea Scrolls together contain parts of 29 of the 52 chapters of the book. These mainly follow MT (with some deviations), and this is also true of the preserved parts of chapter 25 (verses 7-8, 15-17, and 24-26). (See David L. Washburn, *A Catalog of Biblical Passages in the Dead Sea Scrolls*, Atlanta: Society of Biblical Literature, 2002, pp. 128-133)

The LXX rendering of Jeremiah 25:11 makes the Jews servants among the nations for 70 years:

> "And all the land shall be a desolation; and *they shall serve among the nations* seventy years."

Strangely, the LXX leaves out all references to Babylon and King Nebuchadnezzar in Jeremiah 25:1-12. This creates a problem because when Jehoiakim had read and burned the scroll containing the prophecy a few months after it had been given, he asked Jeremiah, *also according to Jer-LXX:*

> "Why is it that you have written on it, saying: 'The *king of Babylon* will come without fail and will certainly bring this land to ruin and cause man and beast to cease from it?" (Jeremiah 36:29)

Evidently the original scroll contained references to the king of Babylon, which strongly indicates that Jer-MT rather than Jer-LXX represents the original text of Jeremiah 25:1-12.

For additional comments about the LXX version of Jeremiah, see GTR^{4}, Ch. 5, A, ftn. 8.

Jeremiah 29:10: The meaning of the 70 years for Babylon

Jeremiah 29:10 explicitly states that the 70 years refer to Babylon, not Jerusalem:

> "This is what the LORD says: 'When seventy years are completed *for Babylon* [*l*ᵉ*bâbel*] I will come to you and fulfill my gracious promise to bring you back to this place [i.e., to Jerusalem]." (NIV)

Furuli notes that most Bible translations render the preposition *le* as "to" or "for" and that only a very few (usually older) translations render it as "at" or "in." (Furuli, p. 85) Of the latter, he mentions six: NWT, KJV, Harkavy, Spurrell, Lamsa, and the Swedish Church Bible of 1917.

Alexander Harkavy's edition from 1939 contains the Hebrew text together with an English translation. Furuli does not seem to have noticed that Harkavy states in the preface that the English translation is the *Authorized Version*, that is, the KJV. George Lamsa's translation has been strongly criticized because of its heavy dependence on the KJV. Also in Jeremiah, chapter 29, he almost slavishly follows KJV. His "at Babylon," therefore, means nothing. I have not been able to check Helen Spurrell's translation. It was published in London in 1885, not 1985, as Furuli' Bibliography erroneously shows, so it is not a modern translation.

The Swedish Church Bible of 1917 has recently been "replaced" by two new translations, *Bibel-2000* and *Folkbibeln* (1998). Both have "for Babylon" at Jeremiah 29:10. In answer to my questions, the translators of both translations emphasized that *l*ᵉ*bâbel* at Jeremiah 29:10 means "for Babylon" not "at" or "in" Babylon. Remarkably, even the new revised Swedish edition of the NWT has changed the earlier "in Babylon" in the 1992 edition to "for Babylon" in the 2003 edition.

Because the rendering "for Babylon" contradicts the theory that the 70 years refer to the period of Jerusalem's desolation, Furuli needs to defend the notably infrequent rendering "at" or "in" Babylon. He even claims that the preposition "for" gives the 70 years "a fuzzy meaning:"

"If 'for' is chosen, the result is fuzziness, because the number 70 then looses all specific meaning. There is no particular event marking their beginning nor their end, and the focus is wrong as well, because it is on Babylon rather than on the Jews." (p. 86)

This is an incredible statement and another example of Furuli's special pleading. It is difficult to believe that Furuli is totally ignorant of the fact that both the beginning and the end of Babylon's supremacy in the Near East were marked by revolutionary events—the beginning by the final crushing of the Assyrian empire and the end by the fall of Babylon itself in 539 BCE. Surely he must know that, according to secular chronology, exactly 70 years passed between these two events. Modern authorities on the history of this period agree that the definite end of Assyria occurred in 610/609 BCE. In GTR[4], Ch. 5, G-2, for example, four leading scholars were quoted to this effect: viz. Professor John Bright and three leading Assyriologists, Donald J. Wiseman, M. A. Dandamaev, and Stefan Zawadski. It would be easy to multiply the number.

Another example is Professor Klas R.Veenhof, who comments about the end of Assyria on pages 275 and 276 of his book *Geschichte des Alten Orients bis zur Zeit Alexanders des Grossen* (Göttingen, 2001). He describes how the last king of Assyria, Assuruballit II, after the destruction of the capital Nineveh in 612 BCE, retreated to the provincial capital Harran, the last Assyrian stronghold, where he succeeded in holding out for another three years, supported by Egypt. Veenhof writes:

> "It was to no advantage that Egypt supported Assyria; the Babylonian and Median armies took the city in 610 B.C., and in the following year [609] they warded off their last defensive attempt. Therewith a great empire was dissolved." (Translated from German)

Realizing that the year 609 marks the natural starting point of the "seventy years for Babylon," Professor Jack Finegan writes on pages 177 and 178 in the revised edition of his well-known *Handbook of Biblical Chronology* (Peabody, Mass.: Hendrickson Publishers, 1998):

> "In Jeremiah 29:10 the promise of the Lord is to bring the people back 'when seventy years are completed for Babylon.' In the history of the ancient Orient the defeat in 609 B.C. of Ashur-uballit II, ruler in the western city of Haran of the last remnant of the Assyrian empire, by Nabopolassar of Babylon, marked the end of that empire and the rise to power of the Babylonian empire (§430). Then in 539 Cyrus the Persian marched in victory into Babylon (§329) and the seventy years of Babylon and the seventy years of Jewish captivity were 'completed' (709 [printing error for 609] - 539 = 70)."

Certainly, no one acquainted with Neo-Babylonian history can honestly claim that the 70 years "for Babylon" have a "fuzzy meaning" because no particular events mark the beginning and end of the period.

Jeremiah 29:10: The Septuagint and Vulgate versions

Furuli next points out that "the Septuagint has the dative form *babylôni*" but with "the most natural meaning being 'at Babylon'." The statement reveals a surprising ignorance of ancient Greek. As every Greek scholar will point out, the natural meaning of the dative form *babylôni* is "for Babylon." It is an exact, literal translation of the original Hebrew *l*ᵉ*bâbel*, which definitely means "for Babel" in this text, as will be discussed below. True, at Jeremiah 29:22 (LXX 36:22) the dative form *babylôni* is used in the local sense, "in Babel," but we may notice that it is preceded by the Greek preposition *en*, "in," to make this clear:

> "And from them a malediction will certainly be taken on the part of the entire body of exiles of Judah that is in Babylon (*en babylôni*)"

Furuli further refers to the rendering of the Latin Vulgate, *in Babylone*, which means, as he correctly explains, "in Babylon." This translation most probably influenced the KJV of 1611, which in turn has influenced several other earlier translations. The point is that all translations derived from or influenced by the Vulgate, such as the KJV, are not independent sources.

Jeremiah 29:10: The Hebrew preposition *l*ᵉ (*lamed*)

The preposition *l*ᵉ is the most common preposition in the Hebrew Old Testament. According to a recent count, it occurs 20,725 times, 1352 of which are found in the book of Jeremiah. (Ernst Jenni, *Die hebräischen Prepositionen. Band 3: Die Präposition Lamed*, Stuttgart, etc.: Verlag Kohlhammer, 2000, p. 17) What does it mean at Jeremiah 29:10? Since the first edition of my book on the Gentile times (GTR) was published in 1983, this question has been asked of dozens of qualified Hebraists around the world. I contacted some and so did some of my correspondents. Although some of the Hebraists explained that *l*ᵉ in a few expressions has a local sense ("in, at"), in most cases it does not, and they unanimously reject this meaning at Jeremiah 29:10. Some of them are quoted in GTR[4] (Ch. 5, B-2).

Furuli disagrees with their view. He believes that because *l*ᵉ is used in a local sense in some expressions at a few places it is likely used in this sense also in Jeremiah 29:10. He argues:

"Can it really be used in the local sense 'at'? It certainly can, and *The Dictionary of Classical Hebrew* lists about 30 examples of this meaning, one of which is Numbers 11:10, 'each man *at* **(***le***)** the entrance of his tent'. So, in each case when *le* is used, it is the context that must decide its meaning. For example, in Jeremiah 51:2 the phrase *lebâbel* means 'to Babylon', because the preceding verb is 'to send'. But *lirûshâlâm* [the letters *li* at the beginning of the word is a contraction of *le*+*yod*] in Jeremiah 3:17 in the clause, 'all the nations will gather *in Jerusalem*' has the local meaning '*in Jerusalem*', and the same is true with the phrase *lihûdâ* in Jeremiah 40:11 in the clause, 'the king of Babylon had left a remnant *in Judah*'." (p. 86)

Well and good, but do these examples allow *l*ᵉ*bâbel* at Jeremiah 29:10 to be translated "in" or "at Babylon"? Is this really a likely translation? Is it even a possible one? This question was sent to Professor Ernst Jenni in Basel, Switzerland, who is undoubtedly the leading authority today on Hebrew prepositions. So far, he has written three volumes on three of the Hebrew prepositions, *b*ᵉ (beth), *k*ᵉ (kaph), and *l*ᵉ (lamed). In *Die hebräischen Prepositionen. Band 3: Die Präposition Lamed* (Stuttgart, etc.: Verlag Kohlhammer, 2000), he devotes 350 pages to the examination of *l*ᵉ. His answer of October 1, 2003 was:

> "As I recently have received an inquiry from Germany concerning Jer. 29,10 (likewise in connection with a theory of Jehovah's Witnesses), I can answer you relatively quickly.
>
> My treatment of this passage is found in the *Lamed*-book p. 109 (heading 4363). The rendering in all modern commentaries and translations is 'for Babel' (Babel as world power, not city or land); this is clear from the language as well as also from the context.
>
> By the 'local meaning' a distinction is to be made between where? ('in, at') and where to? (local directional 'to, towards'). The basic meaning of *l* is 'with reference to', and with a following local specification it can be understood as local or local-directional *only in certain adverbial expressions* (e.g., Num. 11,10 [Clines DCH IV, 481b] 'at the entrance', cf. *Lamed* pp.

256, 260, heading 8151). At Jer. 51,2 *l* is a personal dative ('and send to Babel [as personified world power] winnowers, who will winnow it and empty its land' (*Lamed* pp. 84f., 94)). On Jer. 3,17 'to Jerusalem' (local terminative), everything necessary is in *Lamed* pp. 256, 270 and ZAH 1, 1988, 107-111.

On the translations: LXX has with *babylôni* unambiguously a dative ('for Babylon'). Only Vulgata has, to be sure, *in Babylone*, 'in Babylon', thus King James Version 'at Babylon', and so probably also the New World Translation. I hope to have served you with these informations and remain with kind regards,

E. Jenni."

[Translated from the German. Emphasis added.]

In view of this specific and authoritative information, Furuli's arguments for a local meaning of *l* at Jeremiah 29:10 can be safely dismissed.

What about the 70 years at Zechariah 1:12 and 7:5?

That the 70-year texts at Zechariah 1:12 and 7:5 refer to a period different from the one in Jeremiah, Daniel, and 2 Chronicles is demonstrated in detail in GTR[4], Ch. 5, E-F. There is no need to repeat the argumentation here; most readers have access to this work. Furuli's attempt to equate the 70 years in Zechariah with the 70 years of Jeremiah, Daniel, and the Chronicler evades the real problem.

According to Zechariah 1:12, Jerusalem and the cities of Judah had been denounced for "these seventy years." If this denunciation ended when the Jews returned from the exile after the fall of Babylon, as Furuli holds, why does our text show that the cities still were being denounced in the second year of Darius, 520/519 BCE? Furuli has no explanation for this, and he prefers not to comment on the problem.

The same holds true of Zechariah 7:4, 5. How can the 70 years of fasting have ended in 537 BCE, as Furuli claims, when our text clearly shows that these fasts were still being held in the fourth year of Darius, 518/517 BCE? Furuli again ignores the problem. He just refers to the fact that the Hebrew verbs for "denounce," "fast," and "mourn" are all in the Hebrew perfect, stating that, "There is nothing in the verbs themselves which demands that the 70 years were still continuing at speech time." (p. 88) True, but they do not demand the opposite, either. The verb forms in the passage prove nothing.

But the context does. It clearly shows that the cities were still being denounced "at speech time," in 519 BCE, and that the fasts were still being held "at speech time," in 517 BCE, about 70 years after the siege and destruction of Jerusalem in 589-587 BCE. That is why this question was raised in 519 BCE: Why is Jehovah *still* angry at Jerusalem and the cities? (Zechariah 1:7-12) And that is also why this question was raised in 517 BCE: Shall we *continue* to hold these fasts? (Zechariah 7:1-12) Furuli's interpretation (which echoes the Watchtower Society's) implies that the denunciation of the cities and the keeping of the fasts had been going on for about 90—not 70—years, directly contradicting the statements in the book of Zechariah.

Is Furuli's 70-year desolation of Jerusalem supported by archaeology?

In note 126 on page 91, Furuli indicates that his theory of a 70-year-long desolation period for Jerusalem is supported by archaeological findings. He quotes from an article written by Ephraim Stern, "The Babylonian Gap," in *Biblical Archaeology Review* (Vol. 26:6, 2000, pp. 45-51, 76). Stern points out:

> "For roughly half a century—from 604 B.C.E. to 538 B.C.E.—there is a complete gap in evidence suggesting occupation." (pp. 46-47)

This would indicate a gap of about 68 years. But Furuli fails to explain that the destruction that Stern dates to 604 BCE is the one caused by the Babylonian armies at their first capture of Judah and the surrounding nations in Nebuchadnezzar's accession and first regnal years. This is evidently the destruction that Jeremiah, too, refers to at 25:18 and which he, too, dates to the first year of Nebuchadnezzar in 25:1. Evidently the country was widely devastated by the Babylonian army on its first swing through Judah. (See the comments on this in GTR[4], Ch. 5, A-1, ftn. 10.) Of the destruction of Jerusalem 18 years later—which Stern dates to 586 BCE—Stern writes: "The evidence of this destruction is widely confirmed in Jerusalem excavations." (p. 46) A careful examination of Stern's article shows that there is nothing in it that supports Furuli's views of the 70 years. This is also true of Stern's more recent article on the same subject, "The Babylonian Gap: The Archaeological Reality," published in the *Journal for the Study of the Old Testament* (JSOT), Vol. 28:3 (2004), pp. 273-277.

The Biblical 70 years—Furuli's "different approach"

In the last few pages of chapter 4, Furuli describes his approach to the Biblical prophecies on the 70 years as "different." Different how? It is different, he says, because he allows the Bible to take precedence over secular historical sources. He attempts to show this by comparing his approach with the discussion of the 70 years written by the Seventh Day Adventist scholar Ross E. Winkle. Furuli brings up Winkle's discussion, he says, because he is the only scholar known to him who uses a linguistic approach to the 70-year passages:

> "The only person I am aware of who has discussed the prophecies of the exile from a linguistic point of view and in a scholarly way is a scholar writing in an Adventist periodical." (p. 89)

This is a gross overstatement. I have many commentaries and articles that discuss these passages from a linguistic point of view. Nevertheless, Winkle's discussion is excellent. It was published in 1987 in the scholarly SDA publication *Andrews University Seminary Studies* (AUSS,Vols. 25:2 and 25:3). As a subscriber to that journal, I read Winkle's articles in 1987 and was surprised to find out how remarkably similar most of his observations and conclusions were to my own, published four years earlier in GTR[1]. (See the comments on this in GTR[4], Ch. 5, G-2, ftn. 57.)

Furuli explains that the difference between Winkle's approach and his own is that Winkle "interprets the words of Daniel and the Chronicler in the light of his understanding of the traditional chronology. I, on the other hand, start with the words of Daniel and the Chronicler, which I argue are unambiguous, and

choose the understanding of Jeremiah 25 and 29 which accords with the words of Daniel and the Chronicler: the traditional chronology is not taken into account at all." (p. 90) Furuli then makes some comments about Winkle's analysis of 2 Chronicles 36:20-22, concluding that it is "forced" and "unnatural" because his basis "is a faith in the traditional chronology." (p. 91)

This is not a fair description of either Winkle's approach or of Furuli's own. In this review of the first four chapters of Furuli's book, we have seen a number of insurmountable difficulties that his Oslo Chronology creates not only with respect to the extra-Biblical historical sources but also with the Bible itself.

The amount of evidence against Furuli's revised chronology provided by the cuneiform documents—in particular the astronomical tablets—is enormous. Furuli's attempts to explain away this evidence are of no avail. His idea that most, if not all, of the astronomical data recorded on the tablets might have been retrocalculated in a later period is demonstrably false. Furuli's final, desperate theory that the Seleucid astronomers—and there were many—systematically redated almost the whole astronomical archive inherited from earlier generations of scholars is divorced from reality.

With respect to the Biblical passages on the 70 years, we have seen to what extremes Furuli has been forced to go in his attempts to bring them in agreement with his theory. He has been unable to prove his repeated claim that the 70-year passages in Daniel and 2 Chronicles *unambiguously* state that Jerusalem was desolate for 70 years. His linguistic interpretation of 2 Chronicles 36:21 is misconstrued because he ignores the main clause in verse 20, which plainly makes the servitude end at the Persian conquest of Babylon in 539 BCE. Furuli's linguistic rerenderings of the passages in Jeremiah are no better. To reconcile Jeremiah 25:11 with his theory, he admits that he must discard "the most natural translation" of the verse. And to bring Jeremiah 29:10 into agreement with his theory, he must reject the near-universal rendering "for Babylon" in favor of the unsupportable "in Babylon" or "at Babylon"—translations rejected by all competent modern Hebraists.

Furuli's approach, then, is not Biblical but *sectarian*. As a conservative Jehovah's Witness "scholar", he is prepared to go to any length to force the Biblical passages and the historical sources into agreement with the Watchtower Society's Gentile times chronology—a chronology that is the foundation cornerstone of the movement's claim to God-given authority. As I have amply documented in this review, this sectarian agenda forces Furuli to invent **incredible explanations** of the relevant sources, Biblical as well as extra-Biblical.

A Discussion of the Biblical Material in the Book *Persian Chronology and the Length of the Babylonian Exile of the Jews*, by Rolf Furuli (RF), Oslo 2003.

By Kristen Jørgensen (2004)

[Editor's note: Kristen Jørgensen is a professional Danish linguist with a sound knowledge of the Biblical languages.]

This recent book purports to be a scientific treatment of the subject given in the title, by a Norwegian scholar introducing himself as a lecturer of Semitic languages at Oslo University. The greater part of it consists of a discussion of ancient Middle East chronology based on astronomical observations found on clay tablets and in other old written sources. However, the only part to be discussed here is the material found in chapter four, on pages 75-92, and in the abstract on page 15. A close reading of this chapter creates serious doubts about the intentions of the author, however, as his aim seems merely to prove his sectarian views about the title theme. Right from the outset it points in that direction, as evidenced both by the subtitles and the skewed argumentation, so as not to speak of the various errors and mistakes. Before going into the main text we may take a look at the abstract:

The 'Abstract'

This short paragraph is nothing less than presumptuous: to present categorical statements from the outset along with an unproven conclusion must be regarded as very poor method as seen from a scholarly viewpoint. Indeed, an abstract at the beginning of a thesis is supposed merely to present the theme and the problems to be treated, maybe even outlining the methods to be used in solving them. Any discussion of the final results should be left to a summary at the end, as exemplified in so many learned works. RF's claim that there are six Bible passages mentioning 'a Babylonian exile of 70 years' is erroneous: there is no such passage anywhere in the entire Bible! Consequently, the rest is to all practical purposes quite false, simply because God's inspired Word, the Bible, nowhere states explicitly how long that period was to last but leaves it to the reader to figure it out from the historical facts - and they fully support the view that the exile lasted for no more than half a century. Indeed, it is not mere tradition but diligent Bible scholarship in conjunction with the findings of archaeology, history and chronology which leads one straight to this sound conclusion, a fact which has been substantiated by much competent Bible research over the years.

The Bible ... The subtitle on page 75 repeats the erroneous claims already made and so needs no further comment. However, RF's continued presentation of false information without the giving of proper evidence reveals his purpose: he evidently wants his readers to believe these claims before any proof is presented! This is the method of propagandists, not of honest scholars who are weighing all possibilities carefully before making a decision. Now, as to Leviticus 26, partially quoted by RF, it is evident that punishment for idolatry in Israel was not just a possibility, it was a sure thing, but it is not so sure that Exodus 20:5 implies the same idea; after all, it says nothing about an exile and

the mention of later generations may as well refer back to Genesis 15:13-16, whence we learn that at that time the sins of the Amorites had not yet reached their full measure, and so no action would be taken against them just then.

In the latter part of the first paragraph RF tells us that 'the captivity of the Jews in Babylon is spoken of as an exile', which is hardly news, but of the three scriptures referred to containing the term *gâlût* (which may be translated 'captivity', or 'exile', even 'exiles' or 'captives' collectively) one is slightly off: Jeremiah 52:32 should be 52:31.

The final clause of this paragraph is also deceptively formed: Jeremiah 25:11 does not connect the 70 years with the exile but with the servitude of 'these nations' under Babylon, and 29:10 clearly applies them to Babylon and to no one else! Actually, RF admits as much in the very first clause after the quotations, saying, '... but the text does not say explicitly that it refers to an exile for the Jewish nation'! Of course it doesn't, for that simply would not have been true. Aside from the poor syntax of parts of these paragraphs this statement is a gem by which the author actually casts aspersions on his own argumentation right from the outset! His grammatical analysis 'of' (not 'in') Jeremiah 25:11 is defective: he ignores the first clause in which the subject is 'this whole country', 'will become' is the verbal, and 'a desolate wasteland' is the subjective complement. Then, of course, 'these nations' is the subject of the latter clause, and 'will serve' is the verbal, while 'Babylon' is what is usually called the direct object (the term 'patient' used by the author belongs to the so-called 'Case Grammar' and is not commonly used in connection with Hebrew which lost its case endings in antiquity. However, his use of it makes no difference whatsoever for the analysis of this Hebrew text). Moreover, he states quite correctly that according to the grammatical analysis "'Babylon"... is the nation that should experience the period of 70 years', after which he blows it by falsely claiming that, 'Nevertheless, the writers of Daniel and 2 Chronicles understood the words of Jeremiah to imply a 70-year exile for the Jewish nation'! Now, it may be said with absolute certainty that they could not have understood Jeremiah's words to imply anything like that, simply because the prophet never stated that with even a single word anywhere and so, if anyone 'understood' them in that way it would be either a gross error or, even worse, a deliberate misrepresentation of the inspired message. Barring extreme sloppiness on the part of the writer, the latter may well be the case!

Really, it boggles the mind to try to fathom this claim, that two inspired spokesmen of Almighty God should have misrepresented the inspired words of another faithful servant of God, an inspired prophet who served in Jerusalem during one of the most turbulent periods of her history and who was faithful in performing the task which Jehovah had entrusted to him, despite all the difficulties and hardships he had to suffer for 40 years in Jerusalem and some time later in Egypt! This is a harsh treatment of Jeremiah, as well as of Daniel and the Chronicler who evidently had no difficulty in understanding Jeremiah's words, as is obvious from a close reading of the scriptures in question. By the way, the quotation from 2 Chronicles at the bottom of page 75 is not merely from 36:20, but includes verse 21, even though it is not marked as such.

Actually, RF's entire argumentation in this part of the chapter rests on a falsehood, a sly deception: His statement on page 76 that it 'turns the matter upside down' to begin with what he calls the 'ambiguous words' of Jeremiah 25:10, is all wrong! Things are just the other way around: the one turning matters topsy-turvy is RF by his claiming that Jeremiah's inspired words are 'ambiguous', which they are not - indeed, there is absolutely nothing 'ambiguous' or erroneous in the prophecies of Jeremiah about the fate of Judah and Jerusalem at the hand of the Babylonians. Apparently, RF has invented this postulate as an excuse for seeking a different explanation of these matters. Moreover, here he also shows that he is aware of the problems he is creating for himself, because after claiming falsely that *the land was desolate* for 70 years he says, 'Whereas we at first glance do not understand Jeremiah 25:11 this way, there need not be any problem here.' No, in this he is right, for all problems disappear if we ignore his attempts to twist the truth of God's Word. This will be further elucidated in the analysis to be set forth here.

No ambiguity in God's Word

Nonetheless, he persists in his false claims: after his quotations from 2 Chronicles and Daniel he claims that the words of these two writers are 'unambiguous' and since they 'lived after the exile was terminated, ... they knew the real length of it.' This is correct, of course, only it does not prove his contention for, as stated, Jeremiah's words are as unambiguous as theirs, and since he received his prophetic message from Jehovah God by inspiration, it was utterly correct in all details. The entire argumentation found in this paragraph and the next two is false to the core: while it is true that in certain uninspired writings it may be possible to explain ambiguous passages by means of unambiguous ones dealing with the same subject matter, this principle is not applicable here, since none of the inspired scriptures dealt with are ambiguous! The only reason why the author claims that (thus far with no evidence at all) is that he clearly has an axe to grind, namely to gain support for the age-old claims of certain sectarian expositions made long ago by people who knew altogether far too little about the ancient history of Israel and her neighbouring countries and of the chronology of that period to deal correctly and scholarly with such matters. Even today their successors haven't learned to do it properly but stick stubbornly to their ancient falsehoods!

At this stage a few words may be said about these early sectarian matters, about which even RF may know too little: When young Charles Taze Russell, the founder of the movement of the *Watchtower* people (to whom RF belongs), known since the 1870's as the Bible Students, but since 1931 as the Jehovah's Witnesses, published his dogma about the 'Gentile Times' of Luke 21:24 as being a period of 2,520 years, counting from 606 BCE (much later tacitly 'corrected' to 607!) to 1914 CE, he based this dating on an incorrect chronology used by certain small Adventist groups with which he had been associated for some time and from whom he had learned most of his views about 'the last days' and the beginning of 'the millennium', and evidently he did not try to find out what real scholars had to say about these subjects. Indeed, if he had done so, he might have learned that even before he was born historians had figured out a better chronology for Judah and the Neo-Babylonian empire, as

may be seen in Dr. Alfred Edersheim's *History of the Jewish Nation* from the late 19th century, in which he cites dates for the destruction of Jerusalem from several learned works, the earliest one of which is Dr.G.B.Winer's *Biblisches Realwörterbuch* from 1847-48 (published four years before Russell was born!), which gives the year as 588 BC, while a scholar named Clinton has 587, exactly like modern scholars nowadays! So why did not Mr Russell look to the competent scholars of his day for the correct date? That would have saved him from many a mistake and his followers from the long series of disappointments which they have suffered over the years down till this very day!

The 70 years, the desolation of the land and Daniel 9:2

Well, back to pages 76, 77 of RF's book where we find another slanted subtitle, after which he goes on to Daniel 9:2, making an analysis of the Hebrew text, giving a literal rendering of it and quoting the New World Translation for good measure (in this he cuts a corner by writing '70' instead of 'seventy'). The Hebrew is transliterated, but his system does not seem to conform to any of the well-known standard systems: it employs the letter [æ], which is only used in Danish and Norwegian, never in English texts; also, he does not transliterate the divine name as *Jehovah* or *Yahweh* as is usual in English-language publications, but uses the Jewish substitute *'adônay (*"my lord'), which is not really a transliteration. There are other irregularities in his system, but let this suffice for the moment.

Strangely enough, in his grammatical analysis he does not deal with the Hebrew text but with the secondary English rendering, except for the tiny preposition *le*, which he somehow maltreats together with the verb with which it is connected. Also, it is incomplete, as he omits the initial time adverbial *(bishenat 'achat lemâlekho*, 'in year one of his reign') and the rest is defective - e.g., the subject in the first part of the sentence is not just 'Daniel', but in Hebrew *'ani Dâniêl,* rendered in NW 'I myself Daniel', the inclusion of the personal pronoun '*ani* ('I') showing that the subject is emphatic - Daniel had checked matters for himself in 'the Scriptures'. He also omits the quite important adverbial *bassepârim ('in the Scriptures')* which shows that the aging Daniel did not waste his time but checked the inspired Scriptures at once when the time was up. The definition of the direct object (DO) is somewhat incorrect, too: first come the core words *mishpar hashânim* ('number of years'), followed by an embedded relative clause, *'asher hâyâh debhar-YHWH 'el-Yirmiyâh-hanâbhî* ('which gave word of Yahweh to Jeremiah the prophet'). Finally, the last part of the DO is the clause *lemall'ôt lechorebhôt Yerûshalâyim shibhim shanâh,* in which *lemall'ôt* is the infinitive, *le* being the infinitive marker and the verb *mal'e* ('to fill, fulfill, complete') is in the timeless and intensive piel conjugation ('in order to fully complete'), while *lechorebhôt Yerûshâlayim* is a prepositional phrase functioning as an adverbial ('in regard to/for Jerusalem's desolations'), and lastly, *shibhim shanâh*, ('seventy years') is the direct object. RF's analysis of the word *lemall'ôt,* i.e., that 'the preposition plus infinitive serves as a temporal accusative whose adjunct is 70 years', for which he refers to Ronald J. Williams' *Hebrew Syntax An Outline* (2nd ed. Toronto U.P. 1976, p. 48, § 268) for proof, is in error; indeed, if he had studied the paragraph referred to and the references from it in detail he

would have noted that *le* does not function in that way except when directly connected with a term expressing some time element, as in Williams' examples, e.g. 2 Chronicles 11:17, *leshanim shalosh* ('for three years').

Thus, the prepositional phrase *lechorebhôt Yerûshalâyim*, 'for desolations of Jerusalem' functions as an adverbial indicating the purpose intended, namely to fix the absolute end of the desolations of Jerusalem, i.e., when the 70 years 'for Babylon' were to end. As for RF's little comparison with a 'simpler clause', it is really of no value at all, and that goes for his paraphrase, too. The framed statement in bold-faced type is rather irrelevant: true, there is no need to take the word *chorebhôt* (fem. plur., construct) to signify several desolations of Jerusalem, but neither is it logical to apply it to 'the many ruins of the city', because in Hebrew the so-called plural form may also signify fulness, intensity, magnitude, extension and similar concepts, according to the context, and here it is most likely used to show that the full and complete desolation of Jerusalem would end exactly at the time designated by Jehovah himself, as made known through his prophet Jeremiah. (Cf. Johs. Pedersen, *Hebræisk Grammatik*, Copenhagen 1926, pages 197, 198, § 115) However, we ought to note that RF correctly connects the complete desolation of Jerusalem with the final conquest by the Chaldeans (in 587 BC, not 607), but he errs again when he stubbornly sticks to a 'period of 70 years' for the Jewish exile, even though he is not able to present any real evidence, simply because there is none. Let us just see how NASB renders Daniel 9:2:

> in the first year of his reign I, Daniel, observed in the books the number of the years which was *revealed* as the word of the LORD to Jeremiah the peophet for the completion of the desolations of Jerusalem, *namely,* seventy years. – Cf. also RV, ASV, RSV, AAT, Moffatt, Amplified, Rotherham.

Please note the fine wording 'for *the completion* of the desolations of Jerusalem, namely seventy years': here the emphasis is placed where it belongs, namely on the latter part of the period of desolations, when it is to be *completed*. Here many others have failed in exactly the same way as RF, taking the period of seventy years to signify the total number of years of the exile; a clear example of this grammatical error in a modern translation may be seen in *The Good News Bible:*

> In the first year of his reign, I was studying the sacred books and thinking about the seventy years that Jerusalem would be in ruins, according to what the LORD had told the prophet Jeremiah. – Cf. also NEB, NAB, and NASB.

Interestingly, the GN-Bible renders some of the parts excellently, such as 'I was studying the sacred books', because no doubt that was what Daniel was doing; naturally, this high official of the Babylonian government had copies of the sacred books for his own private use, including the prophecy of Jeremiah, thus being able to make sure of these things, for which he had waited a lifetime! But modern scholars who do not really believe in the inspiration and the complete integriity of the Bible unfortunately distort parts of it, as may be seen in the translations here referred to.

2 Chronicles 36:21

Going on to this scripture (pp.78-80), RF transliterates-cum-translates the Hebrew in the same imperfect way as before, quoting the quite imprecise NWT to boot; indeed, if he had used the more recent NIV he might have imparted a better understanding to his readers. For the sake of completeness we may begin with verse 20 which gives us the necessary background knowledge (NIV):

> He [Nebuchadnezzar] carried into exile to Babylon the remnant who escaped from the sword, and they became servants to him and his sons until the Kingdom of Persia came to power.

Now, in this there is no mention of the number of years that this exile was to last, neither is its beginning dated; however, as to the latter point it is clearly shown that it would only begin after the putting of the enemies in the city to the sword, which happened in 587 BCE; and as to the former point we learn that it would end when Persia took over from Babylon, that is, in 539 BCE. This is in full agreement with Jeremiah's statement, and does in no way contradict his inspired prophecy.

Then, in verse 21, the Chronicler introduces a new element of which Jeremiah had said nothing, namely that during the exile of the Jews the land had enjoyed its rest as had been prophesied long ago in Leviticus 26:15-35; also, he points out that this would last until it had 'paid off its sabbaths'. As the law of God stated in Leviticus 25, each seventh year was a sabbath year of rest during which the land was to lie fallow, and each fiftieth year was to be a Jubilee year of liberty in which the land should also remain fallow. However, Jeremiah never referred to these parts of the law with a single word, a fact to be kept in mind when dealing with verse 21, especially the latter part of it:

> The land enjoyed its sabbath rests; all the time of its desolations it rested, until the seventy years were completed in fulfilment of the word of the LORD spoken to Jeremiah.

Please note that the text does not say, 'all the seventy years *for Babylon* it rested', which would have been erroneous; what it does say is that the land 'rested' until the seventy years mentioned by Jeremiah ('for Babylon') 'were completed' - and since Jeremiah never mentioned the sabbath rest in any of his prophecies, the part of verse 21 dealing with that cannot be included in the reference to 'the word of the LORD spoken to Jeremiah'! The only part to be included in this reference is the one about the 'seventy years' allotted to or 'for Babylon', during which 'these nations' (defined in 25:9 as 'all these nations round about' of which there is an extensive list in 25:17-26) were to serve the kings of the then world power. Consequently, the 'exposition' made by RF is patently false as far as the Chronicler's understanding of Jeremiah's prophecy is concerned.

How about the accents?

Then, on page 79 RF directs our attention to the fact that in the Masoretic text certain accents are used to mark the middle of verse 21, dividing it into two sentences (better, 'clauses') and then also to mark the middle of each of these two parts. Now, this is quite correct - for a fact, there are no less than fourteen accent marks in this verse, although they do not all have the same significance.

As it is, RF does not identify the accents in question, which are 1) the *'atnach* (Ù), seen under the penultimate syllable in the word *shabbetoteyha,* and the *zaqeph qaton* (:), to be seen over the penultimate syllables of the words *Yirmeyahu* and *shabbatah.* The first one is commonly styled a 'verse divider', and is thought to represent as a punctuation mark either a comma or a semicolon, according to the length and structure of the verse, and the latter one is regarded as a less powerful sign, no more than a comma and maybe not even that. However, as far as the semantic contents of the verse and its proper interpretation are concerned, these signs have no authority whatsoever, and RF's attempt to utilize them for that purpose is quite futile.

As it is, these accents were invented long after the inspired consonantal Hebrew texts were written down: according to the textual critics they were added by the so-called Masoretes (8th-10th century CE) who also invented the vowel points to indicate the traditional pronunciation of the sacred texts. These signs were applied, first and foremost, as accent marks, to indicate the stress and rhythm to be applied to the words and phrases in public reading. Even at that, neither they nor the vowel points were ever used in the most sacred of all the scrolls, those used for public reading in the synagogues. They are quite useful, however, as they show textual scholars how the ancient consonantal Hebrew manuscripts were read and understood by the Jewish scholars of the Tiberian school who furnished them with vowel points and accent marks. This is a well-known fact, of course, but these signs are never used by reputable Hebrew scholars in the way suggested by RF. In this paragraph and note 118 he actually commits another real blunder, when he tries to make out that the lines of this verse form a parallelism! Let's just take a closer look at this strange contention:

Is there a parallelism?

RF postulates that the four parts into which he divides verse 21 'speak about the same thing', putting b) and c) together, although his idea about viewing the sabbaths from different angles seems rather strange; indeed, they do not, but even if they did, we must remember that in true Hebrew parallelisms different viewpoints on the matters discussed are quite common and simply make for variations of style. What he fails to see, however, is what has just been pointed out, namely that in Jeremiah's prophecy referred to here there is no mention of a sabbath rest, and so that feature cannot be part of any exposition of his prophecy. For the very same reason his statement that since the accents seem to place a) and b) together they are to be regarded as one unit is in error semantically, and again, RF's part b) of the verse has nothing to do with the fulfilment of Jeremiah's prophecy! Actually, the putting together of a) and d) would have been a better idea semantically, since both mention the fulfilling of Jeremiah's prophecy, but this will not do stylistically, since parallel elements must stand parallel, in successive lines. And when he then makes his rephrased 'parallels', in which the order is a), b), d), and c), he muddles his own exposition well and truly, because this is quite impossible semantically and stylistically.

Actually, the structure of this verse may be regarded quite differently, as a) and d) both refer to the fulfilment of Jehovah's prophecy about the seventy years as spoken by Jeremiah, and so they may be seen as belonging together in their reference; b) and c) then stand as an embedded addition from the hand of the

Chronicler, quite likely because he wants to remind his readers of the catastrophe which had befallen the Judeans because they had neglected to keep Jehovah's commandments about these matters, and maybe also because in the days after the homecoming and the restoration of the walls of Jerusalem by Nehemiah they had again begun to violate the sabbath in various ways, maybe even the sabbatical years, although this is not mentioned. – Nehemiah 13:15-22.

Another failure of his, indeed, the initial one, is however a very common one with amateurs and those with an axe to grind, namely that he has separated this verse from its context, in this case from the preceding verse (20) which I included above. For a fact, the connection is easily seen, because the entire contents of that verse, about Nebuchadnezzar carrying the remnant which had escaped the sword off to Babylon to be servants of him and his sons after him, until the kingdom of Persia came to power, is evidently what is referred to in the first part of verse 21, as it says literally, 'to fulfill word of Yahweh by mouth of Jeremiah' (Kohlenberger's literal translation). To that part may then be added RF's part d) about the seventy years which Jeremiah had said were 'for Babylon'. Thus we have a fine statement by the Chronicler about the prophecy of Jeremiah, into which he puts his own explanatory addition about the fulfilment of the ancient prophetic threat from the Mosaic law about the sabbath rest for the land during the enforced exile of the people in the land of the enemy.

As shown above, RF's claim that 2 Chronicles 36:21 is a parallelism is in error, which anyone even superficially acquainted with this form of Hebrew style would realize, first of all simply because the entire chapter of which this verse is a part is composed in plain prose, and Hebrew parallelisms only occur in poetry! From the time of Bishop Lowth who first of all Westerners described this feature of Old Testament poetry it has been customary to classify parallelisms according to their contents and style. Actually, the only type in which successive lines 'say the same thing', as RF claims for parts of verse 21, is the one called 'Synonymous Parallelism', of which we may quote a typical example as rendered in Ps. 149:2, NIV: 'Let Israel rejoice in their Maker, let the people of Zion be glad in their King.' In this 'Israel' corresponds to 'the people of Zion', 'rejoice' corresponds to 'be glad', and 'their Maker' to 'their King.' Thus these two lines constitute a perfect 'synonymous parallelism', because both parts express exactly the same thought, howbeit with different words. This type is found time and again in all the poetic writings of the Hebrew Bible, also in quite a few of the prophetic ones, as may be seen in the tripartite example from Jeremiah 10:10, NIV: 'But the LORD is the true God; he is the living God, the eternal King.'

The fact that this verse is not a parallelism is also shown by the very accents which RF used in his argumentation: In the Hebrew Bible there are two systems of accents, one for prose and another one for poetry, that is, some of the marks are used in both systems, but in different ways - and the accents to which he referred and their use as mentioned by him show that he has in mind the ones used in prose texts! Also, one well-known feature of the ancient Hebrew manuscripts is that prose is always written in lines of even length, but poetry is written as verse in uneven lines, according to the sense, as may even

be seen in some modern translations, e.g. in the NIV, where Jeremiah's poetic parts are printed like that; this is however ignored in many Bible translations, such as in the NW-Bible.

How are these verses to be translated?

Let us, for the sake of completeness, just take a closer look at the two verses we are dealing with, to see how they are composed; this example is taken from NIV (emphasis added),

> 20 He carried into exile to Babylon the remnant who escaped from the sword, and they became servants to him and his sons *until ('ad)* the kingdom of Persia came to power. 21 The land enjoyed its sabbath rests; all the time of its desolation it rested, *until ('ad)* the seventy years were completed in fulfilment of the word of the LORD spoken by Jeremiah.

Please note that the particle *'ad* ('until') is used not only where RF incorrectly wants to render it *while* (v. 21), but also in the phrase '*until* the kingdom of Persia came to power' (v. 20), in which it would be impossible to render it 'while', and it is only logical to regard it as having been used in the same sense in both verses. As shown by his context, RF's reason for rendering it 'while' is apparently that he dislikes the usual term 'until' being used here, ostensibly because it does not fit his prejudiced ideas. This particle *'ad* has as its basic meaning '*(continuation, duration), as far as, unto',* (Gesenius-Kautzsch-Cowley, *Hebrew Grammar,* § 103 o) as it 'indicates the distance from, the approach towards', i.e. 'until'. According to the Hebrew-German *Handwörterbuch* by Gesenius-Buhl (pages 563-565), the sense is 'bis, bis zu, haüfig mit Einschluss des Zielpunktes ... so daß der Zielpunkt als erreicht vorgestellt w(ird)'; that is, the distance or time indicated by *'ad* is viewed as 'reaching from the starting point to and including the point aimed at.' See also the *Hebrew and English Lexicon* by Brown, Driver and Briggs, pages 723-725, where we find similar definitions by Dr. Samuel Rolles Driver (who handled the treatment of all particles expertly in that work) in full accord with its basic semantic content. This accords fully with its use in 2 Chronicles 36:20, 21, where it is normally rendered 'until' by modern translators, also where RF wants to make it mean 'while', which will not do, because here there is no element necessitating a departure from the usual sense of the word. True, the lexicon lists 'while' as a possible meaning of it, but in BDB page 725 Dr. Driver tells us that it occurs only rarely in that sense and he gives us no reason to accept RF's aberrant views. As it is, in 2 Chronicles 36:21 we find that all English versions render it 'until', and the German ones 'bis, bis zu', while in other languages we find words of exactly the same meaning, such as 'indtil' in Danish, 'til' in Norwegian and 'till' in Swedish. As for the meaning 'while', I haven't been able to find a single translation using that in 2 Chronicles 36:21.

Finally, we may as well discard RF's German 'example' (which seems to be taken from a bad joke) and rewrite the framed text printed in bold-face type on page 80 to bring it into accord with the truth of God's Word, the Bible:

"The words of Jeremiah 25:11, 29.10, Daniel 9:2 and 2 Chronicles 36:20, 21 are all clear and unambiguous: Judah and Jerusalem were to become desolate and remain in this condition from the final destruction of the city in 587 BCE until the end of the 70 years '*for* Babylon', which period ended in the year 539 BCE, when Babel fell to Medo-Persia."

This is what the Bible and history, supported by chronology and archaeology, agree on in all details.

What was the objective of Jeremiah?

This is RF's next subtitle, and the rest of page 80 and the better part of page 81 are filled with his speculations along the twisted and contorted trail he has chosen to follow. Really, it is not necessary to speak of the prophet's objective at all beyond his strong desire to complete the task his heavenly father had given him, about which we read in Jeremiah 1:4-10, NW, from which we may learn of Jehovah's objective in appointing Jeremiah as his prophet in Jerusalem:

> "Before I was forming you in the belly I knew you, and before you proceeded to come forth from the womb I sanctified you. *Prophet to the nations I made you.' ...* to all those to whom I shall send you, you should go; and everything that I shall command you, you should speak. ... Here I have put my words in your mouth. See, *I have commissioned you this day to be over the nations and over the kingdoms*, in order to uproot and to pull down and to destroy and to tear down, to build and to plant." (emphasis added; cf. vss. 11-19)

Actually, that is how Jeremiah's task has been understood by Bible scholars at all times, not only by Christian ones, but also Jewish ones, such as Dr. Joseph Klausner who wrote about Jeremiah that he

> 'intervenes in the political life of his nation, contending not only with priests and popular teachers, but also with kings and princes, prophesying not only against *Judah and Jerusalem*, but also against *the Gentiles and foreign powers, and the whole of the then known world*, enfolding them all in his all-embracing grip, and scrutinizing them with the acute vision of the eagle.' – *Jesus of Nazareth,* translated by H. Danby, London 1929. (Page 390, emphasis added)

Being a priest himself Jeremiah knew the law well and so he was no doubt familiar with the contents of Leviticus, the volume that more than any other part of the Mosaic law addressed the priests, and quite naturally he would also know the contents of chapter 26 with all its promises of rewards for faithfulness and dire threats about punishment for disobedience. However, even at that he never quotes from this chapter, and even though he in his prophecies mentions the Judean exile reasonably often he never connects it with a sabbath rest for the land. So, RF's claim about Leviticus 26 being the 'theme' of Jeremiah's book and his 'point of departure' doesn't hold water, it is as farfetched as the other parts of his homespun yarn. Actually, the Bible itself furnishes some very clear evidence about the text from which the Chronicler took the parts of his statement about the 'sabbath rest' mentioned in connection with Jeremiah's prophecy: the relevant words in 2 Chronicles 36:21 are shown here, followed by the corresponding ones from Leviticus 26:34, 35:

'ad-ratsetah ha'arets 'et -shabbetoteyha kol-yemey hashammah shabbatah

until-she-enjoyed the-land her-sabbaths all-days to-be-desolate she-rested

'az tirtseh ha'arets 'et-shabbetoteyha ...kol-yemey hashammah tishebat

then she-will-enjoy the-land her-sabbaths ...all-days to-be-desolate she-will-rest

These statements are nearly identical, the only differences being found in the words expressing time, namely the two introductory particles and the tenses of the first and the last verb in each of them: in Leviticus the first particle is *'az,* an adverb signifying 'then', here clearly referring to the future, while the Chronicler has *'ad,* a preposition meaning 'until', pointing back in time. Both use the same verbs, in almost the same grammatical form, namely qal, 3rd prs sg fem, the only difference being in the tense; the first verb is *ratsah* ('to enjoy'), for which Leviticus has the future *tirtseh* ('she will enjoy'), while the Chronicler has the preterite *ratsetah* ('she enjoyed'), signifying the past. Then the final verb is *shabbat,* ('to rest'), with the Chronicler it is in the preterite, *shabbatah,* ('she rested'), while in Leviticus it is *tishebat* ('she will rest'), in the future tense. The subjects, the direct objects and the time adverbials, also the verbs following (*hashammah,* 'to be desolate') are identical in both clauses.

There can be little doubt that the Chronicler had both the prophecy of Jeremiah and the book of Leviticus to hand when he penned the last chapter of his book, and it is interesting to see how he took exactly the relevant parts of Leviticus 26:34, 35 and added them to his own statement in 36:21 which included the information from Jeremiah, who, however, had nothing from Leviticus at all.

RF's parallels

Alas, on page 80 RF persists in his stubbornness, stating quite untruthfully that 'Jeremiah was the first to mention an exile of 70 years' which he was not, for neither he nor anyone else did that! He mentioned the seventy years, also the exile and its end, but neither he nor any other prophet stated in just so many words that that exile would last 70 years! Apparently we have to repeat that statement time and again, because RF stubbornly refuses to admit that simple truth! Then, in the last passage before RF's 'parallels' we note a printing error in the third line from the bottom, where 'lead' should read 'led'. As for the many scriptures he has selected for these 'parallels', there is of course nothing wrong with them, only they do not prove his contentions, which of course couldn't be expected.

However, let us take a look at these parallels in which he compares verses from Jeremiah with verses from Leviticus: first, we note that not one of the verses here taken from Jeremiah contains a literal quotation from Leviticus! They even seem to have been chosen rather haphazardly, as though RF has merely picked them out at random from a concordance, with no proper study of their contents, to wit:

In the first one, Jer. 11:10 vs Lev. 26:14, the latter ought to have been or at least included verse 15, and the next one, Lev. 26:31, should have been or included

verse 32; then, Jer. 14:1 ought to have been 14:1-7, and the next to last actually spoke of, not just pestilence, but included sword and famine in the punishment to be meted out. Finally, the sixth and last one is a real howler: RF's 'text' says, 'the holy place would be destroyed.' Now, at this stage of Judean history this could mean only one thing, the temple of Jerusalem; however, Leviticus 26:31, 32 does not say anything about that place (nor about the tabernacle, for that matter), instead we find a prophecy against Israel's false worship and the punishment for it, which would hit their 'high places', their 'incense altars' and their 'lifeless idols', also their 'sanctuaries', no doubt the kind spoken against in Amos 4:4, 5; 5:5; 7:9 and 8:14! Worse still for RF, Jer. 22:5 does not refer to 'the holy place', but to 'the king's house', the royal palace in Jerusalem! – Jer. 22:1-5.

Actually, any really diligent study of these matters could easily have produced many more excellent verses to be used here, but once more RF has been too sloppy in his research. Obviously, he is not interested in getting at the truth, the whole truth and nothing but the truth, but only at connecting his erroneous views with the idea of 70 years for the exile and the sabbath rest of the land, a fact becoming even more obvious when his list of twelve quotations from Jeremiah 4:7 to 44:22 presented on page 81 is checked: As it is, there is nothing strange in these scriptures – after all, Jeremiah had been given the task of prophesying about these events and that he did faithfully, which was his true objective. This becomes even clearer when we realize that all but one of these statements are parts of 'messages from Jehovah', and the one exception, the very last one, is from Jeremiah's speech to the Jewish remnant on the basis of just such a message! Also, we know that he was not the first to speak in this vein: Isaiah had in his time spoken just as candidly, Micah had spoken up in the same manner, and so had others during the years of increasing idolatry. As it was, however, Jeremiah was the man on the spot: he was in Jerusalem where the action was, serving for an entire generation right to the end - and when the Babylonians offered him to go with them in safety to Babylon, he stayed on in the city and he even served with the remnant of the people in Egypt for some time. – Jer. chapters 40-51.

A faulty list of quotations

Then, on page 81 we find some more peculiarities: first, according to RF himself these quotations are taken from NWT, i.e., the Watchtower Bible, but they are not, they are all straight from the NIV! The first three seem to be defective in semantic content, as the writer does not include any reason for the severe threats uttered, and the same can be said about 25:18, which starts in the middle of a judicial statement, so that the reader will have to find out for himself what the culprits mentioned have done to deserve the punishment with which they are threatened. Also, in the last clause of 9:11, NIV has 'so that no-one', while RF merely has 'so no one'. The same error occurs further down, in the rendering of 34:22. Moreover, the fifth one is not from 9:22 but is a partial repetition from 9:11! Then in 33:10 RF breaks off his quote in the midst of a clause, so that we do not get to know 'what will be heard once more' – actually, he should have included verse 11 to make this quotation a complete and natural one. The next one, purportedly from 33:12, is not from that verse but is a short

repetition from verse 10, and in the quoted part of 34:22 we are not told what the 'it' is that is to be destroyed so thoroughly – that item, mentioned no less than three times, is 'this city', Jerusalem, as shown in verses 18-22b. It is extremely difficult to take the work of RF seriously!

At that time Jehovah had wisely placed three trusted and faithful prophets in strategic positions for his purpose: the priest Jeremiah in the midst of Jerusalem, close to the king, the leaders and the priests; Ezekiel, also a priest, was with the exiles in faraway Babylon, and Daniel and his three friends, all of them from the royal tribe of Judah, in the heart of the world empire, in Babylon the capital, where they even had the ear of the king, the one called 'my servant' by Jehovah himself. (Jer. 25:9; 27:6) Now, if RF really had in mind to paint a true picture of the situation for Judah and Jerusalem in those fateful days, the historical and the prophetic books furnish enough material for that purpose. Apparently he does not have that in mind, however, and so when he turns to Jeremiah 25:11 and 29:10, it is seemingly in order to find some much needed support for his views by means of a grammatical analysis. Let's see how he goes about this intricate task (pages 81-87).

Jeremiah 25:11

In the paragraphs leading on to RF's transliteration-cum-translation of this verse he is back in his cantankerous mood, questioning the renderings of NIV, NW and other modern translations, raving about the structure of the verse, suggesting as possible 'solutions' to his hypothetical 'problems' either a different sense of the Hebrew or the acceptance of the rendering of the LXX; none of these options seems feasible, though, because in spite of RF's imaginings the Hebrew text is clear and unambiguous, while the LXX evidently is deficient in this case. This is clear even from RF's slightly skewed rendering, both his transliteration and the translation of the words and phrases; a more precise literal translation of the Hebrew would go like this:

> 11 and-she-will-become all-the-land the-this to-(a)-waste to-(a)-desolation
>
> and-they-will-serve the-nations the-these king-(of) Babylon seventy year(s)

As this verse is part of a larger passage (Jer. 25:8-14), the first item is the usual Hebrew conjunction *ve-* ('and') prefixed to the verb in the usual way. Since Hebrew verbs can express number and person of the action described they actually also express the subject, as seen here; however, when there is also an overt subject they will of course be in agreement grammatically: thus the 'she' of the first phrase (*ve* - plus the Hebrew verbal) is in agreement with the overt subject, 'all the land the this' (in Hebrew, *'erets,* 'land', is feminine). The last two phrases of the first line constitute the subjective complement, showing what 'the land will become', the use of two synonymous phrases expressing emphasis. In the second line the syntax is equally natural: beginning with the conjunction *ve-* ('and'), followed by the verbal with an implied subject, fully agreeing in its grammatical form with the overt subject, both being masculine plural and the overt subject very emphatic with its postpositive double determination. The direct object is 'king of Babylon', the time adverbial

expressing the time limit for the service of 'these nations' to '(the) king of Babylon', namely 'seventy years'. It is all very clear and unambiguous, and it is almost impossible to imagine that anyone would try to pervert the sense of this short verse. RF hasn't given up having his way; though, even though he admits that he understands quite well what 'the natural analysis would be' (at least of the latter part), and he even shows what it ought to be. Nevertheless, he doesn't accept it, but tries to circumvent it in his own devious way. Let us take a close look at things.

Who, indeed, are 'the nations these'?

Even though RF quite correctly identifies the subject, the verbal and the direct object of the latter clause of Jeremiah 25:11, and mentions the 'different nations' and 'all these nations around' several times (cf. page 82, 83) he tries again to muddy the waters by calling the statement in Jer. 25:11 about 'these nations' as servants of the king of Babylon 'vague and unspecified', and on page 84 he speaks about them as 'some undefined nations'. Actually, this is not only incorrect, it is incredibly naïve, for 'these nations' are certainly neither 'undefined' nor 'unspecified' - they are even 'specified' in the very chapter of Jeremiah under discussion: first, we read in verse 9 that Jehovah would send 'and take all the families of the north ... even [sending] to Nebuchadrezzar the king of Babylon and I will bring them against this land and against its inhabitants and against *all these nations round about*" (emphasis added). Moreover, we do not need to be in doubt as to their identity, for in the very same chapter, in verses 17 to 26, they are 'specified' very detailedly: First, Jeremiah tells how he is to make *'all the nations to whom he [Jehovah] sent me* drink the cup of his wrath', and after having mentioned Jerusalem and the towns of Judah and their rulers, he begins in the south and then goes on listing all the neighbouring nations, to the west, north and east, *'all around'* the land of Israel. Please consult a good Bible Atlas for this (NIV; emphasis added):

> Pharaoh, king of Egypt, his attendants, his officials and all his people, and all the foreign people there; all the kings of Uz; all the kings of the Philistines (those of Ashkelon, Gaza, Ekron, and the people left at Ashdod); Edom, Moab and Ammon; all the kings of Tyre and Sidon: the kings of the coastlands across the sea; Dedan, Tema, Buz and all who are in distant places; all the kings of Arabia and all the kings of the foreign people who live in the desert; all the kings of Zimri, Elam and Media; and all the kings of the north, near and far, one after the other – all the kingdoms on the face of the earth. And after all of them, the king of Sheshach [Babel] will drink it too.

Really, for anyone to call this lot 'unspecified' or 'undefined' is truly nonsensical, as is RF's entire argumentation about these matters. And even if 'these nations round about ' had not been listed so carefully, there would still have been plenty of evidence for the normal understanding, because the Hebrew word for nations is a much used standard term for the heathen or Gentile nations all around Israel: In Robert B.Girdlestone, *Synonyms of the Old Testament,* 2nd ed., p. 256 (Grand Rapids 1978) we read about the Hebrew term *goy* ('nation', in plural *goyim,* spelt **goim** in the book):

> Throughout the historical books, the Psalms, and the prophets, the word **goim** primarily signifies those nations which lived in the immediate neighbourhood of the Jewish people; they were regarded as enemies, as ignorant of the truth, and sometimes as tyrants.

This is corroborated by Brown-Driver-Briggs (page 156), according to which this term *(goy)* is used 'usually of non-Hebr. peoples'. In a way, the seed of this development was sown very early -- as we know, when Noah's offspring had reached 70 generations the Scriptural narrative began focusing on Shem's line, and from Abraham, Isaac and Jacob and his twelve sons onward the focus was narrowed down to just one nation, the chosen one, especially after the law covenant was given to it at Sinai. Of course, that did not mean that the other nations were never mentioned again, but from then on they were on the sidelines, as it were, as 'the nations', meaning the non-Jews, i.e. the heathen or Gentiles, as they are often called in older translations, such as KJV. The word itself occurs more than 830 times in the Hebrew Bible, and of these 86 or more than 10% are found in the book of Jeremiah; actually, in accord with the developments of his time, it is the Bible book with the most occurrences of this word. It is primarily used in the plural *(goyim),* often determined *(haggoyim)* and with the word *kol* ('all') in front; thus *kol-haggoyim* ('all the nations') occurs 16 times in Jeremiah; there are also definite forms like the one in 25:11, that is, *haggoyim ha'elleh* ('the nations the these'). This is a very emphatic construction, indicating (like all the determined ones, only stronger than most) that the nations referred to are well known to both the speaker and the listener. To anyone familiar with the contents of the prophecy of Jeremiah this comes as no surprise. – Gen. 10:1-32; 11:10-12:5; 17:1-27; 26:1-5; 35:22b-27; Ex. 19:1-20:21; 24:1-18; 34:1-17; Deut. 7:1-7; 11:23, 24; 26:17-19; 28:1; Josh. 11:23; 2 Sam. 7:23; l Kgs 4:20-25.

Actually, we have other witnesses to the understanding of Jeremiah defended here, namely the Watchtower writers who produced the book *"All Scripture Is Inspired of God and Beneficial"* (New York 1990), in which we read on page 127, paragraph 20:

> **Jehovah's controversy with the nations**
>
> (25:1-38). This chapter is a summary of judgments that appear in greater detail in chapters 45-49. By three parallel prophecies, Jehovah now pronounces calamity for *all the nations on earth.* First, Nebuchadrezzar is identified as Jehovah's servant to devastate Judah and *the surrounding nations, "and these nations will have to serve the king of Babylon seventy years.*" Then it will be Babylon's turn, and she will become "desolate wastes to time indefinite." – 25:1-14 (emphasis added).

Thus the Watchtower people are in full agreement with the Bible on this point, although their pupil, RF, has chosen to view things differently. Actually, he again shows that he knows full well what is the natural translation of the latter clause in Jer. 25:11, namely the one shown as number 1 on top of page 84, 'and these nations will serve the king of Babylon seventy years.' Moreover, his claim that the context focuses 'upon the inhabitants of Judah rather than on some undefined nations' is palpably false: as has been already demonstrated clearly,

the nations in question are very well defined! To be sure, the focus is here a broad one, including both Judah and Jerusalem first, and then all those surrounding nations, because they would all come under the heel of Babylon. And RF's strange contention, that the designation 'its inhabitants ... as mentioned in verse 8' (should be 9) ought to be understood as the antecedent, not of the pronoun 'they', which does not occur in the Hebrew, but of the embedded (or implied) subject from the verb *'abhedu*, down in verse 11, is so farfetched from both a syntactical and a semantic viewpoint, that it is utterly impossible to take it seriously. Indeed, this can be said about his entire tortuous effort about this subject.

What does 'et mean in front of melekh?

On page 83 RF once more turns to a tiny Hebrew particle for help in his quandary; this time it is the particle *'et,* which is seen prefixed to the word *melekh* in the latter clause of Jer. 25:11. As the analysis showed, the phrase *'et-melekh babhel* ('king [of] Babylon') constituted the direct object of that clause, signifying the one 'these nations' would have to serve for seventy years, and the particle *'et* functioned as the objective marker, as it generally does in Hebrew. However, RF does not want that to be so, and so he says, 'While the particle *'et* is often used as object marker, it can be used as a preposition with the meaning "with" as well.' Now, this needs a little modification, for in reality there are two etymologically different Hebrew particles spelled *'et,* not just one, as anyone can see for himself in the Hebrew dictionaries. Unfortunately they are always spelt in the same way when they do not take suffixes, and they are also both connected to the next word by the Hebrew hyphen, the so-called *maqqeph,* as the *'et* found in Jer. 25:11 is. This *'et* fits the description very well of the so-called accusative particle, which is 'prefixed as a rule only to nouns that are definite', that is, they need no article - proper nouns, titles, names of cities and nations, etc., are definite wihout it.

At any rate, since there is no formal difference in this case, the context must decide which *'et* we are dealing with, and here the syntax is clear: as shown in the above analysis: *'abhedu* ('they will serve') is the verbal, *haggoyim ha'elleh* ('the nations the these') is the overt subject, and so, quite naturally, *'et-melekh babhel* is the direct object. This is not only the 'natural analysis', it is simply the only analysis that makes sense! The renowned Hebraist Dr. Driver, who wrote the articles on all the various types of particles in the *Hebrew and English Lexicon* by Brown, Driver and Briggs, gave both particles excellent treatment in that dictionary, which see (pp. 84-87). Of course, he could not include all the occurrences, for *'et* occurs more than 10,000 times in the Hebrew Bible, and of them more than 830 are found in the book of Jeremiah. (A.M. Wilson,'The particle *'et* in Hebrew', *Hebraica* ,Vol. 6, 1890, No. 2, pp. 139-150; No. 3, pp. 212-224) Happily, Dr. Driver also made a most excellent translation of *The Book of The Prophet Jeremiah* (London, 1906), and his rendering of Jeremiah 25:11 is quite clear and unambiguous as may be seen in the section prefaced by this subheading:

Judah, therefore, not less than the neighbouring countries, will be laid waste by the Chaldaeans, and be subject to them for seventy years. (See verses 11 and 12 below):

> 11 And this whole land shall be a waste, and an appalment: and these nations shall serve the king of Babylon seventy years. 12 And it shall come to pass, when seventy years are accomplished, that I will punish the king of Babylon, and that nation, saith Yahweh, for their iniquity, and the land of the Chaldaeans; and I will make it desolate for ever.

Let us just take a good look at another very authoritative translation, made by a grammarian and lexicographer of very high standing in continental Europe, similar to the one enjoyed by Dr. Driver in the English-speaking world, namely Professor Frants Buhl of Copenhagen and Leipzig, who edited Wilhelm Gesenius' large Hebrew-German *Handwörterbuch* for a number of years. He also translated the Old Testament into Danish *(Det gamle Testamente,* Copenhagen 1910) and here follows his rendering of Jeremiah 25:11, 12 in Danish:

> 11 og hele dette land skal blive til en Ørk, og disse Folkeslag skal trælle for Babels Konge i halvfjerdsinstyve Aar. 12 Men naar der er forløbet halvfjerdsinstyve Aar, straffer jeg Babels Konge og dette Folk, og gør det til evige Ørkener. (Cf. the English rendering below):

> 11 and all this land shall become a desert, and these nations must slave for the king of Babylon for seventy years. 12 But when seventy years have run their course, I will punish the king of Babel and this people, and make it into everlasting deserts.

Now, these two eminent Hebraists are most certainly not the only ones who have rendered Jeremiah's words in this way; facts are, I haven't been able to find a single translation or commentary opting for the solution suggested by RF, i.e., to regard the *'et* prefixed to *melekh (babhel*) in verse 11 as the preposition meaning 'with', and I take it for granted that RF has failed in this regard too, or else he would no doubt have told us about it. Consequently, we shall disregard RF's very unorthodox idea as a mere figment of his imagination and stick to the natural and straightforward sense of the Hebrew text of Jeremiah, exactly as the real experts in Biblical Hebrew have rendered it.

What about the LXX and the Old Ethiopic?

As for the LXX, preferred by RF, we agree with the view expressed in the Watchtower publication *Insight on the Scriptures,* vol. II, page 32 (in the article about the Book of Jeremiah):

> The majority of scholars agree that the Greek translation of this book is defective, but that does not lessen the reliability of the Hebrew text.

As it is, the LXX lacks about one seventh of the Hebrew text and the translators have taken many liberties with it, omitting words and phrases here and there, adding others not found in the Hebrew, and it is generally unreliable. After all, it is a second-hand text, a translation into an Indo-European language, made by people who may not have been too well acquainted with Classical

Hebrew, and who admittedly made many mistakes. Regarding the Old Ethiopic, which RF also favours, it is an even weaker witness; no one knows when it was made but apparently it took centuries to complete, and the oldest manuscripts are rather late, no earlier than the 13th century CE. Moreover, it is to a great degree influenced by the LXX, and it cannot really be regarded as an independent witness. After all, Jeremiah was an inspired prophet and his original prophecies taken down in Hebrew and preserved in that language to this very day are the best evidence we have about these matters. The Hebrew text is also supported by the ancient Semitic translations, the Aramaic Targum Jonathan and the Syriac Peshitta, which are much closer to the original Hebrew than the Greek LXX.

Jeremiah 29:10

However, there is one more scripture mentioning the seventy years, the short verse here mentioned, and to this RF now turns (page 85), apparently hoping that he can finally prove his point. However, it is as though the long and hard uphill battle has taken his breath away, for he offers neither transliteration nor translation; instead he again focuses on a tiny particle, the preposition *le* prefixed to the word *babhel,* which he feels has been wrongly rendered by the standard translations. Let us just take a look at the verse in question, transliterating and translating it for the benefit of the reader:

10 ki-khoh	‘amar	YHWH	ki	lephi	mel’ot	lebabhel	shibhim	shanah
for-this	says	Jehovah	when	by-my-mouth	to-be-completed	for-Babel	seventy	year(s)

‘ephqod	‘etkhem	vehaqimoti	‘aleikhem	‘et-debhari	hattobh	lechasir	‘etkhem	‘al-hammaqom	hazzeh
I-will-visit	you	and-I-will fulfill	to-you	my-word	the-good-(one)	to-return	you	to-the place	this-one

Among the many modern translations the NIV gives a good and adequate rendering, but the NWT fails in one point and that is the one that RF wants, for it renders *lebabhel* ‘at Babylon’, as against NIV’s ‘for Babylon’. Let’s recall that Dr. Driver, who wrote all the articles on the prepositions in Brown-Driver-Briggs, also translated the Book of Jeremiah into reasonably modern English (in 1906); here is his version of Jeremiah 29:10 (emphasis added):

> 10 For thus saith Yahweh, As soon as seventy years be accomplished *for Babylon,* I will visit you, and perform my good word toward you, in bringing you back unto this place.

Moreover, he placed an interesting subtitle over this section in the 29th chapter, showing how he understood this important scripture; it goes like this:

For no restoration will take place till the seventy years of Babylonian domination are ended, when those now in exile with Jehoiachin will turn to Yahweh, and he will bring them back (cf. xxiv, 5-7).

Since we are investigating the semantic contents of the preposition *le,* we may as well note that Professor Buhl used the very same word in Danish, 'for', and that the noted German grammarian and translator Emil Kautzsch (who edited Gesenius' Hebrew grammar later translated into English by A. Cowley) used the German form of the same preposition, namely 'für', in front of the word 'Babel'. Actually, already Luther had used the preposition 'für' here, as early as in 1534. The same usage ('for Babel') is found in the translation by Dr. Chr. H. Kalkar (Copenhagen 1847), who as a converted Jew was an expert in Biblical Hebrew. As it is, all the most serious and reasonably literal translations have 'for' here, or words to that effect; NEB has a slightly different wording: 'When a full seventy years have passed over Babylon,...' and AAT has: 'As soon as Babylon has finished seventy years,...', while Moffatt has: 'As soon as Babylon's seventy years are over,...'. The Jewish translation Tanakh agrees with Moffatt, while the older ones by Leeser and JPS use 'for'. As is well known, the KJV has 'at Babylon', which is not so strange when one bethinks that it most likely was influenced by the Vulgate's 'in Babylone'; after all, most of the early English translations until and including the KJV were influenced by that old Latin version – also, the knowledge of Biblical Hebrew was rather imperfect then, but fortunately it has improved enormously since 1611. Curiously, the so-called 'New King James Version' (1982) has kept the 'at' here; however, the reason may well be that the editors did not want a total revision (cf. the Preface), but rather a mere modernization, such as the replacing of obsolete words like 'thou, thee, thy' and 'thine' with the modern pronouns 'you, your' and 'yours'.

However, when the Revised Version came out in 1885 the knowledge of Hebrew was much greater – there were no less than ten professors of Hebrew in the so-called 'Old Testament Company' who revised the Hebrew part of the Bible (including Jeremiah), and so things were changed. One of the real experts among them was Dr. Driver, who has been mentioned already, and it would have been unthinkable for him to render such a preposition wrongly. At that time he was already engaged in the work of compiling the great Hebrew lexicon, in which he gave an expert account of the preposition *le* on pages 510-518, covering a total of 16 columns. Here he classified the meanings of *le* under seven main headings and a lot of subheadings and even lesser groups, totaling 69 semantic variants, some even overlapping. The very smallest main heading, with no subgroups at all, is No. 2 (page 511), 'Expressing locality, *at, near'*, which does not, however, contain anything supporting RF's views.

Dr. Driver gives as the general sense of this preposition **'to, for, in regard to,** ... denoting **direction** (not properly *motion,* as *('el)* **towards**, or *reference to*; and hence used in many varied applications, in some of which the idea of *direction* predominates, in others that of *reference to* ... very often, with various classes of verbs, *to, towards, for.'* Similar explanations are given in Gesenius-Buhl and Köhler-Baumgartner. Interestingly, it was not only in the Revised Version but also in its transatlantic counterpart, the American Standard Version of 1901, KJV's 'at Babylon' had been corrected to 'for Babylon', and that wording has

been kept in the versions later made in that tradition, such as the RSV of 1952 and the NASB of 1977. By the way, on page 86 RF says that the LXX 'has the dative form *babulôni,* the most natural meaning being "at Babylon".' Now, the Greek form is correct, but the sense is not, for in Greek the dative used here is the *dativus commodi et incommodi.* (Also called 'the dative of advantage and disadvantage', cf. C.F.D.Moule, *An Idiom-Book of New Testament Greek,* 2nd ed., Cambridge U.P., 1971, p. 46) See W.W. Goodwin, *A Greek Grammar,* London et al, 1970, pp. 247ff., § 1165, which says: 'This dative is generally introduced in English by 'for'." This is of great importance, as may be seen from the statement by F.C. Conybeare and St. G. Stock in *A Grammar of Septuagint Greek* (Grand Rapids 1980) § 38, in which they discuss the peculiar syntax of the LXX:

> **The Construction of the LXX not Greek.** ... the LXX is on the whole a literal translation, it is to say, it is only half a translation – the vocabulary has been changed, but seldom the construction. We have therefore to deal with a work of which the vocabulary is Greek and the syntax Hebrew.

Apparently, then, the translators of the LXX understood the phrase *lebabhel* correctly and so rendered it in the best possible way into a Greek form having exactly the same sense as the original Hebrew, i.e. 'for Babylon.' Why Jerome didn't imitate this fine effort when making the Vulgate is not known, but in connection with his 'in Babylone' and KJV's 'at Babylon' we ought to realize that such a rendering does not in any way 'prove' RF's contentions about the length of the exile and Jerusalem's devastation: We know from Jeremiah 25:11 that 'these nations [i.e., 'these nations all around', the ones defined so clearly in Jeremiah 25:17-26] shall serve the king of Babylon seventy years', and these seventy years would naturally pass for all and sundry, whether 'in' or 'at' Babylon or elsewhere. Mark you, neither this scripture nor anyone else says 'for Judah' or 'for 'Israel' or for 'the exiles'! So, even though RF and his fellow believers stubbornly stick to their erroneous interpretation of the inspired words of Jehovah spoken by Jeremiah, they have no solid evidence for their ideas!

In the case of the sense of *le* in Jeremiah 29:10 we have the clear evidence outlined in a work which RF does not mention, namely Professor Ernst Jenni's *Die hebräischen Präpositionen. Band 3: Die Präposition Lamed* (Stuttgart et al, 2000). In this monumental work Dr. Jenni lists and categorizes each and every occurrence of *le* in the entire Hebrew Bible, all 20,725 of them! Here we find *le* as used in Jeremiah 29:10 (in *lebabhel)* on page 109, 'Rubrik' 4363, where it is listed with a few other scriptures in which some forms of the verb *ml' [mal'e],* 'voll werden (Tage/Jahr[e])', '(to become full, complete, (days/year[s])' occur; it is listed as a subgroup under 436, 'Dauer' ('duration'). Thus the verbal *lemall'ot* in 2 Chronicles 36:21 means, as shown earlier, 'to complete fully' and the verbal *melo't* 'to be completed' (qal infinitive construct) in Jeremiah 29:10, while the direct object *lebabhel* means 'for Babylon': this corresponds to Dr. Driver's definition **5. g.** *(b),* where *le* is said to be 'corresponding to the Latin *dativus commodi',* with the general meaning 'for', and that brings us back to the LXX-rendering mentioned above with the 'dativus commodi' *Babulôni*, giving exactly the same meaning. In his 'argumentation' RF referred to some other scriptures

in which *le* had been rendered with a local meaning, as 'at', 'in' or 'to', and of course Jenni has these verses in his classification, e.g. defining *le* in Jeremiah 51:2 as a 'personal dative of Babel, personified as world power', and Jeremiah 3:17 as a 'local directional'. Both of these are used correctly in their contexts, agreeing with the general sense of *le*, 'to, towards, for', and the full details about them and their various uses (e.g. the 'local' or 'directional') can be found in Dr. Jenni's very precise classification.

As for the last scripture mentioned by RF in this connection, Jeremiah 40:11, a check on some translations of this verse shows that not everything is as simple as RF appears to think; if, for instance, he had checked the LXX, he would have found a genitive construction in Jer. 47:11 (corresponding to MT's 40:11), which Sir Launcelot Lee Brenton rendered 'the king of Babylon had granted a remnant *to* Judah' in the Bagster *Septuagint*. (Reprint of 1976). The very same construction is found in Rotherham's *The Emphasized Bible,* while the NASB uses 'left a remnant *for* Judah'; several versions have 'a remnant *of* Judah' (e.g. NKJV; RV; ASV) and Leeser's Jewish translation has 'left a remnant *unto* Judah'. Let us also take a look at a very scholarly Norwegian rendering by Mowinckel and Messell in *DET GAMLE TESTAMENTE De senere Profeter* (Oslo 1944), page 417: 'Babelkongen hadde unt Judafolket en rest', ('the king of Babylon had granted the people of Judah a remnant') and then, for the sake of good order, we'll close this little check-up by quoting NW: 'the king of Babylon had given a remnant *to* Judah.' (Emphasis added where pertinent) Even though quite a few versions have 'in' as suggested by RF, it appears to be impossible to get a complete consensus on the way to render *le* in this verse!

In his discussion of the possibility of using *le* in a local sense as 'at' (page 86, § 2) RF points out that '*The Dictionary of Classical Hebrew* lists about 30 examples of this meaning'. Now, this is not so strange and it is actually a very small percentage when we recall that this preposition occurs more than 20,000 times in the Hebrew Bible. To be honest, that learned dictionary does not seem to offer the most comprehensive or the most detailed treatment of *le,* for it has only a total of 373 examples in its entry on that preposition (pages 479-485), while Brown-Driver-Briggs has more than 1500! What is more, whenever BDB has treated a category of *le* as found in one of the books of the Bible, it usually adds that the listed examples are followed by many more in that book or chapter. Moreover, it brims with grammatical and general linguistic information, adding many useful references to Aramaic, Syriac and other Semitic tongues for the sake of comparison.

Regarding the examples of *le* being used in the sense of 'at', RF is somewhat less than accurate, for in section **4.** in the dictionary he uses, which treats 'of place, **at, by, on, along, over'**, there are only 11 examples of 'at', not 30! The section lists 31 verses with a total of 35 examples of 'local' *le,* some of which are even rendered 'for', 'to', or by other words, and there is no added grammatical explanation of any kind whatsoever. Of course, Gesenius-Buhl and Köhler-Baumgartner also have plenty of information on this preposition and its usage, so as not to speak of Professor Jenni's magnificent volume quoted above.

One more point about *lebabbel* in Jeremiah 29:10: On page 85, the last six lines, RF relates that of 70 translations in his library only six had the 'local' meaning,

that is, 'at' in English, which means that the other sixty-four had something else, presumably 'for' or a similar wording. Why this didn't give him pause is difficult to understand -- how can he prefer six renderings to sixty-four? Unfortunately, he identifies only the six he prefers, and not a single one of the majority, the sixty-four with which he disagrees, a fact which only adds to the evidence for his marked prejudice. Of course, NWT is really not a good witness, for the false dogmas of the Watchtower translators undoubtedly caused them to use this rendering. As for the KJV, we have already seen why that old and really outdated version is to be disregarded in this context, and the same may be said about the other English ones as well, e.g. Harkavy's Hebrew-English edition from 1939, in which the English translation is actually taken directly from the KJV! Lamsa's slightly newer version (from 1957) is no better, as it is heavily influenced by the KJV, and one needs only a short survey of Helen Spurrell's *A Translation of the Old Testament from the Original Hebrew* (London 1885) to see that her rendering is clearly patterned on the old KJV, even though it is certainly not a mere copy - to the contrary, she has many renderings which are clear improvements on KJV, such as using JEHOVAH instad of 'the LORD'. Interestingly, in her *Preface* she made a special claim about the text from which she made her translation:

> It seems scarcely necessary to mention that the translation is made from the *unpointed* Hebrew; that being *the Original* Hebrew.

Actually, it would have been strange for her not to have copied the pattern of the old KJV, which had held the field as the 'Authorized Version' for centuries; indeed, to have abandoned it entirely might well have impaired the acceptance of Miss Spurrell's version, which she claimed had 'almost entirely occupied her time for many years past.' It is an interesting coincidence that her translation was published in London in 1885, in the very same year in which the Old Testament part of *The Revised Version* was issued, a fact, however, which precludes her having had access to this new edition, in which the 'at' in Jeremiah 29:10 had been replaced by 'for'.

Now, of course the Swedish Church Bible of 1917 does not have the English 'at' or some particle directly representing it, as e.g. 'på, vid, hos', but it has 'i' ('in') which doesn't prove a thing because, as stated above, the 'seventy years' which had been decided 'for' Babylon's dominion, would also pass 'in' or 'at' Babylon, as well as in all the lands mentioned, in Judah as well as among the Gentiles. Also, this old Swedish version has now been replaced by no less than two new ones (in 1998 and 2000) which both correctly read 'for Babylon' in Jeremiah 29:10. Actually, since all the faulty supports of RF have now fallen by the wayside, he ought to accept defeat and start using the correct renderings of the other sixty-four! And since he has begun to look at the Scandinavian Bibles, he might check the NW-Bible in Danish which has had 'for Babylon' in Jeremiah 29:10 ever since the first edition was printed in 1985, and it is unchanged in the large study edition of 1993!

The words of Zechariah

This section will not be treated here, since the verses used by RF have no relation to the subject under discussion, cf. C.O. Jonsson, *The Gentile Times Reconsidered,* 4th ed., Atlanta 2004, pp. 225-229.

A theological attempt ...

Thus far it has been a very disappointing experience to go through RF's twisted and contorted attempts to 'prove' his outlandish views about the length of the devastation of Jerusalem and Judah and the exile of the Judeans, but this section testifies to a stubbornness in the matter of doctrine on RF's part which is hard to comprehend. Here he deals with a two-part article by an Adventist scholar named Ross E. Winkle who has gone through all the relevant material about this topic and written a well-researched and well-formulated piece which by dint of its careful scholarship and its sober style outshines RF's 'fuzzy' and 'muddled' product by far.

He quite correctly sees Winkle's conclusion as the opposite of his own: 'There is no passage in the Bible which definitely says that Jerusalem and Judah should be desolate for 70 years while the people were exiles in Babylon!' What RF does not concede, however, in the face of the overwhelming Biblical and linguistic evidence for Winkle's conclusion, is that it is correct! In fact, Winkle proves his point in a very careful and methodical way, far removed from RF's prolix and clumsy attempts to pervert the clear and incontrovertible truth of God's Word. Actually, despite his lengthy and confused efforts, RF does not prove one single point of his Watchtower-inspired theory, for the very simple reason that it is not true!

Some of his arguments in this part are nothing less than ludicrous: he does not like that 'Winkle seems to assume that what the Bible says is true', (indeed, what is wrong with that? Doesn't the Watchtower people reason in the same way as Winkle?) and neither does he like Winkle's acceptance of 'the traditional chronology' - but here Winkle stands on firm ground: the Bible is God's own inspired word, truthful and inerrant, and what RF calls 'traditional chronology' is certainly not based on 'circular arguments' but on many years of diligent research by serious and competent scholars! Of course, mistakes have been made over the years, especially in the infancy of this science, but in time they have ben corrected whenever new evidence came to light, and today the ancient history and chronology of the Middle East for the first millennium B.C.E. is well-established and trustworthy in practically all aspects, notwithstanding RF's contrary claims and his unproven pet theories.

RF truly feels unhappy about Winkle's beginning from Jeremiah's testimony and his going on from there to Daniel and the Chronicler, while he himself starts with Daniel and the Chronicler and then goes back to Jeremiah; however, in a situation like this the ideal method is actually to begin from the beginning, which naturally means to take Jeremiah's prophecies first and then, having familiarized oneself with their message, to move on chronologically to the later reactions to these early prophecies and their fulfilment, going first to Daniel and then to the somewhat later Chronicler. In this way the true picture of the events of those times emerges clearly, and that is evidently what Winkle tries to do even though he takes the Chronicler before Daniel, probably because he wants to handle the matter of the 'sabbath rest' for the land properly, without getting it mixed up with the message of Jeremiah's prophecies, and this he does very well indeed.

RF also dislikes Winkle's reference to the literary style of some of Jeremiah's verses, and in this connection he refers to pages 210, 211 in Winkle's article; this is very good, for thus he reveals whence he has his ideas about 'parallelisms' (cf. RF, pp. 79, 80). Let us just take a look at this, before we move on: RF claimed that 2 Chronicles 36:21 formed in four lines a genuine Hebrew parallelism, which I disclaimed, showing that this stylistic feature does not occur in Hebrew prose such as the text in question. Nevertheless, Winkle was first to suggest something like that, even though he did not make quite the same claim that RF did, no doubt because he knew better. Winkle wrote the following about 2 Chronicles 36:20b-21 (pp. 209-211):

> In this passage there are two sets of parallel clauses, either beginning with *'ad* or *lemallot*. Displaying the text according to a quasi-poetic style (in order to highlight the parallels) results in the following (my translation):
>
> | *Line* | |
> |---|---|
> | 1 | And they were servants to him and his sons |
> | 2 | until *('ad)* the reign of the kingdom of Persia |
> | 3 | in order to fulfill *(lemallot)* the word |
> | 4 | of the LORD in the mouth of Jeremiah |
> | 5 | until *('ad)* the land had enjoyed its sabbaths |
> | 6 | (all the days of its desolation |
> | 7 | it kept sabbath) |
> | 8 | in order to fulfill *(lemallot)* seventy years |
>
> Line 2 completes the thought of line 1, while lines 3-4 further clarify lines 1 and 2. Line 5, which starts with the same word as line 2, must be parallel to it.

After this Winkle quotes three examples of this kind of 'parallel structure' (Exodus 16:35; Jeremiah 1:3; 2 Chronicles 36:16), and he is right as far as the similarity of structure is concerned. However, none of these examples fulfill the criteria for true poetic parallelism such as found in the poetic writings in the Hebrew Bible. Instead of this we may apply to them the words of Professor E. König of Bonn University as found in Hastings' *Dictionary of the Bible* (Vol. V, p. 116) where he issued a warning against regarding everything rhythmic in Hebrew prose as though it were parallelisms:

> It must be remembered that the higher form of prose, as employed especially by good speakers, was not without a certain kind of rhythm.

Indeed, this higher form of prose by such eminent speakers as the great prophets, e.g. Jeremiah, whose book is written for a large part (more than half) in poetic form (cf. NIV), and who also penned the all-poetic book of

Lamentations, often used a structure resembling parallelism, but we must remember that simple syntactical parallelistic structures do not on that count alone qualify as true parallelisms; for that the sense, the meaning must be parallelistic, and the form follow the rules of this special style of Semitic poetry (for this, see R.K. Harrison, *Introduction to the Old Testament,* London 1970, Part Twelve, I. Hebrew Poetry; pages 965-975, and similar works).

Apparently, Ross E. Winkle was well aware of this when he wrote the above, for he did not claim that he was dealing with genuine poetic parallelisms, but designated the form of his 'parallel clauses' a 'quasi-poetic style', and in this he was correct because that was all that they were. It seems as though RF overlooked this and so made another one of his typical mistakes; this he also does when he intimates that Winkle's argument 'puts the text upside down', because he himself is the one who does that, misinterpreting the clear messages of Jeremiah, Daniel and the Chronicler. Moreover, it seems that he also borrowed something else from Winkle who says in the last few lines on page 211, that 'modern translations of vs. 2 [Dan. 9:2] are rather *ambiguous* as far as the timing of the seventy years is concerned.' This is, of course, correct, as Winkle's examples (and several others) prove, but it is one thing to point out that some of the 'modern' translations are 'ambiguous', disturbing the sense of the text by their poor rendering, and then to claim that the inspired words of Jehovah uttered by the prophet Jeremiah to God's chosen people are ambiguous and need interpretation by somebody living many years later, who had seen their fulfilment. RF adds to his errors when he says that 'Winkle takes for granted that both the Bible and the traditional New Babylonian chronology are true', not on the basis of linguistic knowledge, but 'by appealing ... to more elusive reasons', because this is just the other way around - the only elusive reasons presented in this connection are 'Made by RF'!

Said in all fairness, Ross E. Winkle's article is one of the best and most sober disquisitions on this subject I've yet seen, and it is certainly worth having and reading, which can hardly be said about RF's bit. Indeed, there is more true scholarship in Winkle's two short articles than in RF's entire fourth chapter dealt with here, and probably even though all the chapters in his book were included.

The two poles ...

In this last section of RF's 'exposition' he reverts to his chronological speculations, repeating once again his false claims about the Bible stating that the exile lasted seventy years, but since these utterly untrue speculations have been thoroughly disproved in the foregoing, there seems to be no need to go into this discussion again.

Summary and Conclusion

Having gone through RF's discussion of the scriptures mentioning the seventy years it is time to assess his effort: First, his treatment of the Hebrew text, including his transliterations, grammatical 'analyses' and translations are too imprecise and far below par for someone introducing himself as a lecturer of Semitic languages in a reputable university. Actually, his understanding of

Classical Hebrew and his command of its grammar, usage and style appear to be defective. Moreover, his entire argumentation consists of the feeblest possible postulates, to wit:

He begins by presenting some very categorical statements, entirely without evidence, after which he surmises that the parts of the inspired Bible text with which he disagrees are 'ambiguous', which they are not; then he tries to make the Hebrew text say something which simply is not in it, and when that appears impossible he opts for the LXX and the Old Ethiopic versions, both of which are defective or faulty in the verses referred to. In his dealings with the main scriptures under discussion, from Jeremiah, Daniel and the Chronicler, he bases much of his argument on three tiny particles, trying to make them say what no Hebrew dictionary, grammar or translator accept, all apparently in the hope that his gullible readers will believe him. The only grammar book he refers to is a rather short syntax, actually little more than a collection of samples whose author does not even stay within the referential framework of Hebrew grammatical nomenclature, but creates his own terms, which, of course, is not very helpful to the students. And the only Hebrew dictionary to which he refers casually is a new and relatively little known work, which, when examined, does not even support his claims! And in his description of a truly scholarly treatment of the subject he has chosen for himself he appears to be entirely out of his depth - it is as though he cannot see the wood for the trees!

In a sense, it is somewhat difficult to find out exactly what RF believes in, because for years he has been known as a member of the congregation of Jehovah's Witnesses, defending their positions on the matters discussed in his book. However, apparently he does not share their absolute faith in the Bible as God's inspired and truthful word, such as when he claims that parts of God's Word are 'ambiguous', which they are not according to the usual Watchtower doctrine; their views of the entire Bible may be summed up in Paul's statement, 'All Scripture Is Inspired of God and beneficial' (2 Tim. 3:16, 17), cf the Watchtower publication bearing that title. Furthermore, he criticizes the Adventist scholar Ross Winkle for 'assuming that what the Bible says is true', which for him apparently is a mere starting point for his own private ruminations. As for the chronology of the period in question, he also feels entitled to assess these matters for himself, without any regard for the weighty results of the diligent research by numerous competent scholars worldwide. In this method, however, he seems to emulate his Watchtower mentors, who also handles such matters in their own way, as was revealed by Raymond Franz, the former member of the Governing Body of Jehovah's Witnesses who wrote the long chapter on chronology in the book *Aid to Bible Understanding* (New York 1969, 1971); in his own book *Crisis of Conscience* (Atlanta, 4th edition 2002), he explained that in trying to prove historically the date set for Jerusalem's destruction by the witnesses (607 BCE) he discovered that there was no evidence for this whatsoever. Now, what did this seasoned Watchtower writer do under such circumstances? This he explains in detail (page 26):

> Everything pointed to a period twenty years shorter than our published chronology claimed. Though I found this disquieting, I wanted to believe that our chronology was right in spite of all the contrary evidence. Thus,

> in preparing the material for the *Aid*-book, much of the time and space was spent in trying to weaken the credibility of the archaeological and historical evidence that would make erroneous our 607 B.C.E. date and give a different starting point for our calculations and therefore an ending date different from 1914. ... like an attorney faced with evidence he cannot overcome, my efforts was to discredit or weaken confidence in witnesses from ancient times ... [so as] to uphold a date for which there was no historical support.

This confession of Mr Franz is very revealing, as it shows to what length Jehovah's Witnesses will go when it comes to defending their ancient dogmas, and it is evident that Rolf Furuli has learned from this method: he is willing to discredit God's Word and twist it for the sake of the doctrines of the sect to which he belongs; a very deplorable attitude, which, however, is in near perfect tune with that of the leaders of the organization. Indeed, the entire presentation is one long and stubborn manipulation of the facts in a most non-scientific way, as can be seen in his very selective use of 'evidence', omitting, avoiding or denigrating anything and everything which is not in accord with his prejudiced views. And when he has to face the sound interpretations by reputable scholars, he does his very best to circumvent them in a mode reminiscent of the style employed for long by his mentors, the leaders of the sect to which he belongs. This is not really a scholarly work which may be used to edify truth-seeking people, but a narrow-minded, sectarian work of little consequence.

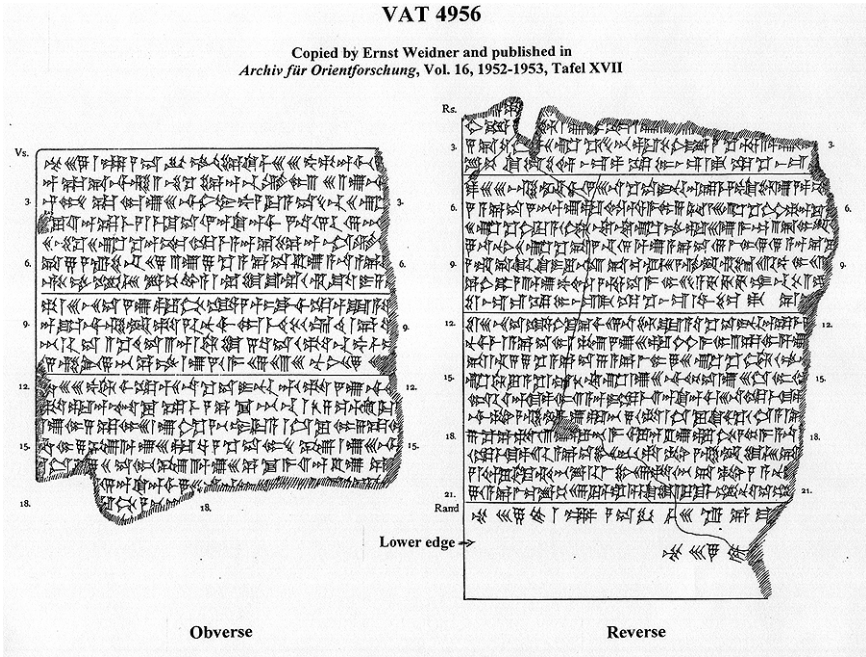
A critical review of Rolf Furuli's 2nd volume on chronology:

Assyrian, Babylonian and Egyptian Chronology. Volume II of *Assyrian, Babylonian, Egyptian, and Persian Chronology Compared with the Chronology of the Bible* (Oslo: Awatu Publishers, 2007).

Part I: The astronomical "diary" VAT 4956

Rolf Furuli's new book on chronology, *Assyrian, Babylonian and Egyptian Chronology* (Oslo: Awatu Publishers, 2007), covers 368 pages. Chapter 6 (pages 94-123) and Appendix C (266-325), which together cover 90 pages or about 25 percent of the book, are devoted to an attempt to overcome the evidence provided by the astronomical cuneiform tablet VAT 4956, dated to the 37th year of Nebuchadnezzar II.

VAT 4956 is a so-called astronomical "diary" that records the positions of the moon and the five planets visible to the naked eye observed during the 37th year of Nebuchadnezzar. About 30 of these records are so well preserved that they can be checked by modern computations. These computations have confirmed that the 37th year of Nebuchadnezzar corresponds to year 568/567 BCE (spring-to-spring).



HAS VAT 4956 BEEN "TAMPERED WITH" IN MODERN TIMES?

Furuli dedicates a substantial part of his discussion to arguing that the cuneiform signs on the tablet have been "deliberately tampered with" in modern times. In particular he claims that the signs for "year 37" at the beginning of the text in line 1 on the obverse of the tablet and the signs for "year 38" and "year 37" in the concluding lines at the lower edge on the reverse seem to have been "incised" by someone in modern times. He also claims that the signs for the name "Nebuchadnezzar" in line 1 on the obverse have been manipulated. After a lengthy analysis Furuli presents the following hypothesis on pages 285, 286:

> "A consideration of the data above together with the unusual publication history of the tablet leads to the following hypothesis: VAT 4956 is an authentic cuneiform tablet that was copied from older tablets in one of the last centuries B.C.E. It came to the Vorderasiatische Museum in Berlin about 1905 as one single entity. Someone discovered that the tablet was extremely important because it was an astronomical tablet with the hitherto oldest astronomical observations. These observations seemed to fit year 37 of Nebuchadnezzar II according to the chronology of Ptolemy, but a clear connection with Nebuchadnezzar II was lacking. In order to make this connection perfectly clear, the one working with the tablet used a modern grinding machine on the edge of the tablet, thus incising the signs for 'year 37' and 'year 38.' The first line with the name of the king was also manipulated. Because of the vibration, the tablet broke into three pieces, which were then glued together. It was discovered that the fit of the signs on both sides of the break on the reverse side was not perfect, and a grinding machine was used to try to remedy this. If this hypothesis is correct, a direct link to years 37 and 38 of Nebuchadnezzar II was not originally found on the tablet, but the lunar observations are genuine, while the planetary positions are probably backward calculations."

On pages 295-324 Furuli discusses the *astronomical contents* reported on the tablet. He finds that the planetary positions on the whole fit the year 568/567 BCE, but claims that the 13 lunar positions better fit the year 588/587 BCE. At the end of the Appendix on pages 324, 325, therefore, he draws the following conclusions:

> "The following principal conclusions can be drawn on the basis of the discussion of VAT 4956: The Diary is most likely a genuine tablet made in Seleucid times, but in modern times someone has tampered with some of the cuneiform signs. Because of the excellent fit of all 13 lunar positions in 588/87, there are good reasons to believe that the lunar positions represent observations from that year, and that the original tablet that was copied in Seleucid times was made in 588/87. Because so many of the planetary positions are approximately correct, but not completely correct, there are good reasons to believe that they represent backward calculations by an astrologer who believed that 568/67 was year 37 of Nebuchadnezzar II. Thus, the lunar positions seem to be original observations from 588/87, and the planetary positions are backward calculations for the positions of the planets in 568/67."

What about the claim that someone in modern times has "tampered" with the signs on the tablet and, by using "a modern grinding machine on the edge of the tablet," has incised the signs for 'year 37' and 'year 38' on the tablet? Furuli proposes this idea as a "hypothesis," as he knows very well that he has not been able to present any evidence in support of the idea.

According to Furuli's hypothesis, the supposed modern forger did not only incise the signs for "year 37" and "year 38" at the edge of the tablet. He also incised the signs for "year 37" and "manipulated" the signs for the name of the king, Nebuchadnezzar, in the beginning of line 1 on the obverse. The first question is how he could have done this, as there would have been no space at all at the beginning of the line for adding anything?

If there was another date and a different royal name on the original tablet, the modern forger had first to remove these signs (with the supposed grinding machine?) before the signs of the new date and the signs of the changes of the royal name could be incised on the tablet. But such a replacement of the first signs of line 1 could never have been done without leaving clear traces (e.g., depressions in the tablet) at the beginning of the line. No such traces exist. The signs look quite genuine. As one specialist on cuneiform points out:

> "Anyone acquainted with cuneiform can see that 'year 37' and 'year 38' are written by an experienced scribe. No modern person could have achieved to scratch (into dried clay!!) true-looking signs." (Communication Hermann Hunger–C. O. Jonsson, Jan. 8, 2008)

Another problem with Furuli's hypothesis is the identity of the supposed modern forger of the dates and the royal name on the tablet. The first translation of the tablet was that of Paul V. Neugebauer and Ernst Weidner, whose translation together with an astronomical examination and a discussion of it was published back in 1915. ("Ein astronomischer Beobachtungstext aus dem 37. Jahre Nebukadnezars II. (– 567/66)," *Berichte über die Verhandlungen der königlich sächlichen Gesellschaft der Wissenschaften zu Leipzig.* Philologisch-historische Klasse. 67. Band. Leipzig: B. G. Teubner, 1915)

As the article by Neugebauer and Weidner clearly shows, the date and the royal name ("year 37 of Nebuchadnezzar") were already on the tablet in 1915 when they were examining it. Are we to believe that these two scholars were forgers, who co-operated in removing some of the original signs on the tablet and replacing them with signs of their own preference? Even Furuli admits that he "cannot imagine that any scientist working with the tablet at the Vorderasiatische Museum has committed fraud." (Furuli, p. 285) He has no idea about who the supposed forger may have been, or how he/she managed to change the signs on line 1 without leaving any traces of it on the tablet.

Finally, Furuli's hypothesis is self-contradictory. If it were true that the planetary positions "represent backward calculations by *an astrologer who believed that 568/67 was year 37 of Nebuchadnezzar II*," and if it were true that "the original tablet that was copied in Seleucid times was made in 588/87," which Furuli argues was the 37th year of Nebuchadnezzar, then the astrologer/copyist must have dated the tablet to the 37th year of Nebuchadnezzar from the very beginning! No modern manipulation of the date would then have been necessary.

Furuli's hypothesis is simply untenable. The only reason for his suggesting it is the desperate need to get rid of a tablet that inexorably demolishes his "Oslo [= Watchtower] chronology" and firmly establishes the absolute chronology for the reign of Nebuchadnezzar II (604-562 BCE).

As discussed in chapter 4 of my book *The Gentile Times Reconsidered* (Atlanta: Commentary Press, 2004), there are at least nine other astronomical tablets that perform the same service. Furuli's futile attempts to undermine the enormous burden of evidence provided by these other astronomical tablets will be discussed in another, separate part of this review.

The question that remains to be discussed here is Furuli's claim that the lunar positions that were observed in the 37th year of Nebuchadnezzar and are recorded on VAT 4956 fit the year 588/587 better than 568/567 BCE.

DO THE LUNAR POSITIONS RECORDED ON VAT 4956 FIT 588/587 BETTER THAN 568/567 BCE?

On the back cover of his new book Rolf Furuli states that the conclusion of his study is that "the lunar data on the tablet [VAT 4956] better fit 588 than 568 B.C.E., and that this is the 37th year of Nebuchadnezzar II." What about this claim?

A careful examination of all the legible lunar positions recorded on this astronomical "diary" proves that the claim is false. Almost none of the lunar positions recorded on VAT 4956 fit the year 588/587 BCE, while nearly all of them excellently correspond to lunar positions in the year 568/567 BCE.

The astronomy program used for this examination is Chris Marriott's *SkyMap Pro 11.04*, which uses the modern complete ELP2000-82B lunar theory. The "delta-T" value used for the secular acceleration of the Moon is 1.7 milliseconds per century, which is the result of the extensive research presented by F. Richard Stephenson in his *Historical Eclipses and*

Earth's Rotation (Cambridge, 1997). The program used, therefore, maintains high accuracy far into the past, which is not true of many other modern astronomy programs.

About a year before Furuli's book had been published in the autumn of 2007 I had examined his claim (which he had published officially in advance) and found that none of the lunar positions fit the year 588/587 BCE. I shared the first half of my results with some of my correspondents. I did not know at that time that Furuli not only moves the 37th year of Nebuchadnezzar 20 years back to 588/587 BCE, but that he also moves the 37th year about one extra month forward in the Julian calendar, which actually makes it fall too late in that year. The reason for this is the following:

On the obverse, line 17, VAT 4956 states that on day 15 of month III (Simanu) there was a "lunar eclipse that was omitted." The phrase refers to an eclipse that had been calculated in advance to be invisible from the Babylonian horizon.

On page 126 Furuli explains that he has used this eclipse record as the "point of departure" for mapping "the regnal years, the intercalary months, and the beginning of each month in the reign of Nebuchadnezzar II, both from the point of view that 568/67 and 588/87 B.C.E. represent his year 37."

In the traditional date for the 37th year of Nebuchadnezzar, this eclipse can easily be identified with the eclipse of July 4, 568 (Julian calendar). Thus the Babylonian date, the 15th of month III, corresponds to July 4, 568 BCE. From that date we may count backward to the 1st of month III, which must have been June 20/21 (sunset to sunset), 568. As the tablet further shows that the preceding Month II (Ayyaru) had 29 days and Month I (Nisannu) 30 days, it is easy to figure out that the 1st of Ayyaru fell on May 22/23, 568, and the 1st of Nisannu (i.e., the 1st day of year 37) on April 22/23, 568 BCE.

On moving back 20 years to 588/87 BCE – the 37th year of Nebuchadnezzar in Furuli's alternative "Oslo Chronology" – we find that in this year, too, there was a lunar eclipse that could not be seen from the Babylonian horizon. It took place on July 15, 588 BCE. According to Furuli this is the eclipse that VAT 4956 dates to the 15th of month III (Simanu). Reckoning backwards from July 15, Furuli dates the 1st of month III to June 30, 588; the 1st of month II (Ayyaru) to June 1, 588, and the 1st of month I (Nisannu) to May 1. (In his discussions and/or calculations he is inconsistently alternating between May 1, May 2, and May 3).

There are a number of problems with Furuli's dates. The first one is that the first day of the Babylonian year, Nisannu 1, never began as late as in May! As shown by the tables on pages 27-47 in R. A. Parker & W. H. Dubberstein's *Babylonian Chronology* (Brown University Press, 1956), the 1st of Nisannu never once in the 700-year period covered (626 BCE – CE 75) began as late as in May. The same holds true of the subsequent months: the 1st of Ayyaru never began as late as on June 1, and the 1st of Simanu never began as late as on June 30. For this reason alone the lunar eclipse that VAT 4956 dates to the 15th of month III cannot be that of July 15, 588 BCE! This eclipse must have fallen in the middle of *month IV* in the Babylonian calendar. Furuli's "point of departure" for his "Oslo Chronology," therefore, is quite clearly wrong.

Very interestingly, the lunar eclipse of July 15, 588 BCE was recorded by the Babylonians on another cuneiform tablet, BM 38462, No. 1420 in A. Sachs' LBAT catalogue, and No. 6 in H. Hunger's *Astronomical Diaries and Related Texts from Babylonia* (ADT), Vol. V (Wien, 2001). I discussed this tablet on pages 180-182 of my book, *The Gentile Times Reconsidered* (3rd ed. 1998, 4th ed. 2004). The chronological strength of this tablet is just as decisive as that of VAT 4956. It contains *annual* lunar eclipse reports dating from the 1st to at least the 29th regnal year of Nebuchadnezzar (604/603 – 576/575 BCE). The preserved parts of the tablet contain as many as 37 records of eclipses, 22 of which were predicted, 14 observed, and one that is uncertain.

The entry containing the record of the July 15, 588 BCE eclipse (obverse, lines 16-18) is dated to *year 17, not year 37*, of Nebuchadnezzar! This entry reports two lunar eclipses in this

year, one "omitted" and one observed. The first, "omitted" one, which refers to the eclipse of July 15, 588, is dated to *month IV (Duzu), not to month III (Simanu)*. So it cannot be the eclipse dated to month III on VAT 4956. That this eclipse really is the one of July 15, 588 is confirmed by the detailed information given about the second, *observed* lunar eclipse, which is dated to month X (Tebetu) of year 17. The details about the time and the magnitude help to identify this eclipse beyond all reasonable doubts. The whole entry reads according to H. Hunger's translation in ADT V, page 29:

"[Year] 17, Month IV, [omitted.]

[Month] X, the 13th, morning watch, 1 *beru* 5° [before sunrise?]

All of it was covered. [It set eclips]ed."

The second eclipse in month X – six months after the first – took place on January 8, 587 BCE. This date, therefore, corresponded to the 13th of month X in the Babylonian calendar. This agrees with Parker & Dubberstein's tables, which show that the 1st of month X (Tebetu) fell on 26/27 December in 588 BCE. The Babylonians divided the 24-hour day into 12 *beru* or 360 USH (degrees), so one *beru* was two hours and 5 USH (= degrees of four minutes each) were 20 minutes. According to the tablet, then, this eclipse began 2 hours and 20 minutes before sunrise. It was total ("All of it was covered"), and it "[set eclips]ed," i.e., it ended after moonset. What do modern computations of this eclipse show?

My astroprogram shows that the eclipse of January 8, 587 BCE began "in the morning watch" at 04:51, and that sunrise occurred at 07:12. The eclipse, then, began 2 hours and 21 minutes before sunrise – exactly as the tablet says. The difference of one minute is not real, as the USH (time degree of 4 minutes) is the shortest time unit used in this text. [The USH was not the shortest time unit of the Babylonians, of course, as they also divided the USH into 12 "fingers" of 20 seconds each.] The totality began at 05:53 and ended at 07:38. As moonset occurred at 07:17 according to my program, the eclipse was still total at moonset. Thus the moon "set while eclipsed."

Furuli attempts to dismiss the enormous weight of evidence provided by this tablet in just a few very confusing statements on page 127 of his book. He erroneously claims that the many eclipses recorded "occurred in the month before they were expected, except in one case where the eclipse may have occurred two months before." There is not the slightest truth in this statement. Both the predicted and the observed eclipses agree with modern computations. The statement seems to be based on the gross mistakes he has made on the previous page, where he has misidentified the months on LBAT 1421 with disastrous results for his calculations.

In the examination below, the lunar positions recorded on VAT 4956 are tested both for 568/567 BCE as the generally accepted 37th year of Nebuchadnezzar and for Furuli's alternative dates in 588/587 BCE as presented on pages 295-325 of his book.

Furuli has also tested the lunar positions for the year 586/585 BCE, one Saros period (223 months, or 18 years + c. 11 days) previous to 568/567. As Furuli himself rejects this year as not being any part of his "Oslo Chronology", I will ignore it as well as all his computations for that year (which in any case are far from correct in most cases).

The record of the first lunar position on the obverse, line 1, of VAT 4956 reads:

(1) Obv.´ line 1: "Year 37 of Nebuchadnezzar, king of Babylon. Month I, (the 1st of which was identical with) the 30th (of the preceding month), the moon became visible behind the Bull of Heaven".

Nisannu 1 = 22/23 April 568 BCE:

The information that the 1st of Month I (Nisannu) was identical with the 30th of the preceding month is given to show that the preceding lunar month (Addaru II of year 36, as shown also at Obv. line 5 of our text) had only 29 days. In 568 BCE the 1st day of Nisannu fell on 22/23 April (from evening 22 to evening 23) in the Julian calendar. After sunset (at c.

18:30) and before moonset (c. 19:34) on April 22 the new moon became visible c. 5.5° east of (= behind) α Taurus, the most brilliant star in the constellation of Taurus ("the Bull of Heaven"). This is close enough to the position given on the tablet.

Furuli's date: Nisannu 1 = 1st, 2nd and 3rd May 588 BCE:

In 588 BCE day 1 of Nisannu fell on 3/4 April according to the modern calculations of the first visibility of the new moon after conjunction. Between sunset (at c. 18:18) and moonset (at c. 19:14) on April 3 the new moon became visible at the western end of the constellation of Taurus, about 14° west of (= in front of) α Taurus. Thus the moon was clearly not *behind* the constellation of Taurus at this time. This position, therefore, does not fit that on the tablet.

But as stated above, Furuli moves Nisannu 1 of 588 about one month forward in the Julian calendar, which is required by his identification of the lunar eclipse dated to month III on the tablet with the eclipse of July 15, 588. (Furuli, p. 296) This should have moved 1 Nisannu to 3/4 May, 588 BCE, a date that is scarcely possible, as all the evidence available shows that 1 Nisannu never fell that late in the Julian calendar in the Neo-Babylonian or any later period. But Furuli goes on to make an even more serious error in connection with this relocation of Nisannu 1.

On page 311 Furuli explicitly states that, "In order to correlate the Babylonian calendar with the Julian calendar, I take as a point of departure that each month began with the sighting of the new moon." He goes on to explain that, due to bad weather conditions, the month could sometimes "begin a day after the new moon." Despite this pronounced (and quite correct) point of departure, Furuli, in his discussion of the *planetary* positions on page 296, dates the 1st of Nisannu in 588, not to 3/4 May but to *May 1*. He does not seem to have realized that this was not the date of the sighting of the new moon after conjunction. On the contrary, this date not only *preceded* the first sighting of the new moon by two days, but also the date of conjunction (the time of lunar invisibility) by one day!

Later on, in the beginning of his discussion of the *lunar* positions on page 312, Furuli seems to have discovered that the May 1 date is problematic, because here he suddenly and without any explanation moves the beginning of 1 Nisannu in 588 forward, at first from May 1 to the evening of May 3, but finally, in the table at the bottom of the page, to the evening of May 2! Such manipulations of the Julian date for 1 Nisannu are, of course, inadmissible. One cannot have *three* different dates for 1 Nisannu in the same year!

True, the conjunction did occur on 2 May, at c. 03:39 local time. (Herman H. Goldstein, *New and Full Moons 1001 B.C. to A.D. 1651*, Philadelphia: American Philosophical Society, 1973, p. 35) But this does not mean that the new moon became visible on that day in the evening after sunset. For a number of reasons, the time interval between the conjunction and the first sighting of the new moon is considerable. As Dr. Sacha Stern explains, "the time interval between conjunction and first evening of visibility is often as long as one day (24 hours); it ranges however, at Mediterranean latitudes between a minimum of about 15 hours and a maximum of well over two days." (S. Stern, *Calendar and Community*, Oxford University Press, 2001, p. 100) The results of modern examinations of the first lunar crescents recorded on the Babylonian astronomical tablets from 568 to 74 BCE are presented by Uroš Anderlič, "Comparison with First Lunar Crescent Dates of L. Fatoohi," available on the web at:
http://www.univie.ac.at/EPH/Geschichte/First_Lunar_Crescents/Main-Comp-Fatoohi-Anderlic.htm .

Thus the new moon could not be seen in the evening of 2 May, either. The earliest time for the visibility of the new moon was in the evening of 3 May, as stated above. Assuming that this incredibly late date for 1 Nisannu were correct, we find that the new moon did appear behind the constellation of Taurus in this evening (of May 3) between sunset (at c. 18:36) and moonset (at c. 20:05). But it was closer to the constellation of Gemini than to Taurus, so the position of the moon still does not fit very well.

In conclusion, the two dates for 1 Nisannu (1st and 2nd May) that Furuli actually uses in his computations are impossible. And should he have used May 3 as the date for 1 Nisannu, this would not have been of much help to him, as all the three dates are unacceptably late as the beginning of the Babylonian year.

(2) Obv.´ line 3 says: "Night of the 9th (error for: 8th), the beginning of the night, the moon stood 1 cubit [= 2°] in front of [= west of] β Virginis."

Nisannu 8 = 29/30 April 568 BCE:

In 568 BCE the 8th of Nisannu fell on 29/30 April. In the beginning of the night on April 29 the moon stood about 3.6° northwest of β Virginis, or about 2° to the west (in front of) and 3° to the north of (above) the star. This agrees quite well with the Babylonian measurement of 2°, which, of course, is a rather rough and rounded-off figure.

Furuli's date: Nisannu 9 = 11 May 588 BCE:

As Furuli (incorrectly) dates 1 Nisannu to 2 May in 588, he should have dated the 8th and 9th of Nisannu to May 9 and 10, respectively. However, he moves the dates another day forward, to May 10 and 11, respectively, as is shown in his table at the bottom of page 313. Based on this error, he claims that, "On Nisanu 9 [May 11], the moon stood 1 cubit (2°) in front of β Virginis, exactly what the tablet says." (Furuli, p. 313)

But this is wrong, too. In the "beginning of the night" of 11 May 588 the moon stood, not to the west of (in front of), but far to the *east* of (behind) β Virginis (about 13° to the east of this star at 20:00). To add to the mess, the altitude/azimuth position of the moon in Furuli's two columns to the right in his table is wrong, too, as it shows the position near midnight, not at "the beginning of the night" as the tablet says.

(3) Obv.´ line 8: "Month II, the 1st (of which followed the 30th of the preceding month), the moon became visible while the sun stood there, 4 cubits [= 8°] below β Geminorum."

Ayyaru 1 = 22/23 May 568 BCE:

In 568 BCE the 1st day of Month II (Ayyaru) fell on 22/23 May. The distance between sunset this evening (at c. 18:49) and moonset (at c. 20:46) was c. 117 minutes. This distance between the moon and the sun was long enough for the new moon to become visible while the sun still "stood there," i.e., just above the horizon. At its appearance the new moon stood about 7.3° south of (below) β Geminorum, which is very close to the position given on the tablet.

Furuli's date: Ayyaru 1 = 1 June 588 BCE:

As Furuli has dated Nisannu 1 to 1 May, and later to 2 May, the 1st of Ayyaru should fall one lunar month later. Furuli (p. 314) dates it to June 1. This, however, conflicts with his earlier dates, because if Nisannu 1 began in the evening of 1 May as he holds at first (p. 296), and if Nisannu had 30 days as the tablet says, he should have dated the 1st of Ayyaru to May 31. But because he later on redates the beginning of Nisannu 1 to the evening of 2 May (p. 312), he is now able to date the 1st of Ayyaru to 1 June. But as was pointed out earlier, the 2 May date for Nisannu 1 is unacceptable, too, as the moon did not become visible until 3 May.

Furuli's choice of 1 June seems to be due to the fact that the new moon could not be sighted until that day. It became visible at sunset (c. 18:56) about 9.7° below β Geminorum. This is not "*exactly* 4 cubits below" this star, as Furuli states (p. 314), but close to 5 cubits below it. Yet this would have been an acceptable approximation, had the date been right. But it does not only conflict with Furuli's dating of Nisannu 1 to 1 May; the month of Ayyaru never began as late as in June. In addition, the altitude/azimuth position Furuli gives in his table (+ 54 and 256) is also wrong, as it does not show the position of the moon at sunset, but at c. 15:16, when it was still invisible. Actually, Furuli's figures for the altitude/azimuth position at the time of observation are so often erroneous that they will henceforth be ignored. The only detail that fairly corresponds to the statement on the tablet, then, is the position of the moon. Everything else is wrong.

(4) Obv.´ line 12: "Month III, (the first of which was identical with) the 30th (of the preceding month), the moon became visible behind Cancer; it was thick; sunset to moonset: 20° [= 80 minutes]".

Simanu 1 = 20/21 June 568 BCE:

In 568 BCE the 1st day of Month III (Simanu) fell on 20/21 June. Day 1 began in the evening after sunset on June 20. At that time the new moon became visible behind (= east of) Cancer, exactly as the tablet says. According to my astro-program the distance from sunset to moonset was c. 23° (= 92 minutes; from sunset c. 19:06 to moonset c. 20:38). This is not very far from the measurement of the Babylonian astronomers. The discrepancy of 3° is acceptable in view of the primitive instruments they seem to have used. As N. M. Swerdlow has suggested, "the measurements could have been made with something as simple as a graduated rod held at arm's length." (N. M. Swerdlow, *The Babylonian Theory of the Planets*, Princeton University Press, 1998, pp. 40, 187)

Furuli's date: Simanu 1 = 30 June 588 BCE:

As Furuli dated the 1st of Ayyaru to June 1, and as the tablet shows that Ayyaru had 29 days, he should date the 1st of Simanu to June 30, which he does. And it is true that we do find the moon behind Cancer on this date. Furuli states that "it was 6° to the left (behind) the center of Cancer, so the fit is excellent." But he has to add immediately that *"it was so close to the sun that it was not visible."* (Furuli, p. 315. Emphasis added.)

The reason is that the conjunction had occurred earlier on the very same day, at about 03:30. (H. H. Goldstine, *op. cit.,* p. 35) In the evening the time distance between sunset (at c. 19:09) and moonset (at c. 19:32) was still no more than 23 minutes, i.e., less than 6°, so the moon was too close to the sun to be visible. Furuli does not comment on the fact that the tablet gives the distance between sunset and moonset as much as 20° (80 minutes), showing that the moon on Simanu 1 was far enough from the sun during the observation to be visible, contrary to the situation in the evening of June 30 in 588. For this reason alone Furuli's date is disqualified.

(5) Obv.´ line 14: "Night of the 5th, beginning of the night, the moon passed towards the east 1 cubit [2°] <above/below> the bright star at the end of the Lion's foot [= β Virginis]."

Simanu 5 = 24/25 June 568 BCE:

In 568 BCE the 5th of Simanu fell on 24/25 June according to the tables of R. A. Parker & W. H. Dubberstein (*Babylonian Chronology,* 1956, p. 28). In the evening of the 24th, the moon passed towards the east c. 2° north of γ Virginis, not of β Virginis. So here is a problem. Either the Babylonian scholar misnamed the star, or he misdated the observation by one day. In the previous evening (on the 23rd), the moon passed c. 4° above (north of) β Virginis. Thus Johannes Koch translates the 5th of Simanu into June 23 of the Julian calendar and calculates that in the evening that day at 22:36 the moon was 4° 17´ above and 0° 55´ behind β Virginis. (See J. K och, "Zur Bedeutung von LÁL in den 'Astronomical Diaries' und in der Plejaden-Schaltregel," *Journal of Cuneiform Studies*, Vol. 49, 1997, p. 88.)

Furuli's date: Simanu 5 = 4 July 588 BCE:

Furuli dates the 5th of Simanu to 4 July 588 BCE. He claims (p. 315) that on this date "the fit is excellent: the moon passed 1 cubit (2°) above β Virginis." Unfortunately, it did not. When the Babylonian day began (at sunset, c. 19:10) the moon was already c. 2 ½ cubits (5°) *behind* (east of) β Virginis. It had passed above β Virginis about 12 hours earlier, in the morning before moonrise, but that would have been on Simanu 4, not on Simanu 5. So the fit is far from "excellent."

(6) Obv.´ line 15: "Night of the 8th, first part of the night, the moon stood 2 ½ cubits [= 5°] below β Librae."

Simanu 8 = 27/28 June 568 BCE:

In 568 BCE the 8th of Simanu fell on 27/28 June. My astro-program shows that in the early night of June 27 the moon stood c. 4.5° south of β Librae, which is very close to the position given on the tablet.

Furuli's date: Simanu 8 = 7 July 588 BCE:

Furuli, who dates the 8th of Simanu to the 7th of July, 588 BCE, claims (p. 316) that the moon on that day "was 2 ½ cubits below β Librae, so the fit is excellent." Again, Furuli is wrong. In the "first part of the night" on 7 July 588 BCE the moon stood as much as c. 6 cubits (12°) *west of* (i.e., far from below) β Librae. It was in fact closer to the constellation of Virgo than to Libra. So Furuli's date does not fit at all.

(7) Obv.´ line 16: "Night of the 10th, first part of the night, the moon was balanced 3 ½ cubits [= 7°] above α Scorpii."

Simanu 10 = 29/30 June 568 BCE:

In 568 BCE the 10th of Simanu fell on 29/30 June. In the first part of the night of the 29th, the moon stood about 8° above (north of) α Scorpii, which is very close to the position described on the tablet.

Furuli's date: Simanu 10 = 10 July 588 BCE:

As Furuli had dated Simanu 8 to July 7, he should have dated Simanu 10 to 9 July 588. But strangely, he mistranslates it into 10 July and claims (p. 317): "The moon was 3 ½ cubits (7°) above α Scorpii, so the fit is excellent." But in the "first part of the night" that day the moon was over 5 cubits (10°) *northeast* of α Scorpii. And even if we move back to the early night of July 9, the moon at that time was about 5 cubits (10°) *northwest* of α Scorpii. It would not be correct to state of any of these lunar positions that the "fit is excellent". None of them fits.

(8) Obv.´ line 17: "The 15th, one god was seen with the other; sunrise to moonset: 7° 30´ [= 30 minutes]. A lunar eclipse which was omitted [….]"

Simanu 15 = 4/5 July 568 BCE:

In 568 BCE the 15th of Simanu fell on 4/5 July. The expression "one god was seen with the other" refers to the situation when the sun and the moon are both visible at the same time when standing in opposition to each other. This was the situation in the early morning of 5 July. From sunrise in the east at c. 04:51 to moonset in the west at c. 05:24, i.e., for about 33 minutes, "one god was seen with the other." This is very close to the time distance recorded on the tablet, 7° 30´, or 30 minutes.

Line 17 also records "a lunar eclipse which was omitted [….]", an expression used of an eclipse that had been predicted in advance to be invisible from the Babylonian horizon. The text is somewhat damaged, but the reference is obviously to the lunar eclipse of July 4, 568 BCE, which according to modern calculations began about 12:50 and lasted until 14:52, local time. As it took place in the early afternoon when the moon was below the horizon, it could not be observed in Babylonia.

Furuli's date: Simanu 15 = 15 July 588 BCE:

Furuli dates Simanu 15 to 15 July 588 BCE. True, there was a lunar eclipse on that day that was invisible from the Babylonian horizon. Furuli claims on page 317 that "the eclipses of July 15, 588; of July 4, 568; and of June 24, 586, all occurred on Simanu 15 and fit the description." However, the time distances between sunrise and moonset at the dates in 588 and 586 do not fit at all with the information on the tablet. On 15 July 588 the moonset (at 04:50) occurred about five minutes *before* sunrise (04:55), so the two "gods" could not been seen with each other that day. And the same problem is connected with the June 24, 586 BCE date. Of the three alternatives, therefore, only the July 4, 568 BCE date fits the information on the tablet.

In passing, Hunger's translation of the obv.´ line 18 should be corrected. It says: "[…. the moon was be]low the bright star at the end of the [Lion's] foot […]"

The signs within brackets are illegible and the text had to be restored by Hunger. But as he himself later explained, the word "moon" was just a guess that he had not checked. Modern calculations show that, if the day number (which is lost, too) was the 16th (July 5/6), the heavenly body that was below "the bright star at the end of the Lion's foot" (= β Virginis) must have been Venus, not the moon. This was later pointed out also by Johannes Koch (JCS 49, 1997, p. 84, n. 7, and p. 89). However, Koch calculates that Venus in the first part of the night of July 5 was 0° 02´above and 1° 06´ behind β Virginis, while the SkyMap Pro 11 program shows that Venus at that time was not 0° 02´above but about 0° 64´ *below* and about 0° 89´ behind β Virginis. These results are in closer agreement with the tablet.

(9) ´Rev. line 5: "Month XI, (the 1st of which was identical with) the 30th (of the preceding month), the moon became visible in the Swallow; sunset to moonset: 14° 30´ [58 minutes]; the north wind blew. At that time, Jupiter was 1 cubit behind the elbow of Sagittarius […]"

Shabatu 1 = 12/13 February 567 BCE:

In 568/567 BCE the first day of month XI (Shabatu) fell on 12/13 February 567 BCE. On day 12 the distance between sunset (at c. 17:44) and moonset (c. 18:53) was 69 minutes (17° 15´), or 11 minutes (2° 45´) *more* than those given on the tablet, 58 minutes. According to the tablet, the new moon became visible after sunset "in the Swallow."

The "Swallow" covered or included a part of the constellation of Pisces. The exact extension of the "Swallow" is not quite clear. But it included a band of stars called "DUR SIM-MAH (ribbon of the swallow)" which included at least δ, ε, and ζ Pisces, perhaps also some other stars. The "ribbon of the swallow" is referred to in over a dozen astronomical reports dating from 567 to 78 BCE, and these have been helpful in locating at least some stars in the group. (Alexander Jones, "A Study of Babylonian Observations of Planets Near Normal Stars," *Archive for History of Exact Sciences*, Vol. 58, 2004, pp. 483, 490) The "Swallow", then, comprised at least the "ribbon of the swallow" and then extended westward along the Pisces.

Furuli's discussion of SIM and SIM-MAH on page 296 is thoroughly misleading, as he tries to confuse the issue by referring to some older views without telling that they were abandoned long ago. This is true of Kugler's suggestion back in 1914 that SIM-MAH applies to the northwest of Aquarius. To be sure, Furuli states that two modern scholars, E. Kasak and R. Veede, in an article published in 2001 applies SIM to "the Bull of Heaven" (Taurus). *They do not!* In their article (available on the web: http:/folklore.ee/folklore/vol16/planets.pdf) they do not mention SIM at all! Furuli also refers to the conclusion of van der Waerden (1974) that it applies to "the south-west part of Pisces" – as if this would be yet another view. The fact is that his conclusion does not conflict with that of other modern scholars, including that of Jones, Hunger, and Pingree. The impression Furuli tries to give, that modern experts widely disagree about the identity of SIM and SIM-MAH, is false. All agree that it covered or included a part of the constellation of Pisces.

My astro-program shows that in the evening after sunset on February 12, 567 BCE, the new moon became visible in the Pisces, about half-way between α Pisces in the south and γ Pisces in the west and c. 8.5° below the centre of the western bow of the Pisces. Furuli's statement that the moon at this time was "13° below the central part of Pisces" is not correct. His claim that the position is "a somewhat inaccurate fit" is totally uncalled-for, in particular in view of his statement that "the fit is excellent" when he finds the lunar position on his own preferred date (February 22, 587) to have been "9° below the central part of Pisces."

There can be no doubt that the moon on February 12, 567 BCE was "in the Swallow," just as is stated on the tablet. At that time Jupiter could also be seen in Sagittarius as the tablet says.

Furuli's date: Shabatu 1 = 22 February 587 BCE:

Furuli's date for Shabatu 1 is 22 February 587 BCE. And it is true that the moon on that day was "in the Swallow." One problem with this date, however, is that the new moon at sunset was so close to the sun (less than 10°) that it most probably was invisible. The conjunction had occurred earlier on the same Julian day, at c. 01:26. Besides, Jupiter was between Aries and Pisces, far away from Sagittarius where it is placed by the tablet.

(10) ´Rev. line 12: "Month XII, the first (of which followed the 30th of the preceding month), the moon became visible behind Aries while the sun stood there; sunset to moonset: 25° [100 minutes], measured; earthshine; the north wind blew."

Addaru 1 = 14/15 March 567 BCE:

In 568/567 BCE the first day of month XII (Addaru) fell on 14/15 March 567 BCE. On day 14 the distance between sunset (at c. 18:06) and moonset (at c. 19:50) was 104 minutes (26°), which is very close to the Babylonian measurement, 25° (100 minutes). The distance between the moon and the sun was long enough for the moon to become visible before sunset ("while the sun stood there"). At that time the moon stood about 15° southeast of α Aries, thus partially behind and partially below the most brilliant star in Aries. This roughly agrees with the position given on the tablet.

Furuli's date: Addaru 1 = 24 March 587 BCE:

Furuli's date for Addaru 1 is 24 March 587 BCE. Of the position of the moon Furuli says (p. 321): "The moon was 13° to the left of (behind) Aries, so the fit is excellent." This is not quite correct. About 86 minutes (c. 21.5°) before sunset ("while the sun stood there"), the moon stood about 7° to the south of (below) the nearest star in Aries (δ Aries) and about 20° to the southeast of (i.e., partially below and partially behind) α Aries. This position is not very exact, but acceptable.

(11) ´Rev. line 13: "Night of the 2nd, the moon was balanced 4 cubits [8°] below η Tauri."

Addaru 2 = 15/16 March 567 BCE:

In 567 BCE the 2nd of Addaru fell on 15/16 March. In the night of the 15th, at c. 19:00, the moon was 4 cubits (8°) directly to the south of (below) η Tauri, also known as Alcyone, the most brilliant star in the star cluster Pleiades. This position agrees exactly with that given on the tablet.

Furuli's date: Addaru 2 = 25 March 587 BCE:

Furuli dates Addaru 2 to 25 March 587 BCE. In the night of that day, at c. 19:00, the moon was about 10.5° southeast of η Tauri, a position that does not agree very well with that given on the tablet. The fit is definitely not "excellent" as Furuli (p. 321) claims it is.

(12) ´Rev. line 14: "Night of the 7th, the moon was surrounded by a halo; Praesepe and α Leonis [stood] in [it ….]"

Addaru 7 = 20/21 March 567 BCE:

In 567 BCE the 7th of Addaru fell on 20/21 March. In the night of the 20th/21st the moon stood between α Leonis and Praesepe, the latter being an open star cluster close to the centre of the constellation of Cancer. As they lie about 23° apart, the halo must have covered a large area in the sky. The next line (line 15), in fact, goes on to state that "the halo surrounded Cancer and Leo." As the moon stood between these two constellations, its position agrees with that given on the tablet.

Furuli's statement (p. 322) that Cancer "is either the constellation or the zodiacal sign that covers 30° of the heaven" is anachronistic, as the zodiacal belt was not divided into signs of 30° each until much later, in the Persian era.

Furuli's date: Addaru 7 = 30 March 587 BCE:

Furuli's date for Addaru 7 is 30 March 587 BCE. He states that Cancer in that night "was 4° above the moon and α Leonis was 13° below the moon." However, Cancer was not *above* but *in front of* (west of) the moon, and α Leonis was not *below* but *behind* (east of) the moon. But as this lunar position was nearly the same as on 20/21 March, 567 BCE, both positions fit.

(13) ´Rev. line 16: "The 12th, one god was seen with the other; sunrise to moonset: 1° 30´ [6 minutes]; …."

Addaru 12 = 25/26 March 567 BCE:

In 567 BCE the 12th of Addaru fell on 25/26 March. According to the tablet sunrise occurred 1° 30´ – 6 minutes – before moonset, meaning that one "god" could be "seen with the other" in the morning for six minutes. My astro-program shows that in the morning of March 26 the sun rose at c. 06:08 and the moon set c. 06:11, that is, they could both be seen at the same time above the horizon for about 3 minutes, which is close to the time given on the tablet.

Furuli's date: Addaru 12 = 4/5 April 587 BCE:

Furuli has misunderstood the kind of phenomenon referred to by the expression "one god was seen with the other". He explains on page 323: "To say that one god (the sun) was seen with the other god (the moon) was one way to express that the moon was full."

Although it is true that the moon was nearly full when it was seen with the sun, this is not exactly what the expression refers to. As explained earlier, it refers to the situation when the sun and the moon stand in opposition to each other – the sun in the east and the moon in the west – *and both can be seen simultaneously above the horizon for a short period of time*. As Furuli has not understood this, his comments on the text are mistaken and irrelevant.

Furuli's date for the 12th of Addaru is 4/5 April 587 BCE. In the morning of April 5 the sun rose at c. 05:54. But the moon had already set at c. 05:13, i.e., about 41 minutes *before* sunrise. Thus one "god" could not be seen "with the other" this morning. Furuli's date, then, is wrong. Only the 567 BCE date fits the statement on the tablet.

In summary, at least 10 of the 13 lunar positions examined fit the 568/567 BCE date quite well, one (no. 10) is acceptable, while two (nos. 2 and 5) are acceptable only if the dates are moved back one day. Of Furuli's dates in 588/587 BCE only one (no. 12) fits, while 9 do not fit at all. The fits of the remaining three (9, 10, and 11) are far from good but acceptable.

The conclusion is, that the observations were made in 568/567 BCE. The year 588/587 BCE is definitely out of the question.

Part II: The Saturn Tablet BM 76738 + BM 76813

The Saturn Tablet consists of two broken pieces, BM 76738 + BM 76813. It contains a list of last and first appearances of Saturn for a period of 14 successive years, namely, the first 14 years of the Babylonian king Kandalanu, whose 22 years of reign is generally dated to 647 – 626 BCE. As the examination below will demonstrate, the Saturn Tablet alone is sufficient for establishing the absolute chronology of the first 14 years of his reign. Every attempt by the Watchtower Society and its apologists to add 20 years to the Neo-Babylonian chronology is effectively blocked by this tablet.

The Watchtower apologist Rolf Furuli in Oslo, Norway, strains every nerve to get rid of the evidence provided by this tablet in his new volume on chronology, *Assyrian, Babylonian and Egyptian Chronology* (Oslo: Awatu Publishers, 2007). The Watchtower Society's chronology, renamed by Furuli the "Oslo Chronology", requires that Nebuchadnezzar's 18th year, in which he desolated Jerusalem, is dated to 607 instead of 587 BCE. This would also move his father Nabopolassar's 21-year reign 20 years backwards in time, from 625-605 to 645-625.

As the Saturn Tablet definitely blocks any change of this kind, it has to be reinterpreted in some way. Furuli has realized that he cannot simply wave it away as unreliable, as he does with so many other uncomfortable astronomical tablets.

To overcome this problem Furuli tries to argue that Nabopolassar and Kandalanu is one and the same person. (Furuli, chapter 12, pp. 193-209) This idea will be discussed in some detail at the end of this article, but one of the problems with it is that the first year of Kandalanu is fixed to 647 BCE, not to 645 as is required by Furuli's variant of the Watchtower chronology (the "Oslo Chronology"). To "solve" this problem, Furuli argues that there may have been not one but two years of *interregnum* before the reign of Nabopolassar. He also speculates that "a scribe could have reckoned his first regnal year one or two years before it actually started"! (Furuli, p. 340) He ends up lowering the first year of Nabopolassar/Kandalanu one year, from 647 to 646, claiming that the observations on the Saturn Tablet may be applied to this lowered reign. He believes his table E.2 on pp. 338-9 supports this. However, as will be demonstrated in the discussion below, there is no evidence whatsoever in support of these peculiar ideas. His table bristles with serious mistakes from beginning to end.

The Planet Saturn has a revolution of c. 29.46 years, which means that it returns to the same place among the stars *at the same time of the year* after twice 29.46 or nearly 59 years. Due to the revolution of the earth round the sun, Saturn disappears behind the sun for a few weeks and reappears again at regular intervals of 378.09 days. This means that its last and first visibility occurs only once a year at most, each year close to 13 days later in a solar year of 365.2422 days, and close to 24 days later in a lunar year of 354.3672 days (12 months of 29.5306 days), except, of course, in years with an intercalary month.

EXAMINATION OF THE ENTRIES FOR THE FIRST 7 YEARS (14 LINES)

On the above-mentioned tablet each year is covered by two lines, one for the last and one for the first visibility of the planet. The tablet, then, contains 2 x 14 = 28 lines. As lines 3 and 4 are clearly dated to the 2nd year, the damaged and illegible sign for the year number in lines 1 and 2 obviously refers to the 1st year of king Kandalanu.

The text of lines 1 and 2:

1´ [Year 1 of Kand]alanu, ´month´ […, day …, last appearance.]

2´ [Year 1, mont]h 4, day 24, in fro[nt of … the Crab, first appearance.]

Comments:

As is seen, the last and first visibility of Saturn is dated to year, month, and day in the lunar calendar of the Babylonians. As the Babylonian lunar months began in the evening of the first visibility of the moon after conjunction, there are two mutually independent cycles that can be combined to test the correctness of the chronology: the lunar first visibility cycle of 29.53 days, and the Saturn visibility cycle of 378.09 days. 57 Saturn cycles of 378.09 days make almost exactly 59 solar years. As explained by C. B. F. Walker, the translator of the tablet:

> "A complete cycle of Saturn phenomena in relation to the stars takes 59 years. *But when that cycle has to be fitted to the lunar calendar of 29 or 30 days then identical cycles recur at intervals of rather more than 17 centuries*. Thus there is no difficulty in determining the date of the present text." – C. B. F. Walker, "Babylonian Observations of Saturn during the Reign of Kandalanu," in N. M. Swerdlow (ed.), *Ancient Astronomy and Celestial Divination* (Cambridge, Massachusetts, and London: 1999), p. 63. Emphasis added. (Walker's article, with picture, is available on the web: http://www.caeno.org/_Eponym/pdf/Walker_Saturn%20in%20Kandalanu%20reign.pdf.)

The modern program used here for finding the last and first visibility of Saturn and the first visibility of the Moon (the latter is compared with the computations of Peter Huber used by C. B. F. Walker) is *Planetary, Lunar, and Stellar Visibility 3*, available at the following site:

http://www.alcyone.de/PVis/english/ProgramPVis.htm

As explained in the introduction to the program, *exact* dating of ancient visibility phenomena is not possible. While the margin of uncertainty in the calculations of the first visibility of the moon is no more than one day, it can be several days for some planets due to uncertainties in the *arcus visionis*, variations in the planetary magnitude, atmospheric effects, weather and other observational circumstances. For a detailed discussion of the uncertainties involved, see Teije de Jong, "Early Babylonian Observations of Saturn: Astronomical Considerations," in J. M. Steele and Annette Imhausen (eds.), *Under One Sky. Astronomy and Mathematics in the Ancient Near East* (Münster: Ugarit-Verlag, 2002), pp.175-192.

These factors "may introduce an uncertainty of up to five days in the predicted dates." (Teije de Jong, *op. cit.*, p. 177) A deviation of up to five days between modern calculations and the ancient observations of the visibility of planets in the period we are dealing with lies within the margin of uncertainty. It does not prove that our chronology for Kandalanu is wrong. Nor does it indicate that the ancient cuneiform records on the Saturn tablet are based on backward calculations instead of observations, as claimed by Rolf Furuli. A greater difference, however, of 6 days or more, would show that something is wrong.

YEAR 1 = 647 BCE IN THE TRADITIONAL CHRONOLOGY:

Lines 1 and 2: For 647 BCE – the date established for the 1st regnal year of Kandalanu – the program shows that the *last visibility* of Saturn took place in the evening of June 14 and the *first visibility* in the morning of July 18. The Babylonian date in line 1 for the *last* visibility is damaged and illegible. The date in line 2 for the *first* visibility of Saturn, however, is stated to be month 4, day 24 in the Babylonian lunar calendar which, therefore, should correspond to July 18 in the Julian calendar. Does this Julian date synchronize with the lunar calendar date as stated on the tablet? As the Babylonian lunar months began in the evening of the first lunar visibility, we should expect to find that the 24th day *before* July 18 fell on or close to a day of first lunar visibility. The 24th day before July 18 brings us back to the morning of June 25, 647 BCE as day 1 of the 4th Babylonian month. As the Babylonian day began in the evening of the previous day, the evening of June 24 should be the time of the first visibility of the moon after conjunction. And our program shows that this day was indeed the day of first lunar visibility: both the Julian date for Saturn's first visibility and the stated Babylonian lunar calendar date are in harmony.

YEAR 1 IN FURULI'S CHRONOLOGY = 646 BCE:

In his revised chronology, Furuli not only claims that Kandalanu was just another name for Nabopolassar. *He also moves the 1st year from 647 to 646 BCE*. How does this redating of the 1st regnal year tally with the ancient record and modern computations? Could it be that C. B. F. Walker is wrong in stating that the dated Saturn phenomena recorded on the tablet recur on the same date in the Babylonian lunar calendar only after more than 17 centuries?

Line 2: In 646 BCE the *first* visibility of Saturn occurred in the morning of July 31. If this was the 24th day of the Babylonian month 4 as the text says, the 1st day of that month would be the 24th day before July 31. This brings us to the 8th of July, and the previous evening of July 7 would be a day of first lunar visibility – if Furuli's alternative date for regnal year 1 is correct.

But it does not fit. According to the program, the day of first lunar visibility before July 31 in 646 was July 13, not July 7. This is a deviation of 6 days, which is too much. The very first entry on the tablet contradicts Furuli's revised chronology.

The text of lines 3 and 4:

3´ [Ye]ar 2, month 4, day 10+[x, …, last appearance.]

4´ [Year 2, mon]th 5, broken, in the head of the Lion, first appearance; not [observed?.]

Comments:

YEAR 2 = 646 BCE:

Line 3: As is seen, both dates are damaged. But if the 2nd regnal year was 646, as is conventionally held, the *last* visibility of Saturn that year occurred in the evening of June 28. According to the program, the previous first lunar visibility occurred in the evening of June 13, which thus corresponded to the 1st day of the Babylonian month 4. The last Saturn visibility on June 28, then, would be month 4, **day 16** (= the damaged "day 10+") in the Babylonian calendar.

Line 4: As stated above, the *first* visibility of Saturn in 646 occurred in the morning July 31 and the previous first lunar visibility fell in the evening of July 13. If July 13 was the 1st day of month 5 in the lunar calendar, July 31 should have been **day 18** (the "broken" day number) in the lunar calendar.

We cannot know for sure if these restorations of the damaged day numbers are quite correct, but there is nothing in the text that contradicts them.

Saturn is stated to have been "in the head of the Lion [SAG UR-A]", which "in the Diaries from -380 onward … designates ε Leonis." (Walker, *op. cit.*, p. 72) My astro-program shows that Saturn at this time was almost on the same ecliptic longitude (104.5°) as ε Leonis (104.0°), but its latitude was about 9° below (south of) the star. If the restoration of the last part of the line is correct ("not [observed?]"), the position was not observed but had to be calculated by the Babylonian scholar. This would explain the inexact latitudinal position.

FURULI: YEAR 2 = 645 BCE:

Line 3: "Year 2" in Furuli's revised chronology is 645 BCE. The *last* visibility of Saturn in 645 fell according to our program in the evening of July 10 and the previous first lunar visibility occurred in the evening of July 1. As July 1 was day 1 in the lunar calendar, July 10 would have been lunar day 10. The damaged day number of the text ("10+"), however, shows that more than 10 days had passed from day 1 until the last visibility of Saturn. If the restored day number was "16" as argued above, this would be a deviation of 6 days from the true date.

Line 4: The *first* visibility of Saturn in 645 took place in the morning of August 12. If that was day 18 of month 5 in the lunar calendar (as argued above), the previous first lunar visibility in the evening of lunar day 1 would have occurred in the evening of July 25. But the program shows that the first lunar visibility occurred in the evening of July 31. If the restored day number, 18, is correct, this is a deviation of 7 days. Besides, the position of Saturn does not tally with the text, either. While the difference in latitude between Saturn and ε Leonis was the same as in the previous year (about 9°), the ecliptic longitude of Saturn in the morning of August 12 was 117.5°, which was 12.5° behind (east of) the star (104.0°). This alone shows that Furuli's alternative date for "year 2" is impossible.

The text of lines 5 and 6:

5´ [Ye]ar 3, month 4, day 7, [last appearance.]

6´ [Year 3] month 5, day 16, in the Lion behind the King (= α Leonis), [first appearance];

´high´.

Comments:

YEAR 3 = 645 BCE:

Line 5: As is seen, the Babylonian months and days for both last and first appearances are preserved. The date established for year 3 of Kandalanu is 645 BCE. As stated above, the *last* visibility of Saturn in that year occurred according to our program in the evening of July 10 and the first lunar visibility occurred in the evening of July 1. As July 1 was day 1 in the lunar calendar, "day 7" in the text would be July 7. However, the program dates the last visibility of Saturn to July 10, so there is a deviation of 3 days, which is not good but acceptable for the reasons explained earlier. The Babylonian astronomer(s) observed Saturn for the last time on day 7, although its actual disappearance did not occur until 3 days later.

Line 6: According to the program, the *first* visibility of Saturn in 645 occurred in the morning of August 12, while the previous first lunar visibility took place on July 31 after sunset. If day 1 in the lunar calendar began in the evening of July 31, the recorded observation of Saturn on "day 16" must have occurred in the morning of August 16. The program, however, dates the first visibility of Saturn 4 days earlier, in the morning of August 12. This deviation is great but may be explained. In fact, the reason seems to be given by the Babylonian observer himself by his adding of the sign for the word NIM, "high," at the end of the line. The word indicates that the planet Saturn at the day of observation was already so high above the horizon that the actual reappearance had occurred some days before "day 16" but had not been observed at that time, perhaps due to the weather. C. B. F. Walker explains:

> "NIM, high: this term indicates that when first observed the planet was higher above the horizon than normal for first visibility, leading to the conclusion that theoretical first visibility had taken place a day or two earlier, but had not been observed. See Huber (1982), 12-13." – Walker, *op. cit.* (1999), p. 74.

Teije de Jong points out that of the 28 records on the tablet "7 records are unreadable or incomplete because of textual damage, while 6 records are unreliable according to the professional annotations of the [Babylonian] observer ('not observed', 'computed' or *'high', i.e. visibility occurred a few days late, presumably because of cloudy skies on the expected day of first visibility*)." – T. de Jong, *op. cit.,* p. 178. Emphasis added.

If the actual but unobserved first reappearance of Saturn had occurred "a few days" earlier than day 16 in the lunar calendar, the difference of 4 days would be reduced by a couple of days or more.

The position of Saturn in the morning of observation (August 16, 645) is stated to be "in the Lion behind the King (= α Leonis)", which is correct: The planet was 5° behind (east of) α Leonis.

FURULI: YEAR 3 = 644 BCE:

Line 5: "Year 3" in Furuli's revised chronology is 644 BCE. The *last* visibility of Saturn in 644 took place in the evening of July 24, while, according to our program, the first lunar visibility prior to that date occurred in the evening of July 20. If lunar day 1 began in the evening of July 20, the last visibility of Saturn on day 7 in the lunar calendar should have occurred in the evening of July 26, 2 days later than shown by the program. This deviation would have been acceptable had it not been for the date of the *first* visibility of Saturn in the same year.

Line 6: The *first* visibility of Saturn in 644 occurred in the morning of August 25, while the first lunar visibility before that date occurred in the evening of August 19. If the latter date was lunar day 1, the first visibility of Saturn in the morning of lunar "day 16" would have occurred on September 4. This is 10 days later than shown by the program. As the word "high" at the end of the line indicates that the actual reappearance of Saturn occurred 2 or 3 days prior to lunar day 16, as argued above, this would still create a difference of 7 or 8 days.

This once again shows that 644 BCE is an impossible alternative for Kandalanu's "Year 3".

It is true that Saturn at this time was "in the Lion behind the King (= α Leonis)", but at a very long distance from the star: nearly 18° east of α Leonis and just in front of σ Leonis.

The text of lines 7 and 8:

7´ [Year] ´4´, at the end of month 4, last appearance; (because of) cloud not observed.

8´ [Year 4, month 6?], day [x], in the middle of the Lion, first appearance; high.

Comments:

YEAR 4 = 644 BCE:

Line 7: Year 4 corresponds to year 644 in the traditional chronology. As stated above, the *last* visibility of Saturn this year occurred in the evening of July 24, and the first lunar visibility prior to that date occurred in the evening of July 20. Although the latter date was lunar day 1, it was not lunar day 1 of month 4 but of month 5. So we have to move back to the previous first lunar visibility in the evening of June 21. The "end" of this month 29 or 30 days later would take us to July 19 or 20. One of these two dates corresponds to "the end of month 4" according to the text. This would be 4 or 5 days before the actual disappearance of Saturn in the evening of July 24. The reason for this difference is explained in the same line to be bad weather: "(because of) cloud not observed." As the event could not be observed, it had to be calculated.

Line 8: The *first* visibility of Saturn in 644 occurred on August 25. Unfortunately, the text on the tablet is so damaged at this place that neither month nor day numbers are readable. The only information in line 8 that can be checked by modern computations, therefore, is the position of Saturn, "in the middle of the Lion" (*ina* $MURUB_4$ UR-A). Its position in the morning of August 25 was c. 1.3° in front of (west of) σ Leo. Although today that is at the rear of the constellation of Leo, the Babylonians also included β Virginis as a part of Leo, calling it GÌR ár šá A, "The rear foot of the Lion." (A. Sachs/H. Hunger, *Astronomical Diaries and Related Texts from Babylonia* [= ADT], Vol. I, 1988, p. 18) Saturn, then, was well within Leo, although not quite in the middle. But as C. B. F. Walker comments, "in all probability *ina* $MURUB_4$ UR-A simply means within the constellation Leo." (Walker, *op. cit.*, 1999, p. 72)

FURULI: YEAR 4 = 643 BCE:

Line 7: "Year 4" in Furuli's revised chronology is 643 BCE. According to the program the *last* visibility of Saturn in 643 took place in the evening of August 5 and the previous first lunar visibility occurred in the evening of July 10. If July 10 was the 1st day of month 4 in the lunar calendar, the end of that month 29 or 30 days later would fall in the evening of August 7 or 8. That would be 2 or 3 days *after* the last visibility of Saturn. As the event could not be observed but had to be calculated by the Babylonian astronomers, this would have been acceptable had it not been for the recorded position of Saturn in the next line.

Line 8: The *first* visibility of Saturn in 643 occurred in the morning of September 6. As stated above, the damaged and unreadable date on the tablet is useless. What about the position of Saturn "in the middle of the Lion" which, as we saw, fitted year 644? Does it also fit year 643? No, it does not. On September 6 in 643 Saturn had moved away from Leo into Virgo, 3.3° behind (east of) β Virginis. Again, Furuli's revised chronology disagrees with the tablet.

The text of lines 9 and 10:

9´ [Year 5], month 5, day 23, last appearance.

10´ [Year 5], at the end of month 6, first appearance; intercalary Ululu.

Comments:

YEAR 5 = 643 BCE:

Line 9: Year 5 corresponds to year 643 in the conventional chronology. As stated above, the *last* visibility of Saturn this year occurred in the evening of August 5 and the previous first lunar visibility occurred in the evening of July 10. Thus, if lunar day 1 began in the evening of July 10, "day 23" in the text would have begun in the evening of August 1. This is 4 days earlier for the last visibility of Saturn than shown by the program, indicating that the actual last appearance of Saturn occurred a few days later than it could be observed for the last time by the Babylonian astronomers (perhaps due to bad weather).

Line 10: As stated above, the *first* visibility of Saturn in 643 took place in the morning of September 6, which would correspond to "the end of month 6" as stated on the tablet. The beginning of the 6th month 29 or 30 days earlier, then, would have been in the evening of August 7 or 8. And the program confirms that the first lunar visibility occurred in the evening of August 8 – an excellent fit!

FURULI: YEAR 5 = 642 BCE:

Line 9: Year 5 in Furuli's revised chronology is 642 BCE. The *last* visibility of Saturn in 642 took place in the evening of August 18 according to the program (August 17 according to the table of C. B. F. Walker, *op. cit.*, p. 66). The previous first lunar visibility took place in the evening of July 28. If the latter was day 1 in lunar month 5, "day 23" would have been August 19. The difference is 1 (or 2) days, which is quite acceptable. But if this shall have any real value as evidence, the *first* visibility, too, must fit.

Line 10: The *first* visibility of Saturn in 642 occurred in the morning of September 19 (day 18 in Walker's table). The previous first lunar visibility occurred, according to the program, on the evening of August 27. As that was lunar day 1, the "end of month 6" 29 or 30 days later would have been September 24 or 25. The first visibility of Saturn would have been in the next morning on September 25 or 26, that is, 6 or 7 (7 or 8) days after the actual event on September 19 (or 18) as shown by the program. As this is beyond the marginal of uncertainty, it is unacceptable. Furuli's revised chronology is once again disproved.

The text of lines 11 and 12:

11´ Year 6, month 5, day 20, last appearance.

12´ [Year 6], month 6, day 22, behind ´the rear foot of' the Lion (= β Virginis), behind AN.GÚ.ME.MAR, first appearance.

Comments:

YEAR 6 = 642 BCE:

Line 11: The 6th year of Kandalanu is dated to 642 BCE. The *last* visibility of Saturn that year occurred in the evening of August 18 (August 17 in Walker's table). The previous first lunar visibility took place in the evening of July 28. If this was lunar day 1, "day 20" of month 5 would have begun in the evening of August 16. This is only 2 days before the date of the program (August 18) and 1 day before the date in Walker's table (August 17).

Line 12: As stated above, the *first* visibility of Saturn in 642 occurred in the morning of September 19 (day 18 in Walker's table), and the first lunar visibility prior to this date took place in the evening of August 27. If lunar day 1 began in the evening of August 27, "day 22" of month 6 began in the evening of September 17, with the first visibility of Saturn occurring in the next morning of September 18. The deviation from the date of the program and from Walker's table is 1 and 0 days, respectively.

The text says that Saturn at this time was "behind ´the rear foot of' the Lion (= β Virginis)". It is true that the Saturn was behind (east of) it, but it was *far behind* the star, c. 15.6°, and it was even 2.2° behind γ Virginis. It seems that the scribe mixed up the two stars.

The reason may be the fact that Saturn was also very close to and in line with Mercury and Jupiter, so the observer may have had difficulties in identifying the faint star in the immediate vicinity of the three planets. (See also Walker's comments, *op. cit.*, p. 73.)

FURULI: YEAR 6 = 641 BCE:

Line 11: Year 6 in Furuli's revised chronology is 641 BCE. The *last* visibility of Saturn in 641 took place in the evening of August 29, and the previous first lunar visibility on August 15 according to the program. If this was day 1 of lunar month 5, "day 20" of that month would have begun in the evening of September 3, a difference of 5 days from that given by the program for the last visibility of Saturn.

Line 12: The *first* visibility of Saturn in 641 took place in the morning of September 30 (Walker, September 29). The previous first lunar visibility took place in the evening of September 14 according to the program. If lunar day 1 began in the evening that day, "day 22" must have begun in the evening of October 5, with the first visibility of Saturn taking place in the next morning on October 6. That is 5 (or 6) days later than shown by the program (and Walker's table).

Still worse, Saturn was neither "behind ´the rear foot of' the Lion (= β Virginis)" as stated in the text, nor in the vicinity of γ Virginis. It was on almost exactly the same ecliptic longitude as α Virginis (167.2°) and only 4° above (north of) it, but more than 14° behind γ Virginis and over 28° behind β Virginis! This clearly disagrees with the position recorded on the tablet and refutes the year 641 as being year 6 of Kandalanu.

The text of lines 13 and 14:

13´ Year 7, month 6, day 10+(x), last appearance.

14´ [Year 7], month 7, day 15, ´in front of´ the Furrow (α+ Virginis), first appearance.

Comments:

YEAR 7 = 641 BCE:

Line 13: The 7th year of Kandalanu is dated to 641 BCE. As stated above, the *last* visibility of Saturn that year took place in the evening of August 29, with the first lunar visibility prior to that date taking place in the evening of August 15. The day number is damaged, but is evidently higher than 10. If August 15 was day 1 in the lunar calendar, the evening of August 29 would correspond to the beginning of Babylonian day **15** of month 6. We cannot know for sure, of course, that this is the correct restoration of the damaged day number, but there is nothing that speaks against it.

Line 14: As stated above, the *first* visibility of Saturn in 641 took place in the morning of September 30 (Walker, September 29). The previous first lunar visibility took place in the evening of September 14. With that as the beginning of lunar day 1, "day 15" (of month 7) must have begun in the evening of September 28, with the first visibility of Saturn taking place in the next morning on September 29. The difference from the date given by the program (and Walker's table) is 1 (or 0) days.

The position of Saturn at its first visibility on September 29 was according to the tablet "´in front of´ the Furrowα(+ Virginis)". As explained above, the astro -program shows that Saturn at this time was almost exactly on the same ecliptic longitude as α Virginis (167.2°) and only 4° above (north of) it. Thus it was not ´in front of´ it, as the text seems to say. However, the text is somewhat damaged at this point and to show this Walker has put the words "in front of" (*ina* IGI) within half brackets (something like ⌐ in front of ¬). Perhaps the damaged sign could also be restored as "above" (⌜ above ¬)? If this is possible, the problem would be solved.

Another possibility is that Venus and Saturn were confused. Venus, in fact, was 8° "in front of" (= west of) α Virginis at this time.

FURULI: YEAR 7 = 640 BCE:

Line 13: Year 7 in Furuli's revised chronology is 640 BCE. The *last* visibility of Saturn in 640 occurred in the evening of September 10, and the previous first lunar visibility in the evening of September 3 according to the program. This would make the distance from the 1st of the lunar month 6 (September 3) to the last visibility of Saturn (September 10) only 7 days.

This conflicts with the tablet, which shows that more than 10 days ("10+[x]") separated the two events.

Line 14: The program shows that in 640 BCE the *first* visibility of Saturn occurred in the morning of October 12 (Walker, October 10). The previous first lunar visibility took place in the evening of October 3. If that was the beginning of day 1 in the lunar calendar, "day 15" of month 7 would have begun in the evening of October 17, with the first visibility of Saturn occurring in the next morning on October 18. But this was 6 days after the date given by the program (October 12) and 8 days after Walker's date (October 10). This deviation excludes year 640 as the 7th year of Kandalanu.

The position of Saturn is given on the tablet as "˝in front of˝ the Furrow (Virginis)", which also seems to conflict with Furuli's alternative chronology. Its position on October 12 and 10 (and still on October 18) in 640 was about 12° *behind* α Virginis, not in front of, above, or below the star. But as the signs are somewhat damaged here, this position is not decisive.

SUMMARY AND CONCLUSION

Above the entries for the first seven years of Kandalanu have been examined. This is half of the entries on the tablet which covers 14 years in all. It is not necessary to tire out the reader with a detailed discussion of the remaining entries. The results for the whole period are presented in the two tables below. The tables show the results only for the entries with fully preserved dates (15 out of the 28 lines). The first table shows how these records tally with the traditional chronology, and the second table shows how they tally with Furuli's revised dates.

In the "Deviation" column the results of C. B. F. Walker are given within parenthesis (W+/-).

TABLE 1

THE SATURN TABLET AND THE TRADITIONAL CHRONOLOGY

YEAR BCE	**VISIBILITY**	**DEVIATION**	**POSITION OF SATURN**
1 = 647	first	0 days (W +1)	text damaged
3 = 645	last	-3 days (W -3)	correct (for first visibility)
5 = 643	last	-4 days (W -4)	not given (for first visibility)
6 = 642	last	-2 days (W -1)	
6 = 642	first	-1 day (W 0)	erroneous?
7 = 641	first	-1 day (W 0)	correct? (slightly damaged)
8 = 640	last	-3 days (W -3)	
8 = 640	first	-5 days (W -2)	correct
10 = 638	last	-4 days (W -3)	
10 = 638	first	-1 day (W +1)	correct
11 = 637	last	-3 days (W -2)	
11 = 637	first	-1 day (W 0)	correct
12 = 636	first	-3 days (W -2)	correct
13 = 635	first	0 days (W +1)	correct
14 = 634	last	-3 days (W -2)	not given (for first visibility)

Comments: The deviations in all cases where the dates are preserved lie all within the margin of uncertainty, at most 5 days according to the web program, and even less according to Peter Huber's calculations used by C. B. F. Walker. Where the positions of Saturn are given and the text is undamaged, the positions are correct except in one case (year 6 = 642 BCE), where the observer/scribe seems to have mistaken β Virginis for γ Virginis.

TABLE 2
FURULI'S "OSLO CHRONOLOGY"

YEAR BCE	VISIBILITY	DEVIATION	POSITION OF SATURN
1 = 646	first	+6 days	text damaged
3 = 644	last	+2 days	wrong
5 = 642	last	+1 days	not given
6 = 641	last	+5 days	
6 = 641	first	+5 days	wrong
7 = 640	first	+6 days	wrong? (slightly damaged)
8 = 639	last	+1 day	
8 = 639	first	+4 days	wrong
10 = 637	last	+4 days	
10 = 637	first	+7 days	wrong
11 = 636	last	+4 days	
11 = 636	first	+7 days	wrong
12 = 635	first	+4 days	wrong
13 = 634	first	+8 days	wrong
14 = 633	last	+6 days	not given

Comments: 6 of the 15 deviations are outside the margin of uncertainty. The positions of Saturn do not fit, either. Of the 8 years in which the recorded positions are legible, 7 are clearly in conflict with the tablet, and the 8th may be wrong, too. This is "year 7" in Furuli's chronology, and the recorded position is slightly damaged and may partly have been misread.

In year 12 Saturn should have been "at the beginning of Pabilsag [= Sagittarius + part of Ophiuchus]". This fits year 636 BCE, but not 635 (Furuli's date for year 12). As the study of the astronomical tablets has shown, the western part of Pabilsag included θ Ophiuchus, which was thus "at the beginning of Pabilsag". (A summary of the examination of the Babylonian constellations and the stars attached to them by the Babylonian astronomers is included in a separate Appendix in Hermann Hunger & David Pingree, *Astral Sciences in Mesopotamia* [Leiden-Boston-Köln: Brill, 1999], pp. 271-277.)

In 635, however, Saturn had moved away from Ophiuchus altogether to about the middle of Pabilsag. In year 13 Saturn should have been "in the middle of Pabilsag". This fits year 635 BCE, but in 634 (Furuli's date for year 13) Saturn had moved away also from the middle of Pabilsag and was close to the eastern end of Pabilsag.

The conclusion is that Furuli's attempt to move the reign of Kandalanu one year forward cannot be upheld astronomically. His revised chronology is demonstrably wrong.

So what about Furuli's attempt to identify Kandalanu with Nabopolassar?

WAS KANDALANU ANOTHER NAME FOR NABOPOLASSAR?

Furuli's "Oslo/Watchtower Chronology" requires that twenty years are added to the Neo-Babylonian chronology somewhere after the reign of Nebuchadnezzar. This, of course, would not only move the reign of Nebuchadnezzar twenty years backwards. It would also move the 21-year reign of his father Nabopolassar twenty years backwards, from 625-605 BCE to 645-625. As stated earlier, such changes are totally blocked by a number of astronomical tablets, including the Saturn Tablet. To overcome this problem, Furuli argues that Nabopolassar was no other than Kandalanu himself! In note 66 on page 56 he says:

> "In the Akitu Chronicle we find a description of the years 16-20 of Samas-šuma-ukin. Then in line 24 we read '*arki* ^{m}*Kan-da-la-nu*' (traditionally translated 'after Kandalanu') followed by 'in the accession year of Nabopolassar.' The Akkadian phrase that is translated as 'after Kandalanu' can also be translated as 'thereafter Kandalanu'; thus we get 'thereafter Kandalanu, in the accession year of Nabopolassar.' The phrase can also mean 'this other Kandalanu' in contrast to some previous Kandalanu. In both cases, Kandalanu can be equated with Nabopolassar."

Thus Furuli not only claims that Kandalanu was Nabopolassar, but he also tries to argue that the phrase *arki Kandalanu* refers to his *accession* year. In arguing this Furuli ignores the fact that two other cuneiform texts use the same phrase, *arki Kandalanu*, not for his accession year *but for a continuing artificial count of his reign after his death*! As discussed earlier, the last of these tablets is dated to *shattu 22*^{kam} *arki Kandalanu,* i.e., "year 22 after Kandalanu." – J. A. Brinkman & J. A. Kennedy, *op. cit.,* p. 49. This alone invalidates Furuli's argument. On page 16 of the same article Brinkman and Kennedy give some other, earlier examples of this posthumous dating method. See also the comments by Grant Frame in *Babylonia 689-627 B.C. A Political History* (Leiden: Nederlands Historisch-Archaeologisch Instituut te Istanbul, 1992), pp. 287, 288.

A second problem with Furuli's identification is that Kandalanu's posthumous "22nd" year was a year of unrest, when several pretenders to the throne fought for power. The Uruk King List gives 21 years to Kandalanu and assigns the next year to two Assyrian pretenders, Sin-shum-lishir and Sin-shar-ishkun. (GTR4, pp. 105-107) Similarly, the Babylonian King List A, which covers the period from the first dynasty of Babylon to the beginning of the Chaldean Dynasty, shows that Kandalanu was followed by Sin-shum-lishir. Unfortunately the list breaks at this point, but it seems likely that it also mentioned Sin-shar-ishkun. – D. O. Edzard (ed.), *Reallexikon der Assyriologie und vorderasiatische Archäologie*, Vol. VI (Berlin, New York: Walter de Gruyter, 1980), p. 93.

The 21-year reign of Nabopolassar, however, was not followed by a period of unrest and war in Babylonia. On the contrary the Babylonian Chronicle BM 21946 shows that the transfer of power from Nabopolassar to his son and successor Nebuchadnezzar was peaceful and without problems. That part of the chronicle says:

> "For twenty-one years Nabopolassar ruled Babylon. On the eighth day of the month Ab he died. In the month of Elul Nebuchadnezzar (II) returned to Babylon and on the first day of the month he ascended the royal throne in Babylon." (Grayson, *Assyrian and Babylonian Chronicles*, 1975, pp. 99, 100; cf. GTR4, p. 102)

At the death of Nabopolassar in 605 BCE the Assyrian empire was gone, so no Assyrian kings existed that could try to take over the power in Babylonia after his death. The political events following the death of Kandalanu and the death of Nabopolassar were wholly different, which once again prove that the two kings cannot have been identicial.

Finally, the intercalary months known from the reigns of the two kings do not agree either, which would have been the case if the two royal names referred to the same king. In the tables below "U" means "Ululu II" (the second 6th month), and "A" means "Addaru II" (the second 12th month). The third column gives the number of tablets with attested

intercalary months from each year with such months. The question marks in Kandalanu's column 2 indicate that it cannot be determined whether the intercalary month in Kandalanu's year 2 was a second Ululu or a second Addaru. For his year "13/14" Walker's list adds: "yr 13 12b or yr 14 6b".

KANDALANU		
Year	*U or A*	*No. of tablets*
2	(?)	1
5	U	2
8	U	1
10	A	2
13/14	(?)	1
19	U	5
22[x)]	U	1
[x)] Kan 22 = Npl acc.		

NABOPOLASSAR		
Year	*U or A*	*No. of tablets*
2	A	3
5	U	3
7	A	4
10	U	5
12	A	4
15	U	4
18[xx)]	U	5
20	A	8
[xx)] PD's year 19 is erroneous. See Kennedy, JCS 1986, p. 211.		

The tables are based on an unpublished list worked out by C. B. F. Walker. My copy is dated March 18, 1996. Walker's list also shows an intercalary Addaru II for year 1 of Nabopolassar, based on D. A. Kennedy's list in *Journal of Cuneiform Studies*, Vol. 38, 1986, p. 179, T.1.14 and p. 222. But after collation in 1990 Walker told me that the royal name is Nabonidus, not Nabopolassar as stated in Kennedy's list. (Letter Walker-Jonsson, Nov. 13, 1990) Walker simply forgot to remove this tablet from his own list.

As the tables show, the two kings had only one clearly dated intercalary month in common: the Ululu II in year 5. If the intercalary month in year 2 of Kandalanu was an Addaru II, this would raise the number to two. But still, most of the intercalary months in the two reigns disagree. This fact in itself definitely disproves Furuli's theory that the two kings were identical.

In summary, the discussion above has demonstrated that Furuli's revised chronology for Kandalanu and Nabopolassar is astronomically and historically untenable and has to be rejected.

ADDENDUM TO MY REVIEW PART II: THE SATURN TABLET BM 76738+76813

As discussed above, Rolf Furuli tries to overcome the evidence presented by the Saturn Tablet from the reign of Kandalanu by arguing that Kandalanu was identical with Nabopolassar. This idea has already been refuted above. But one of the arguments used by Furuli was not dealt with. On pages 329-331 of his Vol. 2 Furuli questions Chris Walker's restoration of the royal name in line 1, obverse, as "(Kand)alanu". (C. B. F. Walker, "Babylonian Observations of Saturn During the Reign of Kandalanu," in N. M. Swerdlow (ed.), *Ancient Astronomy and Celestial Divination*, London: The MIT Press, 1999, pp. 61-76) Walker restores/transliterates/translates line 1 as follows:

1´ [MU 1-KAM kan-d)a-⌐la-nu ITU¬-[x U_4 x-KAM ŠÚ]

1´ [Year 1 of Kand]alanu, ⌐month¬ […, day …, last appearance.]

Furuli, however, claims that (the sign for) *nu* in line 1 "looks more like [the sign for] *pap*" and argues:

"If the sign of line 1 is *pap*, the name of the king could be ^{d}AG.IBILA.PAP (Nabopolassar) rather than Kan-da-la-nu. The space of the piece that is broken away in line 1 and the small part of the sign visible before the sign *pap* or *nu* corroborate both names." (Furuli, p. 331)

Is this correct? Can Furuli's "observations" be trusted? One of my correspondents forwarded Furuli's statements to a professional Assyriologist and expert on cuneiform, Dr. Jon Taylor at the British Museum, and asked him to check line 1´ on the original tablet. In an email dated August 28, 2008, Dr. Taylor answered:

"Dear … ,

with broken text it is always a little difficult to make definitive statements. The traces do let me say the following, however:

1) the last sign of the name is a perfectly good NU; one can compare the other examples of NU in this text. It does not fit the traces one would normally expect for PAP.

2) the previous sign does fit the traces of LA. It does not fit the traces of IBILA.

Given the above, Kandalanu is the most reasonable reading. I can't imagine of a writing that would allow a reading Nabopolassar.

Best wishes,

Jon"

Part III: Are there about 90 "anomalous tablets" from the Neo-Babylonian period?

There are only two possible ways of extending the Neo-Babylonian period to include the 20 extra years required by the Watchtower Society's chronology, and therefore also by Rolf Furuli's so-called "Oslo Chronology": (1) Either the known Neo-Babylonian kings ruled longer than indicated by Berossus, the Royal Canon (often misnamed "Ptolemy's Canon"), and the Neo-Babylonian cuneiform documents, or (2) there were other, unknown kings who belonged to the Neo-Babylonian period in addition to those established by these ancient sources. Virtually all arguments set forth by Watchtower apologists like Rolf Furuli belong to one or both of these two categories. Upon closer examination, however, the arguments used turn out to be nothing but grasping at straws.

In chapter 3 of his second volume on chronology Furuli discusses the many dated contracts (business, legal, and administrative documents) from the Neo-Babylonian period (626-539 BCE). As tens of thousands of such dated tablets have been found from this 87-year period, there are hundreds of tablets dated to each of these years. Yet no tablets have been found so far that are dated to any of the 20 years that the Watchtower Society has added to the period. This creates an enormous problem for its chronology and therefore also for Furuli's "Oslo Chronology." Even if one or two tablets would be found one day with an odd year, this would not solve the problem, because thousands of tablets dated to this 20-year period should have been found. As Furuli himself admits, "one or two contradictory finds do not necessarily destroy a chronology that has been substantiated by hundreds of independent finds." (Furuli, *Persian Chronology and the Length of the Babylonian Exile of the Jews, Oslo, 2003*, p. 22) The only reasonable explanation of a couple of such oddly dated tablets would be that the dates contain scribal errors.

Although no contract tablets have been found that add any extra years to the Neo-Babylonian period, there are some tablets that seem to add a few days, weeks, or – in two cases – some months to the known Neo-Babylonian reigns. Such odd dates may create a short overlap between the last year of a king and the accession-year of his successor. Furuli, who claims he has found "about 90" tablets from the Neo-Babylonian period with "anomalous dates" (pp. 65, 86), tries to use such short overlaps to argue that extra years should be inserted between the two kings. He says on page 18:

> "The natural conclusion to draw when the first tablets of one king's accession are dated earlier than the last tablets of the predecessor's last year, is that the successor's accession year is not the same as the predecessor's year of death. In the case of Nebuchadnezzar II and Evil-Merodach such a conclusion would have destroyed Ptolemy's chronology, and therefore the aforementioned scholars [R. H. Sack, D. J. Wiseman, S. Zawadzki] did not consider this most natural possibility."

Furuli's conclusion is far from being the "most natural" explanation of the short overlaps between the reigns of some Neo-Babylonian rulers. Nor have scholars rejected it because it "would have destroyed Ptolemy's chronology," as if the king list popularly but erroneously named "Ptolemy's Canon" were the only or best evidence we have about the Neo-Babylonian reigns. The best evidence is provided by much earlier documents, including the cuneiform tablets, many of which are contemporary with the Neo-Babylonian period itself. The principal reason why modern scholars so highly regard the above-mentioned king list, more correctly known as the "Royal Canon," used by Claudius Ptolemy and other ancient astronomers, is the fact that it agrees with the chronology established by earlier sources, including the cuneiform documents contemporary with the Neo-Babylonian and Persian periods.

These earlier sources include the lengths of Neo-Babylonian reigns attested by Berossus' *Babyloniaca*, the Uruk king list, and Neo-Babylonian royal inscriptions; by prosopographical evidence provided by contemporary cuneiform documents, chronological interlocking joints provided by a number of contemporary tablets, synchronisms with the chronology of the contemporary 26th Egyptian dynasty, numerous Neo-Babylonian absolute dates established by at least ten astronomical cuneiform tablets, and also the Biblical information about the length of the reign of king Nebuchadnezzar. (2 Kings 24:12; 25:27) It is quite understandable that scholars who are aware of this enormous burden of evidence see no reason to accept Furuli's far-fetched explanation of the brief overlaps of a few days, weeks, or months between some of the reigns of the Neo-Babylonian rulers.

In fact, most of the "odd dates" quoted by Furuli are not odd at all. Fresh collations have shown that most of them either contain scribal errors or have been misread by modern scholars, or have turned out to be modern copying, transcription, or printing errors. Furuli cautions against accepting dates uncritically, pointing out on page 54 that "dates that fall outside the traditional schemes must be very clear in order to be accepted." That is why it is

necessary to have supposedly "oddly dated" tablets collated afresh. Furuli quotes three examples from scholarly works of tablets that were found to have been misread by modern scholars.

Unfortunately, Furuli himself has not applied his "word of caution" to his own research. In the tables on pages 56-64 he presents a number of seemingly oddly dated tablets from the Neo-Babylonian period, most of which on fresh collation turn out to have been misinterpreted or misread. The question is why he has used these tablets in support of his "Oslo chronology" without having them collated. Basing a radical revision of the chronology established for one of the chronologically best established periods in antiquity on unchecked misreadings and misinterpretations of the documents used does not speak very well about the quality of the research performed.

Let us first take a look at the traditional chronology for the Neo-Babylonian dynasty:

Kings:	**Lengths of reign:**	**Years BCE:**
Nabopolassar	21 years	625-605
Nebuchadnezzar	43 years	604-562
Awel-Marduk	2 years	561-560
Neriglissar	4 years	559-556
Labashi-Marduk	2-3 months	556
Nabonidus	17 years	555-539

In the following discussion we will take a close look at each accession of a new monarch during the Neo-Babylonian period and the "overlaps" of reigns Furuli believes he has found.

(1) Kandalanu to Nabopolassar

Before Nabopolassar's conquest of Babylon in 626 BCE the city and the country had been controlled by Assyria for most of the previous 120 years. After the death of the Assyrian king Esarhaddon in 669 BCE the Assyrian empire was ruled by two of his sons, Assurbanipal in Assyria and Šamaš-šum-ukin in Babylonia. After the death of Šamaš-šum-ukin in 648 BCE, Babylonia was ruled by an Assyrian puppet-king named Kandalanu, who died in his 21st regnal year, in 627 BCE. Assurbanipal to all appearances died in the same year.

The death of Kandalanu was followed by a period of general disorder and war between several pretenders to the throne in Babylon. One of them was Nabopolassar, the founder of the Neo-Babylonian dynasty, who succeeded in freeing Babylon from Assyrian control late in 626. The Babylonian chronicle BM 25127 states of the transition from Kandalanu to Nabopolassar:

> "For one year there was no king in the country. In the month of Arahsamnu [= month VIII], the twenty-sixth day, Nabopolassar ascended to the throne" [= Nov. 23, 626 in the Julian calendar]. (Jean-Jacques Glassner, *Mesopotamian Chronicles*, Atlanta: Society of Biblical Literature, 2004, p. 217)

The Uruk king list, however, gives the kingless year to two Assyrian combatants, Sin-šum-lišir, a high Assyrian official, and Sin-šar-iškun, a son of Assurbanipal. Some scribes spanned the same year by artificially extending Kandalanu's reign for another year after his death, the last of these tablets (BM 40039) being dated to day 2 of month VIII, *shattu 22kam arki Kandalanu*, i.e., "year 22 after Kandalanu." This tablet, which is from Babylon, is dated 24

days before Nabopolassar was enthroned in that city on day 26 of month VIII according to the chronicle. – J. A. Brinkman & D. A. Kennedy, "Documentary Evidence for the Economic Base of Early Neo-Babylonian Society," *Journal of Cuneiform Studies*, Vol. 35 (1983), p. 49.

Despite the different ways of spanning the year of *interregnum*, the year intended is the same in all these sources and corresponds to 626. Nabopolassar's 1st year of reign began on Nisan 1 next year, 625 BCE.

Furuli claims that the date of Nabopolassar's accession given by the Babylonian chronicle, day 26 of month VIII, is contradicted by two economic tablets that date his accession earlier:

> "One tablet is dated to day 10 of month IV of his accession year, and another tablet, NCBT 557, which probably is from the reign of Nabopolassar, is dated to day ? in month II of his accession year". (Furuli, p. 55)

In footnote 62 on the same page Furuli points out that the signs for the royal name on the second tablet are damaged and "could refer to Nabû-apla-iddina from the ninth century. However, no other economic texts are that old, so Beaulieu believes that the king is Nabû-apla-usur. This is accepted here." This would create an overlap of about six months between the first tablet dated to Nabopolassar and the last tablet dated to *arki* ("after") Kandalanu:

Months	1	2	3	4	5	6	7	8
arki Kandalanu								last date: VIII/02/22
Nabopolassar's acc. year		first date: II/?/acc.						enthroned: VIII/26/acc.

This is the first example where Furuli applies his thesis that an overlap of a few weeks or months between a king and his successor means that one or more extra years should be inserted between the two kings. He says:

> "If we take the chronicle text that mentions one year without king at face value, there are not one but two lunisolar years between Nabopolassar and the king who preceded him." (Furuli, p. 56)

With respect to reading the royal name on NCBT 557 as Nabopolassar rather than Nabû-apla-iddina (887-855 BCE), Furuli has misunderstood Beaulieu. He does not say that "no other economic texts are that old." The fact is that several economic texts have been found from the reign of Nabû-apla-iddina. On his web site (presently unavailable) Janos Everling listed 17 texts dated to the reign of Nabû-apla-iddina that had been published up to 2000. Of the texts in which the provenance is preserved all except one are from Babylon. The exception, OECT 1, pl.20f:W.-B. 10, seems to be from *Uruk*. What Beaulieu says is that no other tablets *from Uruk* have been found from his reign. (Paul-Alain Beaulieu, "The fourth year of hostilities in the land," *Baghdader Mitteilungen*, Vol. 28, 1997, p. 369.) The text dated to day 10 of month IV of Nabopolassar's accession year, PTS 2208, is from *Uruk*, and so is also NBCT 557 from the 2nd month.

If both of these tablets really belong to Nabopolassar, there is still no contradiction between their dates and the statement in the Babylonian chronicle BM 25127 that Nabopolassar was officially installed on the throne in Babylon some months later. As Beaulieu points out in the same article, "Uruk may have originally been the power base of Nabopolassar, and perhaps even his native city." This had previously also been argued by Assyriologist W. G. Lambert. (Beaulieu, p. 391 + n. 56) If Nabopolassar's rebellion started in Uruk, it is reasonable to conclude that he was first recognized as king there before he, after his capture of Babylon, could be installed on the throne in that city. This is a far more

natural explanation of the "overlap" than Furuli's theory that the "most natural" explanation of such overlaps is that "extra years" are to be added, an explanation that conflicts with other sources from the period and therefore must be rejected.

Two kingless years instead of one *before* Nabopolassar would not, of course, add any extra years to the Neo-Babylonian period, as this period began with Nabopolassar. Furuli's "Oslo Chronology" requires that 20 extra years are added *after the reign of Nebuchadnezzar*, because in this chronology the desolation of Jerusalem in his 18th year is pushed back from 587 to 607 BCE. The result of this is that the 21-year reign of his father Nabopolassar is pushed back from 625-605 to 645-625 BCE. And this in turn would also push the beginning of Kandalanu's reign 20 years backward, from 647 to 667 BCE.

Such a lengthening of the chronology, however, is blocked by astronomy. There are several cuneiform tablets containing records of astronomical observations dated to specific regnal years within the Neo-Babylonian period and earlier. One such tablet that consists of two broken pieces, *BM 76738 and BM 76813*, records consecutive observations of the positions of the planet Saturn at its first and last appearances dated to the first fourteen years of Kandalanu (647-634 BCE). Assyriologist C. B. F. Walker, who has examined and translated this tablet, points out that identical cycles of Saturn observations dated to the same dates within the Babylonian lunar calendar "recur at intervals of rather more than 17 centuries." (C. B. F. Walker, "Babylonian observations of Saturn during the Reign of Kandalanu," in N. M. Swerdlow [ed.], *Ancient Astronomy and Celestial Divination*, Cambridge, Massachusetts, and London: The MIT Press, 2000, pp. 61-76.) In other words, the reign of Kandalanu is so firmly fixed by this tablet that it cannot be moved backwards or forwards even one year, far less 20.

To overcome this evidence, Furuli argues that Nabopolassar was no other than Kandalanu himself! According to this theory, the Saturn tablet moves the reign of Nabopolassar about 20 years backwards and identifies it with the reign of Kandalanu! (Furuli, pp. 128, 129, 329-343) This theory has been discussed and thoroughly refuted in *Part II* of this review.

(2) Nabopolassar to Nebuchadnezzar

According to the Babylonian Chronicle BM 21946 (= Chronicle 5 in A. K. Grayson, *Assyrian and Babylonian Chronicles,* 1975, pp. 99-102; henceforth referred to as "Grayson, ABC") the transition from Nabopolassar to his son and successor Nebuchadnezzar was smooth and unproblematic. Furuli starts by referring to this chronicle:

> "According to the Babylonian Chronicle 5, 9-11, Nabopolassar died on day 8 in month IV of his year 21, and Nebuchadnezzar II ascended to the royal throne on day 1 in month VI in the same year." (Furuli, p. 57)

But Furuli immediately goes on to mention one tablet that seemingly creates a problem:

> "However, there may be some problems with this succession as well. For example, there is one tablet dated after the death of Nabopolassar, on day 20 in month V of his year 21 (PTS 2761)." (Furuli, p. 57)

If Nabopolassar died "on day 8 in month IV", how could a tablet still be dated to his reign 42 days (one month and 12 days) later, "on day 20 of month V"?

Unfortunately Furuli, undoubtedly accidentally, has misquoted the Babylonian Chronicle. It does not say that Nabopolassar died "in month IV" but in month V:

> "For twenty-one years Nabopolassar ruled Babylon. On the eighth day of the month Ab [= month V] he died. In the month Elul [= month VI] Nebuchadnezzar (II) returned to Babylon and on the first day of the month Elul he ascended the royal throne in Babylon." (Grayson, ABC, pp. 99, 100)

The tablet PTS 2761, then, is dated, not 42 but only 12 days after the death of Nabopolassar. Is this really an "overlap" with the reign of Nebuchadnezzar?

When his father died, Nebuchadnezzar was occupied with a military campaign in Syria (and, probably, Palestine). When he was informed about the death of his father, Nebuchadnezzar hastened back to Babylon as fast as he could (by crossing the desert with a few companions, according to Berossus). He was enthroned, says the *Chronicle*, on Elul 1, i.e., 22 days after his father's death. As tablet PTS 2761 is dated 10 days before Nebuchadnezzar's coronation, it does not witness to any overlap between the two kings. It was only natural for the scribes to continue to date their documents to Nabopolassar until his successor had arrived and been installed on the throne.

Furuli, finally, refers to four other tablets that give dates both in the reign of Nabopolassar and in the reign of Nebuchadnezzar:

> "Some tablets also mention both Nabopolassar and Nebuchadnezzar: BM 92742 mentions month II, year 21, of Nabopolassar, and month VII, accession year of Nebuchadnezzar; BM 51072 mentions year 21 of Nabopolassar, and year 4 of Nebuchadnezzar; RSM 1889.103 mentions year 21 of Nabopolassar, and years 1-4 of Nebuchadnezzar; BE 7447 mentions day 24, month XII, accession year of Nebuchadnezzar, and year 19 of Nabopolassar." (Furuli, p. 57)

It is strange that Furuli refers to these tablets, as none of them indicates there was an overlap between the two kings. Furuli admits that, "The data suggest that Nebuchadnezzar started to reign in the same year that his father died," yet he goes on to claim that "the data above may also suggest that there was some kind of coregency, or that there was one year between them."

It is clear that Furuli has not checked any of these four tablets, which he also indirectly admits by stating in note 68 on the same page (p. 57) that all tablets are mentioned in the catalogue by D. A. Kennedy published in the *Journal of Cuneiform Studies*, Vol. 38/2, 1986, pp. 211, 215. Only one of the dates on each tablet refers to the date of the tablet. The other dates refer to events dealt with in the text. The last of the four tablets (BE 7447), for example, deals with the purchase of a house in Babylon. The tablet is dated on day 24 of month XII, accession-year of Nebuchadnezzar, but it ends with the information that payment for the house had been received about two years earlier, on the 24th of month VIII in the 19th year of Nabopolassar. (Eckhard Unger, *Babylon*, Berlin und Leipzig: Walter de Gruyter & Co., 1931, pp. 308, 309) Nothing of this suggests "some kind of coregency" or an extra year between these kings.

As the data presented by Furuli do not suggest anything of this, his statement is nothing but unfounded wishful thinking, contradicted by all the evidence we have about the transition of reign from Nabopolassar to Nebuchadnezzar.

(3) Nebuchadnezzar to Evil-Merodach (Awel-Marduk)

(A) The "ledger" NBC 4897:

Furuli deals with the transfer of reign from Nebuchadnezzar to his son Evil-Merodach on pages 57-59 of his book. He starts by commenting on the cuneiform tablet NBC 4897, a "ledger" covering ten successive years, from the 37th year of Nebuchadnezzar to the 1st year of Neriglissar. The "ledger," which is briefly discussed on pages 131-133 in my book, *The Gentile Times Reconsidered* (4th edition, 2004; hereafter referred to as GTR4), stretches a chronological bridge between the reigns of Nebuchadnezzar, Evil-Merodach, and Neriglissar. Furuli, of course, cannot accept the clear witness of this "ledger":

> "To the best of my knowledge, there is just one cuneiform tablet, NBC 4897, whose contents can be used to argue that Evil-Merodach succeeded Nebuchadnezzar II in his year 43, that Evil-Merodach reigned for 2 years, and that Neriglissar succeeded him in his second year. However, a close scrutiny of that tablet shows that it has little value as a chronological witness." (Furuli, p. 57)

These statements contain *two errors*. Firstly, as far as the transition from Nebuchadnezzar to Evil-Merodach is concerned, I presented not just one but *four* different cuneiform tablets, all of which show that Evil-Merodach succeeded Nebuchadnezzar in his 43rd regnal year. (GTR4, pp. 129-133) Furuli has chosen to ignore all but one of the four tablets. Secondly, his claim that NBC 4897 "has little value as a chronological witness" is false. His few critical assertions on the next page (58) are followed by a reference to "Appendix A for a detailed analysis of the contents of NBC 4897." This Appendix with its slanted analysis and baseless conclusions will be critically examined in another part of this review.

(B) Biblical versus Babylonian dating methods:

Furuli next tries to find support in the Bible for his idea that Nebuchadnezzar ruled longer than 43 years. He refers to the first capture of Jerusalem by Nebuchadnezzar, which the Babylonian Chronicle BM 21946 dates to his "seventh year." The Chronicle states that in this year the king of Babylon "encamped against the city of Judah and on the second day of the month Adar he captured the city (and) seized (its) king," that is, king Jehoiachin, the next to the last king of Judah. – Grayson, ABC, p. 102.

As the month Adar was the 12th and last month of the Babylonian regnal year, Jehoiachin was taken prisoner nearly a whole month before the end of Nebuchadnezzar's seventh regnal year.

The Bible gives a similar description of the same events at 2 Kings 24:10-12:

> "At that time the servants of King Nebuchadnezzar of Babylon came up to Jerusalem and the city was besieged. King Nebuchadnezzar of Babylon came to the city while his servants were besieging it; King Jehoiachin of Judah gave himself up to the king of Babylon, himself, his mother, his servants, his officers, and his palace officials. The king of Babylon took him prisoner in the eighth year of his reign."

Both records emphasize that the Judean king was "seized" or "taken" prisoner, but only the Babylonian Chronicle gives the month and day of the event, showing it happened nearly one month before the end of Nebuchadnezzar's seventh year. The most conspicuous difference, however, is that according to the Biblical book of 2 Kings it happened, *not in the seventh but in the eighth* year of Nebuchadnezzar. The best explanation of this one-year difference is, as many scholars have argued, that Judah did not apply the accession-year system but counted the year of accession as the first regnal year. (GTR4, pp. 314-320; see also the detailed and convincing discussion by Dr. Rodger Young: http://home.swbell.net/rcyoung8/jerusalem.pdf)

Furuli gives no explanation for this one-year difference between the Biblical and Babylonian way of counting regnal years but chooses to ignore the date of the Babylonian Chronicle. This enables him to increase the reign of Nebuchadnezzar from 43 to 44 years. He says:

> "Jeremiah 52:28-31 mentions that Jehoiachin was released from prison in year 37 of his exile, in the year when Evil-Merodach became king. The word *galut* means 'exile,' and the most likely starting point of the period of 37 years must be when Jehoiachin came to Babylon and his exile started or, less likely, when he was captured. *Both events occurred in year 8 of Nebuchadnezzar*, and 37 years from that time would end in year 44 of Nebuchadnezzar's reign and not in year 43 when he is supposed to have died." (Furuli, p. 58. Emphasis added. In footnote 70 on the same page Furuli approvingly quotes J. Morgenstern's calculation of the 37th year, but he ignores the fact that Morgenstern held that the Judean regnal years were counted from Tishri, not Nisan.)

However, the one-year discrepancy between the Babylonian and Biblical way of counting regnal years cannot be ignored. As has often been pointed out, the same discrepancy is also found elsewhere in the Bible. Another example is the battle at Carchemish, when Pharaoh

Necho of Egypt was decisively defeated by Nebuchadnezzar "in the fourth year of King Jehoiakim." (Jeremiah 46:2) This "fourth year of king Jehoiakim" is equated with "the first year of King Nebuchadnezzar" at Jeremiah 25:1.

The same Babylonian Chronicle quoted above (BM 21946) also records this decisive battle at Carchemish. But there it is dated, not to the first year of Nebuchadnezzar but to the 21st and last year of his father Nabopolassar. At that time Nebuchadnezzar is still said to be "his eldest son (and) the crown prince." Later in the same year Nabopolassar died, and Nebuchadnezzar succeeded him in what from then on is called his "accession year," not his first year as does Jeremiah. – Grayson, ABC, pp. 99, 100.

When, therefore, the Bible dates the battle at Carchemish to the first year of Nebuchadnezzar, this has to be understood as his accession-year in the Babylonian dating system. And when the Bible states that Jehoiachin was taken prisoner and brought into exile in the *eighth* year of Nebuchadnezzar, this has to be understood as his *seventh* year in the Babylonian accession year system. As Jehoiachin's exile began in the 7th year of Nebuchadnezzar, the 37th year of exile covered parts of the 43rd regnal year of Nebuchadnezzar and the accession-year of Evil-Merodach. When the difference between the Biblical and Babylonian methods of reckoning regnal years is taken into consideration, the Bible and the extra-Biblical documents are seen to be in full agreement. Only by ignoring this difference is Furuli able to increase the reign of Nebuchadnezzar from 43 to 44 years. (For a more detailed discussion of this difference, see GTR4, pp. 314-320.)

(C) Nine supposedly "anomalous tablets" from the accession year of Evil-Merodach

In a table on page 59 ("Table 3.3") Furuli lists nine tablets from the accession year of Evil-Merodach that he claims are dated before the last tablets dated to the reign of his father Nebuchadnezzar. He concludes:

> "These nine tablets represent strong evidence in favour of an expansion of the years of the Neo-Babylonian Empire." (Furuli, p. 59)

The table starts with five tablets dated to month IV and four tablets dated to month V of Evil-Merodach's accession year, followed by three tablets dated to months VI, VIII, and X of Nebuchadnezzar's 43rd regnal year. If all these 12 dates were real, they would indicate an overlap between the reigns of Nebuchadnezzar and Evil-Merodach of six months.

Furuli's table, however, is totally misleading. The main reason for this is that Furuli has not cared to collate the dates on the original tablets, nor has he asked professional experts on cuneiform to do this for him. Had he done this, he would have discovered that most of the dates he has published are wrong.

The first five tablets in his table, dated to month IV of the accession year of Evil-Merodach, are:

Month/day/year:	**Tablet no.:**
IV/?/acc.	BM 66846
IV (orVI)/?/acc.	BM 65270
IV/5/acc.	BM 65270
IV/20/acc.	BM 80920
IV/29/acc.	UCBC 378

All tablets except the last one is listed in the British Museum's CBT catalogues Vols. VI-VIII, 1986-1988. (CBT = *Catalogue of the Babylonian Tablets in the British Museum*.) The dates on the BM tablets were collated afresh already back in 1990, with the following results:

BM 66846:

When C. B. F. Walker at the British Museum collated the date on this tablet back in 1990 he found that the day number is "1", but that the month name is damaged and illegible. The tablet, therefore, does not support the date given in Furuli's table, IV/?/acc. (C. B. F. Walker, "Corrections and additions to CBT 6-8," 1996, p. 6)

BM 65270 (listed twice):

Strangely, Furuli lists this tablet twice, with three different dates! This confusion is probably due to the fact that the month is damaged and difficult to read. After repeated collations Walker stated that "it is perhaps most likely that the month is 7 rather than 4." (Letter Walker-Jonsson, Nov. 13, 1990; cf. GTR4, p. 323, n. 28; see also Walker in "Corrections …," 1996, p. 5: "the month is damaged; possibly month 7; not month 6 as previously suggested.") On p. 1 of his "Corrections" list of 1996 Walker gives the following warning:

> "Note that in Neo-Babylonian texts there is always the possibility of confusion (because of inaccuracy in either reading or writing) between months IV, VII and XI, between months V and X, and between months IX and XII. The handbooks which suggest that these month-names are clearly distinguishable in the cuneiform script do not give warning of the range of possible error that arises from sloppy, defective or cursive writing. Readings which are critical for chronology should be collated again and again, preferably by different Assyriologists experienced in working with Neo-Babylonian texts."

Another Assyriologist, Stefan Zawadzki, also collated tablet BM 65270. He rejects month 4 (IV) and translates the date on the tablet as "the fifth [day] of the month Ululu/Tašritu(?) [month 6 or 7] of the accession year of Amel-Marduk, king of Babylon." (Stefan Zawadzki, "Two Neo-Babylonian Documents from 562 B.C.," *Zeitschrift für Assyriologie*, Band 86, 1996, p. 218)

BM 80920:

The date, IV/29/acc., is that read by R. H. Sack in his work on Evil-Merodach (Amel-Marduk 562-560 B.C. [= AOATS 4], 1972, text no. 56). The CBT VIII catalogue, p. 245, however, has month VII, and on collation Walker found that the latter is correct. The month is 7, not 4, thus VII/20/acc. "AOAT 4 no. 56 is to be corrected," he says. (Walker, "Corrections …", 1996, p. 8; see also GTR4, p. 323, n. 28.)

UCBC 378:

The fourth tablet in Furuli's table, UCBC 378, dated to "IV.29.00" in the copy by Henry Frederick Lutz, was published in 1931. (H. F. Lutz, *Selected Cuneiform Texts*, Berkeley: University of California Press, 1931, pp. 53 + 94, 95.) The full number of the published text is "UCP 9-1-2, 29." The present museum number is HMA 9-02507 (HMA = Hearst Museum of Anthropology). The number used by Furuli, "UCBC 378," was a provisional number used by Lutz, who kept the tablets in his office and used his own number system before the tablets he translated were officially accessioned.

A transliteration with a translation by R. H. Sack was published in 1972 as text No. 70 in Sack's work on Evil-Merodach (*op. cit.*, pp. 99-100). R. H. Sack does not seem to have checked the original tablet, but based his translation on H. Lutz's copy. Sack, too, gives the same date as Lutz, "month of Du'uzu [month 4], twenty-ninth day, accession year of Amel-Marduk, king of Babylon."

In order to have the original tablet collated afresh, a correspondent of mine sent an email to Niek Veldhuis, Associate Professor of Assyriology at the Department of Near Eastern Studies, University of California, Berkeley, and asked if the date may have been misread by Lutz. In an email dated October 3, 2007, Veldhuis said:

> "I looked at the piece yesterday and you may very well be right. The two month names (4 and 7) are rather similar in cuneiform writing, one written SHU, the other DU6. The tablet is eroded and the sign is not very clear. I have little experience in this period – so I'll have to look at it again, but I can certainly not exclude reading DU6 (that is, month 7)."

Thus the date on this tablet, too, is damaged, and the month may very well be 7, not 4. The claim that the date is anomalous, then, cannot be proven.

In conclusion none of these tablets can be shown to be dated as early as month IV of the accession year of Evil-Merocach. The earliest tablet from his reign with a clear date is still BM 75322, dated to month V, day 20 of his accession year, as is also shown in GTR4, pp. 323, 324.

What about the three tablets dated to the reign of Nebuchadnezzar after the accession of Evil-Merodach in month V? According to Furuli's table, these three tablets are dated to months VI, VIII, and X of the 43d year of Nebuchadnezzar:

Month/day/year:	**Tablet no.:**
VI/26/43	Contenau XII.58
VIII/?/43	Krückmann 238
X/?/43	BM 55806

I will start with the last of the three tablets.

BM 55806:

Back in 1987 I wrote to Professor D. J. Wiseman in London and asked him to collate about 20 oddly dated tablets I had found listed in the then recently published BM catalogue CBT VI (1987). Wiseman checked all the 20 tablets and sent me his observations in a letter dated October 7, 1987. Most of the dates turned out to be modern printing or reading errors. With respect to the date of 55806, X/?/43, Wiseman said that, "The reading seems to be ab (is this an error for shu?)."

Ab is month V, and Shu (SHU = Du'uzu) is month IV.

The tablet was also collated in 1990 by C. B. F. Walker, who gives the following comments in his list of "Corrections …," p. 3:

> "Month appears to be written ITU.AD; year number highly uncertain, and partly erased. Pinches, CT 55, 138, copied ITU.AB = month 10. If the year is really 43 then the month must be understood as AD = Abu."

As shown by Walker's comments, the date is severely damaged. Not only the day and the month, but also the year is highly uncertain. (This is actually admitted by Furuli himself on page 18!) Walker's mentioning of CT 55 refers to volume 55 of a series of BM publications, *Cuneiform Texts from Babylonian Tablets in the British Museum*. Vols. 55, 56, and 57 contain economic texts copied by T. G. Pinches during the years 1892-1894, published 90 years later by the British Museum Publications Ltd in 1982. As shown above, collations of the original tablet by modern specialists show that Pinches evidently misread the month name, which most probably is V rather than X. The tablet cannot be shown to be dated after the accession of Evil-Merodach.

Krückmann 238:

"Krückmann" refers to Oluf Krückmann, *Neubabylonishe Rechts- und Verwaltungstexte*, published in Leipzig 1933. It is also referred to as TuM 2/3 as it is Vol. 2/3 in the series *Texte und Materialien der Frau Professor Hilprecht Collection of Babylonian Antiquities im Eigentum der Universität Jena*. Vol. 2/3 contains copies of 289 cuneiform tablets, many of which are fragmentary. In a chronological table the tablets are briefly described, and when the dates, or at least parts of them, are legible, they are given in three separate columns (giving month,

day, and year, respectively). No. 238 is listed on page 16 as one of the tablets dated to Nebuchadnezzar. The date is evidently very fragmentary, as Krückmann has put both the month and the year within parenthesis, while the day number is shown as illegible:

Monat Tag Jahr

(IX) – (42)

As can be seen, the suggested year number is "42", not "43".

So why does Furuli date the tablet to VIII/?/43? The reason obviously is that Furuli has never consulted Krückmann's work. As I demonstrated in my review of volume I of Furuli's work on ancient chronology, most of the dates presented in his tables had been simply borrowed from web lists published by the Hungarian Assyriologist Janos Everling. Everling's lists (presently not available on the web) were based upon works that had been published all the way from the latter part of the 19th century and up to about 2000. The lists contain over 7,000 tablets from the Neo-Babylonian period alone. In the introduction to his lists Everling explicitly warned that the dates in the lists had neither been proof-read nor been compared with the original tablets. The result is that Everling's lists contain numerous errors. In my review of Furuli's volume I it was shown that he had borrowed extensively from Everling's lists without collations, with the result that the errors in Everling's lists were repeated in Furuli's tables.

This is also true of Everling's reference to Krückmann 238, whom he misquotes as follows:

"TuM 2/3, 238. (Nbk. 43.08.o, <N.>)"

Furuli seems to have simply taken the date from Everling's lists without collation and without checking Krückmann's work. If he had done anything of this, he would have discovered that Everling had misquoted Krückmann 238.

Contenau XII.58:

The date of this tablet, VI/26/43, is correct and is the latest dated tablet from the reign of Nebuchadnezzar. As the earliest known tablet from the accession year of Evil-Merodach is dated to V/20/acc (BM 75322), the overlap between the two rulers is reduced from six months as shown by Furuli's tables to one month and 6 days, as is also shown in GTR4, page 324. As I argued on the same page, the reason for this brief overlap probably is that Nebuchadnezzar had died earlier, but that Evil-Merodach's accession was not generally accepted immediately due to his wicked character. Some scribes, therefore, continued to date their tablets to the reign of Nebuchadnezzar for a few weeks. This is a much more natural explanation of the "overlap" than the idea that "extra years" have to be added between the two reigns – an idea that conflicts with all other relevant sources from this period.

(4) Evil-Merodach to Neriglissar

"90 anomalous tablets"?

As mentioned earlier, Rolf Furuli has repeatedly claimed, both in this book (pp. 65, 86) and elsewhere, that there are about 90 "anomalous tablets" that contradict the traditional Neo-Babylonian chronology and therefore requires an extension of this chronology. On page 86 he states that these 90 tablets are "mentioned in chapter 3." About a dozen of such claimed anomalous tablets have already been discussed above, nine of which were presented in Furuli's Table 3.3 on page 59. Fresh collations by competent scholars showed that most of them did not have any "anomalous dates" at all.

The longest table with such claimed "anomalous dates" however, is Table 3.4 on pages 60-62. It starts in the first two columns with 17 tablets, continuously dated in each of the months II, III, IV and V of the 2nd and last year of Evil-Merodach, the last of the tablets being dated to V/17/02 (month 5, day 17, year 2). These dates are then followed in the next two columns by 37 tablets, continuously dated in each of the months V, VI, VII, VIII and

IX of the accession year of Neriglissar, the first tablet being dated to V/21/acc. or just four days after the last tablet from the reign of Evil-Merodach. This strongly indicates that the transition from Evil-Merodach to Neriglissar took place in the latter part of month V of Evil-Merodach's 2nd year.

However, Furuli also lists nine other tablets that do not seem to fit into this pattern. The first two are dated in the first and early second months of Neriglissar's accession year, i.e., before the 17 tablets dated to months II-V of Evil-Merodach's 2nd and last year, seemingly creating an overlap of about four months between the two reigns. Normally, the two early dates would be viewed as anomalous. But Furuli evidently presupposes that the two dates are correct and counts the 17 following tablets as anomalous!

Further, Furuli lists three tablets dated to months X, XI, and XII of Evil-Merodach's 2nd year, i. e., after the 37 tablets dated to months V-IX of Neriglissar. This would increase the overlap between the two reigns to more than ten months, from Neriglissar's accession in month I to Evil-Merodach's last tablet dated early in month XII. Instead of regarding the three tablets as anomalous, Furuli counts the preceding 37 tablets from the accession year of Neriglissar as anomalous!

Finally, Furuli lists in his table four other tablets that also seem to support an overlap between the two reigns. Two of them are placed early in month V of Neriglissar's reign and two others in month VII of Evil-Merodach's reign. According to Furuli's way of reckoning, the two latter tablets would increase the number of anomalous tablets from the last months of Evil-Merodach's last year of reign from 17 to 19. On the number of anomalous tablets from the accession year of Neriglissar Furuli states that there are "at least 41 tablets dated in the accession year of Neriglissar before the last tablet dated to Evil-Merodach." (Furuli, p. 60) If these 41 tablets and also the previous 19 tablets are all counted as anomalous, we would get 60 "anomalous tablets" during the Evil-Merodach/Neriglissar overlap!

Thus, out of nine tablets with seemingly odd dates Furuli succeeds in creating 60 tablets with "anomalous dates"!

Let us take a closer look at the nine tablets that really seem to be oddly dated. They are:

Neriglissar:

	Month/day/year:	**Tablet no.:**
(1)	I/26/acc.	AOAT 236, 97
(2)	II/04/acc.	BM 75489
(3)	V/?/acc.	BM 60150
(4)	V/06/acc.	BM 30419

Evil-Merodach:

	Month/day/year:	**Tablet no.:**
(5)	VII/08/02	BM 58580
(6)	VII/08/02	BM 75106
(7)	X/17/02	BM 61325
(8)	XI/15/02	?
(9)	XII/02/03	BM 58580

It does not seem that Furuli has himself collated any of these tablets or has had them collated by experienced specialists on cuneiform. Had he done this, he would have discovered that most of the "odd dates" disappear.

Tablet no. 1 is published as no. 97 in a work by Ronald H. Sack in his work, *Neriglissar – King of Babylon* (Neukirchen-Vluyn, 1994). This is Band 236 in the series *Alter Orient und Altes Testament*, which explains the reference to the tablet as AOAT 236, 97. The museum number is BM 60231. Sack's transliteration and translation of the tablet on page 235 reveals that the month sign is damaged. Sack, therefore, adds a question mark after the month name and puts it within half brackets: ⌐Nisanu(?)¬. Although Sack in a table on pages 59-61 gives the year, month, and day of the tablet as Acc/I/26, he leaves out the month altogether in his "Catalogue and Description of Datable Texts" on pages 49-54, giving the year/month/day as "Acc. … 25". (Sack, p. 54)

To get to know just how damaged the month name on the tablet is, I sent an email to Dr. Jon Taylor, Curator at the Department of the Middle East at the British Museum, and asked him to check the date. In an email received on June 24, 2008, he explained:

> "I've had a look at that tablet, and also shown it to several people with more experience in Neo-Babylonian texts than I have. The sign in question is not just damaged but also right on the corner of the tablet, and thus probably distorted. The more you look at it, the more signs it could be. None of us has been able to decide with certainty what it really is. I can send you a photo if you would like to see for yourself."

Obviously, it cannot be claimed that the date on this tablet really is anomalous.

Tablet no. 2, BM 75489, is published as no. 91 in Sack's work on Neriglissar. The tablet is clearly dated to month II, day 4, of Neriglissar's accession year. This was confirmed by C. B. F. Walker, who collated the tablet several times, once together with two other Assyriologists, Dr. G. van Driel and Mr Bongenaar, on November 9, 1990. (Walker, "Corrections," 1996, p. 7; cf. GTR4, p. 326, n. 33.) The date of this tablet, then, is clearly anomalous. Whether it is correct or a scribal error is, of course, another question.

Tablet no. 3, BM 60150, is dated to month V, but the day number is damaged and illegible. As the transition between Evil-Merodach and Neriglissar took place between day 17 and day 21 in the same month (month V), it cannot be shown that this tablet is dated earlier, and it would be wrong to claim that its date is anomalous.

Tablet no. 4, BM 30419, is dated by Furuli to month V, day 6, of Neriglissar's accession year. This is also the date given by R. H. Sack in his book on Neriglissar (published as text no. 12, pp. 150, 151.) However, "month V (ITI.NE)" seems to be a modern misreading. The tablet was examined in 1990 by C. B. F. Walker together with another Assyriologist, Dr. van Driel. Walker explains that, "Only the beginning of the month name is preserved, but we both agree that ITI.N[E] seems to be out of the question and that ITI.Z[IZ], month XI, may be the best guess at the moment." (Letter Walker-Jonsson, November 13, 1990, p. 2) Again, the tablet cannot be shown to be anomalous.

Tablet no. 5 and 9, BM 58580, is listed twice in Furuli's table, but with two different dates: VII/08/02 and XII/02/03. Both dates are wrong. Professor D. J. Wiseman, who collated the tablet in 1987, wrote: "Not year 3 possibly 2/2/2" (day 2, month 2, Year 2). (Letter Wiseman-Jonsson, October 7, 1987) C. B. F. Walker, in "Corrections," 1996, p. 3, confirms Wiseman's reading "2/2/2". The tablet, then, is not anomalous.

Tablet no. 6, BM 75106, dated VII/08/02 in Furuli's table, is actually dated to month IV, according to C. B. F. Walker's "Corrections," 1996, p. 7. The date creates no problem.

Tablet no. 7, BM 61325, was collated by C. B. F. Walker, Dr. van Driel and Mr. Bongenaar on November 9, 1990. Walker says that, "The month is slightly damaged, but seems to be clearly ITI.AB (month X) rather than ITI.NE (month V). Not day 17 as previously stated." The day number is 19. The date on this tablet, then, is X/19/02. This does not necessarily mean that it is correct. It may be a scribal error.

Tablet no. 8, finally, is dated to XI/15/02 in Furuli's table. Furuli points out in a note (p. 62, n. 79) that the inventory number is missing, so he was unable to identify it. He refers,

however, to W. St. Chad Boscawen's table on page 52 of the *Transactions of the Society of Biblical Archaeology*, Vol. VI (London, January, 1878). The date there has day 5, not day 15 as in Furuli's tablet.

Actually, a copy of this tablet by B. T. A. Evetts was published four years later as no. 66 in his *Babylonische Texte* (Leipzig, 1892). As shown on page 3 of the same work, Evetts read both the year number and the royal name differently: He dates it to XI/05/03 of Neriglissar, not of Evil-Merodach! A transliteration and translation of the same tablet by Ronald H. Sack has also been included in his recent work on *Neriglissar – King of Babylon* (= AOAT, Band 236. Neukirchen-Vluyn: Neukirchener Verlag, 1994), pp. 205-206. The museum number is BM 30577. Sack, who collated the tablet afresh, confirms the reading of Evetts. Obviously, Boscawen had misread the tablet. Its date creates no problems.

In the discussion above, the 60 supposedly "anomalous tablets" dated to the transition from Evil-Merodach to Neriglissar presented in Furuli's "Table 3.4" were first reduced to nine tablets that seemed to conflict with conventional chronology. Of these tablets only two could be demonstrated to have clear anomalous dates, i.e., no. 2 (BM 75489), dated to Neriglissar, II/04/acc. and no. 7 (BM 61325), dated to Evil-Merodach, X/19/02. This result is the same as that reached in GTR4 (pp. 325-327). How are the two tablets to be explained? Do they, as Furuli claims on page 60, "strongly suggest that the accession year of Neriglissar is not the same year as the second year of Evil-Merodach, but one or more years must have elapsed between their reigns"? This is certainly not the correct conclusion to draw, as this would contradict many other documents from the period, including the astronomical tablets.

It should be noticed that the dates on these two tablets stand isolated from the other dates in the transition between the two reigns. The tablet dated in month II of Neriglissar's accession year is not followed by any tablets dated to his reign in the next two months, III and IV, while we have several tablets dated in every month of his accession year from month V and onward. Similarly, we have several published and unpublished tablets dated in every month of Evil-Merodach's reign up to month V of his 2nd year, while the tablet from month X of his 2nd year is an isolated date that appears five months later. Normally, we should have several tablets from each of the four months between V and X dated to his reign, but we have none. What does this indicate?

Dr. G. van Driel, in his discussion of the first of the two tablets (AOAT 236, 91 = BM 75489), says:

> "The Sippar text R. H. Sack, Neriglissar no. 91, dated to 4 II accession year, would suggest a considerable overlap with the preceding king Awil-Marduk, to whom later Sippar texts (listed by Sack, p. 26, n. 19) are dated. *A mistake in the date of AOAT 236, no. 91 is the easiest solution.* It should be noted that the Uruk kinglist (J. J. A. van Dijk, UVB 18 [1962] pp. 53-60 obv. 9) gives N. 3 years and 8 months, which could exceptionally refer to the actual reign and not to a reign starting with the beginning of the first full year." – G. van Driel in *Reallexikon der Assyriologie und Vorderasiatischen Archäologie*, Band 9 (Berlin, New York: Walter de Gruyter, 1998-2001), p. 228. Emphasis added. (Cf. the similar comments in GTR4, pp. 326, 327. In note 35 on p. 327 an alternative solution is also discussed.)

The easiest and most natural explanation, then, is that the two odd dates are scribal errors. As Furuli himself admits in his first volume on chronology, "one or two contradictory finds do not necessarily destroy a chronology that has been substantiated by hundreds of independent finds." (Rolf Furuli, *Persian Chronology and the Length of the Babylonian Exile of the Jews*, Oslo, 2003, p. 22) This is certainly true of the two anomalous tablets discussed above.

(5) Neriglissar to Labashi-Marduk

In Table 3.5 on page 62 of his book Furuli presents ten tablets which he claims overlap the end of the reign of Neriglissar with the reigns of the last two kings of in the Neo-Babylonian period, his son Labashi-Marduk and Nabonidus. The dates on the four last tablets from the 4th regnal year of Neriglissar listed in the table are:

Month/day/year:	**Tablet no.:**
I/02/04	BM 41401
I?/06/04	YBC 3433
II/02/04	BM 30334
II/01/04	?

The earliest two tablets from the reign of Neriglissar's successor Labashi-Marduk are dated I/11+/acc. (Pinches 55, 432 = BM 58432) and I/23/acc. (NBC 4534), which seems to be a few weeks earlier than the two latest tablets from the reign of Neriglissar in the table above, BM 30334 and "?". Furuli says:

> "The first tablet from the reign of Labashi-Merodach is dated to day 11+ of month I of his accession year, but this cannot be harmonized with the tablet dated to month II of year 4 of Neriglissar."

The date of BM 30334 in Furuli's table, however, is wrong. A copy of the tablet by B. T. A. Evetts was first published as no. 69 in *Babylonische Texte* (1892). In a table on page 3 he shows the date to be I/02/04. The date on the tablet was collated and confirmed by Ronald H. Sack, whose transliteration and translation of the tablet appears on page 208 of his work on *Neriglissar – King of Babylon* (1994). The date creates no overlap between the two reigns.

Unfortunately, the last tablet in Furuli's table on Neriglissar, dated II/01/04, has no number. As Furuli admits on page 63 he has been unable to identify the tablet and verify the date. He has found the date in an old article by F. H. Weissbach published in *Zeitschrift der Deutschen Morgenländischen Gesellschaft*, Band 62, 1908, page 630. But Weissbach gives no further reference. The date has probably turned out to be wrong. It was not included by R. A. Parker and W. H. Dubberstein in their *Babylonian Chronology 626 B.C. – A.D. 75* (1956), nor has it been referred to in later articles on Neriglissar or in R. H. Sack's work on this regent. The date has to be rejected until Furuli can prove its correctness. The conclusion on page 327 of my book (GTR4), therefore, still stands:

> "The last two tablets known from the reign of Neriglissar are dated I/2/4 (April 12, 556 B.C.E.) and I?/6/4 (April 16). The first tablet known from the reign of his son and successor, Labashi-Marduk, is dated I/23/acc. (May 3, 556 B.C.E.), that is, twenty-one, or possibly only seventeen days later. These dates create no overlap between the two."

(6) Labashi-Marduk to Nabonidus

According to Furuli's Table 3.5, the latest tablet from the reign of Labashi-Marduk is dated III/12/acc., while the earliest tablet from the reign of his successor Nabonidus is dated in the previous month, on II/15/acc.:

The two latest tablets from the reign of Labashi-Marduk:

Month/day/year:	**Tablet no.:**
III/11/acc. (= June 19)	YBC 3817
III/12/acc. (= June 20)	Evetts, Lab. No. 1 (PD p. 13)

The two earliest tablets from the reign of Nabonidus:

Month/day/year:	**Tablet no.:**
II/15/acc. (= May 25)	Clay 1908, 39 (= BE VIII, 39)
III/18/acc. (= June 26)	Strassm. 1889, 1 (= Nbn 1)

At first glance these tablets seem to show an overlap of 26 days between the two reigns. But a closer examination of the texts shows that this is not the case *if the provenance of the tablets is taken into consideration*.

The Uruk king list credits Labashi-Marduk with a reign of only three months, which is confirmed by the contemporary contract tablets, which are dated only to (parts of) months I, II, and III. According to Berossus he was plotted against and killed because of his wicked behaviour. The rebellion broke out almost immediately after his accession, evidently before he had gained control over the whole kingdom. This conclusion is supported by the fact that the tablets dated to his reign come from only four places: Babylon, Uruk, Sippar, and (one tablet) Borsippa.

The earliest tablet dated to Nabonidus is from Nippur. No tablets dated to Labashi-Marduk are from that city. And the latest tablets dated to him from Babylon, Uruk, Sippar, and Borsippa are all earlier than the earliest tablets from these cities dated to Nabonidus. Thus there are no overlaps between the two kings at any of these places. Professor Wolfgang Röllig concludes:

> "Both, then, have ruled, or laid claim to the throne, at the same time, *although at different places*." – W. Röllig in *Reallexikon der Assyriologie und vorderasiatischen Archäologie*, Band 6 (Berlin and New York, 1980), p. 409. Emphasis added. (Cf. also GTR4, pp. 327, 328)

This is shown in the following table:

	Nippur	Babylon	Uruk	Sippar	Borsippa
Labashi-Marduk, latest tablets	---	II/22/acc. (= June 1)	III/11/acc. (= June 19)	III/12/acc. (= June 20)	II/26/acc. (= June 5)
Nabonidus, earliest tablets	II/15/acc. (= May 25)	IV/06/acc. (July 14?)	III/23/acc. (= July 1)	III/18/acc.* (= June 26)	VII/27/acc. (= Oct. 31)

* PD p. 13 mentions a text, VAS VI 65, dated to III/01/acc. (June 9, 556) of Nabonidus. Although Sippar is not mentioned in the text, the inscription is reported to have been found there. It is a building inscription. Although it bears no date, F. X. Kugler (*Sternkunde und Sterndienst in Babel*, II:II:2, 1924, pp. 405-408) argued that it describes restoration work done in Sippar from day 1, month III of Nabonidus' accession year onward. This view is rejected by P.-A- Beaulieu, whose careful study shows that restoration works took place in Sippar "in the second, the tenth, and the sixteenth year of Nabonidus", but not in his accession year. (Beaulieu, *The Reign of Nabonidus, King of Babylon 556-539 B.C.*, New Haven and London: Yale University Press, 1989, p. 6. Cf. his Table 2 on p. 42.)

Furuli's claim (p. 63), that "we can hardly avoid the conclusion that there was one or more years between Neriglissar and Nabonaid," has no factual foundation. The supposed overlap between Neriglissar and Labashi-Marduk is based on misreading of tablets, and the Labashi-Marduk/Nabonidus "overlap," which disappears on local level, is easily explained by the political circumstances that brought Nabonidus to the throne.

(7) Nabonidus to Cyrus

According to the Nabonidus Chronicle (translated by A. K. Grayson as Chronicle 7 in his *Assyrian and Babylonian Chronicles*, Locust Valley, New York: J.J. Augustin Publisher, 1975, pp. 104-111), Babylon was captured by the army of Cyrus on the 16th day of Tishri (= month VII), evidently in the 17th regnal year of Nabonidus (= October 11/12, 539 BCE; the year is damaged and illegible). This date, then, marked the end of the reign of Nabonidus. Cyrus himself entered Babylon on the 3rd day of month VIII, Arahsamnu (= October 28/29). The earliest tablet extant from the reign of Cyrus (CT 57:717) is dated to day 19, month VII (Tishri) of his accession-year, i.e., three days after the fall of Babylon.

Furuli, however, tries to argue that Nabonidus may have ruled longer than 17 years. He claims that, "Some anomalous tablets w[h]ere the reigns overlap do exist, but the dates of two [of] these tablets are explained away *ad hoc* by P&D, as the footnotes show." (Furuli, p. 63) As will be demonstrated below this accusation is false.

In Table 3.6 on pages 63 and 64 he presents four tablets that he claims are dated to Nabonidus *after* the fall of Babylon on VII/16/17:

Month/day/year:	**Tablet no.:**
VII/10/17	Strassm. Nab 1054
IX/xx/17	Strassm. Nab 1055
XII/17/17	CT 57.168
VI/06/18	Contenau 1927, 122

The first date contains a typing error and should be VIII/10/17. Actually, it has been known since 1990 that none of these four tablets have anomalous dates, and it is quite remarkable that Furuli does not know this. All dates are discussed, for example, in my book. All I can do, therefore, is to repeat the information presented in GTR4 on pages 356-358 and in note 62 on page 120:

"VIII/10/17" (Strassm. Nab 1054 =BM 74972):

As Furuli explains in note 84, PD rejected this date because "the month sign is shaded" in J. N. Strassmaier's copy of the text published in 1889. (PD = Parker & Dubberstein, *Babylonian Chronology*, 1956, p. 13; the tablet is listed as no. 1054 in J. Strassmaier, *Inschriften von Nabonidus, König von Babylon*, Leipzig, 1889) They had good reasons for doing this because F. H. Weissbach, who collated the tablet in 1908, explained that the month name was highly uncertain and "in any case not Arahsamnu" (month VIII).

Actually, there is an even more serious error with the date. Back in 1990 I asked C. B. F. Walker at the British Museum to take another look at the date on the original tablet. He did this together with two other Assyriologists. They all agreed that the year is 16, not 17. Walker says:

> "On the Nabonidus text no. 1054 mentioned by Parker and Dubberstein p. 13 and Kugler, SSB II 388, I have collated that tablet (BM 74972) and am satisfied that the year is 16, not 17. It has also been checked by Dr. G. Van Driel and Mr. Bongenaar, and they both agree with me." – Letter Walker to Jonsson, 13 November 1990.

"IX/xx/17" (Strassm. Nab 1055):

This text does not give any day number, the date above just being given as "Kislimu [= month IX], year 17 of Nabonidus". The text, in fact, contains four different dates of this kind, in the following chronological disorder: Months IX, I, XII, and VI of "year 17 of Nabonidus". None of these dates refers to the time when the tablet was drawn up. Such a date is actually missing on the tablet. As F. X. Kugler explained, the tablet belongs to a

category of texts containing instalment dates or delivery dates (*maššartum*). (F. X. Kugler, *Sternkunde und Sterndienst in Babel*, Vol. II:2, 1912, pp. 388, 389) Such dates were given at least one month, and often several months in advance. That is why Parker & Dubberstein explain that "this tablet is useless for dating purposes." (Parker & Dubberstein, *Babylonian Chronology*, p. 14) As shown by its contents, No. 1055 is an administrative text giving the dates for deliveries of certain amounts of barley in year 17 of Nabonidus. - P.- A. Beaulieu in the *Journal of Near Eastern Studies*, Vol. 52:4 (1993), pp. 256, 258.

"XII/17 /17" (CT 57.168 = BM 55694):

This tablet was copied by T. G. Pinches in the 1890's and was finally published in 1982 as CT 57:168. (CT 57:168 = *Cuneiform Texts from Babylonian Tablets in the British Museum*, Part. 57, 1982, No. 168) It is also listed in CBT 6 where the date is given as "Nb(-) 19/12/13+" (= day 19, month 12, year 13+). (Erle Leichty, ed., *Catalogue of the Babylonian Tablets in the British Museum* [CBT], Vol. 6, 1986, p. 184 [82-7-14, 51]) Both the royal name and the year number are obviously damaged and only partially legible. "Nb(-)" shows that the royal name begins with "Nabu-". This could refer either to Nabopolassar, Nebuchadnezzar, or Nabonidus. If it is Nabonidus, the damaged year number, "13+", may refer to any year between his 13th and 17th year.

"VI/06/18" (Contenau 1927, 122):

This tablet was copied by G. Contenau and was published as number 121 ("122" in Furuli's table is an error) in his work *Textes Cuneiformes*, Tome XII, *Contrats Néo-Babyloniens*, I (Paris: Librarie Orientaliste, 1927), Pl. LVIII. Line 1 gives the date as "VI/06/17," but when it is repeated in line 19 in the text it is given as "VI/6/18." PD (Parker & Dubberstein, p. 13) assumed "either a scribal error or an error by Contenau." The matter was settled by Dr. Béatrice André, who at my request collated the original at the Louvre Museum in Paris in 1990: "The last line has, like the first, the year 17, and the error comes from Contenau." — Letter André-Jonsson, March 20, 1990. (See GTR4, p. 120, n. 62)

One could also mention another, similar error on page 117 in the latest CBT catalogue (M. Sigrist, R. Zadok, and C. B. F. Walker [eds.], *Catalogue of the Babylonian Tablets in the British Museum*, Vol. III, London: The British Museum Press, 2006), where text 486 (= BM 26668) is dated "Nbn 18/III/18" (= day 18, month III, year 18). On my request Dr. Jonathan Taylor, who is Curator at the Department of the Middle East at the British Museum, collated the tablet. In an email dated January 15, 2008, he explained:

> "A year 18 for Nabonidus would indeed be very interesting. Unfortunately, the 18 is a typo here and the tablet is datable simply to year 8."

None of the four tablets listed by Furuli have an anomalous date. None of them, therefore, may "suggest either that there was one or more years between Nabonaid and Cyrus, or that the regnal years of Nabonaid could be calculated in a way different from the expected one." (Furuli, p. 63)

Summary

If a scholar believes it is possible to present a radical revision of the generally accepted chronology of an ancient, well known historical period, he/she should be able to present strong evidence of this, and he/she has to be very careful to check if his/her evidence is valid before it is published. Furuli has done nothing of this. His claim that there are "about 90 anomalous tablets" from the Neo-Babylonian period is demonstrably false. And most of the "anomalous dates" that he does quote have been proved not to be anomalous at all. Fresh collations have shown that most of them either contain scribal errors or have been misread by modern scholars, or have turned out to be modern copying, transcription, or printing errors.

The question is why Furuli has used such tablets in support of his "Oslo chronology" without having them collated. Basing a radical revision of the chronology established for

one of the chronologically best established periods in antiquity on misreadings and misinterpretations of the documents used does not speak very well about the quality of the research performed.

Part IV: The Neo-Babylonian Ledger NBC 4897

The cuneiform tablet NBC 4897 is a ledger, tabulating the annual growth of a herd of sheep and goats belonging to the Eanna temple at Uruk for ten consecutive years, from the thirty-seventh year of Nebuchadnezzar to the first year of Neriglissar. As it is an *annual* record, it clearly shows that Nebuchadnezzar ruled for 43 years, his son Amēl-Marduk for 2 years, and that the latter was succeeded by Neriglissar. The tablet makes it impossible to insert any extra years or any extra kings between Nebuchadnezzar and Amēl-Marduk, or between Amēl-Marduk and Neriglissar. This is strong evidence, indeed.

The first presentation and discussion of the tablet was included in an article written by Ronald H. Sack, "Some Notes on Bookkeeping in Eanna," published in M. A. Powell Jr. and R. H. Sack (eds.), *Studies in Honor of Tom B. Jones* (1979). It was a brief, preliminary study of just five normal-sized pages (pp. 114 -118), three of which contain a drawing of the tablet.

Another discussion of the tablet appeared 16 years later in an article written by G. van Driel & K. R. Nemet-Nejat, "Bookkeeping Practices for an Institutional Herd at Eanna," *Journal of Cuneiform Studies*, Vol. 46 (1994), pp. 47-58. It was a somewhat longer study of 12 large-sized pages, six of which contain a drawing, transliteration and translation of the tablet. Their article corrects a number of errors and misinterpretations by Sack.

The most extensive and detailed discussion of the tablet, however, is Stefan Zawadzki's article, "Bookkeeping Practices at the Eanna Temple in Uruk in the Light of the Text NBC 4897," *Journal of Cuneiform Studies*, Vol. 55 (2003), pp. 99-123. Zawadzki's discussion covers 25 large-sized pages, four of which give a transliteration and translation of the tablet. The article contains the most detailed and careful examination of the tablet so far. He corrects a number of misreadings and misinterpretations in the previous articles by Ronald H. Sack and G. van Driel/K. R. Nemet-Nejat.

Do the total numbers on the tablet contain serious mistakes and miscalculations?

Although van Driel and Nemet-Nejat corrected many misinterpretations and misreadings by Sack, they also claimed that the interpretation of the tablet "is hampered by miscalculations and mistakes in the text." (Van Driel/Nemet-Nejat, p. 47) Their conclusion at the end of their article (page 57) is quoted approvingly by Rolf Furuli, who claims that it "highlights the lack of quality of this tablet":

> "For the most part, mistakes occur in the totals. The scribes probably had difficulties similar to ours in reading the numbers in their ledgers. We can understand small mistakes of a single digit, but the mistakes occurring in the crucial final section of NBC 4897 again raise the question of how the administrations could work with this kind of accounting." – Quoted by Rolf Furuli in his *Assyrian, Babylonian, and Egyptian Chronology*, pp. 247, 248 (2007 ed.; pp. 251, 252 in the 2nd ed. of 2008).

As is demonstrated by Zawadzki, however, these claims are much exaggerated. The fact is that they are mainly based on misreadings and misunderstandings by the authors. As Zawadzki explains, van Driel "has solved many problems, *yet he has failed to explain several significant points, or has proposed interpretations that require reevaluation.*" (Zawadzki, p. 100; emphasis added) In fact, when the tablet is correctly read, copied, understood and translated, it can be shown to contain very few errors "in the totals", and these are small and unessential and *do not* occur "in the crucial final section of NBC 4897" as van Driel/Nemet-Nejat state.

Concerning the claim that the mistakes for the most part "occur in the totals", the most serious of these according to van Driel/Nemet-Nejat's translation are found in lines 31 and 35, where the numbers of sheep (rams + ewes + male lambs + young ewes) are summarized as follows:

Line 31: 170 + 390 + 66 + 193 = total: 759.

Line 35: 5 + 198 + 14 + 51 = total: 198.

As van Driel/Nemet-Nejat observed (pp. 53, 57), the numbers they have read in line 31 add up to 819, not 759, and those in line 35 add up to 268, not 198.

With respect to line 31, however, Zawadzki notes that, "Van Driel reads mistakenly 193 lambs while the copy gives clearly 133. The horizontal total of 759 is correct. Thus his calculations in JCS 46, [page] 57 from point (3) to the end of the article [i.e., the whole last page of the article] are wrong." (Zawadzki, p. 104, note 23)

Line 35 contains two further misreadings: The number 198 is a misreading for 138 (Zawadzki, p. 104, n. 25) and number 51 is a misreading for 41. Paul-Alain Beaulieu, who collated the original tablet at Yale, comments, "The tablet has a clear 41, indeed, but the scribe has written 51 and then erased one of the *Winkelhaken* to make 41." (Zawadzki, p. 104, n. 26) The horizontal total of 198 in line 35, therefore, is also correct.

Thus there are no errors "in the crucial final section" of the tablets. When the individual figures have been correctly read, copied and translated, and the procedure used by the accountant to arrive at the "totals" and the "Grand totals" is correctly understood, the calculations of the accountant turn out to be surprisingly free from serious errors. At only two places the "Grand totals" contains errors, and these are very small. For the 37th year (line 5) the "Grand total" shows 176 animals instead of 174, and for the 40th year (line 14) it shows 303 animals instead of 306. For all the other eight years the calculations are correct!

In view of this, it is remarkable that Rolf Furuli in his attempt to undermine the chronological impact of NBC 4897 has devoted so little attention to Zawadzki's careful analysis of the ledger that he has failed to notice that his quotation from van Driel/Nemet-Nejat about the supposed numerical mistakes on the tablet has been refuted by Zawadzki!

Table 1 below, which is based on Zawadzki's study, summarizes the calculations in the ledger, demonstrating that the Neo-Babylonian accountant usually did an excellent job and that the few mistakes he did in his calculations of the annual increase of the herd were of very small consequence. In the table "BF" means "brought forward" and "CF" means "carried forward." "Nbk" means Nebuchadnezzar, "AmM" Amēl-Marduk, and "Ngl" Neriglissar. The regnal year numbers in the first column includes some emendations or reconstructions by van Driel and Zawadzki. (Zawadzki, page 100, note 9) See further Table 2 below.

Table 1: A summary of the calculations in the ledger NBC 4897

Regnal year:	BF from previous year:	- Animals paid for shearing:	- Hides (of dead animals):	- Wages (= animals) to shepherd(s):	+ Lambs (male and female):	+ Kids (male and female):	Grand total (CF) on tablet:	Actual Grand total:
37th Nbk	137		- 12	- 4	16 + 36	0 + 1	**176**	***174*** **!**
38th	176	- 2	- 15	- 5	18 + 40	1 + 1	**214**	**214**
39th	214	- 4	- 19	- 7	23 + 45	1 + 2	**255**	**255**
40th	255	- 2	- 22	- 8	27 + 53	1 + 2	**303**	***306*** **!**
41st	303	- 7 (6+1)	- 27	- 10	31 + 60	2 + 2	**354**	**354**
42nd	354	- 2 (1+1)	- 32	- 11	40 + 65	2 + 2	**418**	**418**
43rd	418	- 7	- 37	- 13	41 + 80	2 + 3	**487**	**487**
1st AmM	487	- 7	- 43	- 15	48 + 90	3 + 3	**566**	**566**
0 AmM							**104**	**104**
1st AmM	566 + 104	- 5					**665**	**665**
2nd	665	- 0	- 61	- 22	66 + 133	4 + 4	**789**	**789**
1st Ngl	789	- 5	- 71	- 26	80 + 146	4 + 5	**922**	**922**
Seen							**208**	**208**
Not seen	922 - 208	- 11 (8+3)					**703**	**703**

Note: The last three lines in the table summarize lines 34–36 of the tablet. In the 1st year of Neriglissar the herd had increased to 922 animals according to line 34. Of these, 208 animals "were seen" according to line 35. As Zawadzki explains, this means that this was "the part of the herd, which was actually brought to the inspection in Uruk". As line 34 goes on to state that "8 lambs were received in Uruk, 3 lambs (were given) for shearing", the number of animals that "were not seen" was 703 (922 – 208 – 8 – 3) as line 36 of the tablet shows.

Does the tablet indicate another king between Nebuchadnezzar and Amēl-Marduk?

Lines 26, 27, and 28 of the tablet are dated to year 1, accession year, and year 1, respectively, of Amēl-Marduk. At first glance this order seems strange. Furuli utilizes it for arguing that, "If the name [in line 27] is Evil-Merodach, the king in line 26 is probably another king, because the accession year of a king is mentioned in line 27, and the first year of a king is mentioned in line 26. And naturally, the accession year of a king will be mentioned before his first year." (Furuli, p. 253)

Furuli has a tendency to "muddy the waters" by giving examples of how one and the same cuneiform sign can be interpreted in many different ways. This is the method he resorts to here. He claims that the signs translated Amēl-Marduk (Evil-Merodach) in line 26 can also be read in many other ways. On pages 252-253 he gives a list of "24 different names, each

of which the signs can represent, depending on how each sign is read." One of these names is Nadin-Ninurta, which according to Furuli may have been an unknown king who "reigned before Neriglissar." (Furuli, p. 78)

But is a combination of a few signs really that problematic? Erica Reiner, who was a leading specialist on cuneiform and Akkadian (she died in 2005), explains:

> "In spite of the polyvalence of the cuneiform syllabary, there is normally only one correct reading for each group of signs, whether the unit be a word or a phrase; in those cases where there is actual ambiguity, it cannot be solved from internal evidence alone, just as ambiguous constructions in any language, including English. To take an example, if sign A has as possible values the syllables *ur*, *liK*, *DaŠ*, and sign B the syllables *kur*, *laD*, *maD*, *naD*, *ŠaD*, (K stands for an element of the set whose elements are {g, k, q}, abbr. K Є {g, k, q}, similarly Š Є {z, s,ṣ, š}, D Є {d, t, >}), the combination AAB, representing one word, will be read, of all possible 16.16.22 = 2^9.11 = 512.11 = 5632 combinations, uniquely and unequivocally as *lik-taš-šad*, because of these 5632 combinations 5631 will be eliminated on graphemical, phonological, and lexical grounds." – Erica Reiner, "Akkadian," in *Lingustics in South West Asian and North Africa* (ed. T. A. Sebeok; Current Trends in Linguistics 6; The Hague: Mouton, 1970), p. 293.

The signs for the royal name in line 26 are read as LÚ-^{d}ŠÚ by Sack, van Driel/Nemet-Nejat, and Zawadzki. Furuli (p. 252) agrees that this is "a reasonable interpretation" of the signs, although he indicates that the signs are only partially legible and that other readings, therefore, are also possible, giving a number of examples of this. The name "Nadin-Ninurta", for example, would require that the signs can be read MU-^{d}MAŠ instead of LÚ-^{d}ŠÚ. To get to know if the signs are really so difficult to read I sent a question about the matter to Elizabeth Payne, an experienced Assyriologist at the Yale University which holds the tablet. Payne, who is also a specialist on the Eanna archive (to which NBC 4897 belongs), answered:

> "This section of the text is not at all damaged. As indicated by Nemet-Nejat's copy (JCS 46, 48) the signs are well preserved and alternate readings would require altering the text… I think Nadin-Ninurta can be safely excluded." (Email received on November 14, 2008)

As the reading LÚ-^{d}ŠÚ, then, is clear, the only reasonable translation is "Aḫu -Marduk". None of the other 23 alternative readings listed by Furuli is possible. Interestingly, Furuli's list does not include "the only really possible alternative reading of LÚ-^{d}ŠÚ, which is Amil-ili-shú, 'man of his (personal) god', a name well attested, but in Old Babylonian times. Since no Neo-Babylonian king by the name of Amil-ilishu is known, and there is a king Amil-Marduk, it is exceedingly unlikely that Amil-ilishu should be read here." (Email from Professor Hermann Hunger dated November 11, 2008)

Apart from these linguistic considerations, a simple and natural explanation of the seemingly peculiar order of regnal years is clearly indicated by the context.

What Furuli has not realized is that the addition of 104 animals in line 27 does not refer to another year's increase of animals due to breeding within the herd. It should be noticed that figures of animals paid for shearing, hides of dead animals, and wages paid, which are given for every year, are missing here. Instead, the reason for the adding of this number is stated to be that it represents "income [*irbu*] from the month of Addaru [month XII], the accession year of Amēl-Marduk." This is the only place in the text where the word *irbu* ("income") is used.

As suggested by Stefan Zawadzki, the most likely explanation for this extra augmentation of the flock stated to come from the end of the previous year (accession year of Amēl-Marduk) is that "the managers of the temple decided, for reasons unknown to us, to increase the herd by animals from other sources." (Zawadzki, JCS 55, 2003, p. 103) These animals had to be

added to the herd at the next annual counting about a month or two later. The "Grand total" in the 1st year of Amēl-Marduk, 566 animals, therefore, was increased by this added group of 104 animals and reduced by the 5 animals paid for the shearing of the flock. This increased the "Grand total" at the same occasion of counting to 665 animals as shown in the next line (line 28 on the tablet).

This simple and natural explanation eliminates Furuli's far-fetched and untenable explanations about "unknown kings" in this period.

The readings of the regnal year numbers

As is shown by the drawings of Sack and van Driel/Nemet-Nejat, some of the year numbers on the tablet are not easily identified and have been read differently by these scholars. This is true of the year numbers in lines 11, 14, 17, 20, 23, and 28. Therefore I wrote to the Yale University and asked if someone there could collate the year numbers afresh. This was done by Elizabeth Payne who, in addition to her observations, also attached a photo of the right half of the tablet. The results of her collations of the six lines mentioned above are shown in the fifth column in the table below. She finds that, "In each instance, the copy of van Driel/Nemet-Nejat is more reliable" than that of Sack. – Email Payne-Jonsson, dated October 29, 2008.

The most reliable readings of the year numbers on the tablet are shown in column 6 of Table 2. The numbers shown for those read differently by Sack, van Driel/Nemet-Nejat, Zawadaki, and Furuli (those in lines 11, 14, 17, 20, 23, and 28) are based on Elisabeth Payne's collations of the original tablet. The reasons for the selected readings of those lines are given below.

Table 2: The readings of the year numbers on NBC 4897

Line + king mentioned	R. Sack	Van Driel/Nemet-Nejat	Rolf Furuli	E. Payne's corrections	The best readings
2 [Nbk][1]	37	37	30-7(?)		37[2]
5	37	37	37		37[2]
8	38	38	38		38
11	29	38 'over erasure'	29	38	38 (?)
14	40	41	40	40 or 41	40 (?)
17	31	41	42	41	41
20	32	42	42	42	42
23	--	43	No year	[4]3	43
26 AmM	1	1	1		1
27 AmM	0	0	0, Another king?		0
28	2	1	2	1!	1
31	2	2	2		2
34 Ngl	1	1	1		1
37 Nbk–Ngl:	37 – 1	37 – 1	37 – 1		37 – 1

Note 1: Line 2 does not contain the name of Nebuchadnezzar. That regnal years 37–43 refer to his reign is evident, however, because line 37 gives the following summary of the amount of goat hair acquired from shearing during all the ten years:

> "40 5/6 minas of goat hair from the 37th year of Nabû-kudurri-usur, king of Babylon until the 1st year of Nergal-šarra-usur, king of Babylon."

Note 2: Lines 2 and 5 are both dated to year 37. But as argued by van Driel/Nemet-Nejat, line 2 shows the balance brought forward from the previous year, i.e., the total number of sheep and goats (137) that had been entrusted the shepherd, "Nabû-ahhē-šullim, the descendant of Nabû-šum-iškun," in year 36. Zawadzki (p. 100) agrees:

> "Van Driel's discussion of the accountant's method of reckoning is correct. The starting point of each subsequent account is the number of stock in the herd specified in the account for the previous year, from which the scribe subtracted … the dead animals (called KUŠ = *mašku*, 'hides'), the animals given as wages (*idî*) and for shearing (referred to as 'x animals *ina gizzî*' in 'Grand total')."

To the remaining number were then added the lambs and kids born during the previous year, resulting in the new "Grand total" in line 5, "176" (actual total as shown in Table 1: 174) at the beginning of year 37. (Zawadzki, pp. 102, 103) The birthing and shearing took place around the turn of the year, "in the months Adaru-Aiaru", i.e., from month XII to month II, which "provided the opportunity to count the stock" and pay the herdsmen "for the shearing after its completion." (Zawadzki, p. 100, including note 7)

The collations of Elisabeth Payne

Line 11: Elisabeth Payne says that "the tablet reads MU.38.KAM [year 38], as copied." Furuli claims (p. 248) that van Driel/Nemet-Nejat's drawing "seems to be MU.28.KAM$_2$," but he is wrong. A close look at the drawing shows three *Winkelhaken*, not just two, so they clearly read "38", which agrees with the tablet as Payne points out. Sack reads "year 29", which is adopted by Furuli, but this is wrong according to Payne.

Actually, we would have expected "year 39" in this line. Instead, the tablet seems to name two successive years "year 38", while year 39 is omitted. The total number of years remains the same, of course. Interestingly, van Driel/Nemet-Nejat (p. 48) note in the margin of their drawing that year number "38" is "written over erasure", which might indicate that it is an error for "39". On the other hand, as the annual shearing and counting took place around the turn of the year, it may have happened in some years that the shearing and counting took place twice, first early in the year as usual, and the next annual shearing and counting in the last month (Addaru) *of the same year* instead of early next year (39). This may very well have been the case here.

Line 14: Sack's drawing clearly shows "year 40" at this place, while van Driel/Nemet-Nejat read "year 41". In their drawing, however, the sign for "1" is not a normal wedge, as the vertical line below the head is either too short or the wedge is turned diagonally upwards toward the left. This is also seen on the photo of the tablet received from Yale. Elisabeth Payne says: "The scribe clearly wrote MU.41.KAM, but there are traces of a possible erasure. It is unclear to me how this line should be read. Either is possible…" As the next year number in line 17 clearly is 41, the most logical conclusion is that "40" is the correct reading here. This, in fact, is also how Rolf Furuli reads the number. (Furuli, pp. 248, 249)

Line 17: Sack has "year 31", van Driel/Nemet-Nejat "year 41", and Furuli "year 42". Who is right? The original tablet, according to Payne, has 41: "Year 41 is correct". Sack's and Furuli's numbers, therefore, are both wrong.

Line 20: Sack has "year 32", but Payne does not hesitate: "Year 42 is correct," she says. Van Driel/Nemet-Nejat and Furuli agree.

Line 23: The year number is damaged, but it would logically be "43" as the next year is dated to the "1st year of Amēl-Marduk," the successor of Nebuchadnezzar. Van Driel/Nemet-Nejat have "43" in their transliteration and translation, but suggest a possible "42" on page 54. Actually, the last part of the number, "3," is still legible. Payne explains: "This line is, indeed, badly damaged, but there are legible traces. Read: P[AB.M]A.ME {87 MU.43.KAM} (erasure …) The text continues after the erasure as read by vD/NN. The '3 UDU' they have in this line, however, is NOT there – it is the +3.KAM from the date." Thus "43" is undoubtedly the correct restoration of the original number.

Line 28: The year number on this line is read as "year 1" by van Driel, but Sack, followed by Furuli, reads "year 2". Elizabeth Payne, who collated the line on November 14, 2008, explains:

> "I would read this section of the text as 'mu.1!.kam', as there are traces of a second 'tail.' It is, however, markedly different from line 31, where there are clearly two vertical wedges (mu.2.kam). In my opinion, the interpretation of vD [van Driel] and NN [Nemet-Nejat] is correct, but the copy omits these traces."

In conclusion, the tablet obviously gives an annual count of the herd, with no years missing. Furuli's claim (p. 248) that "we cannot know that the tablet represents accounts of successive years" is nothing but wishful thinking. That the tablet gives annual reports is also confirmed by the calculations, as summarized in the Table 1 above. As the "Grand total" of the previous year is the same as the BF (balance brought forward) of the next year during the whole ten-year period, it is impossible to add any "unknown kings" or "extra years" to the period. The BF – CF totals tie each year directly to the next year without break. Any insertion of "extra years" or "unknown kings" would immediately destroy these obvious connections and require more annual increases.

This is also confirmed by the annual increase of the herd. Furuli discusses this on page 257, but his calculation is invalid because he includes the 104 animals in line 27 in the annual increase of the herd, while in fact it was added from an external source as shown above. Zawadzki, on the other hand, who takes this into consideration, finds that "the average yearly growth of the herd (excluding the addition of new animals in AmM 1) was about 18%." (Zawadzki, pp. 104, 105)

Thus the tablet NBC 4897 *does* show, clearly, that Nebuchadnezzar ruled for 43 years, and that his son and successor Amēl-Marduk ruled for 2 years and was succeeded by Neriglissar.

Part V: Were there unknown Neo-Babylonian kings?

[**Note:** The first edition of Rolf Furuli's volume 2 was published in the autumn of 2007. Later in that year Part I of my critical review was published on this website. It was demonstrated that Furuli's attempt (in chapter 6 and Appendix C) to redate the lunar observations recorded in the astronomical diary VAT 4956 was untenable. Evidently due to my criticism, Furuli rewrote parts of his discussion of VAT 4956 and quickly had a second revised edition of his book published in May, 2008. He even reclaimed copies of the first edition he had sent out about that time, telling the recipients that he would send them a copy of the new edition.

An examination of Furuli's revisions, however, shows them to be just another failed attempt to get rid of the historical reality as attested by VAT 4956. Very few changes were made in the rest of the book. Thus chapter 4 that is discussed in this part of my review is the same in both editions, the only difference being that chapter 4 in the first edition is found on pages 65-87 while it is found two pages later, on pages 67-89, in the second edition. The page references below are to pages in the first edition.]

As stated in Part III of this review, there are only two ways of extending the Neo-Babylonian period to include the 20 extra years required by the Watchtower Society's

chronology and thus also by Rolf Furuli's so-called "Oslo Chronology": (1) Either the known Neo-Babylonian kings ruled longer than indicated by Berossus, the Royal Canon (often misnamed "Ptolemy's Canon"), and the Neo-Babylonian cuneiform documents, or (2) there were other, unknown kings who belonged to the Neo-Babylonian period in addition to those established by these ancient sources. The first option was discussed and refuted in Part III of this review. The second alternative will be examined here.

In chapter 4 of his book (pages 65-87) Furuli presents "twelve possible Neo-Babylonian kings," some of whom he suggests may have ruled somewhere between the reigns of Nebuchadnezzar and Nabonidus. This, he feels, would open up for the possibility that their combined lengths of reign could move the reign of Nebuchadnezzar 20 years backwards in time, as required by his Oslo version of the Watchtower Society's "Bible chronology". The names of these "possible [additional] Neo-Babylonian kings" are:

(1) Sin-šarra-iškun	(7) A king before Nabunaid and his son
(2) Sin-šumu-lišir	(8) Mar-šarri-us,ur
(3) Aššur-etel-ilāni	(9) Ayadara
(4) Nadin-Ninurta(before Neriglissar)	(10) Marduk-šar-us,ur
(5) Bel-šum-iškun (father of Neriglissar)	(11) Nebuchadnezzar, son of Nebuchadnezzar
(6) Nabû-šalim	(12) Nebuchadnezzar, son of Nabunaid

The kings that Furuli suggests may have ruled as Babylonian kings during the Neo-Babylonian period will be discussed one by one. In order to move the reign of Nebuchadnezzar backwards it is important for the Watchtower Society and its Oslo apologist to have the supposed extra kings ruling *after* Nebuchadnezzar. It would not be of any help for them to place them as Babylonian kings *before* the reign of Nebuchadnezzar or before the reign of his father Nabopolassar.

(1) "Sin-šarra-iškun", (2) "Sin-šumu-lišir", and (3) "Aššur-etel-ilāni"

The three Assyrian kings Sin-šarra-iškun, Sin-šumu-lišir, and Aššur-etel-ilāni are well-known to authorities on Assyro-Babylonian history. Aššur-etel-ilāni and Sin-šarra-iškun were both sons and successors of Assurbanipal, and Sin-šumu-lišir was a high official at the Assyrian court whom Assurbanipal had appointed as tutor or mentor of Aššur-etel-ilāni, Assurbanipal's heir and immediate successor to the Assyrian throne. This is information given by cuneiform texts from this period. The strange thing is that Furuli does not mention *any* of these facts! He does state on page 65 that the three kings are "believed to have ruled in Assyria after Sennacherib" (704-681 BCE). But he does not explain that they actually ruled after the *grandson* of Sennacherib, i.e., after Assurbanipal (668-627 BCE).

Arguing that these three kings in reality may have ruled in Babylonia *after the Neo-Babylonian king Nebuchadnezzar* (604-562 BCE), Furuli first claims that they were not Assyrian but *Babylonian* kings. On page 66 he states that "the dated tablets show that they were kings in Babylon (not Assyria) for 7 years, 4 years, and 1 year respectively." On page 65 he says:

> "The data regarding these kings show that they reigned at least 7, 1, and 4 years respectively, but the tablets dated in their reigns show that they were *Babylonian* kings. This is problematic from the point of view of the traditional chronology, because there is no room for these reigns, even if there was some kind of coregency." (Furuli, p. 65)

By claiming that these kings were *Babylonian* and *not Assyrian* kings Furuli creates a problem that does not exist: If they were Babylonian kings, they cannot have ruled in Babylonia at

the same time as Nabopolassar, but must have reigned in Babylonia *before* this king. The problem created by this conclusion is that there is "no room" for their reigns of 7+4+1 years between Kandalanu and Nabopolassar. (Furuli, p. 66) This paves the way for Furuli's idea that they may have ruled after Nebuchadnezzar:

> "On the basis of the problems of finding room for these kings before Nabopolassar, we may ask whether one or more of these kings ruled Babylon during the years where we completely lack historical data, namely, after Nebuchadnezzar and before Nabunaid. In other words, can any of these kings fill a part of the possible gap of twenty years in the Neo-Babylonian Empire?" (Furuli, p. 67)

The statement that we "completely lack historical data" from the period between the reigns of Nebuchadnezzar and Nabonidus is false. Chronology belongs to the "historical data" as it is the very "back-bone of history," and the chronology of this period is completely known. There are also other historical data from this period. A Babylonian Chronicle, BM 25124 (= Chronicle 6 in A. K. Grayson's *Assyrian and Babylonian Chronicles*, Eisenbrauns 2000 reprint of the 1975 edition) gives information about a campaign by Neriglissar in his third year. Some of Nabonidus' inscriptions also give information about his predecessors. (Paul-Alain Beaulieu, *The Reign of Nabonidus, King of Babylon 556-539 B.C.*, New Haven and London: Yale University Press, 1989, pp. 21, 84-97, 106, 110-111, 123-125) Further, Berossus, who is known to have used sources from the Neo-Babylonian period, gives both chronological and historical information about the four kings who succeeded Nebuchadnezzar: Amel-Marduk, Neriglissar, Labashi-Marduk, and Nabonidus. – See Stanley Mayer Burstein, *The* ***Babyloniaca*** *of Berossus* (Malibu: Undena Publications, 1978), p. 28.

Were Sin-šarra-iškun, Sin-šumu-lišir, and Aššur-etel-ilāni Babylonian kings, really?

The claim that Aššur-etel-ilāni, Sin-šarra-iškun, and Sin-šumu-lišir were *Babylonian* kings, not Assyrian, is demonstrably false. Contemporary sources prove that all of them were *Assyrian* kings, who after the death of Kandalanu in 627 BCE attempted to retain the Assyrian control over Babylonia and crush the revolt of the Chaldean general Nabopolassar. Dr. Grant Frame explains:

> "To the best of my knowledge, of these four contenders for control of Babylonia only Nabopolassar ever used the title 'king of Babylon' or 'king of the land of Sumer and Akkad,' or was called 'king of Babylon' in the date formulae of Babylonian economic texts. In these economic texts, Aššur-etil-ilāni, Sin-šumu-lišir, and Sin-šarra-iškun were called either 'king of Assyria,' 'king of (all) lands,' 'king of the world,' or simply 'king.' The Babylonian scribes obviously wished to avoid stating that any of these three was a true king of Babylonia." – G. Frame, *Babylonia 689-627 B.C.* (Leiden: Nederlands Historisch-Archaeologisch Instituut, 1992), p. 213.

In a more recent work Grant Frame gives the following information about each of the three Assyrian kings:

> **Aššur-etel-ilāni:**
>
> "Assurbanipal was succeeded as ruler of Assyria by his son Aššur-etel-ilāni (or Aššur-etelli-ilāni). No inscription ever calls Aššur-etel-ilāni 'king of Babylon,' 'viceroy of Babylon,' or 'king of the land of Sumer and Akkad,' nor is he included in the various lists of rulers of Babylonia, which put Sin-šumu-lišir or Nabopolassar after Kandalanu. However, a number of royal inscriptions of Aššur-etel-ilāni do come from Babylonia and describe actions in that land and thus these must be included here. Over ten economic texts dated by his regnal years as 'king of Assyria' or 'king of the lands' come from Nippur and these attest to his accession, first, second, third, and fourth years." – Grant Frame, *Rulers of Babylonia. From the Second Dynasty of Isin to the*

> *End of Assyrian Domination (1157-612 BC)* (Toronto, Buffalo, London: University of Toronto Press, 1995), p. 261.

As an example, tablet VAT 13142 calls Aššur-etel-ilāni "king of the world (and) king of Assyria, son of Ashurbanipal, king of the world (and) king of Assyria." (Frame, 1995, p. 264)

Sin-šarra-iškun:

> "The last Assyrian king to exercise any control over at least part of Babylonia was Sin-šarra-iškun, a son of Ashurbanipal. Exactly when he became ruler of Assyria and when he held authority in Babylonia is unclear, but his reign over Assyria ended in 612 BC. Only the Uruk King List includes him among the rulers of Babylonia, assigning the year following the reign of Kandalanu and preceding the reign of Nabopolassar (626 BC) to Sin-šumu-lišir and Sin-šarra-iškun jointly (Grayson, RLA 6/1-2 [1980] p. 97 obverse 4´-5´). No known inscription gives him the title 'king of Babylon,' 'viceroy of Babylon,' or 'king of the land of Sumer and Akkad.' …
>
> No Babylonian royal inscriptions of Sin-šarra-iškun are attested and his Assyrian inscriptions will be edited elsewhere in the RIM series [The Royal Inscriptions of Mesopotamia] (as A.0.116). Approximately 60 economic texts were dated by his regnal years in Babylonia. These indicate that he controlled Babylon, Nippur, Sippar, and Uruk; the earliest texts come from his accession year and the latest from his seventh year. None of these economic texts, however, gives him the title 'king of Babylon'; he is called instead 'king of Assyria,' 'king of the lands,' and 'king of the world." (Frame, 1995, p. 270)

It should be added that, although Nabopolassar's revolt was successful, it took some years before he had attained control over all cities of Babylonia. A few Babylonian cities remained under Assyrian control for a few years after the accession of Nabopolassar to the Babylonian throne.

Sin-šumu-lišir:

> "No royal inscriptions of Sin-šumu-lišir are attested from Babylonia. At least seven Babylonian economic texts (including four from Babylon and one from Nippur) are dated by his accession year. In these he is either given no title, or called 'king of Assyria' or simply 'king.'" (Frame, 1995, p. 269)

The legible dates on the tablets dated to Sin-šumu-lišir are only from months III and V of his accession year. The Uruk King List gives the "kingless" year after the death of Kandalanu in 627 BCE (the last tablet before his death is dated in month III, i.e., May/June) to "Sin-šumu-lišir and Sin-šarra-iškun" jointly, undoubtedly because both were fighting for retaining Assyrian control of Babylonia this year (626 BCE). Whether both also were *kings* in this year is another question. It is known from contemporary cuneiform inscriptions that Aššur-etel-ilāni, not Sin-šarra-iškun, was the immediate successor of Assurbanipal. This information is provided by a cuneiform tablet designated KAV 182 IV. – Joan Oates, "Assyrian Chronology, 631-612 B.C.," *Iraq*, Vol. XXVII (1965), p. 135.

Not only the *Adad-guppi' inscription* (*Nabon. No. 24*; see C. O. Jonsson, *The Gentile Times Reconsidered*, 4th edition [henceforth GTR4], Atlanta: Commentary Press, 2004, pp. 113-116) but also Berossus state that Assurbanipal ruled for 42 years. When his brother Shamash-shum-ukin (Berossus: *Samoges*), Assyria's vassal king in Babylonia, died in Assurbanipal's 21st year (648 BCE), Assurbanipal (Berossus: *Sardanapallos*) "ruled over the Chaldeans for 21 years." (Burstein, *op. cit.,* p. 25) This would indicate that Assurbanipal during the last 21 years of his reign ruled both Assyria and Babylonia, in Assyria as Assurbanipal and in Babylonia under the throne name *Kandalanu*. This is a view shared by a number of modern historians. His last regnal year, then, was 627 BCE and the first regnal year of his son and successor Aššur-etel-ilāni was 626/625 BCE. As the last tablet from his reign is dated to month VIII, day 1, of his 4th year, the accession year of his brother Sin-šarra-iškun should fall in 623

BCE according to this chronology.

Two tablets from the reign of Sin-šarra-iškun and one or perhaps two from the reign of Sin-šumu-lišir are from Babylon. It is to be noted, however, that all of them are dated only in their *accession* years. This, too, would support the conclusion that Sin-šarra-iškun's accession year fell in 623 BCE, because the Babylonian Chronicle BM 25127 (= Chronicle 2 in A. K. Grayson, *Assyrian and Babylonian Chronicles* [ABC], New York: J.J. Augustin Publisher, 1975; reprinted by Eisenbrauns in 2000, pp. 87-90) mentions a "rebel king" in the third year of Nabopolassar (623/622 BCE) who ruled for "one hundred days". For a brief period in that year, therefore, Nabopolassar seems to have lost control over the capital. The "rebel king" may have been Sin-šarra-iškun.

With respect to Sin-šumu-lišir, prosopographical evidence strongly indicates that his brief reign of about three months fell in 626 BCE, before Nabopolassar's enthronement in Babylon. – Rocío Da-Riva, "Sippar in the Reign of Sîn-šum-lîšir (626 BC)," *Altorientalische Forschungen*, Band 28, 2001, pp. 53-57.

The three kings discussed above were demonstrably kings of Assyria, not of Babylonia. This cannot be changed by the fact that Assyria continued to retain control over a few Babylonian cities during the first years of the reign of Nabopolassar. There is absolutely no reason for trying to find room for the reigns of these three kings among the Neo-Babylonian rulers, neither before Nabopolassar nor after the reign of Nebuchadnezzar, as Furuli claims. They belonged to the Assyrian kingdom. As that kingdom continued to exist for seventeen years after Nabopolassar's conquest of Babylon in 626 BCE, there was enough room for their rule as *Assyrian* kings during the final stage of Assyria's existence. Furuli's emphatic claim that "we have three kings who reigned over Babylonia for at least 11 years who cannot be fitted into the traditional chronology of Babylonia" is completely groundless. (Furuli, p. 70) The *Assyrian* rulers during the final stage of Assyria were *contemporary* with the *Babylonian* ruler Nabopolassar.

This is also confirmed by the Babylonian Chronicle BM 21901, which covers the period from the 10th year of Nabopolassar until his 18th year (616/15–608/607 BCE). The chronicle describes the conquest and destruction of Nineveh, the Assyrian capital, in the 14th year of Nabopolassar and states: "At that time Sin-sharra-ishkun, king of Assyria, [*died*] … ." – Grayson's ABC (1975, 2000), Chronicle 3: 44, p. 94.

Thus Sin-šarra-iškun was still "king of Assyria" in the 14th year of Nabopolassar! How, then, can it be claimed that he was a *Babylonian* king and that his reign, therefore, has to be placed *before* that of Nabopolassar, and, because there is no room for him there, it has to be placed *after* the reign of Nebuchadnezzar? The whole idea is preposterous and bears witness to an astounding historical ignorance on the part of Rolf Furuli.

The same chronicle (BM 21901) goes on to tell that after Sin-šarra-iškun's defeat at the fall of Nineveh (in 612 BCE) he was succeeded by Ashur-uballit, who "ascended the throne in [the Assyrian provincial capital] Harran to rule Assyria." There he was finally defeated in the 17th year of Nabopolassar (609 BCE), and with that Assyria ceased to exist. From then on Babylonia was in possession of the hegemony in the Near East. – Grayson, ABC (1975, 2000), Chronicle 3: 49-75, pp. 94-96.

In my discussion of the attempts by scholars to reconstruct the final stage of Assyrian history and the reigns of its rulers, I briefly described the solution of the problems presented by Joan Oates in *Iraq*, Vol. XXVII (1965), pointing out that it had been accepted by some other scholars as "most probably the correct one." (*The Gentile Times Reconsidered*, 4th ed. [hereafter GTR4], Atlanta: Commentary Press, 2004, p. 331) In her more recent chapter on "The Fall of Assyria (635-609 B.C.)" in *The Cambridge Ancient History* (2nd ed., Vol. III:2, Cambridge University Press, 1991, pp. 162-193) Oates once again develops her solution of the problems and also adds some new information in support of it.

The dwindling extent of Assyrian control of Babylonia after the accession of Nabopolassar

Furuli's description of the extension of the Assyrian control of Babylonia after the accession of Nabopolassar is false. He claims that "Sin-šarra-iškun reigned over a great part of, or the whole of Babylonia during his 7 or more years of reign", and that "the contract tablets show that he was ruler over all Babylonia during his 7 or more years." (Furuli, p. 69)

On pages 65 and 66 Furuli states:

> "Of the 57 tablets dated to Sin-šarra-iškun, 22 are from Nippur (central Babylonia), 2 from Babylon (in the northeast), 9 from Uruk (in the south), 5 from Sippar (central Babylonia), 1 from Kār Aššur, and 18 are without the name of the city."

This makes *five* cities, two of which were not even Babylonian cities. Strangely, Furuli reckons the *lack of* city names on some tablets as a *sixth* city, stating on page 67 that "tablets from six Babylonian cities are dated in the reign of Sin-šarra-iškun."

Of the five cities controlled by Assyria after Nabopolassar's accession in Babylon in 626, only three were unquestionably *Babylonian* cities. *Kār Aššur*, which was situated north-east of Babylonia, had been constructed by Assyria in the eighth century BCE. In his first campaign in 745 BCE the Assyrian king Tiglath-pileser III is stated to have brought captives from cities in eastern Babylonia and resettled them in Kār Aššur. – A. K. Grayson in *The Cambridge Ancient History*, 2nd ed., Vol. III:2 (Cambridge: Cambridge University Press, 1991), p. 81.

Nippur came under Assurbanipal's control at the end of 651 BCE during the revolt of his brother Šamaš-šum-ukin. It remained an Assyrian city during the rest of Assurbanipal's reign as shown by documents from Nippur dated by his name, while tablets from other Babylonian cities were dated by the name of Kandalanu during the same period. Dr. Stefan Zawadzki explains:

> "Consequently, regardless of whether we accept the identity of Ashurbanipal and Kandalanu or not, the dates clearly indicate that Nippur **was not under Babylonian control but directly under Assyrian administration**. This situation prevailed later also: Aššur-etel-ilāni dates on business documents come exclusively from Nippur. Lastly, Nippur remained for the longest (along with Uruk and Kar-Aššur) in the hands of the [next to] last Assyrian king, Sin-šar-iškun. This has led scholars to conjecture that Nippur could have been the site of a powerful Assyrian garnison established there with the aim of wielding control over central Babylonia. Thus, during the period from Ashurbanipal assumption (with an intermission of 660-651) until the end of Assyrian presence in Babylonia, Nippur was considered to be [an] **almost integral part of Assyria**. Therefore, the fact that documents there were dated under Ashurbanipal's name cannot stand in the way of identifying him as Kandalanu." – Stefan Zawadzki, *The Fall of Assyria and Median-Babylonian Relations in the Light of the Nabopolassar Chronicle* (Poznan: Adam Mickiewicz University Press, 1988), p. 59. (Emphasis by S. Zawadzki; cf. also the discussion by Steven W. Cole, *Nippur in Late Assyrian Times, c. 755-612 BC.* Vol. IV in the *State Archives of Assyria Studies*, University of Helsinki, 1996, pp. 78-83.)

Furuli's claim (p. 69) that Sin-šarra-iškun was ruler over most or all of Babylonia, then, is false. Only a few of the many cities in Babylonia remained under Assyrian control for a brief period after the accession of Nabopolassar. According to the economic tablets, Sin-šarra-iškun's control over the city of Babylon is limited only to a part of his accession year. His control over Sippar is dated only until the beginning of his 3rd year. His control over Nippur (which, although situated in southern Babylonia, in this period was an Assyrian city as shown above) lasted until his 6th year, while his control over Uruk is dated in his accession year and in his years 6 and 7. After that Nabopolassar had full control over all Babylonia and

could start to attack Assyria proper in the north. – J. A. Brinkman and D. A. Kennedy, "Documentary Evidence for the Economic Base of Early Neo-Babylonian Society," in *Journal of Cuneiform Studies*, Vol. 35/1-2 (1983), pp. 52-59.

(4) "Nadin-Ninurta (before Neriglissar)"

On pages 77-78 Furuli suggests that a king named "Nadin-Ninurta" may have ruled in the period after Nebuchadnezzar and before Neriglissar. This idea is based upon Furuli's discussion of the Neo-Babylonian "ledger" NBC 4897 in his Appendix A (pp. 247-257 in the 2007 edition; 251-262 in the 2008 edition). As this ledger has already been discussed in Part IV of my review and the idea that line 26 may refer to some other king than Amēl-Marduk was thoroughly refuted, there is no need to repeat that discussion here. The claim that the signs for the royal name in line 26 of the ledger, transliterated LÚ-^{d}ŠÚ, can be read in many different ways and refer to at least 24 different royal names is unfounded and false. See Part IV, section "Does the tablet indicate another king between Nebuchadnezzar and Amēl-Marduk?"

(5) "Belšumiškun, king of Babylon"

On page 80 Furuli mentions another four "possible unknown Neo-Babylonian kings," the last of which is Belšumiškun, the father of Neriglissar. Furuli refers to one of the Neo-Babylonian royal inscriptions translated by Stephen Langdon, which he quotes as saying:

> "I am the son of Bel-šum-iškun, king of Babylon."

The second volume of Langdon's work on the Neo-Babylonian royal inscriptions, however, which included the inscriptions from the reign of Neriglissar, was never published in English. The manuscript was translated into German by Rudolf Zehnphund and published under the title *Die neubabylonischen Königinschriften* (Leipzig 1912). The inscription that is supposed to give Belšumiškun the title "king of Babylon" is listed as "Neriglissar Nr. 1". The original Akkadian text as transliterated by Langdon reads in Col. I, line 14 (pp. 210, 211):

> "mâr $^{I\,ilu}$ bêl-šum-iškun šar bâbili^{ki} a-na-ku"

This is verbatim translated into German as,

> "der Sohn des Belšumiškun, des Königs von Babylon, bin Ich,"

A literal translation of this into English would be "the son of Belšumiškun, the king of Babylon, am I," rather than "I am the son of Bel-šum-iškun, king of Babylon."

This is probably also what was written in Langdon's English manuscript. In W. H. Lane's book *Babylonian Problems* (London, 1923), which has an introduction by Professor S. Langdon, a number of the translations of the Neo-Babylonian inscriptions is published in Appendix 2 (pp. 177-195). They are said to be taken from the work, "Building Inscriptions of the Neo-Babylonian Empire, by STEPHEN LANGDON, translated by E. M. LAMOND." The last of these royal inscriptions is "Neriglissar I" (pp. 194, 195). Line 14 of the text says (p. 194):

> "the son of Belšumiškun, King of Babylon, am I."

It is obvious that this statement may be understood in two ways. Either the phrase "King of Babylon" refers back to Belšumiškun as king or it refers to Neriglissar himself. As no contract tablets have been found that are dated to Belšumiškun as king of Babylon, the statement is most likely a reference to Neriglissar. Do we know anything about Belšumiškun, more than that he was the father of Neriglissar?

It is known that Neriglissar, before he became king, was a well-known businessman, and in several business tablets he is referred to as "Neriglissar, the son of Belšumiškin." In none of these tablets is Belšumiškun stated to be, or to have been, king of Babylon.

It is important to notice that Neriglissar mentions his father in another building inscription, "Neriglissar Nr. 2," not as king but as "the wise prince." The same title is also given him on

a damaged clay cylinder kept in St. Louis Library. – S. Langdon, (1912), pp. 214, 215; J. A. Brinkman, *Alter Orient und Altes Testament*, Vol. 25 (1976), pp. 41-50.

If Belšumiškun really was, or had been, a king, why would he be degraded to the role of a prince, even by his own son?

Actually, the real position of this Belšumiškun is known. The so-called "Court List," a prism found in the western extension of Nebuchadnezzar's new palace, mentions eleven district officials of Babylonia. One of them is Belšumiškun, who is there described as the "prince" or governor over "Puqudu," a district in the north-eastern part of Babylonia. The officials on the "Court List" held their positions during the reign of Nebuchadnezzar. – Eckhard Unger, *Babylon* (1931), p. 291; D. J. Wiseman, *Nebuchadrezzar and Babylon* (Oxford: Oxford University Press, 1985), pp. 62, 73-75.

So why should Neriglissar in one of his royal inscriptions call his father "King of Babylon," when he had never occupied that position, and is denied that title in all other texts that mention him? If Furuli's quotation, as translated from German, had been correct, a possible explanation could have been that Neriglissar, who had usurped the Babylonian throne in a *coup d'état*, attempted to justify his course of action by claiming royal descent. In the inscription where Neriglissar seems to be calling his father "the wise prince" ("Neriglissar Nr. 2"), this title is followed by other epithets: "the hero, the perfect, mighty wall that eclipses the outlook of the country." If this description really refers to Belšumiškun and not to Neriglissar himself (the text is somewhat ambiguous), it would reflect a tendency to glorify the descent of Neriglissar. But to state in a royal inscription that Belšumiškun had been "King of Babylon" would have been foolish, as everyone in Babylonia would know that the claim was false.

It is true that P.-R. Berger in his work *Die neubabylonischen Königsinschriften* (1973), in which the inscription "Neriglissar I" is designated "Ngl Zyl. II, 3," says the following on page 77 about the title in Col. I, line 14:

> "In Zylinder II, 3 schliesslich steht hinter dem Vaternamen der Königstitel b. Nach dem bisher üblichen Inschriftsbrauch wären es Aussagen über den Vater und nicht den Autor. Dafür würde auch die wenigstens graphisch präteritale Verbalform des Relativsatzes sprechen."

Translation:

> "In Cylinder II, 3, finally, the royal title b. ['King of Babylon'] stands behind the name of the father. According to the use in inscriptions common so far, this would be statements about the father and not about the author. The graphic preterite verbal form of the relative clause, at least, would also speak in support of this."

However, it is quite clear that the phrase in Akkadian is ambiguous. This is shown, for example, by J. M. Rodwell, who in an article in the work, *Records of the Past*, Vol. V (London, 1892), translated the phrase without the second comma sign (cuneiform, of course, did not use comma signs at all), so that the title "king of Babylon" is naturally given to Neriglissar: "son of BEL-SUM-ISKUN, King of Babylon am I". (Page 139)

Modern experts on cuneiform agree that this translation is just as possible as the other one. One of my correspondents sent a question to Dr. Jonathan Taylor at the British Museum about this matter. In an email dated October 25, 2006, Dr. Taylor answered:

> "Dear . . ..,
>
> While one might expect the royal title to refer here to the father -- note also that Neriglissar refers to himself as king only a few lines earlier -- it is not impossible that the title refers to Neriglissar. It is not unknown for rulers to conclude a paragraph with an affirmation of their kingship. …
>
> Jon
>
> (Jon Taylor)"

The same correspondent also wrote to Michael Jursa, another well-known Assyriologist and specialist on cuneiform and the Akkadian language. In an email dated October 23, 2006 he explained:

> "Dear Mr. ---,
>
> the Akkadian is indeed ambiguous. If one wanted one could take 'king of B[abylon]' as referring to the preceding name, i.e. to Neriglissar's father, rather than to Neriglissar himself. But the other explanation (i.e. the king is Neriglissar) is just as good, and we know of course that it is correct:
>
> the passage means 'I am N[eriglissar], son of BSHI [Belšumiškun], the king of Babylon' - or in German where this is clearer because of the case endings – 'Ich bin N, der Sohn des BSHI, der König von Babylon'. It is more a problem of English language that a literal translation which preserves the word order of the original Akkadian makes BSHI a king, rather than his son. In Akkadian, this is not so. I am surprised that Langdon should have got it wrong – possibly the work of an uninformed translator who misunderstood the English original.
>
> Yours sincerely,
>
> Michael Jursa"

Belšumiškun, then, was never a Neo-Babylonian king. No documents of any kind have been found that are dated to his reign. In the politically neutral economic tablets he is never called a king, and Neriglissar himself calls him "prince", which was evidently the correct title of Belšumiškun. The claim that Neriglissar once, in one of his boastful building inscriptions, calls him "king of Babylon," seems clearly to be based on a mistranslation.

(6) "Nabû-šalim"

Another "unknown king" that Furuli believes may have ruled during the Neo-Babylonian period somewhere after Nebuchadnezzar is named "Nabû-šalim," or "Nabû-ušallim" as his name is usually spelled. In note 113 on page 78 Furuli refers to a tablet held at The Birmingham Museum and Art Gallery designated "1982.A.1749". This reference is wrong. The correct designation is "1982.A.1772". A copy, transliteration and translation of the tablet is published in an article by Dr. Michael Jursa, "Neu- und spätbabylonische Texte aus den Sammlungen der Birmingham Museums and Art Gallery," *Iraq*, Vol. LIX (1997), pp. 97-174. The tablet on which the name Nabû-ušallim appears is No. 47 of the 63 tablets presented by Michael Jursa in the article.

As Furuli explains, the tablet "is dated to *ud.8.kam mu.4.kam* ^{id}AG-GI, which is translated '8 Elulu, year 4, Nabūnaid.' However, regarding the signs ^{id}AG-GI, Jursa comments: 'An error for ^{id}AG-I." The signs for ^{id}AG-I mean "Nabonidus," while the signs for "^{id}AG-GI" mean "Nabû-ušallim." Thus it would seem that the tablet is dated to the 4th year of an unknown king named Nabû-ušallim.

What Furuli does not tell his readers, however, is that the name Nabû-ušallim appears at *three* places on the tablet, in lines 2, 4, and 16, and that it is only in line 16 it is used of the king. Lines 1-4, with the other two occurrences of the name, read (in translation from German):

> "Three and a half shekels of silver from the *ilku*-debt of Nabû-ušallim have Nabû-taklak and Palitu, the wife of Bēl-ušallum, received from Nabû-ušallim."

Nabû-ušallim was, in fact, a well-known businessman during the Neo-Babylonian period. (He is not to be confused with an earlier businessman by the same name, see Hermann Hunger, "Das Archiv des Nabû- Ušallim," *Baghdader Mitteilungen*, Band 5, 1970, pp. 193-304). His name appears regularly in business contracts from the 40th year of Nebuchadnezzar until the 7th year of Nabonidus. – Cornelia Wunsch, *Die Urkunden des babylonischen Geschäftsmannes Iddin-Marduk*, Vol. I (Groningen: STYX Publications, 1993), pp. 27, 28.

In view of this, Furuli's claim that Nabû-ušallim may have been a king "for at least 4 years" – which, of course, he must place in the period between Nebuchadnezzar and Nabonidus – is refuted by the business documents, which present him only as a businessman during all these years and even longer.

So what about ^{id}AG-GI instead of ^{id}AG-I in line 16 on the tablet? As Furuli points out, the close similarity between the two names appears only in the transliterated forms, not in the Akkadian (the cuneiform signs for Nabû-ušallim and Nabû-nā'id):

> 'We should remember that although *gi* and *i* have some resemblance in English, that is not the case in Akkadian. In the name of the king, *gi* and *i* are not letters or syllables but logograms. Thus they represent two different words.' (Furuli, p. 80)

This is true of the latter part of the names. But the first part of the names, 'Nabû-', is identical in cuneiform. It is not so strange, therefore, that the scribe, on beginning to write the signs for 'Nabû-nā'id' in line 16, inadvertently happened to repeat the name he had just written twice earlier in the text, 'Nabû-ušallim.' This kind of error, called *dittography*, is a common one. Obviously, the king intended was Nabonidus, as also Jursa rightly points out in his note on page 128 of his article.

(7) "A king before Nabunaid and his son"

On pages 76, 77 of his book Furuli believes he has found another "unnamed king" who may have ruled between Nebuchadnezzar and Nabonidus. He feels he has found this new king on a tablet at the British Museum known as "The Dynastic Prophecy." Its museum number is 40623. The tablet is translated and discussed by A. K. Grayson on pages 24-37 of his work *Babylonian Historical-Literary Texts* (Toronto and Buffalo: University of Toronto Press, 1975. On page 24 Grayson describes the contents and state of the tablet as follows:

> "It is a description, in prophetic terms, of the rise and fall of dynasties or empires, including the fall of Assyria and rise of Babylonia, the fall of Babylonia and rise of Persia, the fall of Persia and the rise of the Hellenistic monarchies. Although as in other prophecies no names of kings are given, there are enough circumstantial details to identify the periods described. …
>
> "The main tablet appears to have had an introductory section (i 1-6) of which only a few traces are preserved. After a horizontal line the first 'prophecy' appears (i 7-25). Although only the ends of lines are preserved, it is clear that this section contained a description of the fall of Assyria and the rise of the Chaldaean dynasty."

This section ends with a horizontal line, which Furuli claims (page 77) marks the end of the reign of Nebuchadnezzar II. There is no evidence of this. As Grayson points out (page 24), the various details given "suit admirably for the reign of Nabopolassar."

The first three lines of the next section in column ii are damaged and illegible, but lines 4-10, quoted by Furuli, give the following information (the words within brackets are suggested restorations by Grayson, but the horizontal line after line 10 is on the tablet):

4. *will go up from* [… …]
5. will overthrow [… …]
6. For three years [he will exercise sovereignty]
7. Borders and … [… …]
8. For his people he will [… …]
9. After his (death) his son will [ascend] the throne ([…])
10. (But) he will not [*be master of the land*].

Grayson argues (pp. 24, 25) that, "Since the following section (ii 11-16) is clearly about Nabonidus, this paragraph must concern some period after the reign of Nabopolassar and before Nabonidus." As he goes on to note, the preserved information in lines 6-10 seems to refer to Neriglissar and his son and successor Labashi-Marduk. That Nebuchadnezzar and his son Amel-Marduk (Evil-Merodach) are left out is understandable, as the "prophecies" focus on the rise and fall of dynasties and empires and therefore do not deal with all reigns. With respect to the "three years" in line 6, Grayson adds in footnote 3 on page 25: "Perhaps one should restore '(and) eight months' in the break." In that case line 6 would originally have read: "For three years [and 8 months he will exercise sovereignty]."

Furuli's comment on this is that, "We see that Grayson adds words and translates in accordance with the traditional chronology." (Furuli, p. 76) He is wrong. In the traditional chronology (as for example in the "Royal Canon") Neriglissar is given a reign of 4 years. What Furuli does not tell his readers is that Grayson uses the chronology presented on another cuneiform tablet, the *Uruk King List*, which gives Neriglissar a reign of "'3' years 8 months" and Labashi-Marduk "(…) 3 months". (Grayson, p. 25, including n. 2; cf. GTR4, pp. 105-108) The preserved portions of the Uruk King List start with Kandalanu (647-626 BCE) and end with Seleucus II (246-225 BCE). The preserved portions of the Dynastic Prophecy start with the gradual overthrow of Assyria by Nabopolassar after the death of Kandalanu and end somewhere in third century BCE. Grayson's use of the chronology of the Uruk King List, then, is quite natural, as both tablets cover roughly the same period and seem to have been composed during the same century.

The statement in the Uruk King List that Neriglissar ruled for 3 years and 8 months does not conflict with the traditional chronology. The Royal Canon (often misnamed "Ptolemy's Canon"), gives whole years only, while the Uruk King List at this place gives more detailed information. As J. van Dijk observes, "the list is more precise than the Canon and confirms throughout the results of the research." – J. van Dijk in *Archiv für Orientforschung*, Vol. 20 (1963), p. 217.

Furuli disagrees with this, stating that "we have tablets dated in the reign of Neriglissar from month I of his accession year until month I, and possibly month II, of his year 4. Thus Neriglissar reigned at least for 48 months and not just for 3 years and 8 months (44 months)." (Furuli, p. 77)

This claim has already been discussed and refuted in Part III of the present review of Furuli's book. Fresh collations of the "anomalous" dates on the tablets used by Furuli for dating the reign of Neriglissar show that they are either too damaged to be legible, have been misread by modern scholars, or seem to be just scribal errors. The actual reign of Neriglissar seems clearly to have started in month V of his accession year and ended in month I of his 4th regnal year – a period of 3 years and 8 months, exactly as is stated on the Uruk King List.

Furuli uses the only preserved words – "for three years" – on the otherwise illegible line 6 to argue that they refer to another, "unnamed king" than Neriglissar who ruled for no more than 3 years. He says in his last paragraph on page 77:

> "If the scribe gives correct information regarding the three years of reign of the king mentioned in line 6, this must have been a king who is not mentioned by Ptolemy, and who is not found in the traditional list of kings of the Neo-Babylonian Empire. This king also had a son who may have ruled as king as well. So, the Dynastic prophecy may have given us two extra Neo-Babylonian kings. … In any case, a king that ruled for three years is unknown by Ptolemy and those who accept his chronology."

Furuli should have added that such a king was also unknown by the astronomical compilers of the Royal Canon from whom Ptolemy inherited "his" Canon, by Berossus in the early 3rd century BC, by the compiler of the Uruk King List in the same century, by the accountant who in the 1st year of Neriglissar wrote the "ledger" NBC 4897 (see Part IV of my review), by Adad-Guppi', the mother of Nabonidus, and by the scribes who wrote the tens of thousands of contract tablets dated to the Neo-Babylonian period.

And, of course, the astronomical documents, in particular the five known astronomical tablets that records observations dated to the reign of Nebuchadnezzar – the diary VAT 4956, the lunar eclipse tablets LBAT 1419, LBAT 1420, and LBAT 1421, and the planetary tablet SBTU IV 171 – inexorably block every attempt to move the 43-year reign of Nebuchadnezzar backwards in time in order to create room for more kings and twenty more years between Nebuchadnezzar and Cyrus.

Furuli's use of just three words ("for three years") from an otherwise illegible sentence on a damaged line on the obverse of a very damaged tablet reveals how desperate and futile the search for the "unknown kings" is that he needs for giving his "Oslo Chronology" at least a semblance of credibility.

(8) "Mar-šarri-uṣur" and (9) "Ayadara"

Among his "possible unknown Neo-Babylonian kings" Furuli mentions two names that were found inscribed on objects discovered during William Frederic Badè's excavations between 1926 and 1935 at Tell en Nasbeh about 8 miles northwest of Jerusalem in Israel. The site was (and still is) identified as ancient Mizpah, the city where the Babylonians appointed Gedaliah as vassal ruler of Judah after their destruction of Jerusalem in 587 BCE.

The dates of the two inscriptions are difficult to determine. W. F. Albright, George Cameron, and A. Sachs suggested dates that varied between the 11th and the 5th centuries BCE. (Chester C. McCown, *Tell en-Nasdbeh I: Archaeological and Historical Results*. Berkeley and New Haven: ASOR, 1947, pp. 150-152, 167-169) More recently some scholars have suggested that they may have been found in what is now designated "Stratum 2," which is dated to the period following the destruction of Jerusalem in 587 BCE. – Jeffrey Z. Zorn, "Mizpah: Newly Discovered Stratum Reveals Judah's Other Capital," in *Biblical Archaeology Review* (BAR), Vol. 23:5, 1997, pp. 28-38, 66; also André Lemaire, "Nabonidus in Arabia and Judah in the Neo-Babylonian Period," in O. Lipschits and J. Blenkinsopp (eds.), *Judah and the Judeans in the Neo-Babylonian Period* (Winona Lake, Indiana: Eisenbrauns, 2003), pp. 292, 293.

Mar-šarri-uṣur

The name of the first individual was found on a potsherd. What remains of the inscription, which had been engraved before firing and probably is written in Hebrew, has usually been read as "[ʔB]N MRŠRZR[KN]" and is translated "[ʔs]on of Mār-šarri-zēra-[ukīn]." (C. C. McCown, *op. cit.*, pp. 167-169) Recently, however, Professor André Lamaire has argued that the name could be read "[ʔ]N MRŠRṢR[ʔ, [ʔ]ʔ", which he translates "Mar-šarri-*uṣur*[ʔ". – André Lemaire, *op. cit.*, pp. 292, 293.

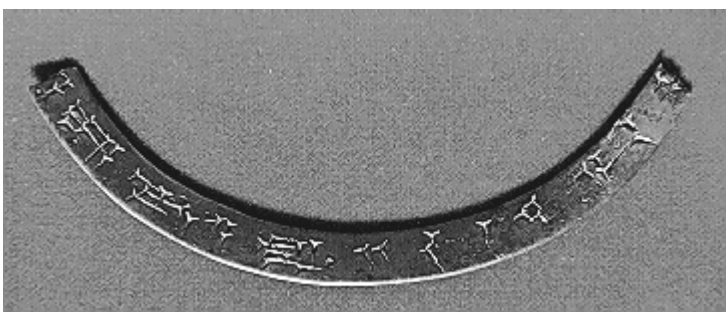
If the first two letters were "BN" (*ben*, "son"), the name of the son (the owner of the pot) is not preserved. If the name of his father is correctly restored as Mar-šarri-uṣur, his title and position is not known. Furuli's suggestion, that he was a king who reigned in Babylon, is just an unfounded guess. Quoting a name without a title on a potsherd found in Judah and suggesting that it refers to a king who may have been reigning in Babylon during the Neo-

Babylonian period is, of course, pure guesswork and a game that no scholar who wants to be taken seriously would run the risk of becoming involved in. The name, written in Hebrew characters, is either Assyrian or Babylonian, and if the inscription found at Mizpah dates from the 6th century BCE, he (or his son) may perhaps have been one of the Babylonian officials known to have been stationed there after the destruction of Jerusalem. (J. Zorn, *op. cit.*, pp. 38, 66)

Ayadara

The name of the second individual was found on a fragment of a slender bronze circlet with an incised cuneiform inscription that originally consisted of 30-35 characters, of which only 11 are preserved. The inscription was not discovered until 1942 in Berkeley, when some supposedly unimportant metal fragments were cleaned in a hot bath with caustic soda and zinc. Jeffrey Zorn states:

> "Since only a small part of the inscription survives, its translation is problematic. It may have read '… Ayadara, king of the world, for (the preservation of) his life and …' This is clearly a dedicatory inscription of sorts, but the words indicating what is being dedicated, and to whom, have been lost. Even the identification of Ayadara is unknown; no one with his name bearing the title 'king of the world' is known from any period. What is remarkable is that such a dedicatory inscription should turn up on a small tell in ancient Judah." – Zorn, *op. cit.*, p. 66.



A photo of the inscription, held at the Badè Museum of Biblical Archaeology in Berkeley, California

Referring to the two inscriptions, Furuli believes he has found two more "unknown kings" here who may have been ruling during the Neo-Babylonian period. He says:

> "Babylonian kings by the names *Mar-šarri-uṣur* and *Ayadara* are unknown in the period covered by Ptolemy's canon, but the discovery of these names suggests that two kings with these names reigned in Babylon." (Furuli, p. 80)

The discovery of the two names suggests nothing of the kind.

To find out if the name "Ayadara" really is totally unknown to scholars, a correspondent of mine wrote to several Assyriologists and asked them if they knew anything about this king. One of them, Dr. Stephanie Dalley at the Oriental Institute in Oxford, England, who turned out to be working on texts from the Sealand dynasties, answered in an email dated 10 October 2007:

> "The king is Aya-dara, abbreviation for Aya-dara-galam-ma, of the First Sealand dynasty [dated to the mid-second millennium BCE]. I am editing a very large archive of that king plus a few texts of his predecessor. The abbreviated form of the name is known from King-list A."

The form of the name in King-list A as translated by A. K. Grayson is "A-a-dàra." – See p. 91 in D. O. Edzard (ed.), *Reallexikon der Assyriologie und vorderasiatischen Archäologie*, Band 6 (1980).

In a more recent letter to this author Stephanie Dalley explains:

> "Although it was certainly unexpected to find that king's name and titles at Mizpah, I have no doubts about the identification. An abbreviated form of his name, though with a different spelling, is already known from one of the king-lists, and the title 'king of the world' is substantiated from one of Aya-dara-galama's year-names. The incorrect re-interpretation of readings given by Horowitz and Ishida contains a basic grammatical error, among other difficulties. All the sign values on the circlet have parallels in mid-second millennium texts." – Letter Dalley–Jonsson, received December 4, 2008.

Dalley states in her letter that more details "are forthcoming from my edition of texts from the First Sealand Dynasty, which is now with the publisher, CDL Press." Clearly, Ayadara cannot be placed in the Neo-Babylonian period.

(10) "Marduk-šar-uşur"

One of the "unknown Neo-Babylonian kings" Furuli has referred to several times in the past first appeared in 1878 in a lengthy article by an early Assyriologist named W. St. Chad Boscawen. He placed the name, "Marduk-šar-uşur," together with another mysterious name, "La-khab-ba-si-kudur," in a separate "Addenda" because he was uncertain about their places in his chronological table. But another, contemporary scholar, Dr. Julius Oppert, soon discovered that the second name was simply a misreading for Labashi-Marduk, the son and successor of Neriglissar. – W. St. Chad Boscawen, "Babylonian Dated Tablets, and the Canon of Ptolemy," *Transactions of the Society of Biblical Archaeology* (TSBA), Vol. VI (London, 1878), pp. 262, 263 (including footnote 1).

The "Marduk- šar-uşur" tablet is dated to day 23, month 9 (Kislev), year 3. However, it was soon discovered, this time by Boscawen himself, that the name was a misreading for Nergal-šar-uşur (Neriglissar). This information, too, was published in the very same volume. Excusing himself, Boscawen explained:

> "When we have some 2,000 tablets to go through, and to read names, which, as everyone who has studied Assyrian knows, is the most difficult part, because it is not easy always to recognize the same name, as it may be written four or five different ways, you may judge it is an arduous task. I have copied two apparently different names; but afterwards found them to be variants of the same name." – *TSBA,* Vol. VI (1878), pp. 78, and 108-111)

That "Marduk- šar-uşur" was a misreading for Nergal-shar-usur was also somewhat later confirmed by two other early Assyriologists, T. G. Pinches and J. N. Strassmaier.

Despite this, Furuli continued to insist that "Marduk- šar-uşur" is a possible reading of the name, and that he may have been an unknown king who reigned during the Neo-Babylonian period!

As Boscawen did not mention the BM (British Museum) number of the tablet, it has been difficult to locate. Not until Ronald H. Sack published it as No. 83 (BM 30599) in his book on Neriglissar could it be identified – by Furuli himself! The date on BM 30599 is the same as that given by Boscawen, "month Kislev, 23rd day, in the third year." In his "Addenda" Boscawen noted that "the contracting parties are Idina-Marduk son of Basa, son of Nursin; and among the witnesses, Dayan-Marduk son of Musezib." (TSBA VI, p. 78) The same individuals also appear on BM 30599 (the latter not as a witness, actually, but as an ancestor of the scribe). It is clearly the same tablet. Sack, however, reads the royal name on the tablet, *not as Marduk-šar-uşur but as Nergal-šarra-usur* (transliterated ^{d}U+GUR-LUGAL-SHESH). –

Ronald H. Sack, *Neriglissar—King of Babylon* (Neukirchen-Vluyn: Neukirchener Verlag, 1994), pp. 224, 225.

To check if it really is possible for a modern Assyriologist to misread the name of Nergal-shar-usur (Neriglissar) as "Marduk-šar-uşur", I sent an email message to C. B. F. Walker at the British Museum back in 2003 and asked him to take a look at the original tablet (BM 30599). In his answer, he explains:

> "I have just taken BM 30599 out to check it, and I do not see how anyone could read the name as anything other than ^{d}U+GUR-LUGAL-SHESH. A reading Marduk-shar-usur would seem to be completely excluded. Our records show that the tablet was baked (and cleaned?) in 1961, but it had been published by T G Pinches in the 5th volume of Rawlinson's *Cuneiform Inscriptions of Western Asia*, plate 67 no. 4 in a copy which clearly shows ^{d}U+GUR. It was also published by Strassmaier in 1885 (*Die babylonischen Inschriften im Museum zu Liverpool*: Brill, Leiden, 1885) no. 123, again clearly with ^{d}U+GUR. So the reading cannot be put down to our cleansing the tablet in 1961, if we did." (Walker to Jonsson, October 15, 2003)

How, then, could Boscawen misread the name? Another Assyriologist, Dr. Cornelia Wunsch, who also collated the original tablet, pointed out in an email to one of my correspondents that "the tablet is in good condition" and that there is "no doubt about Nergal, as published in 5R 64,4 by Pinches. More than 100 years ago he already corrected the misreading by Boscawen." She goes on to explain that "Boscawen was not a great scholar. He relied heavily on the notes that G. Smith had taken when he first saw the tablets in Baghdad."

But Furuli still seems unwilling to give up the idea that an unknown Neo-Babylonian king named Marduk-šar-uşur might have existed. He argues on page 80:

> "Sack read the name as Nergal-šar-uşur, and if this is the same tablet as the one read by Boscawen, I can confirm that Sack's reading is correct, because I have collated this tablet myself at the British Museum. If both scholars read the same tablet, a Neo-Babylonian king with the name Marduk-šar-uşur never existed. However, the broken tablet BM 56709, the signs of which are Neo-Babylonian, refers to year 1 of a king whose name begins with Marduk-. So we cannot exclude that Boscawen read a tablet different from the one read by Sack, and that a king with Marduk in his name reigned in the Neo-Babylonian Empire."

This tablet is listed in the *Catalogue of the Babylonian Tablets in the British Museum* (CBT), Vol. 6 (London: The Trustees of the British Museum, 1986, p. 215). In an unpublished list of "Corrections and additions to CBT 6-8" (my copy is dated March 18, 1996), which Christopher Walker kept at the British Museum, Walker gives the following comments on the text:

> "56709 Marduk-[…] 12/–/1 Dated at Borsippa. CT 55, 92 (not CT 56, 356).
>
> The tablet is probably early Neo-Babylonian."

Note the words "probably" and "early Neo-Babylonian." This is a suggestion. Furthermore, scholars often use the term "Neo-Babylonian" to describe a more extended period than 625-539 BCE. *The Assyrian Dictionary*, for example, starts the period at about 1150 BCE and ends it in the 4th century BCE. (Cf. GTR^{4}, Chapter 3, n. 1) Maybe this is how Walker uses the term here. The names of about a dozen Babylonian kings between ca. 1150 and 625 BCE begin with Marduk-, including Marduk-apla-iddina II (the Biblical Merodach-Baladan, Isa. 39:1, who ruled in Babylon twice, 721-710 and 703 BCE), and Marduk-zakir-shumi II (703). Thus, as the royal name is only partially legible and we do not know exactly to which period the tablet belongs, it is useless for chronological purposes. Placing the king in the

Neo-Babylonian period somewhere after the reign of Nebuchadnezzar is based on nothing else but wishful thinking.

(11) "Nebuchadnezzar, son of Nebuchadnezzar"

Contemporary sources mention seven of Nebuchadnezzar's children, but none of these bore the same name as their father. (D. J. Wiseman, *Nebuchadnezzar and Babylon*, Oxford University Press, 1985, pp. 9-12) Furuli's reference to a son of Nebuchadnezzar of the same name is based on a much later source, a rabbinic work known as "The Chronicles of Jerachmeel," written by Eleazar ben Ašer in the twelfth century CE. (English translation by M. Gaster, *The Chronicles of Jerahmeel*, London: Royal Asiatic Society, 1899) The chronicle relates that Amel-Marduk had become victim to a slander campaign which caused his father Nebuchadnezzar to sentence him to prison and make a younger son, named Nebuchadnezzar, king:

> "… Nebuchadnezzar the Great did not keep his faith with him, for Evil-Merodach was really his eldest son; but he made Nebuchadnezzar the Younger king, because he had humbled the wicked. They slandered him to his father, who placed him (Evil-Merodach) in prison together with Jehoiachin, where they remained together until the death of Nebuchadnezzar, his brother, after whom he reigned." – M. Gaster, pp. 206-207; quoted by Irving L. Finkel, "The Lament of Nabû-šuma-ukîn," in J. Renger (ed.), *Babylon: Focus mesopotamischer Geschichte, Wiege früer Gelehrsamkeit, Mythos in der Moderne* (Berlin: SDV, 1999), p. 335.

Furuli uses this very late and seemingly legendary story to argue that this "Nebuchadnezzar the Younger" may have ruled one year as the immediate successor of Nebuchadnezzar the Great before Amel-Marduk came to power. (Furuli, p. 79) This is indicated, he says, by the conclusion (argued earlier in his chapter 3, p. 58) that Jehoiachin was released from prison 44 years, not 43, after Nebuchadnezzar had begun to reign. This idea has already been refuted in Part III, section (3) of this review, to which the reader is referred.

There may be *some* truth, however, to the story of Amel-Marduk's imprisonment. This has been argued by Irving L. Finkel, who in his article quoted above publishes a Late Babylonian tablet (BM 40475) in which an individual named "Nabû-šuma-ukîn, son of Nebuchadnezzar" laments his grievous situation as a prisoner because of the evil trick played on him by his enemy. Based on another tablet, BM 34113, Finkel suggests that Nabû-šuma-ukîn was the personal name of Amel-Marduk before he was appointed Crown Prince and adopted Amel-Marduk as his throne name.

This is an interesting suggestion, but if it could be shown to be correct there is no room for a rule of a brother of his after the death of Nebuchadnezzar II. Finkel explains why:

> "If this suggestion is indeed correct, a terminus ante quem for the date of Amel-Marduk's release and the adoption of the throne name is the month of Ellul, year 39 of Nebuchadnezzar, i.e. 566 BC. This information is shown by the contract VAS 3 25: 12-13, where reference is made to Nabû-nūrē'a-lūmur, the eunuch (*ša reši*) of Amel-Marduk, the Crown Prince (*mār šarri*)." – I. L. Finkel, *op. cit.,* p. 338.

If Amel-Marduk had been released from prison and been appointed Crown Prince no later than in the 39th year of Nebuchadnezzar, he must have been the immediate successor at the death of his father in his 43rd regnal year. This is confirmed by a number of cuneiform sources, including the ledger NBC 4897. (See GTR4, pp. 129-133; also http://goto.glocalnet.net/kf3/review4.htm.)

(12) "Nebuchadnezzar, son of Nabunaid"

The last of the twelve "unknown kings" that Furuli feels may have ruled during the Neo-Babylonian period is based on the fact that two of the usurpers that Darius I had to defeat during his rise to power after the death of Cambyses in 522 BCE claimed to be a son of

Nabonidus named Nebuchadnezzar. The brief reigns of the two usurpers are described in the Bisitun Inscription of Darius I. A number of contract tablets dated to the accession year and the 1st year of Nebuchadnezzar have been identified as belonging, not to Nebuchadnezzar II but to the two usurpers (Nebuchadnezzar III and IV), which confirmed that these two usurpers really existed. So far 66 tablets have been identified as belonging to the two usurpers. – See my article in the British interdisciplinary journal *Chronology & Catastrophism Review* of 2006, pages 26-28, including note 8 on page 37.

Furuli mentions these two "Nebuchadnezzars" from the early *Persian* period and suggests that a second *Neo-Babylonian* king by the name of Nebuchadnezzar might also lie hidden among the about 2,400 tablets (published up to the end of the last century) dated to Nebuchadnezzar II. He asks:

> "Could there have been two Nebuchadnezzars in the Neo-Babylonian empire instead of just one? Who can exclude this possibility?" (Furuli, p. 84)

In support of this idea he quotes David B. Weisberg, who in 1980 expressed doubts about some of the criteria used to distinguish between Nebuchadnezzar II and the two usurpers in 522/521 BCE. One of these criteria is the titles used of the kings. Nebuchadnezzar II is usually titled "king of Babylon," while the title of the Persian kings usually includes the phrase "king of the countries." When the latter title is used in tablets dated to Nebuchadnezzar, therefore, the king is supposed to be one of the two usurpers. However, as pointed out by Weisberg, there is one tablet in the Yale Babylonian Collection (YBC 3437) dated to year 18 (I/30/18) of Nebuchadnezzar II with the title "king of the countries." This criterion, he says, "should now be modified." – David B. Weisberg, *Texts from the Time of Nebuchadnezzar*. Yale Oriental Series - Babylonian Texts, Vol. XVII [YOS 17] (New Haven and London: Yale University Press, 1980), pp. xxi, xxii.

With respect to the criterion based on *prosopography*, however, Weisberg admitted that it seems to be valid and cogent. His doubts primarily concerned whether there really were two usurpers who claimed to be "Nebuchadnezzar, son of Nabonidus," or just one. – Weisberg, *op. cit.*, pp. xxii-xxiv.

David B. Weisberg's work (YOS 17) was reviewed two years later by the French Assyriologist Francis Joannès in the *Revue d'assyriologie et d'archéologie orientale* (RA), vol. LXXVI, no. 1, 1982, on pages 84-92. Of the texts published by Weisberg, 38 are listed as dated to the accession year and the first year of Nebuchadnezzar. Of these, Weisberg assigns 13 to Nebuchadnezzar II, one to Nebuchadnezzar III, and 17 to Nebuchadnezzar IV. Joannès, however, finds another two texts assigned by Weisberg to Nebuchadnezzar II that he on prosopographic grounds should have assigned to Nebuchadnezzar III and Nebuchadnezzar IV. Joannès writes:

> "The third part (pp. XIX-XXVI) concerns the distinction to make for the first regnal years (years 0 and 1) between Nebuchadnezzar II on the one hand, and the two usurpers Nebuchadnezzar III and Nebuchadnezzar IV on the other hand. The doubt concerns 38 texts from YOS 17, for which the author applies himself to make a choice, presented in a synthetic way on pages XXIV and XXV. I admit that I do not quite understand, in this context, the reasons for the long discussion devoted to Mušêzib-Bêl, son of Zêr-Bâbili, descendant of Ilûta-ibni (pp. XXII-XXIII). The variant Ilûta-ibni/Attabâni is evidently interesting, but the data provided in TCL XII and Tum 2/3 cannot leave any doubt about the dating to make in the case of text 8.
>
> "It would have been more fruitful to look into the case of Šamaš-mukîn-apli, son of Madânu-ahhê-iddin, descendant of Šigûa, referred to in nos. 126 and 302, whom D. Weisberg attributes to years 0 and 1 of Nebuchadnezzar II. But Šamaš-mukîn-apli, the šâpiru of the prebendal brewers in Eanna, is attested from the 2nd year of Cyrus to the 22nd of Darius I. Likewise, in no. 126, the carpenter Guzanu (l. 23) is referred to elsewhere in the 5th year of

> Cambyses. Thus no. 126 is to be dated to Nebuchadnezzar III, and D. Weisberg's argument that the defeat of this king would forbid a contemporary attestation (here the 27, 28, 29-IX) is invalid. …
>
> "In a corresponding way no. 302 is dated to Nebuchadnezzar IV. It is important to emphasize that in such cases the title 'king of Babylon' or 'king of Babylon and of the countries' does not constitute a decisive criterion. It is the prosopography that remains the most useful one, when this is possible.
>
> "He does not enter into our intention to go back in detail to this problem, but we would like to emphasize one point: Right up to now the view expressed by A. Poebel permits a reconstruction that is completely coherent, and the elements brought up by YOS 17 certainly do not question them." – F. Joannès, op. cit., pp. 84, 85; (translated from the French). Arno Poebel's reconstruction is found in his article, 'The Duration of the Reign of Smerdis, the Magian, and the Reigns of Nebuchadnezzar III and Nebuchadnezzar IV,' published in AJSL, Vol. 56:2 (Apr. 1939), pp. 121-145.

A detailed discussion of the chronology of the three usurpers Bardiya, Nebuchadnezzar III, and Nebuchadnezzar IV was presented in a lengthy article by Stefan Zawadzki published in 1994. (Zawadzki, 'Bardiya, Darius and Babylonian Usurpers in the Light of the Bisitun Inscription and Babylonian Sources,' *Archaeologische Mitteilungen aus Iran* [*AMI*], Band 27, 1994, pp. 127-145, with important details added in *NABU* 1995-54, 55, and 56) Zawadzki's discussion is based on a detailed prosopographic research that conclusively establishes the existence and precise chronology of the three usurpers. For the two Nebuchadnezzars (III and IV) the prosopographic information presented on pages 135 and 136 of the article is particularly enlightening. Strangely, Furuli, who questions even the very existence of these two kings, seems to be totally unaware of Zawadzki's important study. At least he never refers to it.

Furuli's theory that there may also have been a second Nebuchadnezzar who ruled during the Neo-Babylonian period, on the other hand, is completely groundless. He is not able to present any criteria whatsoever by which such a theory could be tested.

Summary

In the discussion above it has been demonstrated that none of Furuli's twelve "unknown kings" can be inserted anywhere in the Neo-Babylonian period. Three of them were Assyrian kings, not Babylonian, and one belonged to the First Sealand dynasty. One royal name turned out to be an old misreading, three "kings" were not kings at all, and four others did not even exist!

And, of course, there is no room for the insertion of any "unknown kings" or any "extra regnal years" into the Neo-Babylonian period. Tens of thousands of dated tablets that fix the length of each reign throughout the whole period, as well as several dozens of records of astronomical observations dated to these reigns that turn them into an absolute chronology make any attempt to lengthen or shorten this period impossible. All attempts to revise the chronology of the Neo-Babylonian period have failed and have forced the proponents of such revisions to either give them up or to claim that all the ancient documents that contradict their theories must have been falsified by later writers and copyists. When reality is in conflict with the theory, reality has to be rejected!

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The Gentile Times Reconsidered, by Swedish author Carl Olof Jonsson, is a scholarly treatise based on careful and extensive research, including an unusually detailed study of Assyrian and Babylonian records relative to the date of Jersualem's destruction by Babylonian conqueror Nebuchadnezzar.

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