The Rising of Canopus, the Septuagint,

and

The Encounter Between Shimon the Just and Antiochus the Great

Ari Belenkiy

Mathematics Department, Bar-Ilan University, Israel

Abstract. In this short note we discuss the origin and circumstances of the story about an encounter between a Jewish high priest (Shimon the Just in the Talmudic version or Jaddua in Josephus) and Alexander the Great. As was suggested by Solomon Zeitlin in 1924, the actual story related to the surrender of Jerusalem to Antiochus the Great in 199 BC by the high priest Shimon II. The question of whether Alexander could have possibly entered Jerusalem remained open, however. Here we interpret several vague Talmudic stories related to the encounter and claim that Alexander’s name was a later substitution for the original name, that of Antiochus. The Septuagint plays a crucial role in explaining the “recognition” of the high priest by the king. The visibility of Canopus may provide more precise timing for Antiochus’ arrival in Jerusalem. We also suggest when the change of names could have first happened.

Introduction

The story about a meeting between a Jewish high priest (taken to be Jaddua) and Alexander the Great has been discussed in a number of papers, and with rare exceptions, all agree that such a meeting could not have taken place. An extensive discussion can be found in Shaye Cohen’s paper, “Alexander the Great and Jaddus the High priest according to Josephus,” and Arnaldo Momigliano’s essay, “Flavius

---

Josephus and Alexander's visit to Jerusalem.”

Cohen developed a thread, initially coming from Adolph Buchler, in support of the independence of three different strands in Josephus’ narrative about Alexander's exploits in the Near East, avoiding, however, any definite statement on the historicity of the encounter between Shimon ha-Zadik and Alexander the Great. Momigliano’s argument for a (“dogmatic” in his words) denial of the encounter was that none of the Greek historians ever reported it. True as that is, there are also too many suspicious details in both Josephus and the Talmud to accept the story at face value.

Josephus Flavius (Antiq., 11:8:5, Whiston ed.) says that when the Book of Daniel was shown to Alexander, the latter ‘rejoiced,’ assuming that the prophecy about the Greek king who ought to destroy Persia referred to him. The Talmud (B. Yoma, 69a) calls the high priest ‘Shimon ha-Zadik’ (Shimon the Just) while the latter, a grandson of Jaddua, according to Josephus, took office two generations later, after Alexander’s death. Both Josephus and the Talmud claim that at the encounter, the king ‘recognized’ the High priest as a man whom he allegedly saw ‘in a dream’ in his native country some years earlier. Moreover, the Talmud (Y. Avoda Zara, 3:1) adds a bizarre remark, which seemingly cannot be taken seriously, that the ‘Jewish sages lifted Alexander and showed him that the Earth was round.’

However, the challenge of interpretation can be met under the assumption that the actual encounter occurred between Shimon ha-Zadik and Antiochus the Great in 199 BC. It is not just that the two encounters are ‘too similar,’ as Cohen already observed. It is not that only with the identification of Shimon ha-Zadik with Shimon II the eight Pharisaic generations from Shimon ha-Zadik to Shammai and Hillel (mentioned in Pirkei Avot, ch.1) became uniformly stretched over a plausible period

---

2 A. Momigliano, "Flavius Josephus and Alexander's visit to Jerusalem," Essays on Ancient and
of two hundred years. There is much more at stake: all the peculiar facts mentioned by Josephus and the Talmud can be given simple explanations under a single basic assumption, that most of the Bible at the time of the encounter was already translated into Greek. *Septuagint* is the watchword. Therefore the encounter could not possibly have happened before c. 270 BC.

However, after this paper was written the author ran across Solomon Zeitlin’s 1933 *The History of the Second Jewish Commonwealth*, where he noticed a self-reference to his earlier 1924 paper (in Hebrew) published in the collection “Ner Maaravi.” There Zeitlin made a statement similar to the one defended in this paper, and additionally succeeded in explaining several other difficulties. Discovery of Zeitlin’s paper caused the rewriting of this paper while specifying more modest goals: demolishing the remaining Talmudic “Alexander” stories and conjecturing on when the substitution of Antiochus’ name could have taken place.

**I. Historical Background of the Encounter**

For the reader’s convenience, we shall repeat several decisive arguments by Zeitlin about the historical background of the encounter. Let us start with a brief chronology of the relevant events from Alexander III (d. 323 BC) to Antiochus III (d. 187 BC).

**Assumed High Priesthood Chronology**

---

3 And not over three hundred years, as it had to be with Shimon I, where first four generations were stretched over 200 years.

4 Based on Chapters 11-12 of *Jewish Antiquities* by Josephus Flavius. Cf. analogous table in the *Dead Sea Scrolls: A New Translation*, translation and commentary by M. Wise, M. Abegg, Jr. & Ed. Cook,
The Encounter

The original story spoke about an encounter between High Priest Shimon II and Antiochus III, the Great. There was a struggle c. 200 BC between two political parties in Jerusalem, the pro-Syrian and the pro-Egyptian, which resulted in the surrender of Jerusalem to Antiochus the Great.

Zeitlin was probably the first among the scholars to identify Shimon ha-Zadik with Shimon II as opposed to Shimon I, the candidate of Josephus and many after him. Another important contribution of Zeitlin’s was a proposed amendment of Shimon’s characterization from ישרי (survivor) to נשיא (leader) of the Knesset ha-Gedola. Suggesting that Onias III (and not IV) was an actual builder of the Temple in

Harper, San Francisco, 1996, pp. 36-7. Some discrepancies point to the vagueness of the original source.

Josephus (Antiq., 12: 2) described only one episode of actual translating, happened in the seventh year of Ptolemy II (c. 275 BC). However, the presence in the Septuagint of several later sources (like the Book of Ben Sira) suggests that there could have been several later large-scale translations as well.

Isaac Newton and Graetz among them.
Heliopolis, Zeitlin satisfactorily explained why Pirkei Avot does not count him among the Pharisaic founding fathers.

**The State of the Problem**

Surprisingly, later historians (Cohen and Momigliano included) do not quote Zeitlin. Moreover, Zeitlin himself never ventured to say definitely whether the encounter between Alexander the Great and a Jewish high priest could have taken place. This means that the question is not yet closed, and here we attempt to make a final resolution.

We analyze several other peculiar facts and add new arguments claiming that even tiny details of the encounter could belong only to the Antiochus III - Shimon II pair. Antiochus ‘recognized’ the High priest because he was already familiar with the Septuagint, the Greek translation of the Bible. The alleged ‘lifting’ of the king occurred upon his conquering the citadel (mighty fortress) in Jerusalem, built by Ptolemy I. The proof that the ‘Earth was round’ was given to the king by showing him the bright southern star *Canopus* (which cannot be seen in Antioch) from the citadel’s roof. The place of the encounter, Sapha, is identified as Har ha-Tsofim, a place to the north of Jerusalem. Antipater, mentioned in Talmud, could be Antiochus’ nephew. While editing the text, Josephus added several words, like Macedonia and Parmenio, that were foreign to the original story.

We conjecture that the change of names took place soon after Octavian’s 30 BC visit to Alexander’s sepulcher, sometime during Herod the Great’s tenure. We additionally conjecture that the 72 translators of the Septuagint were 6 priests from 12 mishmarot, thus giving a time constraint on the date of the writing of I Chronicles.
II. Talmudic “Alexander” Stories

‘Recognition of the High Priest’

Areus’ letter to Onias III (I Macc, 12:19-23) witnesses that the Septuagint’s fame spread over the Greek world toward the end of the 3rd century BC. The question of how it was translated (in stages or at once) and transmitted still remains open. One can guess that Antiochus III could have been familiar with Leviticus VIII,\(^8\) whose description of a high priest’s garments allowed the king to ‘recognize’ High Priest Shimon II at their encounter at Sapha.

‘Roundedness of the Earth’

A decisive proof in favor of Antiochus, rather than Alexander, being the hero of the Talmudic story about the encounter comes from the Talmudic saying (Y. Avoda Zara, 3:1) that “the king [Alexander] on his horse was lifted up and shown that the Earth was round.” To convince Alexander, a disciple of Aristotle, about the spherical nature of Earth was hardly necessary. However, we know nothing about the philosophical training of Antiochus III. The ‘lifting’ of Antiochus could have a very transparent explanation - it might be related to his capture of the citadel, a mighty fortress near the Temple Mount built by the first Ptolemies.\(^9\) Antiochus the Great, in his letter to Ptolemy V (Antiq., 12:3:3), writes that ‘Jews helped him eject Egyptians from the citadel.’ Surely he would visit the citadel after capturing it, as did many victors in the past.

---

\(^8\) Or with Exodus XXVIII or XXXIX

\(^9\) Likely, Baris (the future Antonia) on the northwest of the Temple Mount. The citadel’s existence is confirmed by the Second Book of Maccabees IV:12, V:6. According to Josephus, Antiochus IV later built another citadel, Akkra, adjacent to the Temple from the south. It is our opinion that Baris was an enlargement of the “Tower of Hundred” built by Nechemia.
The ancients - Egyptians and Greeks - advanced several arguments to prove that the Earth is round. The major argument by astronomers, referred to by Aristotle in his work *On the Heavens*, was the round form of the Earth's shadow on the moon during lunar eclipses; another that one can see a different sky (stars) at different latitudes.\(^\text{10}\) The only bright star that can be seen in Jerusalem (31°47N) but effectively cannot be seen in Antiochia (36°12N), Antiochus’ capital in northern Syria, is *Canopus, α Argo*, the second brightest star in the sky. In 199 BC it could be seen in Jerusalem from mid-September until mid-March. Even in its highest position over the southern horizon, *Canopus* rises only to 5.7° of altitude over Jerusalem,\(^\text{11}\) and one needs to ascend a high point to be able to see it.

**The Season of the Encounter**

Unfortunately, Greek historians say nothing about the precise time of year that Alexander’s and Antiochus’ armies marched in the neighborhood of Jerusalem. We can suggest, however, two indirect arguments.

After defeating the Egyptian general Scopas at the battle fought at the fountains of Jordan, Antiochus\(^\text{12}\) ‘overran Bethania, Samaria, Gadara, Avila and came to Jerusalem.’ Here is a break in Josephus’ narration and we learn the details from the above-mentioned letter from Antiochus to Ptolemy after the war. Antiochus wrote about the wonderful reception given to him by the Jews and that, because of the Jewish assistance to him, he ‘freed Jews from taxes for the next three years until the month Hyperberetus.’ Because Heperberetus is the twelfth month of the Seleuco-

\(^\text{10}\) See Aristotle, *De Caelo*, book 2, chapter 14. Jews surely learned these arguments from the Egyptians while translating the Septuagint.

\(^\text{11}\) See Sky View Cafe 4.0 [http://www.skyviewcafe.com/](http://www.skyviewcafe.com/). I am grateful to several colleagues from the History of Astronomy List (HASTRO-L) Discussion Group who referred me to this program.
Macedonian calendar, the most obvious solution is that the king began counting three years from Dios, the first month, - since he was in Jerusalem in that month. In 199 BC Dios began on October 17. On this day one could observe Canopus over Jerusalem from 2am to 5am (dawn), with its maximum height of 5.5° above the southern horizon at 4am.

The fact that tractate Yoma reports on the encounter hints that it happened around Yom Kippur, which fell in the September-October period.

Alexander, by contrast, had to invade Egypt proper. It was imperative to avoid the Nile’s annual flood in June-July. For a military expedition against Egypt, the entire summer was undesirable. Autumn was a better option. However, Alexander, as we know (Antiq., 11:8:4), lost 7 months besieging Tyre and 2 months besieging Gaza. This could have shifted his schedule by 9 months, to the spring/summer. We have no records of whether Alexander passed by Jerusalem on his way back from Egypt.

Sapha

The place of the encounter lends another argument in favor of Antiochus. Josephus translated Sapha as a ‘prospect,’ explaining that the name was given because from that site it was easy to see Jerusalem and the Temple. The name, both phonetically and etymologically, strongly reminds one of Har ha-Tsofim (Mount Scopus), which means exactly the same: ‘observers.’ The place is on the north of

---

12 According to a non-extant fragment of Polybius’ Histories, preserved by Josephus in Antiq., 12:3:3.
13 Actually, the king in Josephus’ narrative mentions Dios, but in a somewhat confused way, as though Josephus, on rewriting the original story, confused Dios with Dium, a city in Macedon.
15 The embassy from Alexander to Jaddua, mentioned by Josephus (Antiq., 12:1:1), could be perfectly true.
Jerusalem - the direction from which Antiochus had to come after conquering Samaria. Alexander, according to Josephus, came from Gaza, from the southwest, from which there are no convenient places to observe Jerusalem and the Temple Mount.\footnote{One can think of two more convenient places to see the Temple Mount in modern Jerusalem: Talpiot in the south and the view along the Jaffa Road in the west. However, their names are far from "Sapha" and there is no reliable source for their original names.}

\textbf{‘The Book of Daniel’}

The modern Book of Daniel XI 11-19 makes a direct reference to Antiochus III but contains neither praises nor favorable forecasts. Why would Antiochus ‘rejoice’ on reading the book? Would he be delighted to see the work of a mature historian, a second Herodotus? Hardly, since during his military campaign he had much more skillful historians, such as Zeno, to mention one.\footnote{Polybius (The Histories XVI:14) considered Zeno, together with another contemporary historian, Antisthenes of Rhodes, as ‘worthy of notice’ though he criticized both for some minor mistakes in their description of the Coelo-Syrian war.}

We conjecture that the ‘Book of Daniel’ shown to Antiochus was either a non-extant book, like the so-called \textit{Vision of Daniel} found in fragments in Qumran, or in one of the books of the Septuagint. This could be either the Book of Genesis or the Book of Exodus, which provide many opportunities to ‘rejoice’ for someone who had just defeated the Egyptians. The death of Pharaoh and his cavalry could be one most delightful piece, Abraham’s adventures in Egypt another.\footnote{Polybius (The Histories XVI:14) considered Zeno, together with another contemporary historian, Antisthenes of Rhodes, as ‘worthy of notice’ though he criticized both for some minor mistakes in their description of the Coelo-Syrian war.}

Upon hearing Exodus XXIII, the king could have agreed to a remission of taxes every seventh year (\textit{Antiq.}, 11:8:5), while the description of the tabernacle in Exodus XXVI may have caused him to agree to the Jewish plea for improving the
building and the state of its servants (Antiq., 12:3:3). The first year of tax remission gives a framework for when Antiochus’ letter was written. It could happen only at the beginning of the Sabbatical year 199-198 BC, and therefore the encounter would have occurred a year or two earlier.19

**Echo of a Folkloric Rabbinical Story**

Josephus (Antiq., 13:5:8) writes that the head of the Jewish embassy to the Romans sent by Jonathan Hashmonai c. 145 BC was Numenius, son of Antiochus. The last name is a timely echo of the rabbinical story that Jews promised the conqueror (supposed to be Alexander) that all boys born that year would be called by his name. The father of Numenius, Antiochus, could have been born precisely in 199-198 BC. However, the first time we find the name Alexander in Jewish history is c. 140-130s BC.20

**Changing the name**

Historic memory played a bad joke on Antiochus the Great - after his son, Antiochus Epiphanus, so greatly offended the Jewish nation this name could no longer be a bearer of something good and was substituted with the more palatable, even symbolic, name Alexander, whose famous bearer was coming more and more into vogue in the 1st century BC. The peak of Alexander’s popularity and beginning of his cult was reached in 30 BC, when young Emperor Octavian, upon conquering

---

18 In the *Vision of Daniel*, found in the 4th Qumran cave (4Q243, 4Q244, 4Q245, see, e.g., the Dead Sea Scrolls, op.cit., p. 267), there are many quotations from Exodus and Genesis.

19 Zeitlin (*The History*, p. 16) placed the encounter in 202 BC.

20 King Alexander Janneus was born in 125 BC and Queen Salomea Alexandra in 138 BC (Antiq, 13:16:6). ‘Alexander’ could have become a popular name in Judea after Alexander Balas seized the Seleucid kingship in 155 BC and made an alliance with the Jews.
Egypt, bestowed god-like honors on Alexander’s embalmed corpse.\(^\text{21}\) A formal substitution of Alexander’s name for Antiochus’ could be carried out somewhere after 30 BC, though before Josephus (b. 37 CE) was initiated in the Pharisaic wisdom.

**Josephus the historian**

Josephus Flavius, whom Titus permitted to collect the holy books from the burning Temple, while writing *Jewish Antiquities* in 90s CE in Rome was concerned with his reputation as a reliable historian - Rome was a merciless critic. Alexander was already an unquestionable, almost mythological hero, and Josephus thought that it could be helpful for the future Jewish cause to associate Jews with his name. Even if he had some doubts about the historicity of the encounter, he could not turn back the tide - Antiochus the Great had ended his life as a Roman enemy, so nothing glorious would follow for Jews from claims of arranging a splendid reception for him.\(^\text{22}\)

Josephus had to look for a historically plausible counterpart to Alexander - Shimon II the Just was chronologically too far away. First Josephus placed the encounter in the Pharisaic narrative immediately after Jaddua’s dream (*Antiq.*, 11:8:4) inside the story about Alexander’s relations with the Samaritans. Next he moved the appellation ‘the Just’ to High Priest Shimon I.

The original Pharisaic tradition, preserved by the Talmud (B. Yoma, 69a) in a somewhat confusing way, mentions an Antipater, aide to the king, present at the

\(^{21}\) See Suetonius, ‘August.’ As late as 130 BC the author of the ‘First Book of Maccabees’ calls Alexander a ‘son of Phillip, king of Macedonia.’ Polybius, throughout *The Histories* (c. 140-120 BC), also calls him just ‘Alexander.’

\(^{22}\) Besides, contemporary historians have started reevaluating the stature of Antiochus III. In *The Histories*, XV:37, analyzing the 200-198 BC war against Egypt initiated by Antiochus, Polybius had already remarked that ‘in the late period of his life Antiochus became inferior to his former self.’
encounter. The reference is likely to Antipater, a nephew of Antiochus III, who assisted the king in two wars against Egypt and was featured prominently several times in the historical chronicles.\textsuperscript{23} Josephus, upon learning there were Greek historical books in Rome, could realize that Antipater - a historically sound friend of Alexander who had been left behind in Macedon to supervise home affairs - could not possibly have been present at the encounter. In writing about the encounter, Josephus substituted Parmenio (Alexander’s general and close aide, who accompanied Alexander in his Egyptian campaign) for Antipater.

Josephus could also be responsible for inventing some other details, e.g., for suggesting which parts of the Book of Daniel would please ‘Alexander.’

\textbf{“Seventy”}

Let us make a passing remark on the number and identity of the translators. There is an eternal problem of whether there were 70 or 72. The letter written to Ptolemy by the High priest Eleazar (\textit{Antiq.}, 12:2:6) implies the number ‘72’ because it was the result of taking six men “from every tribe.” Josephus might have (intentionally?) misunderstood the original manuscript (ten tribes had been missing for many years, while only Judah, Levi and Benjamin inhabited Judea).

Josephus himself invariably refers to 70. For some reason he declined to mention the translators’ names, though seemingly he possessed the entire list (\textit{Antiq}, 12:2:7). Let us venture to offer two possibilities. The number of the translators could vary if there were several translations made after the first one, c. 270 BC, described by Josephus. We know about several books included in the Septuagint that were written much later than the mid-3rd century. Second, it could be that each of these 72

\textsuperscript{23} See Polybius, \textit{The Histories}, V:87 and XVI:18).
men were priests - six from each of the 12 mishmarot, priestly watches. This argument, which runs counter to the accepted tradition of 24 mishmarot recorded in I Chronicles XXIV, suggests a serious constraint to I Chronicles’ dating, placing it in the mid-3rd century BC.

If, however, it is accepted, then the kernel of a future political party, rallied later by High Priest Shimon II, constituted the rank-and-file priests and not just laymen.24

**Conclusion**

All of the fable-like Talmudic stories surrounding the encounter of the Jews with a conquering king obtain a straight rational explanation if the encounter is placed in the beginning of the 2nd century BC, after the Septuagint became famous in the Greek world. With this in mind, the only suitable pair of historical characters who could have met under the circumstances described by Josephus and the Talmud is Shimon the Just and Antiochus the Great.

The story of the encounter is clearly Pharisaic in origin. First the bitter pill of betrayal was folded into a sweet cover of minute glory and privileges heaped on by Antiochus the Great. However, its glorious overtones were soon overshadowed by disastrous political consequences - religious coercion and pollution of the sanctuary. Pharisees desperately needed to change decorations. Pharisaic historians substituted Alexander’s name for that of Antiochus and moved the story from its proper place in their historic narrative.25

---

24 Some of the later leaders of this party were priests as well: Shimon ben Shetach, a brother of Queen Salomea Alexandra (wife of the king and high priest Aristobulus and later, after his death, wife of his brother, Alexander Janneus), and, probably, Shammai.

25 Its proper place is before the letter of Antiochus to Ptolemy, related in Antiq.,12:3:3, in the place where Josephus inserted a quotation from Polybius, as if filling in a lacunae in the original text.
Josephus, writing in Rome and for Romans, had to convince Romans of the truth of the encounter between the Jews and Alexander and included Parmenio and Macedon in the story. After his monumental *Antiquities of the Jews* was written and acknowledged by the Roman elite, the Talmudic version, written down later, seemed unreliable and a bit childish. Though discrepancies between the two should have alarmed historians, they did not, for the reasons we delineated in the introduction.

**Acknowledgements**

I would like to thank Albert Baumgarten for references to modern literature on the subject and Larry Zalcman (both of Bar-Ilan University) for encouragement. I am grateful to Tom Peters and Robert H. van Gent (University of Utrecht) for references to Canopus; to Joan Griffith (of Maryland) for web references to Alexander the Great; to Wayne Zanker (of Adelaide) for discussion on the Seleuco-Macedonian calendar; to Mike Sanders (of California) for discussion on the location of the citadel and to Ed Wright (Arizona University) for a discussion about Jerusalem’s topography.