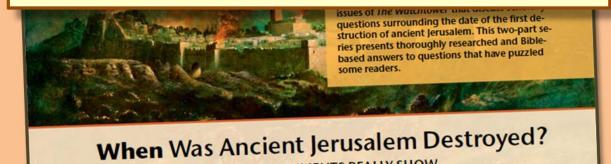


(Part A)

of

When Was Ancient Jerusalem Destroyed? Part 2: What the clay documents really show (The Watchtower, November 1, 2011)

Doug Mason



PART TWO WHAT THE CLAY DOCUMENTS REALLY SHOW

CRITIQUE (PART A) of

When Was Ancient Jerusalem Destroyed? Part 2, What the Clay Documents Really Show (Watchtower, November 1, 2011, pages 23 - 28)

Version 1

This Critique of the article appearing in The Watchtower of November 1, 2011 is in two parts:

- Part A (this document) discusses points raised by the article
- **Part B** provides supporting factual evidences and additional relevant material. Available at: http://www.jwstudies.com/Critique_Part_B__References__of_Jerusalem_Destroyed_part_2.pdf

Each major subject canvassed in this Critique commences with a new page. This allows the reader to quickly identify the subject matter, and if need be, provide those pages to a Watchtower apologist.

The October 1, 2011 and November 1, 2011 issues of *The Watchtower* magazine presented two parts of the Article: "*When was Ancient Jerusalem Destroyed?*"

My Critique of "Part One: Why It Matters?; What the Evidence Shows" is available at:

http://www.jwstudies.com/Critique of When Was Ancient Jerusalem Destroyed.pdf

At its Conclusion to Part One, The Watchtower explained the purpose of its Part Two:

Is there really no historical evidence to support the Bible-based date of 607 B.C.E.? What evidence is revealed by datable cuneiform documents, many of which were written by ancient eyewitnesses? We will consider these questions in our next issue.

I am enormously grateful to two very special people without whom this Critique could never have been written, let alone in the short time that was available. They are Ann O'Maly and Marjorie Alley. I simply cannot thank them enough.

I also wish to acknowledge my debt to Carl Olof Jonsson and my enormous respect for his knowledge and his many years of genuine friendship. Carl, I thank you.

This Critique is of course my responsibility, so please address any concerns to me.

© Doug Mason, Melbourne. October 2011

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PLEASE NOTE!

This Critique is provided in two Parts:

- Part A (this document)
- Part B (References)

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JEREMIAH'S "SEVENTY YEARS"

Part 2 opens with the subject of the "Seventy Years", even though it is canvassed in Part 1 of these articles in the *Watchtower* magazine¹. Although it is the subject of a separate Critique², comments are required on the statements made in Part 2.

Jeremiah's first statement on the Seventy Years

Jeremiah made two references to a period of 70 years. In his first statement, Jeremiah said it would be a period when all of the nations he named would serve the king of Babylon for 70 years. That servitude was an addition to the long-repeated warning that the land of Judah would be devastated.

I will summon all the peoples of the north and my servant Nebuchadnezzar king of Babylon," declares the LORD, "and I will bring them against **this land** and its inhabitants and against **all the surrounding nations**. I will completely **destroy them** and make them an object of horror and scorn, and an everlasting ruin. ...

This whole country will become a desolate wasteland, and these nations will serve the king of Babylon seventy years. ...

I will bring upon that **land** all the things I have spoken against it, all that are written in this book and prophesied by Jeremiah against **all the nations**.³

Jeremiah's second statement

In Jeremiah's second statement on the Seventy Years, he wrote to the exiles at Babylon they were to ignore their prophets who were promising them a swift return. He told them to settle down, because a period of 70 years had been decreed it would continue its course. This meant there would be no swift release.

To all those I carried into exile from Jerusalem to Babylon: "Build houses and settle down; plant gardens and eat what they produce. Marry and have sons and daughters; find wives for your sons and give your daughters in marriage, so that they too may have sons and daughters. Increase in number there; do not decrease. ...

"Do not let the prophets and diviners among you deceive you. ... This is what the LORD says: "When seventy years are completed for Babylon, I will come to you and fulfill my gracious promise to bring you back to this place."⁴

Jeremiah pleaded with them to have patience, to settle down to a full and prosperous life. He warned them that when the decreed 70 years had been completed, only then would the LORD come to them. The exiles in Babylon understood; they realised Jeremiah was telling them their exile would continue for many more years.

"[Jeremiah] has sent this message **to us in Babylon**: It will be a **long time**. Therefore build houses and settle down; plant gardens and eat what they produce." ⁵

The Watchtower, instead of recognising that Jeremiah was speaking of **several nations** having to **serve** Babylon for 70 years, tries to make the period apply to an exile from Judea that commenced

¹ *The Watchtower*, October 1, 2011, pages 26-31

² <u>http://www.jwstudies.com/Critique_of_When_Was_Ancient_Jerusalem_Destroyed.pdf</u>

³ Jer. 25:9, 11, 13, (all Bible references are from the NIV, unless otherwise indicated)

⁴ Jer. 29:4-6, 8, 10

⁵ Jer 29:28

after Jerusalem had fallen. The *Watchtower* fails to recognise that Jeremiah's reference to the total destruction of Judah had been threatened for centuries, and that Jeremiah was adding a punishment of 70 years servitude to Babylon. It was a punishment to be served by Judah and by its neighbours. Its end would be marked by the punishment of Babylon.

Jeremiah told the king of Judah and its people that the threat of destruction could be avoided if the people obeyed God's priests and prophets. The servitude to Babylon, however, could not be avoided.⁶

The end point of the Seventy Years

Jeremiah makes the end of the Seventy Years very plain:

"When the **seventy years are fulfilled**, I will **punish the king of Babylon** and his nation, the land of the Babylonians, for their guilt," declares the LORD, "and will make it desolate forever. **They themselves will be enslaved** by many nations and great kings; I will repay them according to their deeds and the work of their hands." Jer. 25:12, 14

Since this was a period of servitude to Babylon, as symbolised by Jeremiah and Hananiah at Jeremiah 28, the period stopped immediately when Babylon fell. Servitude to Babylon could not continue any longer, as its regional dominance had ended.

THE Bible says that the Jewish captives were to be <u>exiled in Babylon "until the</u> <u>seventy years were completed</u> in fulfillment of the word of the LORD spoken by Jeremiah."

WT, Nov. 1, 2011, page 22

The passage at 2 Chronicles 36:21 is not talking about the "exiled Jewish captives", but is instead talking about desolation of the "land":

The land enjoyed its sabbath rests; all the time of its desolation \underline{it} rested, until the seventy years were completed.⁷

The text does not say the land rested for seventy years; just that it rested until the seventy years were brought to their end.

When were they <u>released? In "the first [reg-nal] year of Cyrus</u> king of Persia." (2 Chronicles 36:21, 22, *New International Version*)

WT, Nov. 1, 2011, page 22

2 Chronicles 36:21, 22 links the end of the Seventy Years to the end of Babylonian rule and to the decree by Cyrus during his first regnal year over Babylon. Depending on the calendar used by a writer, Cyrus' first year ran from either March 538 to March 537, or from September 538 to September 537.

[The remnant] became **servants** to [Nebuchadnezzar] and his sons **until the kingdom of Persia** came to power.

The land enjoyed its sabbath rests; all the time of its desolation it rested, **until the seventy years were completed** in fulfillment of the word of the LORD spoken by Jeremiah. In the **first year of Cyrus** king of Persia, ... the LORD moved the heart of Cyrus king of Persia to make a proclamation.

⁶ This is discussed in the Critique to Part 1 of this *Watchtower* article.

⁷ 2 Chronicles 36:21, NIV

The exiled captives of all the serving nations were released when Cyrus made his decree. Since they were **released** from servitude, this meant they were no longer in servitude to Babylon. They were released because the 70 Years had come to its end. The end came for all nations at the same time, with the same event, the end of Babylonian rule.

	Bib-
lical and secular history agree	that this exile
in Babylon ended after Cyrus o	conquered Bab-
ylon and freed the Jews	2

WT, Nov. 1, 2011, page 22

The Seventy Years were **not** an "exile **IN** Babylon"; the Seventy Years was a period of servitude by several nations to Babylon. As the above Scripture states, the period ended when "the kingdom of Persia came to power". Not a day earlier, not a day later.

"This is the inscription that was written: MENE, MENE, TEKEL, PARSIN "This is what these words mean: *Mene* : God has **numbered the days** of your reign and brought it **to an end**. *Tekel*: You have been weighed on the scales and found wanting. *Peres*: Your **kingdom is divided and given** to the Medes and Persians." ... That **very night** Belshazzar, king of the Babylonians, was slain and Darius the Mede **took over the kingdom**.⁸

Return of Exiles

the Jews, who returned to Jerusalem in 537 B.C.E.

WT, Nov. 1, 2011, page 22

The date of the return to the temple site is an unsubstantiated guess, without evidence or proof, because none exists. No one knows whether Jews returned in 538, 537, 536 or even 535 BCE. Further information is provided at:

http://www.jwstudies.com/When_Did_the_Jews_Return_to_Jerusalem.pdf

Since the Bible explicitly says that the exile lasted for 70 years, it must have begun in 607 B.C.E.

WT, Nov. 1, 2011, page 22

The Bible does not state that the Seventy Years ended when Jews returned to Jerusalem. Well may the exile have lasted 70 years, but it did not require the destruction of Jerusalem. Jeremiah said the Seventy Years was a period of servitude to Babylon by several nations. It does not say it relates to any exile; indeed, Jeremiah explicitly stated that willing servitude to Babylon would see that nation remain on its land.

While it focuses on the 539 BCE date for the Fall of Babylon, the WTS's critical date is **537** BCE for the assembling of the first Exiles at the temple site at Jerusalem. There is no Biblical or other information to prove this date is correct. For that reason, scholars provide alternate dates, but no one really knows. It's a subjective guess. This is discussed at:

http://www.jwstudies.com/When_Did_the_Jews_Return_to_Jerusalem.pdf

and pages 4 - 12 of: http://www.jwstudies.com/The_Jews_return_home_ver_3.pdf

⁸ Dan. 5:25-28, 29-31, NIV

How the WTS starts its Seventy Years

However, most scholars date the destruction of Jerusalem at 587 B.C.E.

WT, Nov. 1, 2011, page 22

This is a distraction from what the Watchtower Society teaches. **They do not start their Seventy Years with the destruction of Jerusalem.** The WTS start the period from the moment Jews entered Egypt following the murder of Governor Gedaliah. This is the event that the WTS dates at 607 BCE.

The Bible does not say the Jews went into Egypt in the same year that Jerusalem was destroyed. As is shown in the Critique of Part 1, it is not possible for all of the events recorded in the Bible from Jerusalem's destruction until those Jews went into Egypt to have been completed within 2 months. It is more than probable the Jews entered Egypt 4 years after Jerusalem was destroyed, linking that uprising against Gedaliah to Nebuchadnezzar taking more captives from the land during his 23rd year.

The writers only stated that they entered Egypt in the seventh month, Tishri. They were not providing chronological information; they were providing a religious statement. The seventh month of the year, Tishri, the beginning of the Jewish calendar year, is their most religiously significant month. It includes Selichot, Rosh Hashana, Yom Kippur, Sukkot, Shemini Atzeret and Simchat Torah.

The 3rd day of Tishri is celebrated by Jews as the *Fast of Gedaliah*. The events that followed the murder of Gedaliah are told at pages 1 to 5 of *Part B* of this Critique.

[The *Fast of Gedaliah*] is one of the Four Fasts connected with the Destruction of Beth-Hamikdosh.⁹

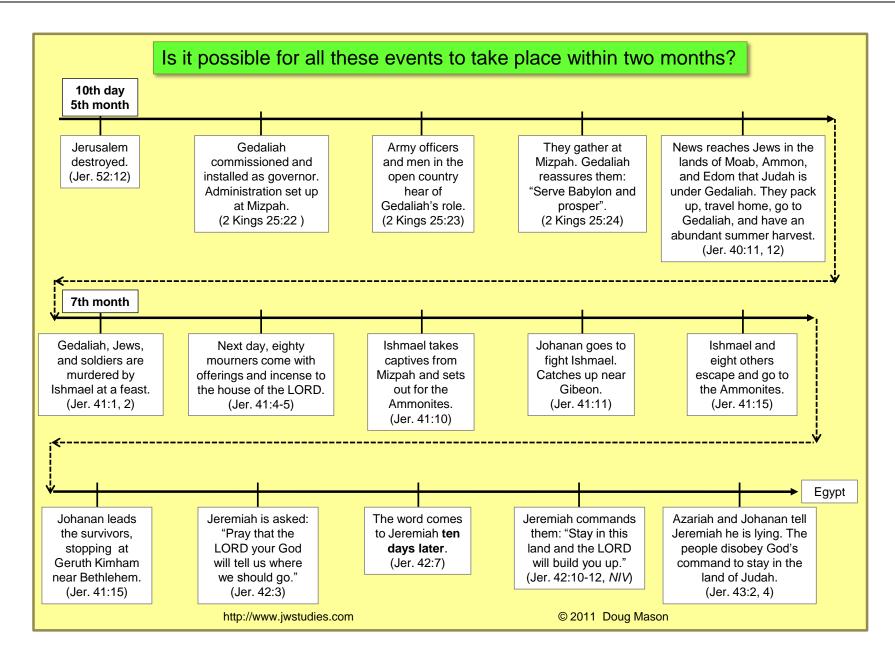
The religious significance of the seventh month Tishri provides the explanation for the statement that the Jewish exiles dedicated the altar in the seventh month. Once more it was not put there for chronological reckoning, but written in that way because of the religious significance of Tishri, the seventh month.

It is impossible for all of the events that took place during the period from Jerusalem's destruction until those Jews went into Egypt to have been completed within 2 months. It is more probable the Jews entered Egypt 4 years after Jerusalem was destroyed, linking that uprising against Gedaliah to Nebuchadnezzar returning and taking more captives from the land during his 23rd year. This topic is covered at pages 19 to 22 of:

http://www.jwstudies.com/Critique_of_When_Was_Ancient_Jerusalem_Destroyed.pdf

That Critique includes the diagram shown on the next page of this Critique.

⁹ *The Complete Story of Tishrei*, page 22, Nissan Mindel (Merkos L'inyonei Chinuch, 1994)

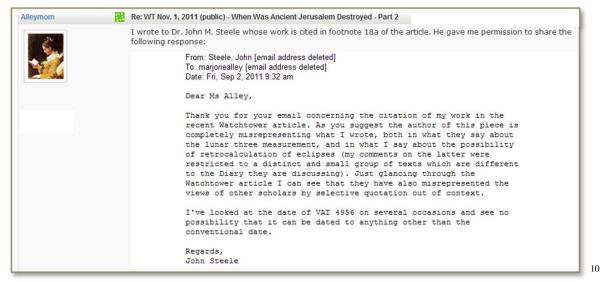


SCHOLARS DENY THE WATCHTOWER'S 607 BCE DATE

Note: <u>None</u> of the secular experts quoted in this article hold that Jerusalem was destroyed in 607 B.C.E.

The Watchtower, Nov. 1, 2011, page 23

No secular expert supports the *Watchtower*'s date for the destruction of Jerusalem, so the *Watchtower* must be very careful that when it uses these scholars, it acts honestly and openly, with integrity. This is a responsibility that the article has towards its readers. Each reader is entitled to know that the information the article reports from a scholar is truly representative of the author who is cited. There must be no hint that any scholar is misrepresented, misquoted, or cited with partiality.



This is a matter of providing full, open and honest reporting, thereby enabling the reader to make an informed personal decision based on all the available evidence.

Part B of this Critique provides material from references cited by the *Watchtower* article. These examples from Raymond Dougherty, F. Richard Stephenson and David M. Willis show that the *Watchtower* article hides the facts provided by their sources.

Other information provided in *Part B* enables the reader of this Critique to perform their own calculations using available computer programs. In this way, the reader can verify that the *Watchtower* failed to provide results with honesty.

The source of dates for the period

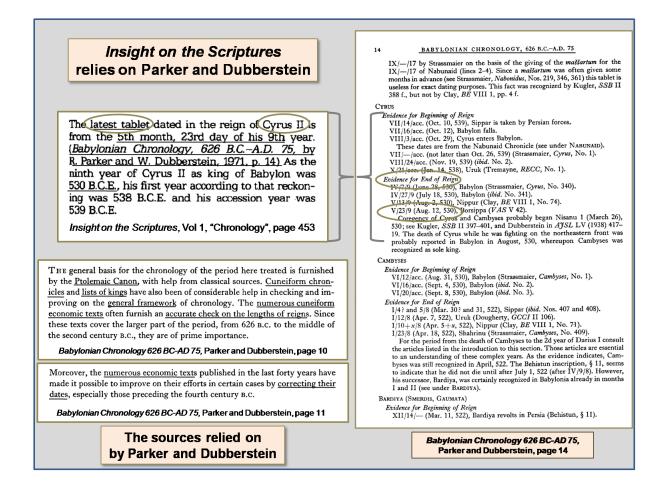
The Bible does not provide BCE dates. The Watchtower Society [WTS] relies on the secular tablets, chronologies, dates, data and information provided to it. These sources include classical historians, business tablets, astronomical tablets, and secular scholarship. The WTS cannot commence its chronological journey without accepting these sources. After accepting information provided to it through these sources, the WTS rejects the reliability of those sources.

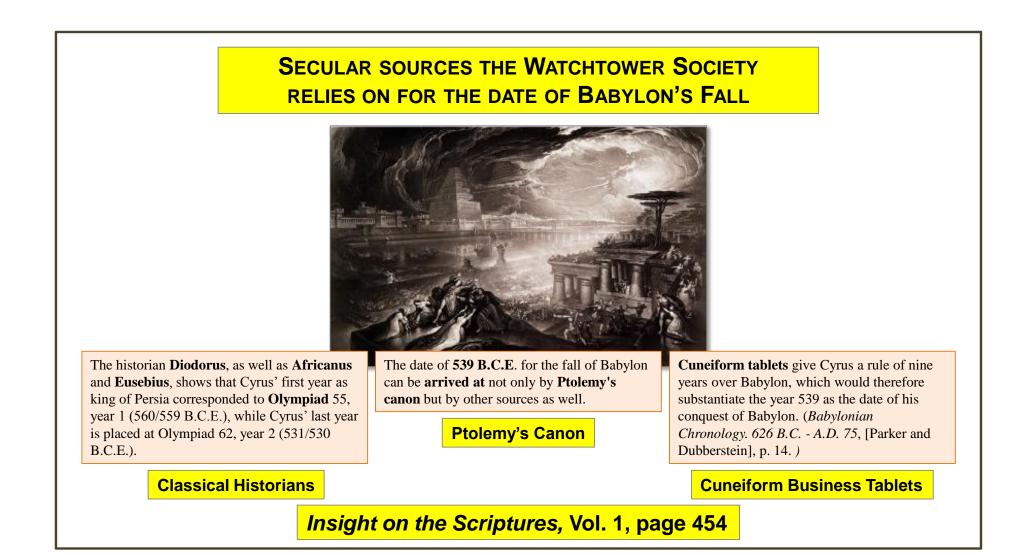
As an example: when the WTS begins its dates for the neo-Babylonian period, the WTS state that they rely on the information provided in the book by Parker and Dubberstein. Their book tells the WTS that the latest business tablets for Cyrus show how long he reigned. The book also tells the WTS that Cyrus' reign ended in 530 BCE.

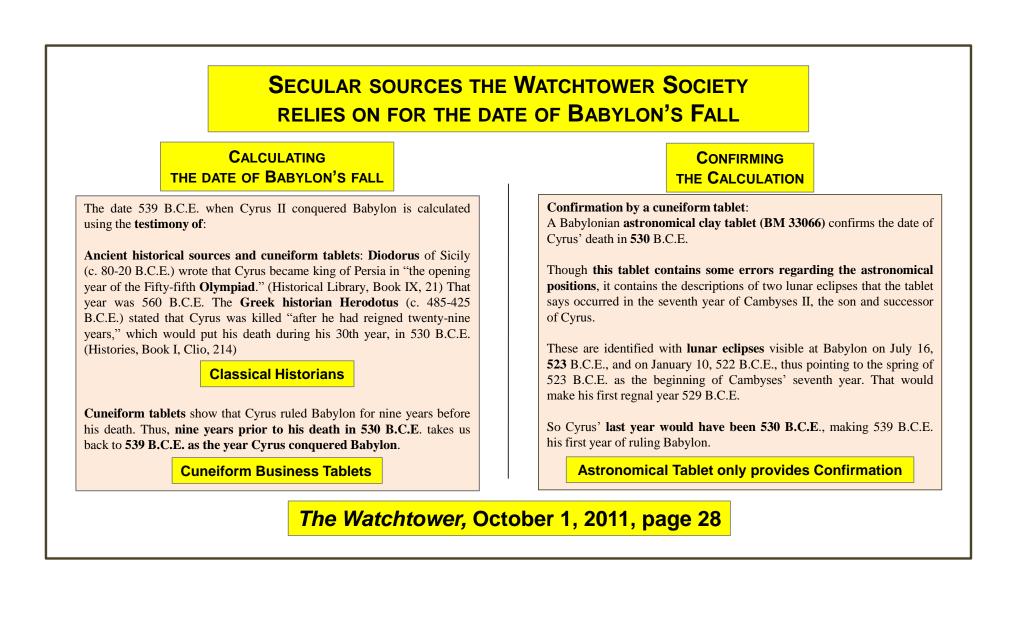
¹⁰ <u>http://www.jehovahs-witness.net/watchtower/bible/215282/5/WT-Nov-1-2011-public-When-Was-Ancient-Jerusalem-Destroyed-Part-2</u>

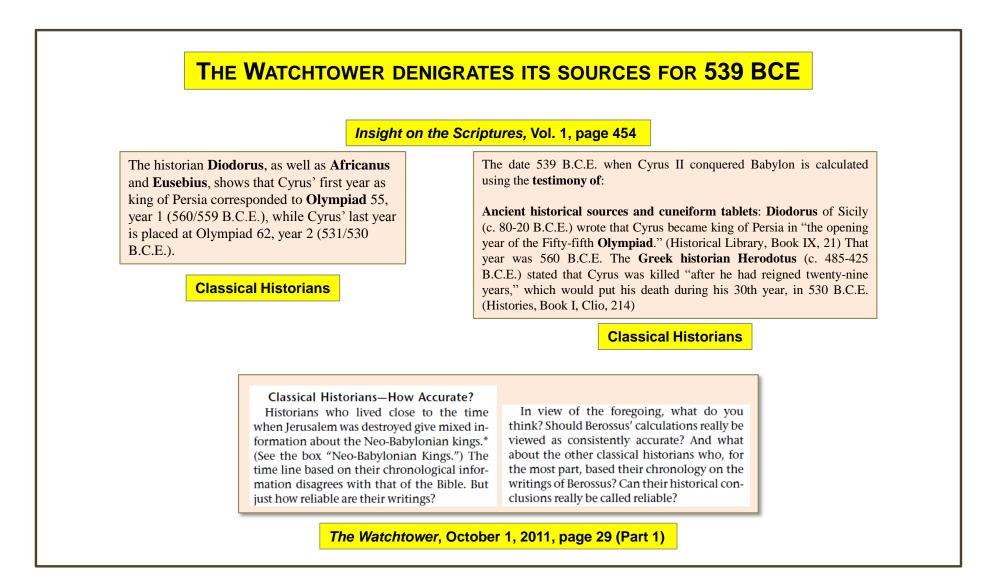
As Parker and Dubberstein state, their general framework is provided by Ptolemy's list of kings, while the "numerous economic ('business') tablets provide the "accurate check on the lengths of reigns".

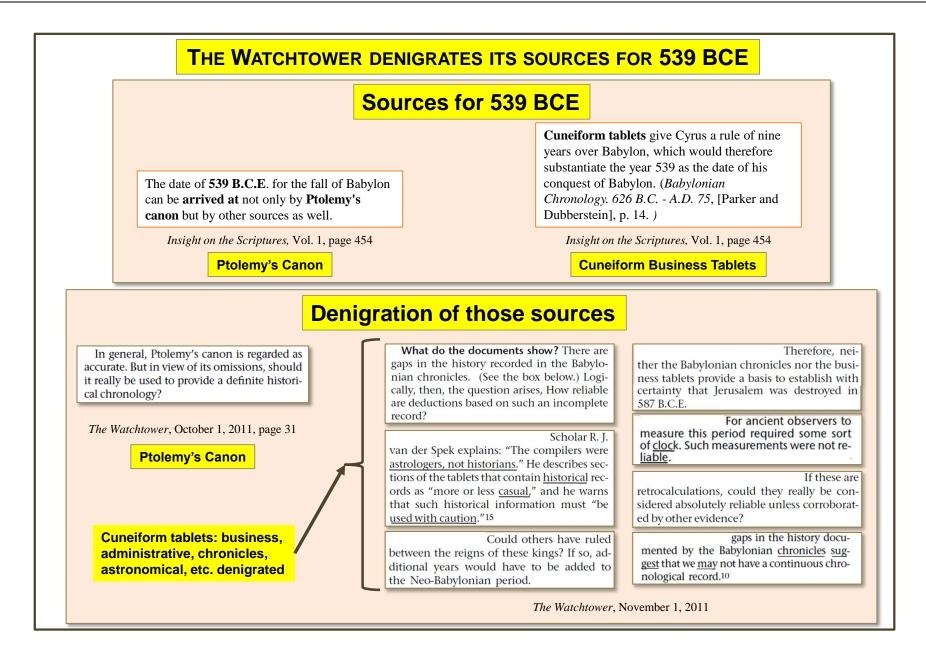
The WTS is caught in a bind, since it accepts the information provided at page 14 of Parker and Dubberstein but the WTS rejects the sources that Parker and Dubberstein used.



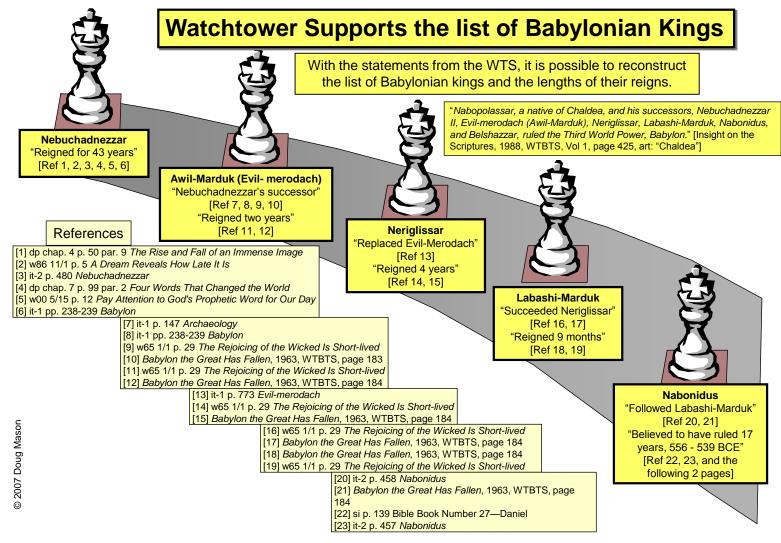








The WTS decries the accepted list of neo-Babylonian kings and the accepted lengths of their reigns. But the details it provides in its own literature enable that very chronology to be constructed.



From http://www.jwstudies.com/WTS_support_for_the_Babylonian_king-list.pdf

WHAT DO THESE CLAY TABLETS SHOW?

The Watchtower says that secular scholars accept 587 BCE for the destruction of Jerusalem because they follow the records provided by the clay tablets written during the time of the destruction or shortly after.

Why do they conclude that? They base their calculations on ancient <u>cuneiform documents</u> that provide <u>details</u> <u>about Nebuchadnezzar II and his successors</u>. Many of these documents were written by <u>men who lived during or close to the time of</u> <u>Jerusalem's destruction</u>.

WT, Nov. 1, 2011, page 22

Part 1 of the *Watchtower* article argued that scholars rely on the classical historians and on Ptolemy's Canon, whereas Part 2 now explains that scholars rely on the cuneiform tablets, including **tens of thousands** that were written at the time.

Soundness questioned

	But just how sound
are the	calculations that point to the date
587 B.C.	E.? What do these documents <i>really</i>
show?	2

WT, Nov. 1, 2011, page 22

It is indeed right and proper to question any calculations. Likewise, it is just as right and proper to question the soundness of the calculations made by the *Watchtower*. However, the *Watchtower* article does not provide the information that enables a reader to know whether the article's calculations are sound. The article does not reveal the criteria used for the calculations, nor does it provide details of the results.

Part B of this Critique provides detailed results of scholars' calculations applied to 587 BCE for the destruction of Jerusalem as well as the results for considering 607 BCE as the date of that event. The data is provided so that a reader can easily see which date is correct and be able to conduct their own calculations.

There are tens of thousands of tablets that do not require calculations, since each business tablet is dated in terms of a king's reign. No calculation is required to locate and identify the earliest and latest tablet for each king. These tablets provide a continuous record of daily life in Babylonia and the evidence of the length of each king's reign.

"Three types of tablets relied on by scholars"

consider three types of documents that scholars often rely on: (1) The Babylonian chronicles, (2) business tablets, and (3) astronomical tablets.

WT, Nov. 1, 2011, page 22

The article failed to mention the chronology provided through the Babylonian Adda-guppi stelae, written for the mother of Nabonidus.

Not only do scholars make full use of these sources, but the WTS relies on Babylonian documents for dates such as 530 BCE (business tablets), 539 BCE (chronologies) and 523/522 BCE (astronomical tablet). The November *Watchtower* article accepts astronomical tablets, as it analyses tablet VAT 4956, which is dated to Nebuchadnezzar's 37th year. It is thus directly relevant to the subject of the *Watchtower* article.

BUSINESS TABLETS

Most business tablets from the Neo-Babylonian period are legal <u>receipts</u>. The tablets were <u>dated</u> to the day, month, and year of the <u>reigning king</u>.

WT, Nov. 1, 2011, page 23

There are tens of thousands of business¹¹ tablets, with each dated to the year, month and day of the ruling monarch.



Dated from 595 BC, this is a receipt acknowledging the payment of 0.75 kg of gold to a temple in Babylonia by a "chief eunuch" named Nabu-sharrussu-ukin¹²

These economic tablets list business transactions, banking records, administrative activities, and actions associated with temples. It is possible to trace individual business activities, such as those of the Hebrew family, the Egibi brothers.

Business tablets exist for all the years traditionally attributed to the Neo-Babylonian kings.

WT, Nov. 1, 2011, page 24

When the <u>years</u> that these kings ruled are <u>totaled</u> and a calculation is made back from the last Neo-Babylonian king, Nabonidus, the date reached for the destruction of Jerusalem is 587 B.C.E.

WT, Nov. 1, 2011, page 24

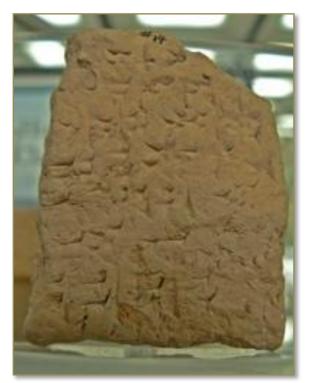
¹¹ Also known as "economic" tablets

¹² http://www.time.com/time/world/article/0,8599,1645738,00.html

The process works whether the calculations start with the first neo-Babylonian king or if it starts with the last one. These tens of thousands of business and administration tablets provide a continuous record that confirms the accepted chronology.

this method of dating works only if each king
followed the other in the same year, without any breaks in
between.

WT, Nov. 1, 2011, page 24



Nebuchadnezzar year 20, month 9, day 10 [i.e., September 10, 585 BC]. Neo-Babylonian administrative text recording expenditures of small amounts of silver for oil and beer for workmen¹³

What the Watchtower attempts

To meet the WTS's needs, the *Watchtower* needs to extend the neo-Babylonian chronology by 20 years, either by locating extra rulers or by extending the reigns of known rulers. But its search has been in vain, despite the very large number of records that are available.

Among the tens of thousands of business tablets, there is not one that provides the WTS with the evidence it so desperately needs. Does the *Watchtower* seriously suggest that for 20 years the Babylonians stopped conducting business, that for 20 years they failed to make any administration demands, they conducted no banking, and all activities with the temples ceased?

Watchtower chronology needs these business tablets

The Bible does not, indeed cannot, provide BCE dates. Nor could it possibly use the Julian calendar, as it was introduced centuries later, shortly before the Christian Era, reputedly by Julius Caesar.

To commence its chronological journey, the WTS uses data provided on those secular clay tablets. By identifying the dates on the earliest and latest economic tablets during a king's reign, it is possible to reconstruct an accurate chronology of the period. That is the process followed by Parker and Dubberstein.

¹³ <u>http://iis.bhsu.edu/lis/specialcollections/tablets.cfm</u>

The numerous cuneiform *economic* texts often furnish an accurate check on the lengths of reigns. Since these texts cover the larger part of the period, from 626 B.C. to the middle of the second century B.C., they are of prime importance.¹⁴

When the WTS commences its calculation of the date when Babylon fell, it starts from that very listing by Parker and Dubberstein, as the book *Insight on the Scriptures* states:

The latest tablet dated in the reign of Cyrus II is from the 5th month, 23rd day of his 9th year. (*Babylonian Chronology, 626 B.C.-A.D. 75*, by R. Parker and W. Dubberstein, 1971, p. 14)¹⁵

Nebuchadnezzar and Amel-Marduk overlap

tablets of the new ruler's accession year should logically be dated during months after the last month of the former king.

WT, Nov. 1, 2011, page 23

This is not true when two rulers claim power at the same time. This might result from a mutual agreement, such as with a coregency, or it might result from conflict, with each monarch having his own community of supporters. When two rulers claim power at the same time, the dates on the tablets provide evidence of that overlap.

What have experts said? R. H. <u>Sack</u> examined numerous <u>business</u> tablets from the Neo-Babylonian period. In <u>1972</u>, Sack wrote that new unpublished British Museum texts placed at his disposal "<u>completely upset</u>" <u>previous conclusions</u> regarding the <u>transition</u> of rule from <u>Nebuchadnezzar II</u> to his son <u>Amel-Marduk</u> (also known as Evilmerodach).⁶

6. Amel-Marduk 562-560 B.C.—A Study Based on Cuneiform, Old Testament, Greek, Latin and Rabbinical Sources. With Plates, by Ronald H. Sack, published 1972, page 3.

WT, Nov. 1, 2011, pages 23-24, 28

The following provides the direct and immediate context of the two words that the *Watchtower* took from Sack:

Attention is immediately focused on the occurrence of *two tablets dated to the same day*, with one (an Uruk text) containing the name of Nebuchadnezzar, and on the other (probably from Sippar) bearing the name of his son and successor, Amel-Marduk. This, on the surface at least, would *seem to warrant the conclusion that Amel-Marduk's reign commenced on or about October 8, 562.*

However, two new unpublished British Museum texts, recently placed at my disposal, *completely upset this convenient arrangement*. ... The texts, surprisingly enough are quite clearly dated to the months of Du'uzu and Abu (i.e., the fourth and fifth months of the

¹⁴ Parker and Dubberstein, page 10.

¹⁵ Insight on the Scriptures, Vol. 1, page 453

Babylonian calendar year) of the accession year of Amel Marduk, and thus clearly *overlap* the final, or forty-third year, of his father Nebuchadnezzar.

As Parker and Dubberstein have already shown, texts continue to be dated to the reign of Nebuchadnezzar throughout the month of Ululu (sixth month) of his final year. ...

The existence of two texts dated to the same day (Oct. 8, 562), with one bearing the name of Amel Marduk, and the other of Nebuchadnezzar, more than likely points to the early days of October as the time when the king actually died. In view of this new (though admittedly scanty) evidence, it seems much more probable that a kind of *coregency* existed prior to Nebuchadnezzar's death.

Therefore, at this place in his book, Sack wrote that the tablets indicated an overlap. The *convenient arrangement* of thinking that one king followed another was "completely upset" by this evidence of an *overlap*.

Since both claimed to be king on the same day, this shows there was no gap between them, but rather an overlap. The WTS needs to find its 20 extra years somewhere else.

Sack knew that tablets showed Nebuchadnezzar II to be still ruling in the <u>sixth</u> month of his last (43rd) year. But these newly deciphered tablets from the accession year of the following king, Amel-Marduk, were dated to the <u>fourth</u> and <u>fifth</u> months of what had been assumed to be the same year.⁷ Clearly, there was a <u>discrepancy</u>.

7. The tablets BM 80920 and BM 58872 are dated in Evil-merodach's fourth and fifth months of his accession year. These were published by Sack in Amel-Marduk 562-560 B.C.—A Study Based on Cuneiform, Old Testament, Greek, Latin and Rabbinical Sources. With Plates, pages 3, 90, 106.

WT, Nov. 1, 2011, pages 24, 28

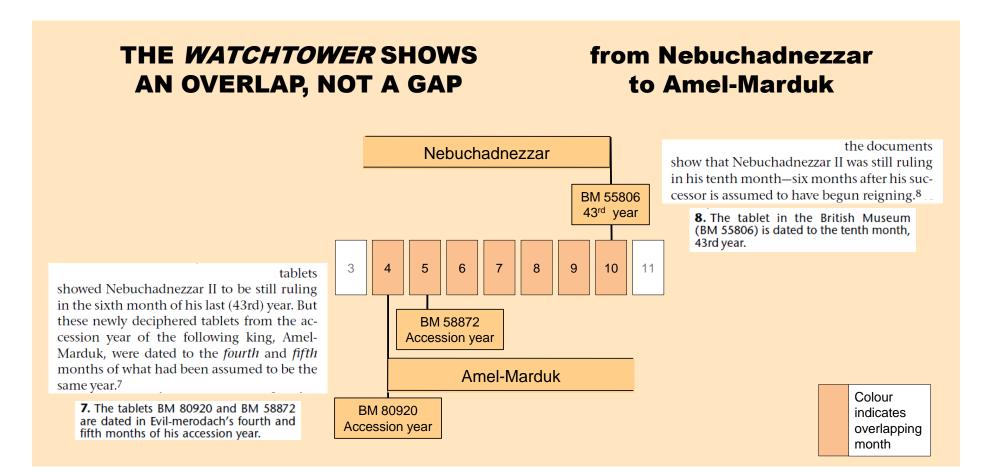
the documents show that Nebuchadnezzar II was still ruling in his tenth month—six months after his successor is assumed to have begun reigning.⁸

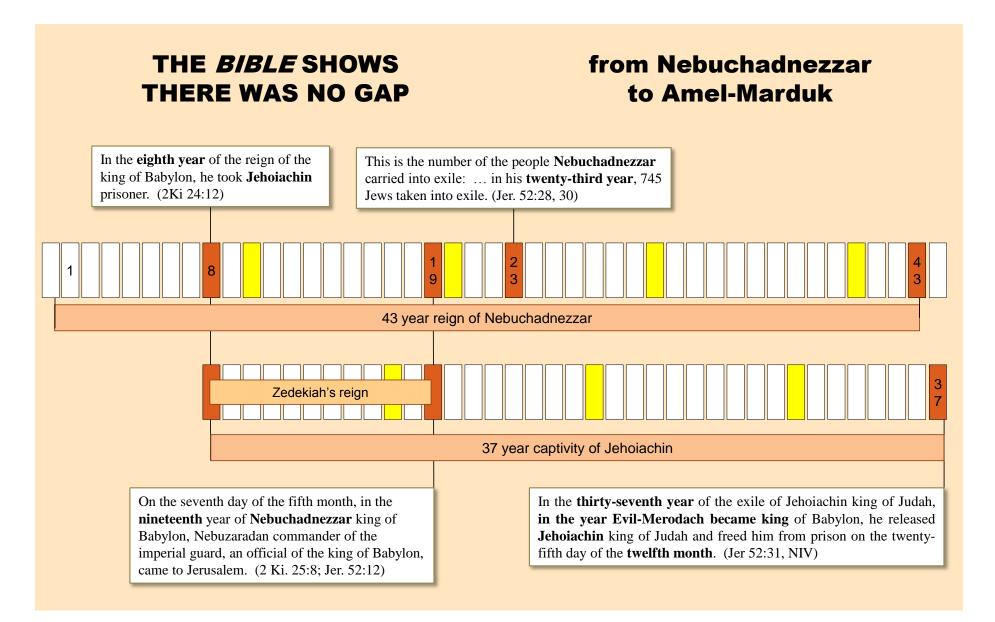
8. The tablet in the British Museum (BM 55806) is dated to the tenth month, 43rd year.

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This arrangement described by the *Watchtower* is illustrated on the following page. It shows an overlap of the reigns of Nebuchadnezzar and his son, Amel-Marduk.

The diagram on the page following shows that the Bible agrees there was no gap between the reign of Nebuchadnezzar and Amel-Marduk.





CORRECTIONS TO DATES OF from Nebuchadnezzar TABLETS STILL SHOW NO GAP to Amel-Marduk The *Watchtower* article did not show the corrected dates of tablets BM 80920 and BM 55806, or tablet Contenau, XII 58 from *Contrats neo-babyloniens I-II* (1927-29) Contenau, XII 58 Dated 26/6/43, this tablet is the last one attested 43rd year of Nebuchadnezzar to Nebuchadnezzar's reign. This tablet was not mentioned in the Watchtower article. Correction to the date of tablet BM 55806 BM 55806 (Babylonian Chronology, 626 BC – AD 75, Parker and Cont. XII 58 Dubberstein, 1956, page 12. N.B. the date format is 43rd vear? 43rd year day/month/year.) BM 55806 has been corrected to "Nbk 10+/5?/43?... month appears to be written ITU.AD [month 5]; Month Month Month Month Month Month **Correction to the date of tablet BM80920** year number highly uncertain, and partly erased." 3 5 4 6 7 8 BM 80920 has been corrected to "[Amel-(Corrections and Additions to the Catalogue of the Marduk] 20/7/acc" Babylonian Tablets in the British Museum, volumes 6-BM 80920 8, by C.B.F. Walker, 1996. N.B. the date format is Accession year (Corrections and Additions to the Catalogue of the day/month/year.) Babylonian Tablets in the British Museum, volumes 6-BM 58872 8, by C.B.F. Walker, 1996. N.B. the date format is Colour Accession year day/month/year.) indicates overlapping Accession year of Amel-Marduk month

Jehoiachin was exiled to Babylon eleven years before Nebuchadnezzar destroyed Jerusalem during his 19th year. Jehoiachin was thus freed twenty-six years later, at the time Evil-Merodach became king. Since Nebuchadnezzar reigned 43 years, this means Evil-Merodach assumed the throne without any gap between Nebuchadnezzar's reign and his own. The Bible record says there is no room here for a 20-year gap.

Claimed discrepancy in the transition from Amel-Marduk to Neriglissar

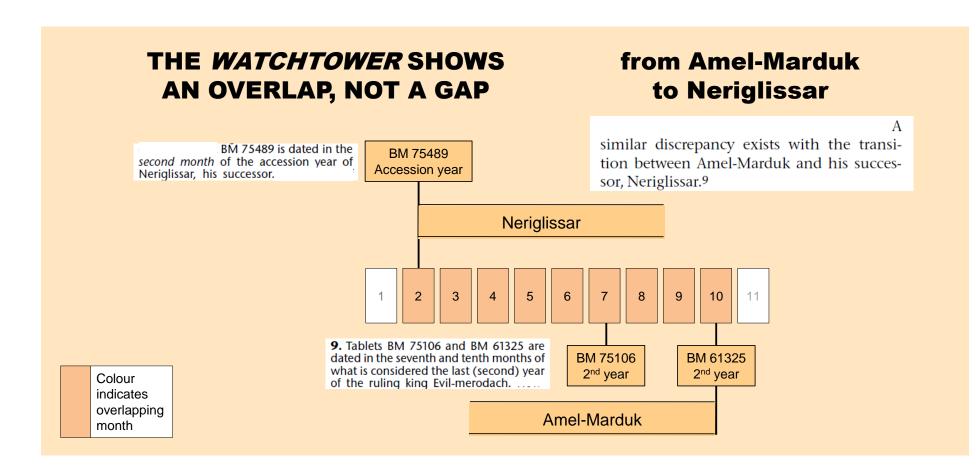
A similar discrepancy exists with the transition between <u>Amel-Marduk</u> and his <u>succes</u>sor, <u>Neriglissar</u>.⁹

If the transition from Amel-Marduk to Neriglissar is, as the *Watchtower* states, "similar" to the previous transition, and the evidence from the clay tablets support this conclusion, then there was another coregency, not a 20 year "gap".

9. Tablets BM 75106 and BM 61325 are dated in the seventh and tenth months of what is considered the last (second) year of the ruling king <u>Evil-merodach</u>. How-ever, the tablet BM 75489 is dated in the second month of the accession year of Neriglissar, his successor.-Catalogue of the Babylonian Tablets in the British Museum, Volume VIII, (Tablets From Sippar 3) by Erle Leichty, J. J. Finkelstein, and C.B.F. Walker, published 1988, pages 25, 35. Catalogue of the Babylonian Tablets in the British Museum, Volume VII, (Tab-lets From Sippar 2) by Erle Leichty and A. K. Grayson, published 1987, page 36. Neriglissar-King of Babylon, by Ronald H. Sack, published 1994, page 232. The month on the tablet is Ajaru (second month).

WT, Nov. 1, 2011, pages 24, 28

The illustration on the following page shows how the *Watchtower* article's endnote 9 is describing an *overlap* of the reigns of Evil-Merodach and Neriglissar.



Dougherty: overlap from Labashi-Marduk to Nabonidus

When writing about any confusion in the transition from Labashi-Marduk to Nabonidus, Raymond Dougherty wrote that it resulted from an *overlap*.

Chronological data secured from contract tablets belonging to the period of transition from Lâbâshi-Marduk's reign to that of Nabonidus appear to suggest a state of uncertainty in the kingdom. Dated documents indicate an overlapping of reigns and hence a condition of political confusion. The known texts connected with Lâbâshi-Marduk's occupancy of the throne range from the twelfth day of the second month to the twelfth day of the third month of his reign. The earliest tablet of Nabonidus' reign is dated on the fifteenth day of the second month of his accession year, only three days after the earliest tablet of the reign of Lâbâshi-Marduk.263 The accession year of Lâbâshi-Marduk was the latter part of the preceding calendar year. It is difficult to determine the exact length of the reign of Låbåshi-Marduk because so few texts belonging to his time have been published.²⁶⁴ If the records are to be taken as they stand, the official chronology of the period indicates a regnal overlapping of nearly a month. The real reason for such a situation can be conjectured with difficulty. Other tablets dated at the end of Lâbâshi-Marduk's reign and at the beginning of Nabonidus' reign will probably furnish information as to the true course of events.265

Nabonidus and Belshazzar Dougherty, pages 73-74

The book *Nabonidus and Belshazzar* by Raymond Dougherty (died 1933), has been referred to several times over decades by the WTS. A list of quotations by the WTS from Dougherty's book is provided at:

http://www.jehovahs-witness.net/watchtower/bible/215878/1/Nabonidus-and-Belshazzar-by-Raymond-Philip-Dougherty

BABYLONIAN CHRONICLES

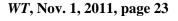
The Babylonian chronicles are a series of tablets recording major events in Babylonian history.

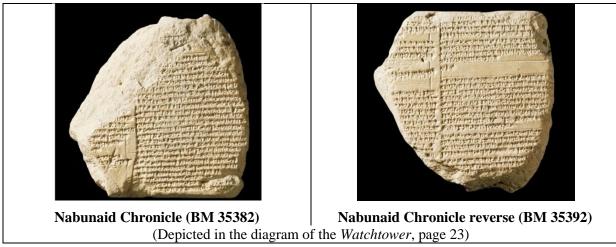
WT, Nov. 1, 2011, page 23

What have experts said? R. H. <u>Sack</u>, a leading authority on cuneiform documents, states that the <u>chronicles</u> provide an <u>in-</u><u>complete record of important events</u>. He wrote that historians must <u>probe "secondary</u> <u>sources</u>... in the hope of determining what actually happened."

WT, Nov. 1, 2011, page 23

What do the documents show? There are gaps in the history recorded in the Babylonian chronicles. (See the box below.) Logically, then, the question arises, How reliable are deductions based on such an incomplete record?





"Suggestion" of gaps in the Chronicles

gaps in the history documented by the Babylonian <u>chronicles</u> <u>sug-</u> <u>gest</u> that we <u>may</u> not have a continuous chronological record.¹⁰

WT, Nov. 1, 2011, page 24

"Suggest" and "may" are feeble foundations. They are simply guesses, assumptions, not facts, not evidence. Gaps in the *history* do not mean gaps in the *chronology*. The history provides records of events, whereas the chronology that supplies the structure is obtained through other sources.

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. ...

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.¹⁶

Most of these Chronicles are incomplete. ... In all, the Neo-Babylonian period (625 -539 BCE) includes a total of eighty-seven years. ... Less than half of these years are covered by the preserved parts of thechronicles. Yet some important information may be gathered from them. ...

The last chronicle (BM 21946) the famous *Nabonidus Chronicle*, covers the reign of Nabonidus, who was the father of Belshazzar. This chronicle unfortunately is damaged. ...

Notably ... for the sixth year [of Nabonidus] it is stated that Cyrus, king of Anshan, defeated the Median king Astyages and captured Ecbatana, the capital of Media. If Nabonidus ruled for seventeen years and if he was dethroned by Cyrus in 539 BCE, [then] his first year must have been 555/54 BCE and his sixth year, when Cyrus conquered Media, must have been 550/49 BCE. The Watch Tower Society, in fact, agrees with these datings. ...

Suppose now that twenty years have to be added to the Neo-Babylonian era, ... 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.¹⁷

Though the chronicles available do not furnish a complete chronology for the Neo-BabyIonian period, the information which they do preserve supports the dates for the lengths of the reigns of the Neo-BabyIonian 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

¹⁶ A. K. Grayson in *Reallexikon der Assyriologie und vorderasiatischen Archäologie*, ed. D. O. Edzard, Vol. VI (Berlin and New York: Walter de Gruyter, 1980), p. 86.

¹⁷ Insight on the Scriptures (1988), Vol. I, pp.454, 566; Vol. 2, p. 612

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." Sometimes scribes garbled the narration by changing the date of a defeat and weaving it into an account of a later battle. 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.¹⁸

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.¹⁹

Gaps in history, but not in chronology

In the Babylonian chronicles, there are gaps in the *history*, but not of the chronology, as the following diagram illustrates.

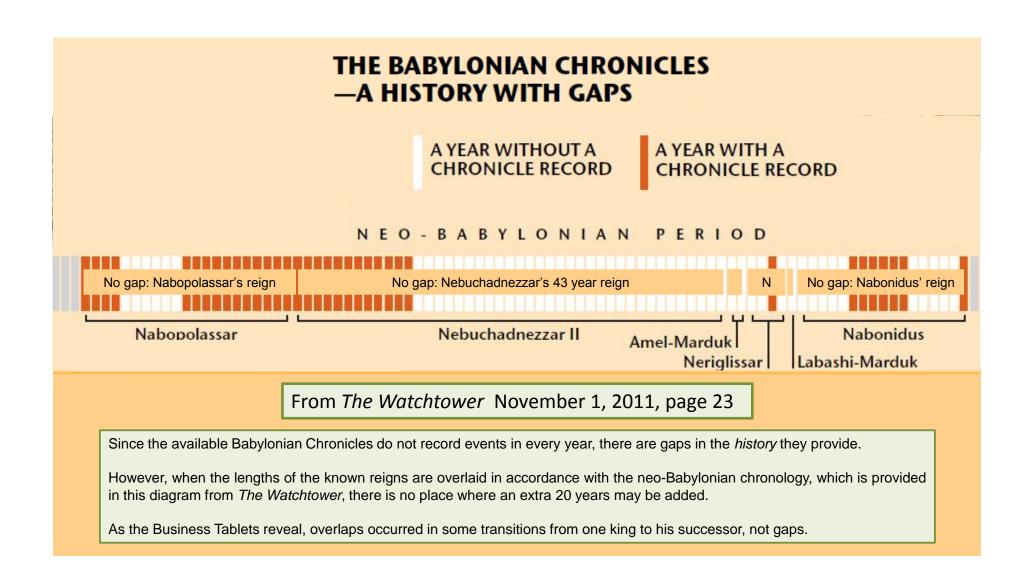
The Bible provides even less historical information, identifying only nine of the years during the period from the start of Jehoiakim's reign to the Fall of Babylon.

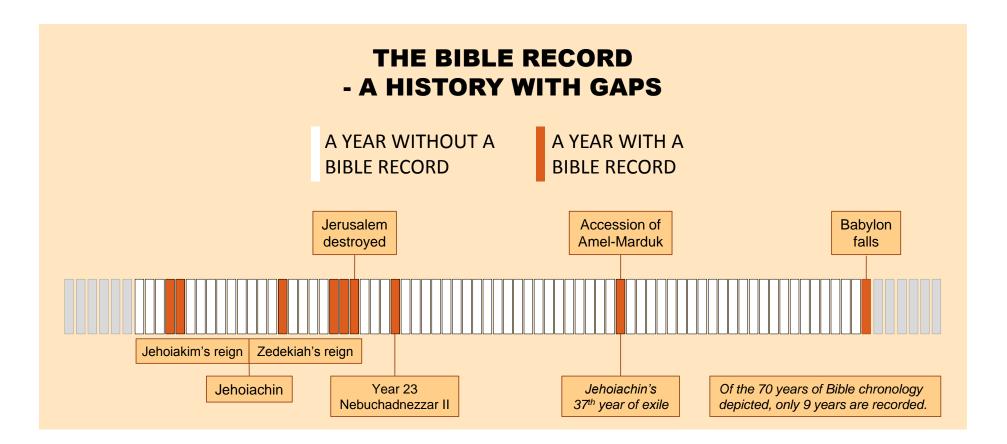
A problem only for the Watchtower

The positive dating of the destruction of Jerusalem is a problem of serious religious consequence only for the WTS. The dates of the neo-Babylonian period depend on the reliability of the records and on the skill of the secular scholars. If the records are unreliable, then the WTS has deep problems, for where else can it get its dates? BCE dates and technical measurements such as provided on the Babylonian astronomical tablets are not available from the Bible.

¹⁸ Grayson, *ibid.* (1980), 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*, 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." (cited in *The Gentile Times Reconsidered*, Carl Olof Jonsson)

¹⁹ The Gentile Times Reconsidered, pages 100-105, Carl Olof Jonsson





King	Year	Reference
Jehoiakim	4	Jer. 25:1; 36:1; 46:12
	5	Jer. 36:9
Zedekiah	4	Jer. 28:1; 51:59
	9	Jer. 39:1; 52:4
	10	Jer. 32:1
	11	Jer. 39:2; 52:5
Nebuchadnezzar	7	Jer. 52:28
	8 (= 3 months of Jehoiachin)	2 Kings 24:12
	18	Jer. 52:29
	23	Jer. 52:30
Jehoiachin	12th year of exile	Eze. 33:21
Evil-Merodach	Accession (37th year of Jehoiachin's exile)	2 Kings 25:27

The Bible references for the illustration on the previous page: "THE BIBLE RECORD – A HISTORY WITH GAPS"

DOES RAYMOND DOUGHERTY PROVIDE SUPPORT FOR AN EXTRA KING OF BABYLON?

10. Consider the example of <u>Neriglissar</u>. A royal inscription regarding him states that he was "the son of Bêl-shumishkun," the "king of Babylon." (Italics ours.) Another inscription calls Bêl-shumishkun the "wise prince." The original word rendered "prince," rubû, is a title also meaning "king, ruler." Since there is an obvious discrepancy between the reign of <u>Neriglissar</u> and his predecessor, <u>Amel-Marduk</u>, <u>could</u> this "king of Babylon," Bêl-shum-ishkun, have ruled for <u>a time between the two?</u> Professor R. P. <u>Dougherty</u> acknowledged that "the evidence of <u>Neriglissar's noble ancestry</u> cannot be disregarded."—Nabonidus and Belshazzar—A Study of the Closing Events of the Neo-Babylonian Empire, by Raymond P. <u>Dougherty</u>, published 1929, <u>page 61</u>.

WT, Nov. 1, 2011, page 28

This is a gross misrepresentation of what Raymond Dougherty wrote in that footnote of his book, and of everything he states throughout it. The following²⁰ provides the direct context from Dougherty cited in *The Watchtower*.

A most
suggestive parallel exists in the part played by <u>Neriglissar</u> , a son-in- law of Nebuchadrezzar, at <u>Jerusalem in 586 B. C.²²⁵</u>
²¹⁵ Jeremiah 39: 3. See AJSL XLII, 2, p. 130, for the discussion of a text published by Unger in <i>Theologische Literaturzeitung 50</i> , XXI, (Oct. 17, 1925) referring to Nergal- šar-uşur as one of the rabâti ŝa ^{mat} Akkadām, 'princes of the land of Akkad.' This accords with the title Rab-mag given to Nergal-sharezer. Contract tablets dated in the reigns of Nebuchadrezzar and Amêl-Marduk indicate that Neriglissar was prominent in affairs before he became king. The slaves of Neriglissar are referred to in StrNbk 83: 3; 266: 2, 5; 322: 4, 5; 419: 2. His ^{amat} rab biti, 'major-domo,' is mentioned in StrNbk 411: 3, 4. His ^{amat} si-pi-ri, 'scribe,' is alluded to in StrNbk 413: 3-5. Tablets dated in the reign of Amêl-Marduk prove that certain things were done at the command <u>of Neriglissar</u> ; see EMNL 9: 8; 14: 10; 19: 9; 22: 14. These facts are in harmony with the view that Neriglissar occupied an influential position during the reign of <u>Nebu- chadrezzar</u> , his father-in-law, and during that of <u>Amêl-Marduk</u> , his brother-in-law.
In a number of the texts which have been quoted <u>Neriglissar</u> is referred to as the <u>son of</u> <u>Bél-shum-ishkun</u> . The royal inscriptions of Neriglissar corroborate this, with lofty titles ascribed to Bél-shum-ishkun, viz., <i>šar Bábili^{si}</i> , 'king of Babylon,' <i>NKI</i> p. 210, no. 1, col. I, line 14; <i>rubå e-im-ga</i> , 'wise prince,' <i>NKI</i> p. 214, no. 2, col. I, line 11; <i>id-lum</i> <i>gi-il-ma-lum</i> , 'perfect hero,' <i>ibid</i> , line 12; <i>na-şi-ir ma-aş-şa-ar-tim É-sag-ila</i> u Bábili ^{si} , 'keeper of the fortresses of <i>Esagila</i> and Babylon,' <i>ibid</i> , lines 12, 13. With the data now at our disposal identification of Bél-shum-ishkun with any known sovereign is difficult. Pinches in <i>The Old Testament in the Light of the Historical Records of Assyria and Babylon</i> , <i>and United Pinches in The Old Testament in the Light of the Historical Records of Assyria and Babylonia</i> , p. 409, intimates that the record is in error which states that the father of Neri- glissar was king of Babylon. Tiele in <i>Babylonisch-assyriasche Geschichte</i> , p. 465f, expresses the view that Bél-shum-ishkun may have been the Assyrian king whose name ended in -ishkun; see I <i>R</i> , p. 8, no. 6. This is now known to be impossible, because the king's name in reality was Sin-shar-ishkun. A discussion of importance with reference to this question is that of Schnabel in <i>OLZ</i> XXVIII, 345-349, as it gives a reconstruction of the chronology of the end of the Assyrian empire. However, the evidence of <u>Neriglissar's noble ancestry cannot be disrogarded</u> , as it furnishes a basis for his importance as a man of affairs before he became king and explains his ability to make a <u>marital alliance with the house of Nebuchadrezzar</u> . The similarity of Nabonidus' rôle is striking.

Dougherty, pages 60-61

It is simply a discussion on the question of Neriglissar's royal status. When writing of any confusion in a transition to Nabonidus, Dougherty clearly states that this resulted from an overlap.

²⁰ Nabonidus and Belshazzar, pages 60 – 61, Raymond Philip Dougherty,

Chronological data secured from contract tablets belonging to the period of transition from Lâbâshi-Marduk's reign to that of Nabonidus appear to suggest a state of <u>uncertainty</u> in the kingdom. Dated documents indicate an overlapping of reigns and hence a condition of political confusion. The known texts connected with Lâbâshi-Marduk's occupancy of the throne range from the twelfth day of the second month to the twelfth day of the third month of his reign. The earliest tablet of Nabonidus' reign is dated on the fifteenth day of the second month of his accession year, only three days after the earliest tablet of the reign of Lâbâshi-Marduk.263 The accession year of Lâbâshi-Marduk was the latter part of the preceding calendar year. It is difficult to determine the exact length of the reign of Låbåshi-Marduk because so few texts belonging to his time have been published.²⁶⁴ If the records are to be taken as they stand, the official chronology of the period indicates a regnal overlapping of nearly a month. The real reason for such a situation can be conjectured with difficulty. Other tablets dated at the end of Lâbâshi-Marduk's reign and at the beginning of Nabonidus' reign will probably furnish information as to the true course of events.265

	NABOPOLASSAR	
	(Founder of Dynasty)	
	NEBUCHADREZZAR	
	(Son of Nabopolassar)	
AMÊL-MARDUK	NERIGLISSAR	NABONIDUS
(Son of Nebuchadrezzar)	(Son-in-law of Nebuchadrezzar)	(Son-in-law of Nebuchadrezzar?)
	LÂBÂSHI-MARDUK	BELSHAZZAR
	(Son of Neriglissar)	(Son of Nabonidus)

Dougherty, page 79

There is nothing here or anywhere throughout Dougherty's book that suggests or allows for any additional neo-Babylonian king. Evidence for this is provided in *Part B* of this Critique.

The WTS's familiarity with Dougherty's book

The book Nabonidus and Belshazzar by Raymond Dougherty (died 1933), has been referred to several times over decades by the WTS. A list of quotations by the WTS from Dougherty's book is provided at:

http://www.jehovahs-witness.net/watchtower/bible/215878/1/Nabonidus-and-Belshazzar-by-Raymond-Philip-Dougherty

HYPOTHETICAL SITUATIONS

There is nothing wrong with creating hypothetical situations. Researchers in all fields of human endeavour make breakthroughs by imagining a scenario and then testing its validity. Should testing demonstrate that an hypothesis is not valid, it is discarded; but the lessons learned provide guidance for testing further hypotheses.

Hyopthetical #1: Could others have? ... If so ...

Could others have ruled between the reigns of these kings? If so, additional years would have to be added to the Neo-Babylonian period.

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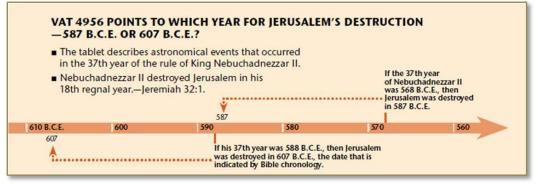
This hypothesis proposes that *if* others ruled between the reigns of these kings *then* additional years would have to be added to the neo-Babylonian period.

The statement then needs to be tested against factual evidence. When the evidence supports an hypothesis, it progresses to the stage of a theory. Since testing reveals that the hypothesis is not supported by factual evidence, the hypothesis has to be discarded.

Hypothetical #2: If Nebuchadnezzar's 37th year was 588 BCE ...

<u>If 588 B.C.E.</u> marked the 37th year of Nebuchadnezzar II, then his 18th year would be 607 B.C.E.

WT, Nov. 1, 2011, page 25



Hypothetical positions at WT, Nov. 1, 2011, page 25

Testing of this hypothesis shows that 588 BCE did not mark Nebuchadnezzar's 37th year. It shows that his 37th year fell in 568 BCE, which means that his 18th year, in which Jerusalem was destroyed, was 587/586 BCE.



The data show that VAT 4956 is dated at 568 BCE

THE COMPILERS WERE ASTROLOGERS (VAN DER SPEK)

Scholar R. J. van der Spek explains: "The compilers were astrologers, not historians." He describes sections of the tablets that contain <u>historical</u> records as "more or less <u>casual</u>," and he warns that such historical information must "be <u>used with caution</u>."¹⁵

15. Bibliotheca Orientalis, L N° 1/2, Januari-Maart, 1993, "The Astronomical Diaries as a Source for Achaemenid and Seleucid History," by R. J. van der Spek, pages 94, 102.

WT, Nov. 1, 2011, pages 25, 28

The following provides the immediate context from van der Spek's book that is cited in *The Watchtower*.

Astrology was also used for weather forecasts⁷), which might explain the wheather reports in the diaries. Even the commodity prices were subject of astrological predictions, as may be deduced from a Late Babylonian text from Uruk⁸). Thus, also the historical events, mentioned in the diaries, are therefore not recorded out of historical interest, but for astrological and 'divinational' purposes. The compilers were astrologers, not historians. This explains the fact that the historical sections, as Hunger indicates in his Introduction (p. 36), "are of a remarkable unevenness: sometimes they record events of ephemeral importance from the city of Babylon, in other cases events of political significance". The reason for the recording of historical events probably was to present a relationship between events in the sky and on earth. Events on earth could be a victory of the king in a certain battle, but also the fact that "five dogs approached one bitch". Both kinds of 'historical events' played a role in the omina, which explains why both are mentioned in the diaries.

Bibliotheca Orientalis, R. J. Van der Spek

Additional relevant citations from this article by van der Spek are provided in the *Companion Reference*.

It is readily recognised that these Babylonian observers and their observations were intimately part of their religious belief system.

In the second millennium b.c., Babylonian scribes assembled a vast collection of astrological omens, believed to be signs from the gods concerning the kingdom's political, military, and agricultural fortunes. The importance of these omens was such that from the eighth or seventh until the first century, the scribes observed the heavens nightly and recorded the dates and locations of ominous phenomena of the moon and planets in relation to stars and constellations. The observations were arranged in monthly reports along with notable events and prices of agricultural commodities, the object being to find correlations between phenomena in the heavens and conditions on earth. These collections of omens and observations form the first empirical science of antiquity and were the basis of the first mathematical science, astronomy. For it was discovered that planetary phenomena, although irregular and sometimes concealed by bad weather, recur in limited periods within cycles in which they are repeated on nearly the same dates and in nearly the same locations. N. M. Swerdlow's book is a study of the collection and observation of ominous celestial phenomena and of how intervals of time, locations by zodiacal sign, and cycles in which the phenomena recur were used to reduce them to purely arithmetical computation, thereby surmounting the greatest obstacle to observation, bad weather.²¹

To see these measured distances of planets from stars purely, or even principally, as a primitive coordinate system, or simply as a way of specifying location seems to me anachronistic; they must have some divinatory or magical purpose, just as the numerous reports in the omen texts of conjunctions of planets and stars without distances.²²

To make use of any dates from astronomical tablets, the WTS is driven to make use of tablets prepared by astrologers who were seeking omens and signs, and who were often associated with the Babylonian temple system. That includes VAT 4956, which the *Watchtower* article indicates it now needs to accept.

Since events in the starry heavens and on earth provided significant omens, this means it is likely the Babylonians would have taken care with their measurements.

²¹ Product Description of *The Babylonian Theory Of The Planets* by Noel Swerdlow

²² The Babylonian Theory Of The Planets, page 41, Noel Swerdlow

ASTRONOMICAL TABLETS

The Watchtower considers business tablets and Chronicles unreliable

Therefore, neither the Babylonian chronicles nor the business tablets provide a basis to establish with certainty that Jerusalem was destroyed in 587 B.C.E.

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Unfortunately for the WTS, this eliminates those sources that provide it with the date of 539 BCE for the Fall of Babylon. The WTS says it has no faith in these tablets for determining the date of Jerusalem's destruction, but it needs these secular records to provide it with dates for the neo-Babylonian period.

What astronomical tablets are

The article describes astronomical tablets as:

Cuneiform tablets that
contain descriptions of the positions of the
sun, moon, planets, and stars, coupled with
such historical information as the regnal year
of a particular king.

WT, Nov. 1, 2011, page 24

The WTS accepts the data and the historical information contained on astronomical tablets. This is shown by the *Watchtower* article's detailed discussion on the contents of one such tablet, VAT 4956. The article's serious approach to that tablet shows that it accepts the Babylonians' ability to accurately measure and record that data.

The WTS also makes use of an astronomical tablet to provide the BCE date of the 7th year of Cambyses.

What experts do say about astronomical tablets

Experts agree that the Babylonians had developed extensive <u>charts and schemes to predict</u> when <u>eclipses</u> would most likely occur.

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The following is a typical example of what experts say about astronomical tablets.

All of the surviving observations (and predictions) of lunar eclipses from earliest times (731 BC) to 609 BC - as well as many later observations down to 317 BC - are recorded on a series of five British Museum tablets. Their reference numbers are: BM 32238 (= LBAT 1414), BM 45640 + 35115 + 35789 (= LBAT 1415 + 1416 + 1417: three joining pieces) and BM 32234 (= LBAT 1419). ...

BM 32238 cites eclipses from 731 to 659 BC (obverse) and from **389 to 317 BC** (reverse). Tablets **BM 45640 + 35115 + 35789** contain data from **703 to 632 BC** (obverse) and from **415 to 360 BC** (reverse), while **BM 32234** extends from **609 to 537 BC** (obverse) and from 519 to 447 BC (reverse).

Many names of rulers are preserved on these tablets: e.g. Nabu mukin-zeri (who reigned from 731 to 726 BC), Bel-ibni (702-699

BC), Samassum-ukin (667-647 BC), Kandalanu (647-625 BC), **Nebuchadrezzar II (604-562 BC)**, Xerxes I (485-465 BC) and Philip (323-316 BC).

From the well-defined chronological sequence on this series of texts, virtually all eclipse dates can be confidently restored.

BM 38462 (= LBAT 1420) reports lunar eclipses for **almost every** year from the beginning of the reign of Nebuchadrezzar II (604/3 BC) to his 29th year (576/5 BC). The damaged (but still recognisable) name of Nebuchadrezzar is given on the first line of the tablet.²³

Beginning with Nabonassar, Babylonian chronology is securely established.²⁴

²³ *Historical Eclipses and Earth's Rotation*, F. Richard Stephenson, page 149, Cambridge University Press, 1997. (Emphases added)

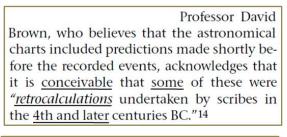
²⁴ Stephenson, page 95. (Emphases added)

PREDICTIONS AND RETRO-CALCULATIONS

"It is possible," states Profe sor John Steele, "that some of the earliest <u>pro- dictions</u> could have been made by projectin the scheme <u>backwards</u> when the text we compiled." (Italics ours.)13 13. Astronomical Diaries and Rela- ed Texts From Babylonia, Volume	e- g as From: Steele, John [email address deleted] To: marjoriealley [email address deleted] Date: Fri, Sep 2, 2011 9:32 am Dear Ms Alley,
page 391.	recent Watchtower article. As you suggest the author of this piece completely misrepresenting what I wrote, both in what they say abou
WT, Nov. 1, 2011, pages 24, 28	the <u>lunar three measurement</u> , and in what I say about the possibilit of <u>retrocalculation of eclipses</u> (my comments on the latter were restricted to a distinct and small group of texts which are differe
	to the Diary they are discussing). Just glancing through the Watchtower article I can see that they have also misrepresented the
	views of other scholars by selective quotation out of context.
	I've looked at the date of VAT 4956 on several occasions and see no
	possibility that it can be dated to anything other than the conventional date.
	conventional date.
	Regards, John Steele

There is no doubt that some readings were predictions, and the writer of the tablet often makes this clear. This does not make the records unreliable. The Babylonians' skill at measuring and recording the movements of the sun, moon, and planets is confirmed by the results of astronomical simulations on modern computers.

The Babylonians' skill enabled them to recognise patterns, which ultimately permitted the Babylonians to correctly predict astronomical events.



14. Mesopotamian Planetary Astronomy-Astrology, by David Brown, published 2000, pages 164, 201-202.

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The following is the *full quotation* from David Brown. While the *Watchtower* article emphasises the possibility of the records being retro-calculations made in later centuries, David Brown actually states "it is much more likely the eclipse records were *predictions*".

So, although it is conceivable that the eclipse predictions dating to 731, 686, 684, 677, 668, and 649 BC^{25} were actually *retro-calculations* undertaken by scribes in the 4th and later centuries BC, it is much more likely that they were *predictions* made and recorded shortly before each of those years, and that they were only later incorporated into the *Saros Canon*.²⁶

 $^{^{25}}$ These dates are earlier than the neo-Babylonian era because David Brown's book focuses on the period from 750BCE – 612 BCE. He makes it clear that his studies relate to that period and do not necessarily reflect the mind-set of any other period.

²⁶ Mesopotamian Planetary Astronomy-Astrology, page 201, David Brown, 2000. (Emphases added)

The relative accuracy and number of readings taken over many years caused the ancients to discover the length of each cycle. This enabled them to predict and retro-calculate some events, such as eclipses. Modern astronomical computer programs provide the means for modern researchers to perform retro-calculations over thousands of years. These enable the recorded ancient data to be verified.

> If these are retrocalculations, could they really be considered absolutely reliable unless corroborated by other evidence?

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Modern astronomy programs can show the night sky over Babylon for any date in history. They show whether the events recorded by the Babylonians took place as they said. It does not matter whether an astronomical event was predicted, seen, or retro-calculated, today's sophisticated astronomy programs can prove whether an event took place as the Babylonians had described.

In 1915, Paul V. Neugebauer and Ernst F. Weidner, without the benefit of modern computer programs, checked the records on VAT 4956. More recently, scholars F. Richard Stephenson, David M. Willis, and Hermann Hunger used modern astronomy programs to check the records. All of these studies showed that the events took place in 568/567 BCE.

Hermann Hunger and researchers Ann O'Maly and Marjorie Alley have shown that the events recorded on VAT 4956 could *not* have taken place during 588/587 BCE, which is the *Watchtower*'s proposed date. Their results, along with the report by Stephenson and Willis, are provided in *Part B* of this Critique. Sufficient information is also provided that enables any researcher to make their own investigation using astronomical computer software.

Recognition must also be given to the research, dedication and contribution made by Carl Olof Jonsson, including the proof that VAT 4956 is dated at 568/567 BCE. Carl provides the outcomes of his extensive research, including his response to these articles in the October 1 and November 1, 2011 *Watchtower* magazines²⁷. Countless people have benefited from his research and from his commitment.

²⁷ <u>http://kristenfrihet.se/vtsvar/vtsvar1.pdf</u>

ONE EXAMPLE OF AN ASTRONOMICAL TABLET: VAT 4956

After casting aside the Babylonian Chronicles and the business records, the *Watchtower* article focuses its attention on one astronomical tablet, VAT 4956. Although the British Museum holds the majority of astronomical tablets, the *Watchtower* ignores them, along with the reliable information they contain.

Astronomical tablet VAT 4956 is dated twice to the 37th year of Nebuchadnezzar. Accurate dating of this tablet therefore proves the Julian year when Jerusalem was destroyed.

the example of <u>VAT 4956</u>. The opening line of this tablet reads: "<u>Year 37 of Nebukadne-</u> <u>zar</u>, king of Babylon."¹⁶

16. Astronomical Diaries and Related Texts From Babylonia, Volume I, by Abraham J. Sachs, completed and edited by Hermann Hunger, published 1988, page 47.

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Records on VAT 4956

it contains <u>detailed descriptions</u> of the position of the <u>moon</u> and <u>planets</u> in relation to different <u>stars</u> and <u>constellations</u>. Also included is one <u>lunar eclipse</u>. Scholars say that <u>all</u> these <u>positions</u> occurred in <u>568/567 B.C.E.</u>, which would make the 18th year of Nebuchadnezzar II, when he <u>destroyed Jerusalem</u>, <u>587 B.C.E.</u>

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An English translation of VAT 4956 is provided in *Part B* of this Critique, where colours are used to help identify the features mentioned in this passage from the *Watchtower*.

Lunar eclipse record on VAT 4956

The tablet mentions a <u>lunar eclipse</u> that was calculated as occurring on the <u>15th</u> day of the third Babylonian month, Simanu. It is <u>a fact</u> that a lunar eclipse occurred on <u>July 4</u> (Julian calendar) of this month during <u>568 B.C.E.</u> However, there was also an eclipse 20 years earlier, on July 15, 588 B.C.E.¹⁷

17. Babylonian Eclipse Observations From 750 BC to 1 BC, by Peter J. Huber and Salvo De Meis, published 2004, page 186.

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July 4, 568 BCE is the equivalent of the 15th of Simanu. This information is provided to the *Watchtower* by the table in *Babylonian Chronology* 626 *BC-AD* 75 by Parker and Dubberstein. The WTS frequently refers to that publication for its dates.

Parker and Dubberstein show that in 20 years earlier, the 15th day of the 3rd month of 588 BCE was June 15. According to their table, July 15, 588 BCE fell the fourth month, Duzu.

WALDO H. DUBBERSTEINACHAEMENIDBABYLONIANHEBREWMACEDONIANOLD PERSIANELAMITENisanuNisanArtemisiosAdukanishHadukannashAiaruIyyarDaisiosThuravaharaTurmarSimanuSivanPanemosThaigarchishSakurrisishDuzuTammuzLoösGarmapadaKarmabadashAbuAbGorpiaiosTurnabasishUluluElulHyperberetaiosQarbashiyashTashrituTishriDiosBagayadishBagiyatishArahsamnuHeshvanApellaiosMarqashanashKislimuKislevAudynaiosAçiyadiyaHashiyatishTebetuTebethPeritiosAnamakaHanamakash
Shabatu Shebat Dystros Samimash Addaru Adar Xanthikos Viyakhna Mikannash In the tables the Babylonian month names, abbreviated to their first three letters, are used. In the tables the Babylonian month names, abbreviated to their first three letters, are used.

To overcome this barrier, the Watchtower article creates its own Babylonian calendar for 588 BCE.

According to VAT 4956, this eclipse occurred on the 15th of the third Babylonian month, which suggests that the month of Simanu began 15 days earlier. If the eclipse fell on July 15,

588 B.C.E. according to our Julian calendar, then the first day of Simanu would be June 30/July 1, 588 B.C.E.

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Although there is an array of astronomical data on tablet VAT 4596, the *Watchtower* article considers only one: the eclipse during Babylonian month III. Starting with the assumption that the eclipse happened in 588 BCE, the *Watchtower* article creates a calendar of its own devising that results in the year starting on May 2/3, 588 BCE.

There- fore, the first Babylonian month (Nisanu) would have started the new year two months earlier, on May 2/3. While nor- mally the year of this eclipse would have begun on April 3/4, VAT 4956 states on line 6 that an <i>extra month</i> (intercalary) was added <i>after</i> the twelfth (last) month (Addaru) of the preceding year.
this made the new year actually not start until May 2/3.

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Not only does the listing provided by Parker and Dubberstein show that no year started as late as May, they also state that the Babylonians added extra months when they needed to ensure that the New Year started in March/April.

In the period covered by this study, the Babylonian calendar year was composed of lunar months, which began when the thin crescent of the new moon was first visible in the sky at sunset. Since the lunar year was about eleven days shorter than the solar year, it was necessary at intervals to intercalate a thirteenth month, either a second Ululu (the sixth month) or a second Addaru (the twelfth month) in order that New Year's Day, Nisanu 1, should not fall much before the spring of the year (late March and early April).²⁸

The listing in Parker and Dubberstein shows that a second Addaru (February) was added in 587 BCE, thus making the following New Year (Nisan) start on April 23, 587 BCE. If 588/587 BCE *had* started as late as May, there would have been no need to add an extra month during that year in order to make 587 BCE start in April.

An unsubstantiated claim

Thus, the date of this eclipse in 588 B.C.E. well fits the data on the tablet.

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The article boldly asserts that its created calendar for 588 BCE fits the data on the tablet. No evidence, no proof. Analysis of the data on the tablet, such as the Lunar Threes, the 13 lunar positions, and the planetary information conclusively prove that the article's assertions are completely false.

This is shown later in this *Critique* and in the accompanying *Part B*. The data on VAT 4956 do *not* fit the article's calendar for 588 BCE.

there are <u>13 sets of lunar</u> observations on the tablet and <u>15 planetary</u> observations. These describe the position of the moon or planets in relation to certain stars or constellations.¹⁸

WT, Nov. 1, 2011, page 25

²⁸ Parker and Dubberstein, page 1

in the article "Ein astronomischer Beobachtungstext aus dem 37. Jahre Nebukadnezars II" (An Astronomical Observer's Text of the 37th Year Nebuchadnezzar II), by Paul V. Neugebauer and Ernst F. Weidner, pages 67-76, there are <u>13 sets of observations of the moon</u> wherein it is described in relationship with a certain star or constellation.

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These 13 lunar observations on VAT 4956 could not relate Nebuchadnezzar's 37th year to 588 BCE, and the *Watchtower* article dismisses the planetary observations. Furthermore, the mass of evidence provided through the other available astronomical tablets is ignored by the *Watchtower* and the reader is kept unaware of them and their significance to the dates of the period.

Planetary evidence points conclusively to 568/567 BCE

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? 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.²⁹ 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! ³⁰

Part B of this Critique provides an analysis written in 1965 by Max Hatton, *Planetary evidence points conclusively to 568/567 BCE*.

²⁹ The expression "in front of" in the text refers to the daily westward rotation of the celestial sphere and means "to the west of".

³⁰ Gentile Times Reconsidered, Fourth Edition, page 159, by Carl Olof Jonsson, Commentary Press, 2004

Watchtower rejects planetary readings on VAT 4956

Though the cuneiform <u>sign</u> for the <u>moon</u> is <u>clear and unambiguous</u>, <u>some</u> of the <u>signs</u> for the <u>names</u> of the <u>planets</u> and their <u>positions</u> are <u>unclear</u>. (Mesopotamian Planetary Astronomy—Astrology, by David Brown, published 2000, pages 53-57)

Because of this, the <u>planetary</u> observations are open to speculation and to several different interpretations.

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The *Watchtower* article wants to treat the lunar observations on VAT 4956 separately to the planetary observations so that it can dismiss the planetary readings. As justification, the *Watchtower* cites pages 53 to 57 of David Brown's book, *Mesopotamian Planetary Astronomy-Astrology*.

On those pages cited by the *Watchtower*, David Brown provides a means for making sense of the planets' names by placing them into five categories, A to E. He explains that with categories B to E, some planets' names used during the 8th to 7th centuries BC were, in certain circumstances, shared with other planets, stars or constellations. However, this is not the case with the planets' names in category A:

I have found that all the names attested for the seven planets in the period c. 750-612 BC can be placed in five categories. For example, the names Sagmegar, Delebat, Salbatanu, Sihtu, Kaiamanu, Samsu and Sin are unique to Jupiter, Venus, Mars, Mercury, Saturn, the Sun and the Moon respectively. They are never used for any other celestial bodies. They are what I am terming the "A-names" for these planets.³¹

Brown continues, explaining the characteristics of each group of names. In his "A-names" list, he places those names that are unique to that planet and are never used for any other body in the heavens. Here is a selection of his findings (pages are reproduced in *Part B*):

Names unique to the planet (amongst celestial bodies) and which can be used under any circumstances. ...

JUPITER: *Sagmegar*. Used in all text groups. ... written in the -567 Diary [VAT 4956] ...

VENUS: *Delebat*. Used in all text groups in all periods. It appears as *dele-bat* in the -651 [Diary], and all subsequent Diaries.

MARS: *Salbatanu*. ... It is used in all text groups. *Salbatanu* does not appear in the Diaries where Mars is always referred to by the single sign *an*

MERCURY: *Sihtu*. Used in all text groups including the -651 Diary, and all subsequent Diaries

SATURN: *Kaiamanu*. ... in the -567 Diary [VAT 4956]In this and in all subsequent Diaries the name genna is used for Saturn.³²

A comparison of Brown's list with VAT 4956 shows that each of these planetary terms appears on the tablet. At times Brown directly references the tablet. Since astronomers and historians are so familiar with the date of VAT 4956, they refer to it simply by giving its date: "the -567 diary" (= 568 BCE).

³¹ Mesopotamian Planetary Astronomy-Astrology, page 54, David Brown, 2000

³² Brown, op. cit., pages, 55, 56, 57

Planetary data appear about thirty times on tablet VAT 4956, so they can provide a significant amount of information. The *Watchtower* article gives the appearance that it needs to ignore this array of available planetary information.

- Jupiter: lines 4, 13, 5', 12'
- Venus: lines 4, 10, 11, 13, 3', 6', 17', 18', 19', 20'
- Mars: lines 10, 12, 13, 16, 18'
- Mercury: lines 9, 10, 12, 13, 17', 18', 19', 20'
- Saturn: lines 2, 9

Contrary to the *Watchtower*'s footnote, D. Brown's book does not support the notion that on VAT 4956 "some of the signs for the names of the planets and their positions are unclear." There is no confusion with the planets' names, everything is very clear.

LUNAR THREE TIME INTERVALS OF VAT 4956

The Lunar Three measurements are of critical importance³³. These are relatively short time intervals between the rising and/or setting of the sun and the moon, measured at the start, middle, and end of a month.

> There are also eight time intervals between the risings and settings of the sun and the moon.18a

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18a. These time intervals ("lunar threes") are the measurement of time from, for example, sunset to moonset on the first day of the month and during two other periods later in the month.

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Lunar Threes of VAT 4956

The terms Lunar Three, Lunar Four and Lunar Six^{34} relate to the time intervals recorded on many astronomical texts of the rising and setting of the sun and moon. Lunar Six refers to the following group of time intervals:

When measured	Time interval measured ("time-degrees")	Babylonian name
(1) First day of the month	Between sunset and the setting of the moon after it had become visible for the first time after conjunction.	па

About the middle of the month, up to four time intervals related to the full moon were recorded, along with the date they occurred.

(2) When the moon set for the last time before sunrise.	Time between moonset and sunrise.	ŠÚ
(3) When the moon set for the first time after sunrise.	Time between sunrise and moonset.	na
(4) When the moon rose for the last time before sunset.	Time between moonrise and sunset.	ME
(5) When the moon rose for the first time after sunset.	Time between sunset and moonrise.	GE_6

At the end of the month

(6) When the moon was visible	Date and the time between	
for the last time.	moonrise and sunrise.	KUR

At the time of VAT 4956, the Babylonians took the three measurements (1), (3), and (6); hence the term Lunar Threes. These are illustrated on the following pages.

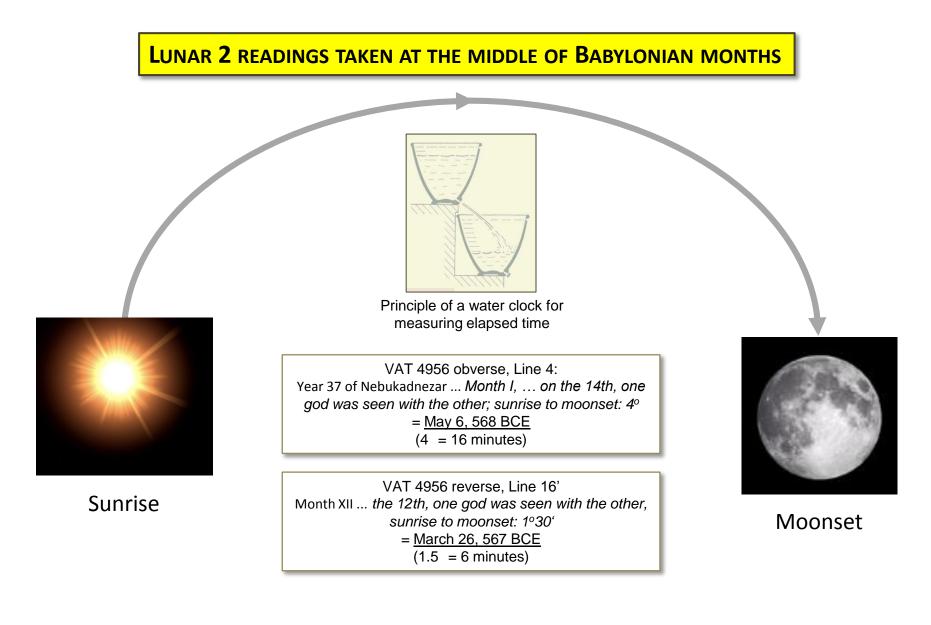
 $^{^{33}}$ The time intervals are measured in *time degrees*. In translations, the degree (0) unit is used. The intervals are recorded with the unit UŠ and its subdivision NINDA; there are 60 NINDA in an UŠ. Since 1 UŠ equals 4 minutes of time, it is often convenient to translate UŠ as "time degree". These time intervals vary from year to year, as they are affected by the cycles of the moon. ³⁴ These terms were coined by A. Sachs

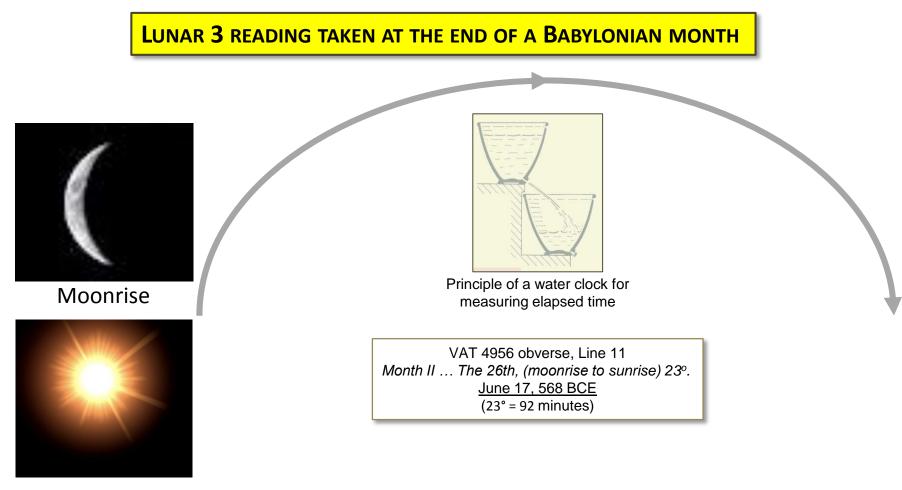
The "Lunar Three" Time Intervals for VAT 4596 prove its date at 568 BCE

LUNAR 1 READINGS TAKEN AT THE START OF BABYLONIAN MONTHS

Principle of a water clock for measuring elapsed time Moonset VAT 4956 obverse, Line 12 Month III (the 1st of which was identical with) the 30th (of the preceding month), ... sunset to moonset: 20° = June 20, 568 BCE (20 = 80 minutes)VAT 4956 reverse, Line 5' Month XI (the 1st of which was identical with) the 30th (of the preceding month); ... sunset to moonset: 14°30' Month XI, Day 1 = Feb. 12, 567 BCE (14.5 = 58 minutes)VAT 4956 reverse, Line 12' Month XII; ... sunset to moonset: 25° = Mar. 14, 567 BCE (25 = 100 minutes)

Sunset





Sunrise

Since the moon can <u>easily be tracked</u>, the positions of those other celestial bodies mentioned on VAT 4956 and connected to the moon can be identified and their positions dated with a good measure of <u>certainty</u>.

Scholars have <u>tied</u> these time measurements <u>to calendar dates</u>. ("The Earliest Datable Observation of the Aurora Borealis," by F. R. Stephenson and David M. Willis, in *Under One Sky—Astronomy and Mathematics in the Ancient Near East*, edited by John M. Steele and Annette Imhausen, published 2002, pages 420-428)

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Calculations of these Lunar Three readings prove the date when they were taken. Even though "scholars have tied these [Lunar Three] time measurements to calendar dates", the *Watchtower* article does not supply the results provided by any scholars, including their own.

The above endnote to the *Watchtower* article cites pages 420 - 428 of *Under One Sky: Astronomy and Mathematics in the Ancient Near East*, F. Richard Stephenson and David M. Willis, editors: John M. Steele, Annette Imhausen, Ugarit-Verlag, Münster, 2000. *Part B* of to this *Critique* provides extracts from that source. They state:

We **conclude** that the various lunar threes on the text are quite in keeping with a date for the tablet of 568-567 B.C. In addition, reference to Table 1 reveals that even at this early date, timing errors were typically of the order of 1° - no mean achievement. ...

The observations analysed here are sufficiently diverse and accurate to enable the accepted date of the tablet – i.e., 568-567 BC – to be confidently affirmed. It should be emphasised that although the circumstances of conjunctions of the moon with stars tend to repeat at 19-year intervals (the Metonic cycle), **this is not the case for lunar threes**.³⁵

Part B of this Critique provides further information on Lunar Threes:

• An extract on the subject of by Hermann Hunger. He compares the results of the VAT 4956 Lunar Threes readings for 568/567 BCE and for 588/587 BCE using the tables from Parker and Dubberstein, and also with a year beginning on May 2/3, as suggested by the *Watchtower*:

The measurements of the intervals could not have been taken on the date given on the tablet if the tablet were referring to year 588/7. The differences between text and computation are in both cases much larger than in 568/7 BC. Using the words of

³⁵ Under One Sky: Astronomy and Mathematics in the Ancient Near East, pages 424, 428, F. Richard Stephenson and David M. Willis. (Emphases supplied)

Stephenson and Willis, 588/7 BC can be confidently excluded.³⁶

- Results of computer analysis of the Lunar Threes readings on VAT 4956 by Researcher Marjorie Alley conclusively show that the Lunar Three measurements on VAT 4956 were taken in 568/567 BCE.
- Results of computer analysis of the Lunar Threes readings on VAT 4956 by Researcher Ann O'Maly conclusively show that the measurements on VAT 4956 were taken in 568/567 BCE.

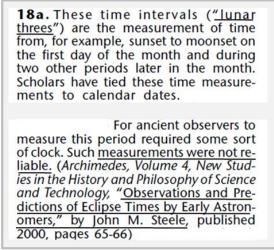
These analyses in *Part B* show the results of testing VAT 4956 for the year:

- 568 BCE using the calendar provided by Parker and Dubberstein (and accepted by the *Watchtower* article);
- 588 BCE using the calendar provided by Parker and Dubberstein;
- 588 BCE using the calendar created by the *Watchtower* article.

In every case, the results prove that date of VAT 4956, from the 37th year of Nebuchadnezzar, is definitely 568 BCE. The *Watchtower* article failed to provide any data or list any results.

Information provided in *Part B* of this Critique enables a reader to verify the results with computer programs that provide astronomy simulations and data.

Reliability of the measurements



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In the context of the Lunar Threes, the *Watchtower* article refers to pages 65 - 66 of *Observations and Predictions of Eclipse Times by Early Astronomers* by John M. Steele. The article suggests Steele supports the view that Lunar Three measurements are unreliable.

However, the pages that are cited by the *Watchtower* focus exclusively on *eclipses*, not on Lunar Threes. The word "eclipse" appears six times on those two pages; the expressions "Lunar Threes" and "Lunar Sixes" do not appear there.

By their very nature, lunar eclipses can take much longer than the time of a Lunar Three period. Thus any errors in a timing device would be much greater when the period of an eclipse is being measured. Of course, if the readings are not reliable, then the article could not use of them to prove its date of 588 BCE.

The *Watchtower* article fails to advise the reader that in the previous section of that same book, John Steele *does* address Lunar Sixes³⁷. The *Watchtower* article fails its readers.

³⁶ <u>http://goto.glocalnet.net/kf4/reviewHunger.htm</u>

Although the following Table from John M. Steele summarises results from after 400 BCE, he still shows how accurate the Lunar Three and Lunar Six measurements are.

	Lunar Six	Mean Error A (°)	Mean Error B (*)	
	na	1.1	1.1	
	ŠÚ	1.3	2.0	
	na	-0.4	-1.1	
	ME	-1.1	-1.7	
	GE6	1.0	1.7	
	KUR	2.1	2.1	
rising and setting wa	s defined a	as the moment	when the upper	g (A) that the time of limb of the luminary ng was defined as the

"Observations and Predictions of Eclipse Times by Early Astronomers", page 51, John M. Steele (referenced at endnote 18a of the *Watchtower* article)

The accuracy or otherwise of the readings can be verified by modern computation. Regardless of any general inaccuracy of the method of measuring used by those Babylonians, it is possible to use modern computer programs to rule out the *Watchtower* article's date of 588/587 BCE for VAT 4956.

The question of the accuracy of the clocks used by the ancient observers in measuring the Lunar Three intervals is irrelevant for the WT's proposed year of 588/587 BCE.

Why? Because **sophisticated modern astronomy programs work as "time machines" which can take us back to view the sky over ancient Babylon on any date in history**, and those programs demonstrate conclusively that it is impossible for the sunrise to moonset (SR-MS) Lunar Three intervals recorded on VAT 4956 to have occurred during the WT's proposed year of 588/587 BCE.

Why is it impossible for VAT 4956's sunrise to moonset (SR - MS) intervals to have occurred in 588/587 BCE? Because in 588/587 BCE the moon set BEFORE sunrise on the dates recorded on VAT 4956. You cannot calculate how much time elapsed between sunrise and moonset if the moon set BEFORE sunrise!

It does not matter how accurate the ancient clocks were if the moon actually set well BEFORE sunrise. And that the moon DID set before sunrise on those dates is confirmed not by ancient water clocks but by highly sophisticated modern astronomy programs. On two of the dates (Month I, day 14 and Month XII, day 12), the moon set more than half an hour before sunrise.

It does not matter if the ancient clocks were inaccurate. The Babylonian observers would have SEEN the moon set well before the sun rose. They would not have needed clocks of any sort to SEE that the moon set before sunrise. And if the moon set BEFORE sunrise, then it is IMPOSSIBLE to measure how long AFTER sunrise the moon set.

It does not matter what kind of clock you have if you cannot measure SR - MS because the moon is NOT EVEN IN THE SKY. It does not matter if you have a Timex, or a Rolex, or an atomic clock, or an

³⁷ With Lunar Sixes, three further readings were taken than with the earlier Lunar Threes.

ancient water clock, or if you just count ONE- Mississippi, TWO-Mississippi --- you cannot measure moonset for a moon that is not there!

So, as interesting as Steele's article may be, it is a red herring. The WT writing dept. was obviously scrambling desperately to come up with some kind of quote which they could use to cast aspersions on the importance of the Lunar Three intervals. The best they could do was come up with the suggestion that the clocks were inaccurate. But one does not need a clock at all in order to look up and see whether or not the moon is visible in the sky after sunrise.³⁸

³⁸ Personal email from Marjorie Alley, 5 October 2011

INVESTIGATIONS OF 13 LUNAR POSITIONS ON VAT 4956

Because of the <u>superior reliability of the lu-</u> <u>nar</u> positions, <u>researchers</u> have carefully analyzed these 13 sets of <u>lunar</u> positions on VAT 4956.

WT, Nov. 1, 2011, page 25

This means that the *Watchtower* eliminated the Babylonian Chronicles, the Babylonian commercial and administrative tablets, the contemporary chronology (Adda-guppi stelae), ignored the planetary readings and Lunar Three readings on VAT 4956, ignored the numerous astronomical tablets held in the British Museum, and created its own calendar for 588 BCE.

However, the *Watchtower* deems the lunar readings of VAT 4956 sufficiently acceptable as its authority for its dates. The fact that VAT 4956 is acceptable is shown by the fact that they bothered to analyse the data.

They analyzed the data with the aid of a computer program capable of showing the location of celestial bodies on a certain date in the past.¹⁹

WT, Nov. 1, 2011, pages 25, 27

19. This analysis was made with the astronomy <u>software entitled TheSky6@</u>. In addition, the analysis was augmented by the comprehensive <u>freeware</u> program Cartes du Ciel/Sky Charts (CDC) and a <u>date converter</u> provided by the U.S. Naval Observatory.

WT, Nov. 1, 2011, page 28

The *Watchtower* article's Footnote 19 nominates the software being used, but it fails to describe the researchers and the input parameters they used. And the article does not list the results from these programs. The article's readers are therefore unable to verify the claimed outcomes.

What did their analysis reveal? While <u>not all</u> of these sets of <u>lunar</u> positions match the year 568/567 B.C.E., <u>all 13 sets match</u> calculated positions for 20 years earlier, for the year <u>588/587 B.C.E.</u>

WT, Nov. 1, 2011, page 27

That is meant to be "proof"? Anyone could prove anything at all using this method. Someone could just as easily claim an opposing conclusion by simply making a bald unsubstantiated claim.

Readers are simply given a claim that has no evidence, no proof. Nothing, just a bald assertion. The reader has to place complete trust that the article is telling the truth. In effect the article is saying: "Believe it or not"; "Trust us, for we know what we are doing".

Do all 13 sets of lunar positions on VAT 4956 fit the year 588/587 BCE?

In contrast to the lack of information from the *Watchtower*, Part B of this Critique provides an indepth Study.³⁹

It should have become clear by now that, *even when the premises and criteria* of the "researchers" are used in examining VAT 4956 (e.g. a late May start to the Babylonian new year, sometimes having a new

³⁹ Critique Part B, pages 30 - 35

month begin before first lunar crescent visibility, omitting key data and including speculative data in the analysis), the claim "all 13 sets [of lunar positions] match calculated positions ... for the year 588/587 B.C.E." *still* remains totally false! 40

From Carl Olof Jonsson

After providing detailed and extensive information, Carl Olof Jonsson concluded:

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's⁴¹ 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.⁴²

⁴⁰ Post by Ann O'Maly at: <u>http://www.jehovahs-witness.net/watchtower/bible/216051/1/Do-All-13-Sets-Of-</u> Lunar-Positions-On-VAT-4956-Fit-The-Year-588-587-B-C-E

⁴¹ For comments on the relevance of Jehovah's Witness Rolf Furuli, see page 56 of this Critique. ⁴² <u>http://goto.glocalnet.net/kf2/review.htm</u>, Carl Olof Jonsson

CORRECTIONS TO THE RECORD

<u>One</u> of the places where the <u>lunar</u> observations fit 588 B.C.E. even better than 568 B.C.E. is shown in the tablet reproduced on these pages. On <u>line 3</u> of that tablet, we read that the moon was in a certain position on the "night of the 9th [of Nisanu]." However, the scholars who first dated the event to 568 B.C.E. (astronomical -567) acknowledged that in 568 B.C.E., the moon was in that position on "the 8th of Nisanu and not on the 9th." To support dating the tablet to 568 B.C.E., they <u>postulated that the scribe erroneously</u> wrote "9" instead of "8."²⁰

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Should it be the 9th day or the 8th day?

- (1) As shown in the accompanying photograph, the Akkadian symbol for the number 9 is clearly seen.
- (2) In their transliteration of this cuneiform text, Neugebauer and Weidner changed the "9" to an "8."
- (3) Only the footnote indicates that there was a "9" in the original text.
- (4) Even in their German translation, they put "8."
- (5) In 1988, Sachs and Hunger published the text as it actually reads, with a "9."
- (6) Yet, they preserve the alteration in their English translation, calling the "9th" an "error for: 8th."

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VAT 4956 Copy: E.F.Weidner, AfO 16 Tf. XVII Photo: Pl. 1 and 3 Transcription, translation, and commentary: P.V. Neugebaner an achtungstext aus dem 37. Jahre Nobukadnezars II. (-567/66) (= der Wins., Phil-hist. Kl. Bd. 67/2, 1915). Obv.' MU-37 MAG-NIG-DU-SES LUGAL TIN-TIR 1 ····] ⁴SAG-UŠ ina IGI SIM 2 ina še-ri TIR-AN ina SUR GE, 9 SAG GE, 1 KUS sin ina IGI "".GI **G** 3 TUR MR R .. DIMOTE in the west. Night of the 3rd, the moon was 2 (it rained'. Night of the 9th (error for: 8th), begi **61** 3 1 cubit in front of β Virginis. The 9th, the sun in : [.... The 11th] or 19th Junitar's annunhal sising On the 14th

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20. Berichte über die Verhandlungen der Königl. Sächsischen Gesellschaft der Wissenschaften zu Leipzig (Reports Regarding the Discussions of the Royal Saxonian Society of Sciences at Leipzig); Volume 67; May 1, 1915; "Ein astronomischer Beobachtungstext aus dem 37. Jahre Nebukadnezars II, (-567/66)" (An Astronomical Observer's Text of the 37th Year Nebuchadnezzar II), by Paul V. Neugebauer and Ernst F. Weidner, page 41.

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But the lunar position in line 3 finds an *exact match* on Nisanu 9 of 588 B.C.E.²¹

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21. VAT 4956 reads on line three: "The moon stood 1 cubit [or 2 degrees] in front of ß Virginis." The previously mentioned analysis concluded that on Nisanu 9, the moon was 2°04' in front of and 0° below the star ß Virginis. It was considered an exact match.

WT, Nov. 1, 2011, page 27

So the whole argument hinges on this "previously mentioned analysis". No evidence, no methodology, no peer review, no explanation, nothing. Just put all your trust in us, and don't ask questions.

From Carl Olof Jonsson re "9" or "8"?

Jehovah's Witness Rolf Furuli has been a staunch apologist for the WTS's date of 607 BCE for the destruction of Jerusalem. It is therefore not surprising that the article in the November *Watchtower* reflects Furuli's thinking. There is nothing improper in this. The WTS commonly calls on those who defend its positions, whether they are of the Anointed or not, to provide articles for them.

Carl Olof Jonsson is likewise noted for his strong defence of the conventional neo-Babylonian chronology, and in the process Carl has opposed and exposed positions put forward by Rolf Furuli.

In the following discourse, Carl discusses a position put forward in the first edition of Rolf Furuli's second volume⁴³, and it is therefore relevant to the article in the *Watchtower*.

I discussed the lunar positions on VAT 4956 in my analysis of Furuli's claims at "Kristen Frihet", "English Page". These are my comments on the position described regarding line 3:

(2) Obv. $\leq 1 = 3 \text{ says}$: "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."

<u>Nisannu 8 = 29/30 April 568 BCE</u>

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.

⁴³ Assyrian, Babylonian, Egyptian, and Persian Chronology, Vol. II

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.

Furuli's claim – and therefore also that of the WT article on pages 26 and 27 - is wrong. It is simply a lie.⁴⁴

⁴⁴ Personal email received Monday, 19 September 2011

FINAL APPEAL

Clearly, <u>much</u> of the astronomical data in VAT 4956 fits the year 588 B.C.E. as the 37th year of Nebuchadnezzar II. This, therefore, supports the date of 607 B.C.E. for Jerusalem's destruction

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The totality of this *Watchtower* article relies on the reputed testing by faceless "researchers" using undisclosed methods. They only *claim* to have arrived at the right answer regarding part of the information provided by one Babylonian tablet.

The article removed every other prop the WTS needs to provide it with the date of 539 BCE for the Fall of Babylon, and it has placed the totality of its foundation on a faulty explanation of a tablet it had previously rejected

The articles make significant omissions:

- Neither Part 1 (*Watchtower*, October 1, 2011) nor Part 2 (*Watchtower*, November 1, 2011) provided any evidence proving the WTS's date of 537 BCE for the return of Jews to the site of the destroyed temple. If it be argued that some others have accepted that date, then this is overshadowed by the unanimous voices saying Jerusalem was destroyed in 587 BCE.
- The articles never addressed its date of 607 BCE for the exodus of Jews into Egypt following the murder of Governor Gedaliah. It is impossible for all of the events that the Bible describes took place from the destruction of Jerusalem to the time they entered Egypt could have taken place in two months.

The WTS's foundation lies on shaky ground.

CONCLUSION

The Watchtower Society's own words condemn this Watchtower article

In addition to checking the reliability of the sources, consider carefully how you plan to use the information. <u>Make sure that your</u> <u>use of quotations and statistics harmonizes with the context from</u> <u>which they are taken.</u> ... Overstating matters or exaggerating reports involving number, extent, or seriousness raises questions of credibility.

When you are consistently accurate in what you say, you will come to be known as a person who respects truth. This reflects well on Jehovah's Witnesses as a group. More important, it honors "Jehovah the God of truth."—Ps. 31:5.⁴⁵

The two Parts of this *Critique* has shown that the *Watchtower* article cannot be trusted, because it:

- misrepresents its sources;
- fails to provide the contexts of the sources it cites;
- does not describe the methods it uses or the outputs from its calculations;
- exhibits gross inconsistencies, such as accepting information from sources but rejecting the way that those sources arrived at their conclusions;
- does not provide all the necessary statistics;
- ignores critical data, such as the many witnesses that show the Lunar Three measurements prove Nebuchadnezzar's 37th year equated to 568 BCE;
- reasoning from innuendo and from faulty hypotheses;
- hides the fact that calculations prove Jerusalem was not destroyed in 607 BCE;
- presents their faulty interpretation of the "Seventy Years" as "Bible chronology".

⁴⁵ Benefit from Theocratic Ministry School Education, (2002), p. 225, Study 40 "Accuracy of Statement". (Emphases supplied)