Abstract
Determining the chronology of Herod the Great, as given in Josephus, involves many questions: consular years, Sabbatical years, Nisan or Tishri years regarding Herod’s reign, inclusive or non-inclusive counting for elapsed time, and the year from which Herod’s sons considered their reigns to have begun. The present paper focuses on just two of these issues—elapsed time and Nisan versus Tishri years—as dealt with in the two most frequently cited positions formulated for the death of Herod, those of Schürer and Filmer. Tables at the end demonstrate which of the two views best agrees with the many designations of elapsed time in Josephus.

Keywords
Josephus, Herod the Great, NT chronology, birth of Christ, Schürer, Filmer

Over the many years in which the chronology of Herod the Great has been discussed, the two positions that have found the most advocates are first, those associated with the name of Emil Schürer,1 holding for a 4 BC date for the death of Herod, and second,

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those largely associated with the thesis of W. E. Filmer, who put the death of Herod in early 1 BC. Although various other positions have been advocated, such as those that put the death of Herod in 5 BC, these will not be dealt with in the present paper, since the majority of scholarship in the past 100 years has aligned with the basic outlines of either the Schürer chronology or that of Filmer. In recognition of the fact that other scholars have contributed significantly to either side of this debate, rather than speaking of the “Schürer consensus” and the “Filmer hypothesis,” these two positions will be referred to as the “consensus view” and the “minority view” in what follows, since there is no dispute over the fact that, at the present time, the majority of scholars take the first or “consensus” view.

WORKING ASSUMPTIONS OF THE TWO PRIMARY APPROACHES TO THE CHRONOLOGY OF HEROD

The two positions have fundamentally different assumptions that they use to explain the information found in Josephus that bears on the chronology of Herod’s life. For the consensus view, these assumptions are the following:

- Unless Josephus states otherwise (for instance, in referring to years of the Olympiad, or to Roman consular years), the calendar year is assumed to begin in Nisan (March/April). Since it will be important in what follows to distinguish a Nisan-based year from one which starts in January (our system and that of the Romans), any such year will be written as the BC year in which Nisan occurred, followed by an “n” to indicate that the year being considered is not a Julian year,


but a Jewish year that started in Nisan. The importance of this more exact notation will appear in what follows. The consensus view places Herod’s capture of Jerusalem in 37n.

- Josephus, in measuring elapsed time, uniformly used inclusive numbering, also called non-accession reckoning. If Josephus says that Herod reigned 37 years after his investiture by the Romans, this means that only 36 actual years had passed, since Herod’s first partial year is to be reckoned as a full year in the count. In order to clarify how this works in formulae showing elapsed time, the “actual” elapsed time will be used with “(act)” following so that the formula is unambiguous. Thus when Josephus says that Herod died 34 years after he had Antigonus slain, his date of death is to be calculated as 37n – 33 (act) = 4n, that is, at some time in the year beginning on Nisan 1 of 4 BC.

- The Sabbatical-year calendar in effect at this time is taken as that of Benedict Zuckermann, in which a Sabbatical year began in the fall of 38 BC, consistent with the statement in *Ant.* 14.475/14.16.2 that a Sabbatical year was in effect while Herod and Sossius were besieging Jerusalem. Since Sabbatical years began in Tishri (the fall), this conjectured Sabbatical year may be written as 38t; its latter six months overlapped the first six months of 37n, during which the siege took place according to the consensus view.

- The consular years given by Josephus for Herod’s investiture by the Romans, and, three years later, his capture of Jerusalem, are accepted as correct. These correspond to the Julian years (starting January 1) of 40 BC and 37 BC, respectively.

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4 The convention of expressing dates advocated here, which may be called the “Nisan/Tishri” notation, is similar to that introduced by Valerius Coucke in the 1920s: V. Coucke, “Chronologie biblique” in *Supplément au Dictionnaire de la Bible*, ed. Louis Pirot, vol. 1 (Paris: Libraire Letouzey et Ané, 1928): cols. 1245–1279. Instead of placing the ‘n’ and ‘t’ immediately after the BC year, he placed the letters before, followed by a period and a space.

5 *Ant.* 17.192/17.8.1; *War* 1.655/1.33.8.

6 That the notation introduced here is not just a matter of pedantry should be apparent when compared to the usual way of expressing these dates, whereby Herod’s death is calculated as 33 years after 37 BC, and hence at some time in 4 BC. Assuming that Josephus was thinking in terms of regnal years, and therefore the number of years was important, this means that Herod’s death in the consensus calculation was not just at any time from January 1 of 4 BC and the start of Passover on Nisan 14 of that year, but must be confined to a 13-day interval between Nisan 1 and Nisan 14. The importance of this distinction will be brought out in Section §11.

7 Benedict Zuckermann, *A Treatise of the Sabbatical Cycle and the Jubilee: A Contribution to the Archaeology and Chronology of the Time Anterior and Subsequent to the Captivity Accompanied by a Table of Sabbatical Years.* (Trans. A. Löwy; London: Chronological Institute, 1866).
Herod’s successors dated their reigns in a *de facto* sense; those reigns started in 4 BC, placing Herod’s death in that year.

The minority view (Filmer et al.) uses the following working assumptions.

- Unless Josephus states otherwise (for instance, in referring to years of the Olympiad, or to Roman consular years), the calendar year is assumed to begin in Tishri (Sept/Oct). Herod’s siege of Jerusalem began in the spring of 36 BC, which was in the Tishri-based year 37t. It ended on the Day of Atonement (“the fast”) exactly 27 years (“on the same day”) after its capture by Pompey in 63 BC, i.e. on Tishri 10, 36 BC. This was nine days after the beginning of the calendar year 36t. His investiture by the Roman Senate was in 39t.

- Josephus, in measuring elapsed time, uniformly used non-inclusive numbering, also called accession reckoning. Thus, when Josephus says that Herod reigned 34 years after the capture of Jerusalem, this means 34 actual years, and his date of death is to be calculated as 36t – 34 = 2t, which agrees with his dying shortly after the full lunar eclipse of January 9/10, 1 BC.

- The Sabbatical-year calendar in effect at the time of Herod’s siege of Jerusalem is taken as that of Ben Zion Wacholder, in which a Sabbatical year began in the fall of 37 BC, consistent with the statement in *Ant.* 14.475/14.16.2 that a Sabbatical year was in effect during the siege of Jerusalem in the summer of 36 BC.

- The consular years given by Josephus for Herod’s investiture by the Romans, and, three years later, his capture of Jerusalem, are incorrect, and accepting them as correct has led to conflict with many other statements in Josephus for those who follow the consensus view. In the same sentence in which Josephus gives the consular for Herod’s investiture by the Romans, he gives the wrong Olympiad year, a fact acknowledged by Schürer. If Josephus (or, more probably, his source) had the wrong Olympiad year, this would also make his consular year open for questioning. In addition, Appian’s *Civil Wars* (5.8.75)

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9 In order for Herod’s investiture by the Romans to be in 39t, it would have to be on or after Tishri 1 of that year, i.e. after September 21. An inscription from Aphrodisias in Asia Minor records a decree from Antony, Octavius, and the Senate dated October 2, 39 BC (Joyce Reynolds, *Aphrodisias and Rome* [Hertford: Stephen Austin and Sons, 1992]: 70, 74–75). All the principal actors involved in giving Herod the kingship were therefore in place in early 39t.


11 *Ant.* 14.487/14.16.4. Josephus places Herod’s appointment during the one hundred and eighty-fourth Olympiad, which ended on June 30, 40 BC. He also states that Calvinus and Pollio were consuls when Herod was appointed.

12 Schürer, *History* 1.393, n. 3.
implies that Herod’s investiture was in the consular year corresponding to 39 BC.\textsuperscript{13}

- Two of Herod’s successors, Archelaus and Antipas, antedated their reigns to 4 BC (i.e., 4t) because that was when they were given governing authority by Herod;\textsuperscript{14} their de facto reigns began in 1 BC. The case of Philip is problematic, because various early texts of Josephus place his starting year as 1 BC, not 4 BC.

It is evident that Josephus had a continuing interest in dating events according to elapsed time, as is shown in the passages listed below related to the life of Herod and taken from his Antiquities and War. He relates the passage of years as measured from the Hasmonean period, from well-established events in Roman history, or from events in Herod's life. In the following discussion, a comparison will be made of the dates for these elapsed times when measured with the assumptions of the consensus view (elapsed times are by inclusive reckoning) or with those of the minority view (non-inclusive reckoning).

These findings about elapsed times in Josephus need to be viewed in light of the larger discussion of issues related to the chronology of the intertestamental period, such as the Sabbatical-year calendar, the question of whether Herod’s successors antedated their reigns, and the validity of Josephus’s consular dates for Herod’s appointment as king by the Romans and his capture (with Sossius) of Jerusalem. These correlated questions are not the subject of the present study, but it is hoped that future discussions that deal with these topics will take into account the conclusion reached here: that, whatever other positions are advocated related to the chronology of Herod the Great, due consideration must be given to the evidence that Josephus, in his presentation of that chronology, uniformly used non-inclusive reckoning, as opposed to the inclusive reckoning employed to support the consensus view.

**TISHRI YEARS**

More needs to be said about one of these assumptions held by the minority position, namely that Josephus always reckoned Herod’s regnal years as starting in Tishri, not in Nisan as in the consensus view. Support for the consensus position is almost always derived from the statements in the Mishnah and Talmud\textsuperscript{15} that Nisan 1 was the New Year for kings and festivals.\textsuperscript{16} There is no restriction in these statements to

\textsuperscript{13} Filmer, “Reign of Herod,” 285; Steinmann, “When Did Herod the Great Reign?” 7.
\textsuperscript{14} *War* 1.625/1.32.2, 1.631–632/1.32.3. See also the fuller discussion in Steinmann, “When Did Herod the Great Reign?” 20–25.
\textsuperscript{15} *m. Roš Haš.* 1; *b. Roš Haš.* 1a.
\textsuperscript{16} “It used to be assumed that Herod and his successors counted their regnal years according to a spring era, from 1 Nisan, but – as successive editions of Schürer’s handbook show somewhat amusingly – this was never more than an assumption based on rabbinic law. But the relevance of that law to Herod is more than doubtful.” Schwartz, *Studies*, 174.
the post-Exilic period, and, since much if not most of the discussion in the Mishnah and Talmud relates to interpretation of biblical passages, they were clearly intended to include kingship during the time of the First Temple. In that regard, the Mishna and Talmud are plainly wrong. Coucke and Thiele have shown, from relevant biblical texts, that the southern kingdom of Judah used regnal years starting in Tishri. Instead of relying on the later traditions of the Mishnah and the Talmud, at least some consideration should have been given to the possibility that Herod, and Josephus, would have been acquainted with the reckoning of the kings on the throne of Judah and would have used their calendar in determining when a king’s year started.

Josephus deals with this question in a passage that is often cited for support of a Nisan-based year. However, closer examination will show that the passage says just the opposite: Josephus meant for us to understand that he used Tishri-based years for kings. Near the beginning of *Antiquities*, as if to inform us of what kind of calendar will be used in what follows, Josephus mentions the two calendar systems used by his people, the one starting the year in Nisan and the other in Tishri (*Ant*. 1.81/1.3.3). After relating that Moses instituted Nisan as the first month for festivals and “everything related to divine worship,” he continues:

ἐπὶ μέντοι γε πράσεις καὶ ωνάς καὶ τὴν ἄλλην διοίκησιν τὸν πρῶτον κόσμον διεφύλαξε

“concerning, however, buying (πράσεις) and selling (ωνάς) and the other financial administration [or tax administration] (διοίκησιν) he [Moses] preserved the earlier arrangement.”

The lexicons give the meaning of διοίκησις as “administration, management,” or “control, government, administration, treasury department.” There is no meaning of “ordinary affairs” as rendered by Whiston, and later, Thackeray. By using the word διοίκησις, Josephus rather clearly intended that we understand that the affairs of government (administration) were according to a Tishri-based calendar, and it is

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The most obvious use of Tishri years in ancient Judah is found at 2 Kgs 22:3–23:23. Josiah began repairing the temple in his eighteenth year. Finances were raised and workmen were gathered from throughout the land for the project. Nisan came and the Passover was celebrated. However, even after Passover, it was still Josiah’s eighteenth year, meaning that the new year did not begin in Nisan. Thus Josiah’s eighteenth year began instead on the first day of Tishri.


unfortunate that Thackeray apparently just followed Whiston in rendering this Greek word into English.\textsuperscript{20}

Thus, Josephus is stating that all activities other than those related to divinely mandated religious observances would be reckoned by a fall calendar that started with the first day of Tishri, with the Greek word employed denoting especially governmental/administrative activities.

INDIVIDUAL PASSAGES SHOWING JOSEPHUS’S TREATMENT OF ELAPSED YEARS

Passages below are introduced with a section marker of the form “§1” so that, in later discussions, only the section marker need be given instead of repeating the references to the associated passages in \textit{Antiquities, War}, and elsewhere. This will be particularly useful in avoiding clutter in the tables at the end. Those tables are meant to provide a convenient summary of the results derived from the more thorough discussion in the relevant sections, and to give prominence to the different results produced by adopting the consensus assumption of inclusive dating throughout Josephus (first table) versus the minority assumption of non-inclusive counting (second table).

(§1) HASMONEAN DYNASTY OF 6 PRIESTS LASTED 79 YEARS; TOTAL OF INDIVIDUAL REIGNS AGREES\textsuperscript{21}

The dynasty is reckoned from Simon becoming high priest in 170 S.E.\textsuperscript{22} (142n), with its end when Pompey captured Jerusalem in 63 BC, a span of 79 years. Years given in Josephus are: Simon, 8 years; Hyrcanus I, 31 years; Aristobolus 1 year; Alexander Janneus 27 years; Alexandra’s governorship 9 years; Aristobolus 3½ years, for a total of 79½ years. If these numbers were by inclusive reckoning, one year would need to be subtracted from each figure to represent the actual length of reign, giving 73½ (actual) years. In light of this clear example that Josephus used non-inclusive reckoning, the consensus view necessarily must say that this case is an exception to the general rule. There is no contradiction and no special pleading of this sort needed by the minority view which holds that Josephus always used non-inclusive reckoning except when an ordinal number is used.

\begin{footnotesize}
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    \item \textsuperscript{20} Schwartz, \textit{Studies}, 174, realized what Josephus intended: “Josephus, at any rate, states in \textit{Ant.} 1.80–81 that 1 Tishri remained the New Year for all purposes apart from religious ones.”
    \item \textsuperscript{21} This argument is presented in Filmer, “Reign of Herod,” 292.
    \item \textsuperscript{22} S.E. = Seleucid Era.
\end{itemize}
\end{footnotesize}
(§2) ABOUT 45 YEARS FROM HEROD’S APPOINTMENT AS ΣΤΡΑΤΗΓῸΣ BY THE ROMANS UNTIL HIS DEATH

“Herod was appointed, by Sextus Caesar, governor of Coele-Syria . . . All this happened in B.C. 47, or in the beginning of B.C. 46.” At that time he was 25 years of age. He was about 70 when he died, allowing the following calculations for the year of his death:

Consensus:  47n + 25 – ~70  = ~2n  Does not fit 4n consensus year for Herod’s death

Minority:  47t + 25 – ~70  = ~2t  Agrees with Herod dying in early 1 BC

(§3) IN HEROD’S 3RD YEAR SINCE HE WAS MADE KING BY ROMANS, WHEN WINTER WAS OVER, HEROD AND SOSSIUS BEGAN THE SIEGE OF JERUSALEM

The use of the ordinal here, “the third year” necessarily implies inclusive numbering in either system of reckoning. The Greek language and English use ordinals in the same way when inclusive reckoning is intended. Inclusive numbering then implies 38n in the consensus view and 37t in the minority view. Josephus says that the siege lasted for five months and the city was captured “in the solemnity of the Fast,” that is, on the Day of Atonement. Since the Day of Atonement was in Tishri, the siege, according to the data from Josephus, began in Iyyar of the same year that the consensus view holds was the year of the siege, 37n (Iyyar is the month after Nisan). But this contradicts the 38n for Herod’s third year of the consensus view; the consensus view is self-contradictory. There is no problem with the minority view that starts Herod’s third year in Tishri of 37t and accepts the start of the siege in Iyyar of 36 BC.

Consensus:  40n – 2 (act) = 38n. Does not work; see discussion

Minority:  39t – 2 (act) = 37t  Agrees with Josephus: siege started in Iyyar, 36 BC

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23 Ant. 17.148/17.6.1; War 1.231/1.10.8.
24 Schürer, History, 1.384.
25 Although most texts of Ant. 14.158/14.9.2 read “15 years of age,” it is generally thought that the 15 is a copying error for 25.
26 Ant. 17.148/17.6.1.
28 Thackeray’s translation in the Loeb series is inaccurate: “it being now just three years since he had been proclaimed king in Rome.” The Greek is Συνήγετο δ’ αὐτῶ τρίτον ἔτος ἐξ οὖ βασιλεὺς ἐν Ἰουδαίᾳ ἀπεδέδεικτο. “Τρίτον ἔτος” is ordinal: “third year.”
29 War 1.160/1.18.2.
30 Ant. 14.287/14.6.4. The Greek word is νηστείας, the same word used in Acts 27: 9 to refer to the Day of Atonement. There is no reason to accept any of the various alternatives that have been offered in interpreting what Josephus meant.
(§4) AFTER HEROD “HAD COMPLETED THE 17TH YEAR OF HIS REIGN,” AUGUSTUS CAESAR CAME TO SYRIA

Dio Cassius (Roman History 54.7.4–6) says that Augustus spent the winter in Samos, “and in the spring of the year when Marcus Apuleius and Publius Silius were consuls, he went on into Asia, and settled everything there and in Bithynia.” The consular year was 20 BC. Herod had completed his 17th year of reign, so Caesar came in his year 18. In order for this agree with the consensus dates for Herod, the consensus view measures Herod’s 18th year from his capture of Jerusalem in 37n, giving 37n – 17 (act) = 20n. However, the next section will show that the 18th year should be measured, not from the year in which Herod and Sossius captured Jerusalem, but from Herod’s investiture by the Romans three years earlier. In the minority view there is no conflict with the requirement that the time is to be measured from Herod’s investiture by the Romans in 39t.

Consensus: 40n – 17 (act) = 23n Does not fit coming of Augustus in 20 BC
Minority: 39t – 18 = 21t Fits Augustus coming before Tishri 1, 20 BC

(§5) HEROD BEGAN WORK ON THE TEMPLE IN HIS 15TH YEAR, ALSO CALLED HIS 18TH YEAR

After relating the coming of Augustus to Syria in Antiquities, Josephus says that, still in the 18th year of his reign, Herod began work on the Temple. In the corresponding passage in War, Herod starts construction of the Temple in year 15 of his reign. As pointed out by Filmer, there is no conflict when we understand that the three-year difference is the number of years between Herod’s appointment as de jure king by the Romans versus when he became king de facto in the conquest of Jerusalem. Consequently, unless we are to charge Josephus with an error when there is a logical and natural explanation of why he used two different figures, it must be held that the consensus view that measures the 18th year of Herod in this passage from the capture of Jerusalem is in error and Josephus, in War, does not contradict what he says about the same event in Antiquities. For the “15 year” figure, then,

Consensus: 37n – 14 (act) = 23n for start of Temple construction (does not work)
Minority: 36t – 15 = 21t Agrees with start of construction before Tishri, 20 BC

31 Ant. 15.354/15.10.3.
32 Ant. 15.380/15.11.1 (18th year); War 1.401/1.21.1 (15th year).
33 “Reign of Herod,” 296. See also Andrew E. Steinmann, From Abraham to Paul: A Biblical Chronology (St. Louis: Concordia, 2011): 229.
§6 Jerusalem fell to Herod 27 years, to the day, after it fell to Pompey in 63 BC.

Inclusive numbering, using the principle that a part of a year counts as a whole year, cannot be used here; there was no extra part of a year.

Consensus: $63n - 27 = 36n$  Conflict with consensus date of 37n

Minority: $63t - 27 = 36t$  Agrees with capture of Jerusalem in 36t

§7 Hasmonean government came to an end “after (μετὰ) 126 years”

1 Macc 6:58, 59 (Lysias speaking, at end of siege of Beth-Zur, in 150 s.e. = 162n): “now therefore let us be friends with these men, and make peace with them, and with all their nation; and covenant with them, that they shall live after their laws, as they did before: for they are therefore displeased and have done all these things, because we abolished their laws.” This marks the reasonable beginning of the Hasmonean government, although strife continued for a few years. The use of μετὰ (after) requires non-inclusive counting, so that a full 126 years had elapsed from this date until the Hasmonean government ceased when Antigonus was deposed.

Consensus: $162n - 126 = 36n$  Does not agree with consensus date of 37n

Minority: $162n - 126 = 36n$  Agrees (1 Macc 6 uses Seleucid Nisan-based years)

§8 Aristobolus was high priest for “one year only”

Aristobolus was installed on the same day that Herod and Sossius captured Jerusalem, usually taken as the Day of Atonement. He was murdered after the Feast of Tabernacles in the following year. Only one “new year” occurred during his high priesthood, by either Nisan or Tishri reckoning.

Consensus: by inclusive reckoning, he should be given 2 years; does not work

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34 Ant. 14.487/14.16.4. Josephus recognizes something fatalistic about the coincidence that Jerusalem fell the second time “on the very same day, after 27 years.” Josephus’s use of “after” (μετὰ) also indicates that the 27 years are to be measured in a non-inclusive sense; a full 27 years had passed.


36 There is no evidence that the temporal use of μετὰ means anything other than after or following. See Bauer et al., Greek-English Lexicon; Liddell et al., Greek-English Lexicon; Lust, et al., A Greek-English Lexicon of the Septuagint (Stuttgart: Deutsche Bibelgesellschaft, 2003).

37 Ant. 15.56/15.3.3.
Minority: the assumed accession (non-inclusive) reckoning agrees with Josephus

(§9) BATTLE OF ACTIUM (SEPT. 2, 31 BC) OCCURRED IN SEVENTH YEAR OF HEROD

Although the Antiquities and War passages use the ordinal, “seventh year” of Herod for when the Battle of Actium took place, in accession reckoning this does not imply inclusive numbering. In the accession-year system, a king’s “first year” was the year after his “zero” or accession year, and his seventh year would be a full seven years after the accession year. This is amply demonstrated for the regnal years of the divided monarchy, and also in Babylonian and Assyrian official records. Tishri 1 in 31 B.C. was on September 21, so that the Battle of Actium took place toward the end of Herod’s seventh Tishri-based year, 32t BC.

A curiosity of this particular statistic is that the consensus view also seems to work, although to do so it must take Herod’s starting year as the year in which he conquered Jerusalem, rather than the year in which he was appointed as king by the Romans that is the more common starting place in Josephus. The compound errors of the consensus view (wrong starting year, wrong use of a Nisan calendar, and wrong use of inclusive numbering) cancel each other out to give the correct time for the battle. The fact that the consensus formula seems to work cannot be used to disprove the minority view, however, because the minority view also gives the correct date for the Battle of Actium, and it starts from a more probable starting date.

Consensus: 37n – 6 (act) = 31n Works OK; Battle of Actium Sept. 21, 31 BC
Minority: 39t – 7 = 32t Works OK; Battle of Actium Sept. 21, 31 BC

(§10) HASMONEANS RULED 125 YEARS

This was a statement of Herod on his deathbed, according to Josephus. See reference §6, where the more exact figure is given as 126 years. If these were the actual words of Herod (not very likely), then we do not expect a dying man to be overly concerned with an exact chronology. If the words are the invention of Josephus, he can be given credit for a realistic portrayal of a man in distress for whom a meticulous chronology would seem artificial. In any event, the 125 years does not fit either

38 Ant. 15.121/15.5.2; War 1.370/1.19.3.
39 In Section §3, the construction δ' αὐτῷ τρίτον ἔτος ἐξ οὗ βασιλεύς ἐν Ῥώμῃ ἀπεδέδεικτο, can be translated as “It was his third year from when he was proclaimed king in Rome.” This is not counting accession or non-accession, but factual, i.e., counting from (ἐξ) when Herod was actually proclaimed king (βασιλεύς…ἀπεδέδεικτο). The difference in terminology is critical; Josephus’s reference there is not to the third year of Herod’s reign (βασιλεία), but the third year from the time he was proclaimed king (βασιλεύς).

40 Ant. 17.162/17.6.3.
approach exactly, and the 126 years is what should be taken seriously. Nisan Seleucid years should be assumed, consistent with usage in 1 Maccabees.

Consensus: \[162n - 124 \text{ (act)} = 38n\] Does not agree with consensus 37n for death of Antigonus

Minority: \[162n - 125 = 37n\] Does not agree with minority 36n/37t for death of Antigonus

(§11) HEROD REIGNED 34 YEARS AFTER ANTIGONUS WAS SLAIN, BUT 37 YEARS AFTER HE WAS DECLARED KING BY THE ROMANS\(^{41}\)

Although the consensus view calculates 4n for the death of Herod in both cases, there is a problem with this date that is usually glossed over by those who support the consensus.\(^{42}\) Assuming that Josephus was accurate in his designation (and his repeated use of elapsed times throughout the reign of Herod indicates he thus intended), then Herod had to die in the narrow time slot between Nisan 1, 4 BC, and the Passover that began 13 days later (Nisan 14). During those 13 days, the following events took place:

- Word was sent from Jericho to Jerusalem to gather the vast amount of wealth and funeral trappings that would be part of the funeral procession and burial. The accumulation of this wealth, for which “Archelaus omitted nothing of magnificence therein,”\(^{43}\) must have taken a day at least, probably more. After the material had been accumulated, it was sent to Jericho to use in preparing the body for burial. Even if the magnificence of the event was exaggerated, a state funeral of this type would have required considerable effort in preparation. The minimum time for these events would be three days.

- After the body was prepared for burial and the cortège organized, the body was taken to Herodium, where it was buried. “[T]he time needed for the procession and for the final ceremony in Herodium would be no less than three days.”\(^{44}\)

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\(^{41}\) Ant. 17.192/17.8.1; War 1.655/1.33.8.

\(^{42}\) In the extensive charts that Schürer uses to display the chronology of Herod, dates are given in terms of AUC and BC years, thus obscuring the difficulty of the narrow timeframe for Herod’s death. In a long footnote beginning on History p. 1.464 and continuing to page 465 he devotes one sentence to the problem. After citing the Mishnah and the Talmud that say that New Year for kings was on 1 Nisan, he writes “If this be so, the thirty-fourth year of Herod would begin on the 1st Nisan of the year B.C. 4, and Herod must in that case have died between 1st and 14th Nisan, since his death occurred before the Passover.”

\(^{43}\) War 1.671/1.33.9. The events following Herod’s death, including his funeral, are also found in Ant. 17.156–191/17.6.3–17.8.1.

\(^{44}\) Alla Kushnir-Stein, “Another Look at Josephus’ Evidence for the Date of Herod’s Death,” Scripta Classica Israelica 14 (1995): 76. Kushnir-Stein explains the necessary logistics to support this statement. Her summary: the date of the Schürer consensus for
• A seven-day period of mourning followed.45
• After the period of mourning, Archelaus gave a feast for the multitude. After the feast, he went to the Temple and gave an oration to the people that was well received.46 This could have all happened on the same day, one day after the mourning period.
• However, the mood of the crowd soon changed, at the instigation of some agitators. It was demanded that those who were responsible for the death of those who pulled down the golden eagle in front of the Temple be punished,47 and that Joazar, who had been appointed high priest by Herod because of his support of Herod in this incident, be removed from office. Archelaus acceded to this latter request. All of this must have taken at least one day after the initial time of acceptance by the crowd.
• Archelaus sent his general to address the crowd; he was driven away with stones “...as also those who went in after him to call for self-control. Archelaus kept sending in many men, and they [the rebels] answered everything with rage...”48 Allowing one day for these various embassies would seem to be a very minimum.
• The Passover began.49

The sum of the various events just described as taking place between the death of Herod and before the start of Passover that year is \( 3 + 3 + 7 + 1 + 1 + 1 = 16 \), assuming the extreme minimum time for each event. An excess of days for any one of these events would make the sum greater. But even assuming that Herod obligingly helped the consensus view by dying at the earliest possible time in this period, on Nisan 1, the following events would have gone beyond the start of Passover. The consensus view, with its insistence on Nisan-based years and the death of Herod in 4n, is therefore not credible unless Josephus is entirely discredited with regard to the circumstances of Herod’s death. That position, however, is highly unlikely; all the events he describes are consistent with the magnificence that would be expected for the funeral and the likelihood of the following turmoil. There is no problem, however, with the minority chronology that places the death of Herod at some time shortly after the full lunar eclipse of January 9/10, 1 BC, and well before the start of Passover on April 8 of that year.

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45 War 2.1/2.1.1 (cf. Num 19:11).
46 War 2.2–4/2.1.1–2.
49 Ant. 2.10/2.1.3.
Consensus: 37n – 33 (act) = 4n Does not work; events above cannot fit into 13 days

40n – 36 (act) = 4n Does not work; events above cannot fit into 13 days

Minority: 36t – 34 = 2t Consistent with Herod’s death in early 1 BC

39t – 37 = 2t Consistent with Herod’s death in early 1 BC

§12) HIGH PRIESTLY REIGNS OF HYRCANUS II AND ANTIGONUS TOTALED 27 YEARS

Hyrcanus II, appointed by Pompey, reigned 24 years. He was followed by Antigonus, appointed by the Parthians, who reigned 3 years and 3 months, after which he was defeated by the armies of Sossius and Herod. The total of 27 years and 3 months agrees with the total of 27 years given by Josephus for the time between the capture of Jerusalem by Pompey and its capture by Herod (the extra months must be absorbed into the reign of Hyrcanus, whose years are not broken down into years and months). By inclusive reckoning of the consensus assumptions, the total time should be 23 actual years for Hyrcanus II and 2 actual years 3 months for Antigonus, a total of 25 years plus 3 months, contradicting the 27 years elapsed time given by Josephus. That the 27 years could be by inclusive numbering (so actual 26 years) is ruled out by the exactness of the figure, i.e. 27 years to the day.

Consensus: 23 (act) years + 2 (act) years & 3 months = 25 years & 3 mo. Does not work.

Minority: 24 years + 3 years & 3 months = 27 yrs. Possible if extra months in Hyrcanus’s reign.

§13) 28 HIGH PRIESTS, OVER 107 YEARS, FROM “TIMES OF HEROD” TO DESTRUCTION OF TEMPLE

The 28 high priests, as listed in VanderKam and as extracted from the writings of Josephus, must include Antigonus, otherwise there would be only 27. When Josephus

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50 Ant. 20.245/20.10.1.
51 Ant. 20.244–245/20.10.4.
53 Ant. 20.250/20.10.5.
54 James VanderKam, From Joshua to Caiaphas: High Priests after the Exile (Minneapolis: Fortress, 2004): 385–487. The difficulty of the 28 high priests and 107 years presents for the consensus theory was first presented by Andrew Steinmann, “When Did Herod the Great Reign?” 25–26. To our knowledge, it has never been answered by proponents of the consensus view. One Web-based attempt claimed that, since Antigonus was a king,
wrote that during “the times of Herod” there were 28 high priests, he therefore started those times with Herod’s investiture by the Romans, not with Herod’s capture of Jerusalem and deposing of Antigonus. The consensus view, in contradiction to Josephus’s use of the phrase, nevertheless starts “the times of Herod” with his capture of Jerusalem in 37n, giving 37n + AD 70n – 1 (no year zero) = 106 actual years—contradicted, however, by its reckoning only 27 high priests, not 28.

In Ant. 20.246/20.10.4, Josephus says, “The latter [i.e., Antigonus] ruled for three years and three months, following which he was captured after a siege by Sossius and Herod. When he had been taken to Antioch, he was slain by Antony.”55 It is not clear here what happened after 3 years and 3 months: the start of the siege? Capture of Antigonus? His being slain by Antony? The most reasonable interpretation would seem to be his capture. If we assume this was on the Day of Atonement in 37 BC (consensus year), then going back 3 years and 3 months puts the start of his reign in June or July of 40 BC, i.e. in 40n, and the time for the 28 high priests would be 40n BC + AD 70n – 1 (no year zero) = 109 years. This does not work, even with inclusive reckoning. In the minority view, if Antigonus was captured on the Day of Atonement in 36 BC, then three years and three months earlier would be June or July of 39 BC, which was in 40t according to the Tishri-based calendar. This formula also does not work for the minority view: 40t BC + AD 69t – 1 (no year zero) = 108 years, not 107.

Was Josephus being inexact here, since neither of the two systems comes out to exactly 107 years? Perhaps so, but there is another explanation. In the two places where Josephus gives timespans related to the reign of Antigonus,56 he measures 34 years for Herod “since he had procured Antigonus to be slain.” If the 107 years in the ambiguous passage (Ant. 20.246/20.10.4) refers to the same event, then the consensus formula still does not work, but the minority formula, in which it is assumed that Antigonus was sent to Antony and then put to death at least three months after his capture in Tishri of 36 BC, dates Antigonus’s death to 36t.57 This gives his accession year as 39t and the formula

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55 Ant. 20.246/20.10.4.

56 Ant. 17.191/17.8.1; War 1.665/1.33.8.

57 The Greek is: τρία δ’ ἔτη καὶ τρεῖς μῆνας ἄρξαντα τοῦτον Σόσσιός τε καὶ Ἡρώδης ἐξεπολιόρκησαν Ἀντώνιος δ’ ἀνείλεν εἰς τὴν Αντιόχειαν ἀναχθέντα (Ant. 20:246/20.10.4). This suggests, in line with the interpretation just given, that Josephus is terminating the 3 years and 3 months with Antigonus’s death at Antony’s hand: “When this one had reigned three years and three months, Sossius and Herod captured him by means of a siege, [though] Antony killed him, [after] having brought him to Antioch.” Thus, the formula would put the start of his reign in Tishri 39 and the end of his reign in Nov/Dec 36 and the calculation would be: 39t BC + AD 69t – 1 (no year zero) = 107 years. Note that Josephus does not move on to Herod’s acts as king until after he treats Antigonus’s death. So, at least for Josephus, Herod’s reign does not begin until
works out exactly: $39\text{ BC} + 69\text{ AD} - 1$ (no year zero) = 107 years. With this approach, it is not necessary to charge Josephus with inexactness and contradicting his other dates relative to Antigonus and Herod; inexactness was not his problem, ambiguity was.

Consensus: Wrong because only 27 high priests included in consensus interpretation

Minority: $39 + 69 - 1$ (no year zero) = 107 to fall of Jerusalem (possible)

TABLES OF ELAPSED TIMES

The following tables are intended to provide a summary of the results of the preceding discussion and a convenient way to allow easy comparison of the consequences of which assumption is made regarding Josephus’s method of reckoning elapsed time: by inclusive or non-inclusive numbering. In the tables, the presence of a “Yes” in the rightmost column does not necessarily imply that the opposing alternative is wrong; the item might fit both hypotheses because of their underlying assumptions. It will be seen, however, that in all cases except §9, only one alternative agrees with the data as given in Josephus.

Antigonus’s execution. This would be in keeping with Josephus’s pro-Hasmonean ideology.
Table 1. Formulae for Elapsed Times in the Consensus Approach: Inclusive Reckoning.

<table>
<thead>
<tr>
<th>Event</th>
<th>Consensus formula</th>
<th>OK?</th>
</tr>
</thead>
<tbody>
<tr>
<td>(§1) 6 Hasmonean rulers from Simon through Aristobolus; total of reigns agrees with 79 years between Simon becoming high priest in 142 n and Pompey capturing Jerusalem in 63 n</td>
<td>If Inclusive counting is assumed, one year must be subtracted for each of the 6 rulers, giving 73 years</td>
<td>No</td>
</tr>
<tr>
<td>(§2) 45 years from Herod’s appointment as στρατηγὸς in late 47 or early 46 BC, age 25 until his death at age about 70</td>
<td>$47n + 25 - 70 = 2n$</td>
<td>No</td>
</tr>
<tr>
<td>(§3) Herod began siege of Jerusalem in third year (τρίτον ἔτος) after appointment by Romans</td>
<td>$40n - 2 (act) = 38n$ (not possible since siege began after Nisan 1, 37 BC)</td>
<td>No</td>
</tr>
<tr>
<td>(§4) In Herod’s 18th year from appointment as king by Romans, Augustus Caesar comes into Syria (20 BC). Work starts on Temple</td>
<td>$40n - 17 (act) = 23n$</td>
<td>No</td>
</tr>
<tr>
<td>(§5) Work begins on Temple in Herod’s 15th year, also called his 18th year (see §4)</td>
<td>$37n - 14 (act) = 23n$</td>
<td>No</td>
</tr>
<tr>
<td>(§6) Jerusalem fell to Herod 27 years, to the day, after it fell to Pompey in 63 BC. Non-inclusive counting.</td>
<td>$63n - 27 = 36n$ (conflicts with 37n, consensus date)</td>
<td>No</td>
</tr>
<tr>
<td>(§7) Hasmonean government ended “after μῆτα 126 yrs.” μῆτα requires non-inclusive reckoning.</td>
<td>$162n - 126 = 36n$</td>
<td>No</td>
</tr>
<tr>
<td>(§8) Aristobolus was HP for “one year only”</td>
<td>2 years by inclusive reckoning</td>
<td>No</td>
</tr>
<tr>
<td>(§9) Battle of Actium was in Herod’s 7th year</td>
<td>$37n - 6 (act) = 31n$</td>
<td>Yes</td>
</tr>
<tr>
<td>(§10) Herod on his deathbed: Hasmoneans ruled 125 years, to deposing of Antigonus</td>
<td>$162n - 124 (act) = 38n$</td>
<td>No</td>
</tr>
<tr>
<td>(§11) Herod reigned 34 years after Antigonus was slain, but 37 years after declared king by Romans</td>
<td>$37n - 33 (act) = 4n$</td>
<td>No 58</td>
</tr>
<tr>
<td>(§12) Hyrcanus II, appointed high priest by Pompey in 63 BC, ruled 24 years, followed by Antigonus, 3 years 3 months. Total is 27 years 3 months, agreeing with 27 years from Pompey’s capture of Jerusalem to Herod’s.</td>
<td>Inclusive reckoning would mean 23 actual yrs and 2 actual yrs, 3 mo: total 25 yrs 3 mo, contradicting 27 exact yrs</td>
<td>No</td>
</tr>
<tr>
<td>(§13) 28 high priests &amp; 107 years from Antigonus to fall of Jerusalem in AD 70</td>
<td>$40n (BC) + AD 70n - 1 (no year 0) = 109 years</td>
<td>No</td>
</tr>
</tbody>
</table>

58 See the discussion related to §11, showing that the events related to Herod’s death cannot fit into the 13 days starting with Nisan 1, 4 BC.
Table 2. Formulae for Elapsed Times in the Minority Approach:
Non-Inclusive Reckoning.

<table>
<thead>
<tr>
<th>Event</th>
<th>Minority formula</th>
<th>OK?</th>
</tr>
</thead>
<tbody>
<tr>
<td>(§1) 6 Hasmonean rulers from Simon through Aristobolus; total of reigns agrees with 79 years between Simon becoming high priest in 142 BC and Pompey capturing Jerusalem in 63 BC</td>
<td>Non-inclusive counting shows the numbers agree.</td>
<td>Yes</td>
</tr>
<tr>
<td>(§2) 45 years from Herod’s appointment as στρατηγὸς in late 47 or early 46 BC, age 25, until his death at age about 70</td>
<td>$47t + 25 − 70 = 2t$</td>
<td>Yes</td>
</tr>
<tr>
<td>(§3) Herod began siege of Jerusalem in third year (τρίτον ἔτος) after appointment by Romans</td>
<td>$39t − 2 (act) = 37t$</td>
<td>Yes</td>
</tr>
<tr>
<td>(§4) In Herod’s 18th year from appointment as king by Romans, Augustus Caesar comes into Syria (20 BC). Work starts on Temple</td>
<td>$39t − 18 = 21t$</td>
<td>Yes</td>
</tr>
<tr>
<td>(§5) Work begins on Temple in Herod’s 15th year, also called his 18th year (see §4)</td>
<td>$36t − 15 = 21t$</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>$39t − 18 = 21t$</td>
<td></td>
</tr>
<tr>
<td>(§6) Jerusalem fell to Herod 27 years, to the day, after it fell to Pompey in 63 BC. Non-inclusive counting.</td>
<td>$63t − 27 = 36t$</td>
<td>Yes</td>
</tr>
<tr>
<td>(§7) Hasmonean government ended “after μῆτα 126 yrs.” μῆτα requires non-inclusive reckoning.</td>
<td>$162n − 126 = 36n$. (Hasmoneans used Seleucid Nisan reckoning)</td>
<td>Yes</td>
</tr>
<tr>
<td>(§8) Aristobolus was HP for “one year only”</td>
<td>1 year, non-inclusive reckoning</td>
<td>Yes</td>
</tr>
<tr>
<td>(§9) Battle of Actium was in Herod’s 7th year (accession reckoning)</td>
<td>$39t − 7 = 32t$</td>
<td>Yes</td>
</tr>
<tr>
<td>(§10) Herod on his deathbed: Hasmoneans ruled 125 years, to deposing of Antigonus</td>
<td>$162n − 125 = 37n$ (Hasmoneans used Seleucid Nisan reckoning)</td>
<td>No</td>
</tr>
<tr>
<td>(§11) Herod reigned 34 years after Antigonus was slain, but 37 years after declared king by Romans</td>
<td>$36t − 34 = 2t$</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>$39t − 37 = 2t$</td>
<td></td>
</tr>
<tr>
<td>(§12) Hyrcanus II, appointed high priest by Pompey in 63 BC, ruled 24 years, followed by Antigonus, 3 years 3 months. Total is 27 years 3 months, agreeing with 27 years from Pompey’s capture of Jerusalem to Herod’s.</td>
<td>Non-inclusive numbering works correctly here and elsewhere in Josephus</td>
<td>Yes</td>
</tr>
<tr>
<td>(§13) 28 high priests &amp; 107 years from Antigonus to fall of Jerusalem in AD 70 (see discussion)</td>
<td>$39t + AD 69t − 1$ (no year 0) = 107 years</td>
<td>(Yes)</td>
</tr>
</tbody>
</table>
CONCLUSION

[Note: the conclusion as shown below is slightly different from what was submitted to the editors on April 1, 2020, because we had failed to include updated information related to our corrections regarding section §9 in that submission. It is our hope that the version of the conclusion shown below will be accepted for the publication copy.]

The intention of the present paper was to examine the consequences of two sets of assumptions as applied to the many places in Josephus where he expresses dates for Herod in terms of elapsed years. The discussion focused on the question of whether Josephus was using inclusive or non-inclusive counting, and whether he started the years for Herod in Nisan (the spring) or in Tishri (the fall). There was no attempt, except in occasional incidental ways, to examine the other relevant issues for the chronology of Herod: consular years, Sabbatical years, numismatic evidence, and the year in which Herod’s sons considered their reigns to begin. The authors are aware of these other issues, and subsequent studies will show that they are in harmony with the present conclusions. Only the two most prominent positions regarding the chronology of Herod, those often associated with the names of Emil Schürer and W. E. Filmer, were subjected to the present analysis. For the analysis as applied to these positions, results were summarized in two tables. In those tables, the consensus view (Schürer), with its working assumptions about inclusive reckoning and Nisan years, was shown to be inadequate in calculating all elapsed time references in Josephus except §9, whereas the working assumptions of the minority (Filmer) view calculate everything correctly, including §9. Both systems are in disagreement with the 125-year approximation of §10, but the Filmer chronology is in agreement with the more precise figure of 126 years given in §7, whereas the consensus chronology fails that test.

To summarize: The harmony of the chronology advocated here is shown in Table 2, as contrasted with the incoherency of the chronology based on the consensus hypotheses as shown in Table 1. The success of the chronology based on the minority hypotheses substantiates its date of 1 BC for the death of Herod. This, in turn, is in harmony with the date of late 3 or early 2 BC for the birth of our Lord, and also with the statement in Luke 3:1, 23 that Jesus was “about thirty years old” when he was baptized in the summer of Tiberius’ fifteenth year as emperor (i.e., AD 29). This date for Jesus’ birth was accepted by virtually all the Church fathers, with consequent ramifications for the entire chronology of the New Testament.

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60 If Jesus was born in late 3 BC, he would have turned 30 years old in late AD 28 and would have been about 30¾ years old at his baptism. If he was born in early 2 BC, he would have turned 30 years old in early AD 29 and would have been about 30¾ years old at his baptism.