

The Tradition of the 364-Day Calendar versus the Calendar Polemic in Second Temple Judaism¹

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Abstract: The article presents the major hypotheses concerning the emergence of the 364-day calendar within Judaism and the related calendrical controversy, which presumably caused the separation of a certain group of Jews, known to us as the Qumran Community, from the temple cult in Jerusalem. It is not known whether the 364-day calendar tradition is older than that of the *Astronomical Book*, or whether the adoption of this tradition was accompanied by conflicts. The Qumran texts do not provide unequivocal evidence for any calendrical polemics. The only witness to these polemics is *The Book of Jubilees*, copies of which were found in the Qumran library. However, the Qumran Community itself did not share the radical line of *The Book of Jubilees*, which condemns reliance on the moon in time-keeping. The 364-day calendar is presumed to have been a distinctive feature of the Qumran Community, which however did not arouse any controversies within Second Temple Judaism.

Keywords: calendar; 364-day; Qumran; polemic; controversy

Less than a year after the publication of the first manuscripts, discovered by two Bedouins in one of the caves on the northwest shore of the Dead Sea (1947),² Shem-aryahu Talmon put forward a hypothesis that the cause of the schism that gave rise to the Qumran community was a dispute over the observance of a correct calendar.³ Several years later this view was approved by Józef Tadeusz Milik,⁴ and then by several other scholars,⁵ although it was Talmon who regarded the calendrical controversy as fundamental in understanding the origin of the Qumran community and

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2 Burrows – Trever – Brownlee, *The Dead Sea Scrolls of St. Mark’s Monastery*, I–II.

3 Talmon, “Yom Hakkippurim,” 549–563.

4 Milik, *Ten Years of Discovery*, 64–70.

5 VanderKam, “The Origin, Character and Early History,” 390–411; *idem*, “2 Maccabees 6–7a,” 52–74; Chyutin, “The Controversy of the Calendars,” 209–214; Wacholder, “Calendar Wars,” 208–222; VanderKam, *Calendars in the Dead Sea Scrolls*, 113–116; Vermes, *The Complete Dead Sea Scrolls in English*, 77–79; Fraade, “Theory, Practice, and Polemic,” 147–181.

sustained his thesis till the end of his life.⁶ However, the publication of the subsequent texts from the remaining caves and the resulting knowledge of the calendrical system included in the Qumran texts changed our perception of their function and significance within the community, and consequently, the presumed importance of the system for its formation. The aim of this paper is to answer the following questions: When and in what circumstances could the 364-day year have been adopted into Judaism? Did the process take place peacefully or rather in an atmosphere of dispute? What role did the Qumran community play in the adoption of the 364-day year? Did the community defend it as an already established tradition or did they initiate it? Finally, do the currently available source texts support the thesis of a calendrical polemic as the main reason for the origin of the Qumran community?

1. Introduction to the Concept of the 364-Day Year

After the publication of all the available manuscripts from Qumran it became evident that the 364-day year was the basis for almost all the calendrical texts.⁷ The 364-day year is made up of twelve months of 30 days each; however, at the end of each quarter, an additional day is inserted to give a total of 364 days. The 364-day year probably originated from the Babylonian ideal 360-day year, although scholars have discussed the probable presence of the 364-day year in the Babylonian texts.⁸ The essential feature of this year, as it appears in the writings of the Qumran community, is the constancy of its days, irrespective of astronomical phenomena and the actual length of the lunar and solar years. Therefore, the Sabbath and particular appointed festival times fall on the same day of the month each year, and the 364-day year begins on a Wednesday since on the fourth day God created the celestial bodies (Gen 1:14-19), which allow us to create a system of reckoning time.

As the 364-day year does not correspond to the actual length of the solar year (365.25 days), it cannot be described as a solar year,⁹ especially that, except for *The Book of Jubilees*, the users of the 364-day calendar did not negate the lunar phe-

⁶ Talmon, "The Calendar Reckoning," 162–199; *idem*, "Anti-Lunar-Calendar Polemic," 29–40; *idem*, "Calendar Controversy in Ancient Judaism," 379–395; *idem*, "Calendars and Mishmarot," 112–117; Talmon – Ben-Dov – Glessmer, *Qumran Cave 4*, XVI, 3, 6.

⁷ Abegg, "The Calendar at Qumran," 154–171. It is not certain whether the scroll 4Q318 refers to the 360-day year; nevertheless, such a year might have been the basis for the 364-day year. The problem of 4Q318 has been described in detail: Greenfield – Sokoloff, "An Astrological Text from Qumran," 507–525; Albani, "Der Zodiakos in 4Q318," 3–42; Wise, "Thunder in Gemini," 13–50.

⁸ Horowitz, "The 360 and 364 Day Year," 35–44; *idem*, "The 364 Day Year," 49–51; Koch, "AO 6478, MUL.APIN," 97–99; *idem*, "Kannte man in Mesopotamien," 109–112; *idem*, "Ein für allemal," 112–114.

⁹ Phillip R. Callaway ("The 364-Day Calendar Traditions at Qumran," 19–28) and Uwe Glessmer ("Calendars in the Qumran Scrolls," 231) prefer the term "traditions of the 364-day calendar," while Jona-

nomena, but, on the contrary, took them into account.¹⁰ Moreover, it is also not correct to opt for – as Milik did¹¹ – a synchronous calendar since the concept of the 364-day year is based on a theoretical calculation and is not an attempt to reconcile the sun's movements and the lunar phases. In this context, the intriguing thing is that no textual evidence has yet been found, which would allow us to explain how the community solved the factual disparity between the 364-day schematic year and the solar year, especially over a period of several years or a few dozen decades.¹²

The schematic 364-day year emerged in Judaism for the first time in the *Astronomical Book of Enoch* (1 *Hen* 72–82, 3rd century BC¹³), then in *The Book of Jubilees* (mid-2nd century BC¹⁴), and finally, in texts discovered at Qumran (2nd century BC–1st century AD). Obviously, this calendrical tradition must have existed within Judaism for some time before it was written down, but having no textual evidence we can only guess what the circumstances and time of its adoption were. Nevertheless, in order to define the *terminus a quo* of a potential calendar polemic in the context of the 364-day year tradition, we should firstly indicate a probable period during which this calendar may have come to be considered normative by at least one Jewish group.

2. The 364-day Year – Between Babylon and Jerusalem

One of the first hypotheses for the origin of the 364-day calendar was put forward by Annie Jaubert. She observed that the 364-day calendar she had reconstructed strikingly harmonised with the late priestly tradition of the Hebrew Bible. For if the 364-day calendar were to be applied to it, by no means would the Sabbath day be violated (whether due to travelling or performing any other forbidden activity), and moreover, festival days would consistently be held on Sundays, Wednesdays or Fridays.¹⁵ Considering that the oldest book in which the 364-day calendar can thus be discerned is the Book of Ezekiel, it can be concluded that its tradition dates back

than Ben-Dov calls it “a schematic calendar” (“The 364-Day Year in the Dead Sea Scrolls,” 80), in turn, Ron H. Feldman uses the term “Sabbath” (“The 364-Day ‘Qumran’ Calendar,” 350).

¹⁰ Ben-Dov – Horowitz, “The Babylonian Lunar Three,” 104–120; Ben-Dov, “Lunar Calendars at Qumran?,” 173–189; Baumgarten, “4Q503 (Daily Prayers),” 399–407.

¹¹ Milik, *The Books of Enoch*, 274–276.

¹² The text of 4QOtot (4Q319) may show certain attempts of such intercalations, see Glessmer, “The Otot-Texts (4Q319),” 125–164. For other hypothetical intercalary systems of the 364-day calendar and their evaluation see Beckwith, “The Modern Attempt,” 457–466; *idem*, *Calendar and Chronology*, 125–140. Ben-Dov (*Head of All Years*, 18–20) doubts whether such a system was ever used since there is no evidence of its existence, and moreover, it would be an admission that this divine and biblically rooted calendar is imperfect.

¹³ Nickelsburg – VanderKam, *1 Enoch* 2, 339–341; Drawnel, *The Aramaic Astronomical Book*, 28, 46–53.

¹⁴ VanderKam, *The Book of Jubilees*, V–VI; VanderKam – Milik, “Jubilees,” 2.

¹⁵ Jaubert, “Le Calendrier des Jubilés,” 250–264; *idem*, *The Date of the Last Supper*, 22–38.

to at least the exilic period. According to Jaubert, this calendar was the official cultic calendar in the first centuries of the Second Temple period although with time it came under the influence of the lunar system that characterised the secular calendar in Judah at that time, as evidenced by Sir 43:6-8.¹⁶ The overly violent attempt to modify the 364-day calendar during the reign of Antiochus IV Epiphanes (175–163 BC) was to cause the Maccabean revolt, after which the conservative circles related to *The Book of Jubilees* and the community of Qumran tried to restore the traditional priestly of 364-day calendar for the purposes of worship.¹⁷

Jaubert's hypothesis has been criticised by some scholars¹⁸ who think that her idea of the biblical authors' preference in the dating of feasts having fixed days of the week (a Sunday, Wednesday or Friday) resulted from their literary predilection rather than their disciplinary adherence to the 364-day calendar scheme.¹⁹ Further, Ben Zion Wacholder points out that while those Qumran calendrical texts that used the allegedly traditional 364-day calendar emphasise the days of the week, the biblical texts only focus on the day of the month.²⁰ It is also puzzling why a centuries-old tradition calendar that does not correspond to the factual solar or lunar year bears no evidence of an intercalation system that would solve the problem of the real difference between the 364-day year and the solar year. In turn, Ron H. Feldman has accused Jaubert of not attempting to place the transition to a 364-day calendar in any historical event that could have shed light on the motives lying behind the choice of this calendar.²¹

Despite the lack of textual evidence proving that the 364-day calendar was used in Judah during the Second Temple period, numerous scholars refer to the appearance of the 364-day year in the first post-exilic years. Hartmut Stegemann emphasises the influence of the Jews of the Egyptian milieu in this context. In his opinion, the Jewish repatriates who returned from Egypt to Jerusalem after the Edict of Cyrus (539 BC) chose to adopt the well-known Egyptian lunisolar calendar²² to the sev-

¹⁶ Jaubert, *The Date of the Last Supper*, 43–51; 137–146.

¹⁷ Jaubert, *The Date of the Last Supper*, 45–46.

¹⁸ See Baumgarten, "The Calendar of the Book of Jubilees," 317–328; Kutsch, "Der Kalender des Jubiläenbuchs," 39–47; Davies, "Calendrical Change," 81–84; Wacholder – Wacholder, "Patterns of Biblical Dates," 1–40.

¹⁹ Presenting the results of his analysis in tables showing the dating of the biblical texts and favouring one day of the week over another, as well as one month over the others, Ben Zion Wacholder concludes that if the biblical authors followed a specific calendar rather than literary predilection, then the biblical dating would have been more varied and random. See the tables: Wacholder, "Calendar Wars," 218–222; discussions of the tables in Wacholder, "Calendar Wars," 210–211.

²⁰ Wacholder, "Calendar Wars," 211.

²¹ Feldman, "The 364-day 'Qumran' Calendar," 356.

²² It was a 365-day solar calendar to which five epagomenal days at the end of the year were added. By the Decree of Canopus issued by Ptolemy III Euergetes in 238 BC, the intercalation was changed by adding a sixth day to the five-day celebration of the beginning of the year every four years. For the Egyptian calendar, see Stern, *Calendars in Antiquity*, 125–166.

en-day Sabbath cycle by deleting one day from it and establishing a new 364-day calendar for worship, which was done in the year of the dedication of the rebuilt temple (515 BC).²³ At the same time, the Babylonian lunisolar calendar²⁴ was left for administrative purposes as it was in force in the Middle East and was used by Jewish returnees from Babylon.²⁵

Also, Wacholder accepts the thesis that the first postexilic years (ca. 500 BC) witnessed the introduction of the 364-day year in Judaism.²⁶ Referring to the Aramaic texts from Elephantine (5th century BC)²⁷ and slaves' sale documents in Samaria (5th–4th cc. BC)²⁸ – both of which testify to the Babylonian lunisolar calendar – and at the same time, recalling the ancient polemics between the Sages and the Boethusians (בִּיְהוּסִים) in the Talmudic tradition regarding the dating of the Feast of Weeks,²⁹ Wacholder concludes that the essence of this “calendar war” must have been a conflict between the Jerusalem elite opting for the lunisolar calendar and a sectarian group that in turn wanted to impose the 364-day calendar they had created, the tradition of which was found in the *Astronomical Book*, and then in *The Book of Jubilees* and the texts from Qumran.³⁰ The conflict must have arisen out of the inability to determine precisely – in Jerusalem and outside it – when a particular feast day was to be celebrated. Although the proto-rabbis took over the 19-year intercalation system of the lunisolar calendar³¹ from the Babylonians (6th century BC), this system was not actually put to use until the 5th/6th cc. AD.

²³ Stegemann, *The Library of Qumran*, 166–169.

²⁴ It was a 354-day calendar based on the lunar year (354.36 days), consisting of 12 months alternating 30 and 29 days, supplemented every eight years with three months, and at least from the 4th century BC it was supplemented seven times with 30 days in a 19-year cycle. Both intercalation systems aimed to make up for the annual loss in relation to the solar year (365.24 days). For the Babylonian lunisolar calendar see Stern, *Calendars in Antiquity*, 71–123.

²⁵ Stegemann, *The Library of Qumran*, 171.

²⁶ Wacholder, “Calendar Wars,” 207–222.

²⁷ B2, 1 Cowley 5; see “Contracts,” Porten – Yardeni, *Textbook of Aramaic Documents*, II, 18; “Double Dates in the Mibtahiah Archive,” Porten – Yardeni, *Textbook of Aramaic Documents*, II, 185. See also: Porten, “The Calendar of Aramaic Texts,” 13–32; Stern, “The Babylonian Calendar at Elephantine,” 159–171.

²⁸ Gropp, “The Samaria Papyri from Wadi Daliyeh,” 3–116.

²⁹ *Megillat Ta’anit* 1,1; *Mishnah Rosh Hashanah* 2,1ff; *Yerushalmi Rosh Hashanah* 2,1 (57,4); *Bavli Rosh Hashanah* 22b; *Mishnah Menachot* 10,2; *Tosefta Rosh Hashanah* 1,15.

³⁰ For the sake of clarity, it should be added that Jewish scholars identify some *halakhic* interpretations of the Qumran community with those associated with the Boethusians by the rabbinic tradition, hence Wacholder’s assumption that the 364-day calendar from Qumran may have had its origin in this sect. For the relationship between the Boethusians’ views and the *halakha* of the Qumran community, see Sussman, “The History of Halakha,” 179–200, esp. 191–200; the full Hebrew text bearing the same title can be found in: *Tarbiz* 59 (1990) 11–76. For the relationship between the Boethusians and the Essenes see Schremer, “The Name of the Boethusians,” 290–299. In fact, there is no evidence that the separation of the Boethusians from the so-called mainstream Judaism was caused by a conflict over the observance of the calendar, especially the 364-day calendar.

³¹ See, n. 25.

Recognising the emergence of a Jewish 364-day calendar from the schematic year,³² Feldman formed a hypothesis that this calendar was implemented as part of the sabbatarian reforms attributed to Nehemiah; moreover, it was a key catalyst to institutionalise a perpetual weekly Sabbath, thereby replacing a full-moon Sabbath³³ described in the biblical texts written or redacted during the exile.³⁴ According to Feldman, after Nehemiah had arrived in Jerusalem with a 364-day calendar as a creation of the Babylonian-Persian Jewish community he imposed it on the local Judean community, which, in his opinion, broke the proper Sabbath day (see Neh 13:15-21), being probably observed according to the standard lunar year. He presented it, like the Mosaic Law, as being revealed by Yahweh. Although he notes that the Babylonian month names also appear in the post-exilic biblical texts, including the Book of Nehemiah itself (1:1; 2:1; 6:15), they were used in a secular context, but where the context indicates a cultic use, the months are given without any names, similar to the use of the 364-day calendar known from Qumran.

Although the strength of Feldman's hypothesis is the fact that he took into account the Babylonian origin of the 364-day calendar, of which the ancient authors could not have been certain, there is still no evidence dating from the Persian period that could confirm such a radical calendar revolution, especially in the context of the celebration of the Sabbath.

Another hypothesis moves the process of the emergence of a 364-day calendar to the third century BC. Its author, Roger T. Beckwith,³⁵ assumes that the 364-day year tradition from the *Astronomical Book* must have preceded the book itself, and as this tradition was preserved by the Essenes, its origin must be related to the Proto-Essene movement, just like the origin of the *Astronomical Book*. According to Beckwith, the proto-Essene movement arose during the Ptolemaic sovereignty (305–198 BC), which was also marked by an increased influence of the Greek culture. It was under the influence from the Egyptian calendar and the Greek calendar,³⁶ that the proto-Essenic movement could have created a calendar that, unlike the 365-day Egyptian calendar, was divided into four equal seasons following the Greek calendar. In

³² He agrees with Wayne Horowitz's opinion ("The 360 and 364 Day Year," 35–44; "The 364 Day Year in Mesopotamia Again," 49–51), according to which the 364-day year can be found in the assumptions of the Mesopotamian astrological texts.

³³ The Sabbath understood in this way, referring to the Babylonian *šapattu*, falling on the 14th or the 15th day of the lunar month, is the day when the moon appears at sunset and is present in the sky until sunrise, and from sunrise to sunset it is no longer visible.

³⁴ Feldman, "The 364-day 'Qumran' Calendar," 342–364.

³⁵ Beckwith, *Calendar and Chronology*, 105–110.

³⁶ It is the Greek astronomical calendar which was a lunar calendar, synchronised with the solar year in an 8-year cycle by adding the thirteenth month in the third, fifth and eighth year. The knowledge of this calendar seems to be revealed in the Ethiopian Book of Enoch (cf. *1 Hen* 74:12-16), see Glessmer, "Calendars in the Qumran Scrolls," 266, n. 163. For the Greek calendar see Stern, *Calendars in Antiquity*, 25–70, esp. 49–53.

his reconstruction, Beckwith neither links the process of the creation of the 364-day calendar with any specific historical event nor suggests possible controversies that could have accompanied the process.

Also, Hanan Eshel opts for the 3rd century BC as the date of the calendar and its Egyptian influence.³⁷ As he states, the terms *יָרֵךְ* “moon” and *יָרֵךְ הַחֹדֶשׁ* “new moon,” used in the biblical chronology, show that in the First Temple period, the Israelites used the lunar calendar that was easy to apply in an agrarian and mostly illiterate society; it was enough to observe the moon phases. With time, however, the educated priestly caste decided that it was worth changing the calendar to a solar one, and this decision was most likely made during the Ptolemaic rule, when the Jerusalem elite was strongly influenced by the Egyptian circles. Since, after many centuries of using the lunar system, this kind of change was a huge revolution, it had to be presented in theological terms as being not contrary to the will of God. This role was to be played by the *Astronomical Book*, which would reflect the priestly attempt to promote the universal acceptance of the calendar change. Yet, the agrarian community, opposing the Jerusalem elite, would have continued to observe the moon in their everyday life.

Moreover, Sacha Stern supports the emergence of the 364-day calendar from the Egyptian calendar as the most likely hypothesis. He begins his argument by assuming that since a lunisolar calendar was used throughout the Middle East, it is doubtful that Judea was an exception in this regard. The fact that the biblical authors did not see the need to specify the dates of the events they described must have resulted from the assumption that the then recipients of the text would automatically have associated the given date with the calendar they used. If there was a separate, cultic 364-day calendar, a unique one in the context of the Middle East, one might expect that the biblical authors would have provided some clarification, which, however, cannot be seen in the biblical texts. There is, therefore, no reason to place the practice of the 364-day calendar earlier than in the third century BC, i.e. when it first appeared within Judaism in the *Astronomical Book*.³⁸

As far as the latter is concerned, Stern agrees with Johannes Koch that the 364-day year is not a borrowing from the astrological texts included in MUL.APIN,³⁹ but was invented by the author of the book who followed the ideal 360-day year from MUL.APIN.⁴⁰ Nevertheless, the mere fact that there was a 360-day year in the Babylonian texts does not explain the innovative transition to the 364-day year at all, for it may well have been inspired by other sources.

³⁷ Eshel, “4Q390,” 108–110.

³⁸ Stern, *Calendars in Antiquity*, 197–198.

³⁹ Koch, “AO 6478, MUL.APIN” 97–99; *idem*, “Kannte man in Mesopotamien,” 109–112; *idem*, “Ein für allemal,” 112–114.

⁴⁰ Stern, *Calendars in Antiquity*, 198–199.

The rejection of the Babylonian sources as an inspiration for the invention of the 364-day year is supported by the fact that the 360-day year is by definition theoretical, scientific, schematic and unchanging, not intended for practical purposes, while the Babylonian tradition calendars, designed for their practical usage, were always based on the lunar phenomena and were, therefore, subject to change.⁴¹ Thus, if in Judaism the 364-day calendar was created for worship, or at least for practical usage, its creators must have relied on a calendar that had a long tradition and which could potentially inspire the Jewish elite. As shown by Stern, such a calendar was the 365-day Egyptian one.

The idea of the Egyptian inspiration of the calendar is supported by its nature, which – like in the case of the 364-day calendar known from Qumran – is constant, unchanging, abstract and independent of any empirical observations; at the same time serving public and religious purposes.⁴² The “Judaisation” of the Egyptian calendar, which involved the transition from 365 days to 364 days, resulted from the desire to create a year divided into four seasons, rather than three seasons as it was in the case of the Egyptian calendar. Thus, the 364-day year from the Book of Enoch is a compromise between the ideal Babylonian 360-day year (divided into four equal seasons) and the Egyptian 365-day year.⁴³ Another plausible explanation might be that the Jews rejected the five epagomenal days as abnormal on account of their absence in the year, or more likely, because those days were dedicated to the celebration of the birthdays of the major Egyptian gods.⁴⁴

It is no coincidence that for the first time the 364-day year was recorded in the *Astronomical Book*, which dates back to the third century BC, that is to say, the time when the Ptolemies ruled Judea. Although Stern is aware that the Ptolemies did not impose their calendar in Judea as they used the Macedonian calendar, it was precisely this fact that would have given the Judeans full freedom to “Judaise” the Egyptian calendar. Naturally, this was only done by a certain group of Judeans, while all the rest continued to follow the lunisolar calendar; the incompatibility with the latter, and also with the movements of the celestial bodies, could have resulted in the rejection of the new calendar as completely impractical.⁴⁵ Thus, while Beckwith regards the 364-day year as a “compromise” between the Greek calendar and the Egyptian calendar, Stern opts for a “compromise” between the Egyptian calendar and the Babylonian ideal year.

The hypotheses, which have briefly been presented, concerning the emergence of the 364-day calendar in Judaism lead to many possibilities due to the lack of textual evidence. It is difficult to prove the existence of the 364-day calendar scheme from

⁴¹ Stern, *Calendars in Antiquity*, 199–200.

⁴² Stern, *Calendars in Antiquity*, 200.

⁴³ Stern, *Calendars in Antiquity*, 201.

⁴⁴ Stern, *Calendars in Antiquity*, 201.

⁴⁵ Stern, *Calendars in Antiquity*, 202.

the exilic and post-exilic biblical texts; at most, following Jaubert, their inconsistency with this scheme can be taken into account. This, however, is still not sufficient to believe that the 364-day calendar was used for cultic purposes whether in the Babylonian-Persian period or during the reigns of the Ptolemaic dynasty.

The fact is that the non-biblical Jewish texts from the 7th century BC⁴⁶ and from the 5th-4th centuries BC⁴⁷ contain the lunisolar calendar, which at that time was in force in Syro-Palestine and was also used by the Jews at Elephantine. Nevertheless, it was a secular calendar that did not necessarily serve cultic purposes in Judah.

As there is no doubt that the author of the *Astronomical Book* was inspired by the Babylonians' astrological knowledge,⁴⁸ the pre-exilic origin of the 364-day calendar should rather be ruled out, but if it were used in the post-exilic times, it would be at best of a theoretical nature, not implemented in political or cultic life.⁴⁹

So far, the first witness of the adoption of the 364-day year by the Jews is the *Astronomical Book* (3rd century BC),⁵⁰ but as aforesaid, there is no consensus as to whether this year was adopted from Babylonia as a 364-day scheme or whether it emerged from the ideal 360-day year, which to a certain extent is revealed in the contents of both the *Astronomical Book* and *The Book of Jubilees*.⁵¹ Perhaps Stern is right stating that the fact of drawing inspiration from the 360-day year does not necessarily mean that a 364-day year emerged on the basis of that year. Nevertheless, it does not show any textual relationships with the theory of the *Astronomical Book* that would attest to the alleged "compromise" between the ideal year and the Egyptian calendar.

Although the *Astronomical Book* presents the 364-day year in a neutral and scientific way, the text 72:1-3 betrays the author's polemic against a group that did not insert four additional days in the 360-day year (72:1). The author shows that this calculation was erroneous (72:2), at the same time referring to the authority of Uriel the angel, to whom God gave knowledge about all the luminaries of the heaven (72:3).⁵² In the parallel text, 82:4-8, the same group that does not insert the four extra

⁴⁶ Avigad, "Epigraphical Gleaning from Gezer," 43-49; Talmon, "The New Hebrew Letter," 89-112.

⁴⁷ Porten, "The Calendar of Aramaic Texts," 13-32; Stern, "The Babylonian Calendar at Elephantine," 159-171.

⁴⁸ Albani, *Astronomie und Schöpfungsglaube*, 173-272; Glessmer, "Horizontal Measuring," 259-282; Drawnel, "Moon Computation," 3-41; Ben-Dov, *Head of All Years*, 153-196; Drawnel, *The Aramaic Astronomical Book*, 260-311.

⁴⁹ Milik, *The Books of Enoch*, 8.

⁵⁰ Helen R. Jacobus accused Józef Tadeusz Milik and Henryk Drawnel of reconstructing the *Aramaic Astronomical Book* too hastily on the basis of its later Ethiopian version, overlapping the former with a 364-day year, which in her opinion was an anachronism. The fact that in the Ethiopian version of the Book of Enoch we are dealing with a 364-day year does not prove that this year was present in the original Aramaic version and as such it evolved into a 364-day calendar known from the texts of the later community at Qumran; see Jacobus, "Calendars in the Qumran Collection," 225-229; cf. Jacobus, *Zodiac Calendars*, 260-343, especially 334-340.

⁵¹ Cryer, "The 360-Day Calendar Year," 116-122.

⁵² Nickelsburg - VanderKam, *1 Enoch* 2, 458-460.

days to the year is called “the sinners,” while those who correctly calculate are labelled “the righteous.”⁵³ However, 82:5 suggests that this group did not insert the four extra days to a year as an act of ill will, but rather an act of miscalculation simply born out of ignorance.⁵⁴ The author does not say anything else about this erring group with whom he gets into polemic; hence it is difficult to identify it.

The Book of Jubilees is clearly polemical in the context of the 364-day year. Its author warns that all those who calculate according to the moon phases will notice that the moon disturbs the seasons, reducing it by ten days a year. As a result, confusion will arise, the holy days will be insulted, and a profane day will be considered holy; in other words, they will go wrong while observing the months, sabbaths, feasts and jubilees (6:36-37). Obviously, the mention of a ten-day reduction of the year is a reference to the 354-day lunar year. Thus, unlike the *Astronomical Book*, the author of *The Book of Jubilees* does not address the problem of unconsciously omitting the four extra days in the year because he does not even mention them,⁵⁵ but he clearly aims the shafts of his criticism at the followers of the lunar year, while opting for the solar year. In fact, it is the only Judaic source that distinctly and unequivocally favours the sun while criticising observations based on the phases and visibility of the moon.

As *The Book of Jubilees* is dated to the mid-second century BC, i.e. after the Maccabean Revolt, but before the community of Qumran was formed,⁵⁶ its calendar polemic against the deceptive observations of the moon (*Jub.* 6:35-38) may reflect the events that led to the formation of the Qumran community and consequently, the preservation of the 364-day year tradition.

3. The 364-day Year – Between Jerusalem and Qumran

In the context of the calendar polemics, one of the better-documented hypotheses, aiming at reconstructing the events of the first half of the second century BC, was proposed by James C. VanderKam.⁵⁷ First of all, he agrees with Jaubert that the 364-day calendar was the official cultic calendar used from at least the Second Temple period, and its change occurred with the decrees of Antiochus IV Epiphanes.⁵⁸ In

⁵³ Nickelsburg – VanderKam, *1 Enoch 2*, 550–551.

⁵⁴ Nickelsburg – VanderKam, *1 Enoch 2*, 552.

⁵⁵ Certainly, their equivalent cannot be the four “days of remembrance” (*Jub.* 6:23), which begin each of the quarters of the year because they are actually the same as the first day of the month and do not constitute the extra days added at the end of each month, ending a division.

⁵⁶ VanderKam, *Textual and Historical Studies*, 282–285.

⁵⁷ VanderKam, “The Origin, Character and Early History,” 390–411.

⁵⁸ Although James C. VanderKam (“The Origin, Character and Early History,” 390–399) sees certain disadvantages of Annie Jaubert’s hypothesis, he thinks that it is still the best one to explain the biblical calendar data.

his opinion, several texts suggest that, as a result of the decrees of Antiochus IV, the traditional sacrifices and the observance of festival days and sabbaths were abandoned and replaced by other rites and festivals (e.g. Dan 8:11-14; 9:27; 11:31; 12:11; 1 Macc 1:41-61; 2:15-26; 2 Macc 6:1-11), which obviously does not prove that the current calendar system was changed at that time.⁵⁹ Nevertheless, the text of Dan 7:25, in which the prophet announces that the fourth beast will try to change the fixed times and laws, seems to indicate a real change of the calendar since the use of the verb שנה can only be understood as a change of something, while the subject of the change itself is defined by the noun ימים, which is equivalent to the Hebrew word מועד, referring to the fixed feasts.⁶⁰ VanderKam is convinced that this text alludes to the change from the 364-day calendar to the lunisolar one, which would later be condemned in *The Book of Jubilees*.

This interpretation of Dan 7:25 would be supported by the fragments of 2 Macc 6:7a and 1 Macc 1:59, referring to the monthly celebration of the birthday of Antiochus IV, which was not only of a family and political character, but as suggested by 2 Macc 6:7a, also of a cultic character.⁶¹ Evidently, in order for the Jews to celebrate the king's birthday by offering sacrifice on the same day of each month (1 Macc 1:59), they must have been imposed a Seleucid cultic calendar, harmonised with the secular Macedonian calendar,⁶² so that the Jews would not miss the newly imposed festival.⁶³ If so, it would mean that by virtue of the edict of Antiochus IV in 167 BC, in Jerusalem the cultic calendar was changed from a 364 day-year to the lunisolar 354 day-year. It was the latter that the group of Jews, who formed the foundations of the community at Qumran, came out against later on. Yet, VanderKam notes, as if anticipating counter-arguments, that a return to the 364-day calendar could have taken place as early as in 162 BC, when the decrees of Antiochus IV were formally repealed after the victory of Judah Maccabee.⁶⁴ In his opinion, this did not happen firstly, because the Maccabees did not control the temple worship in Jerusalem at least till 152 BC, and secondly, because the Judeans had for long observed the lunisolar calendar in their everyday lives, and so it was convenient for them to harmonise it with the cultic calendar.⁶⁵

However, there was a group of Jews, who, on the one hand, was associated with the circles supporting *The Book of Jubilees*, and on the other, composed of the Za-

⁵⁹ VanderKam, "2 Maccabees 6-7a," 59.

⁶⁰ VanderKam, "2 Maccabees 6-7a," 59-60.

⁶¹ VanderKam, "2 Maccabees 6-7a," 61-67.

⁶² Before the death of Alexander the Great (323 BC) this calendar was correlated with the Babylonian lunisolar calendar, and then, by the decree of Seleucus I, the Babylonian month names were replaced by the Macedonian names. For the Macedonian calendar from the time of the Seleucids see Stern, *Calendars in Antiquity*, 234-246.

⁶³ VanderKam, "2 Maccabees 6-7a," 68.

⁶⁴ VanderKam, "2 Maccabees 6-7a," 70.

⁶⁵ VanderKam, "2 Maccabees 6-7a," 70-71.

dokites, a group that later formed the Qumran community, did not accept such a revolutionary change of the calendar because in their understanding, it violated God's order and his covenant. The events that led to the flight of a certain group of priests to the Judean Desert occurred between the death of Alkimos (159 BC) and Jonathan's accession to the office of high priest (152 BC), i.e. a period when no one performed the office of high priest (*Ant.* 20:237).⁶⁶ Some scholars, however, have assumed that during the *intersacerdotium* the future leader of the community at Qumran, called the Teacher of Righteousness, served as high priest.⁶⁷ Whether he was actually a high priest is not certain.⁶⁸ In any case, the appointment of one of the Maccabean brothers, Jonathan (152 BC), not of the Zadok line, to the office of high priest by the Seleucid king (Alexander Balas) must have been related to the revolt of a certain part of the priests, who, as a result of the conflict, had to escape to the Judean Desert. One of the bones of contention would have been the issue of the calendar because the members of the proto-Qumran community opted for the 364-day calendar tradition, but Jonathan, as a Seleucid pawn, insisted on observing the lunisolar calendar.⁶⁹

VanderKam's hypothesis was fairly soon criticised by Philip R. Davies,⁷⁰ who alleges that its grounds are based on negative arguments or on other hypotheses, and at the same time on a misinterpretation of the key evidence. Davies begins his criticism by questioning the hypothesis that VanderKam took over from Jaubert; namely, that the 364-day calendar occurs in the exilic and post-exilic biblical texts since assuming the usage of the calendar, we can note that the Sabbath was never violated in the Bible, which does not seem to be accidental. Yet, as Davies observes, a similar effect becomes evident in the case of the lunisolar calendar.⁷¹ He also disagrees with the argument that avoiding the use of the Babylonian month names and replacing them with ordinal month names in the post-exilic texts is indicative of the use of the 364-day calendar. Taking the Book of Esther, which uses both the month names and ordinals, as an example he proves that the ordinals are given alternatively and not because of the 364-day calendar. Where, in turn, only an ordinal is given, it refers

⁶⁶ Hartmut Stegemann (*The Library of Qumran*, 147) considers Flavius' opinion unlikely as in 164 BC the Maccabees restored the annual celebration of Jewish festivals, including the Day of Atonement, during which the presence of the high priest was essential. In addition, at that time Judah enjoyed peace that was made with the Seleucids in 157 BC; so there was no reason why the high priest could not attend the celebrations of the Day of Atonement.

⁶⁷ Stegemann, *The Library of Qumran*, 147–148; Murphy-O'Connor, "Demetrius I and the Teacher of Righteousness," 400–420; VanderKam, "2 Maccabees 6–7a," 72–73.

⁶⁸ Wise, "The Teacher of Righteousness," 587–613.

⁶⁹ VanderKam, "2 Maccabees 6–7a," 72–74. As Milik once stated (*Ten Years of Discovery*, 80–82), the fact that the Hasmoneans were not of Aaronic lineage could have been a theoretically sufficient cause for the schism, but there may be additional reasons, for example the immoral conduct of the priests or their wrongdoings in worship. The latter theoretically may include the issue of the calendar, although Milik himself did not suggest it.

⁷⁰ Davies, "Calendrical Change," 80–89.

⁷¹ Davies, "Calendrical Change," 82.

to the lunar month because it is impossible that on the 14th day of the month Adar (i.e. the twelfth) a day of feast (Esth 9:15-22) would be established, when according to the 364-day calendar it would then be a Sabbath day.⁷²

Davies also accuses VanderKam of misunderstanding the texts of *Jub.* 1:13-14 and CD III,13-14. The first text obviously places the departure from God's revealed calendar *after* the Babylonian exile, but still *before* the return from captivity. This is confirmed in the second text in which the author speaks of the apostasy of all Israel, who ceased to celebrate the Sabbath that God established. Knowing when a Sabbath day falls is one of the things hidden by God. However, God revealed this knowledge to the Qumran community as part of his covenant with them. The author of CD, speaking of sabbaths in the context of hidden things, uses the verb נסתרות (a Niphal form), referring to this knowledge that has been hidden from the rest of Israel, but at the same time speaks of the revelation (גלה) of the hidden things to those who have persistently obeyed God's commandments, i.e. his community. In this light, Israel's departure from the 364-day calendar is shown as the result of God's "hiding" it from Israel, and not as an old departure from the will of God in the exilic or post-exilic period,⁷³ as VanderKam saw it.⁷⁴

As for the decrees of Antiochus IV, which were to trigger the change of the 364-day calendar in favour of the lunisolar calendar, ignoring the aforementioned doubt whether the former was observed at all, Davies suggests that abandoning the Jewish calendar and including pagan feasts in it would have been an even graver and more shameful act for the Jews than its annulment.⁷⁵ Furthermore, the text of Dan 7:25, alluding to the change of the set times (feasts) and referred to by VanderKam, does not necessarily point to the new calendar calculation but simply to the replacement of the Jewish festivals by pagan ones, which was automatically associated with a change of the date of the feast because, naturally, pagan festivals did not take place at the same time as the Jewish set times.⁷⁶ Further, Davies refutes VanderKam's thesis that the Maccabees, after recapturing Jerusalem, kept the calendar that their enemy had imposed only a few years earlier. Such a decision would have required them to undertake an extremely laborious task of transferring the festivals – celebrated for centuries each year, on the same day of the same month – to a lunisolar calendar whose days of the week change every year.⁷⁷ Such a precedent would certainly not have gone unnoticed. So it is more likely to assume that the lunisolar calendar was in force before the decrees of Antiochus IV, and that the Maccabees merely reinstated Jewish festival days to it.

⁷² Davies, "Calendrical Change," 82–83.

⁷³ Davies, "Calendrical Change," 84.

⁷⁴ VanderKam, "2 Maccabees 6–7a," 54–55.

⁷⁵ Davies, "Calendrical Change," 86.

⁷⁶ Davies, "Calendrical Change," 86–87.

⁷⁷ Davies, "Calendrical Change," 87.

Although Davies shares the belief maintained by Jaubert and VanderKam regarding the early exilic origin of the 364-day calendar, he claims that it was abandoned shortly after the return from the Babylonian exile.⁷⁸ Nevertheless, there was a group of Jews, strongly associated with the Babylonian culture, who had cultivated the tradition of the 364-day year for centuries, and who to some extent was related to the circles from which the Qumran community emerged,⁷⁹ although – contrary to what VanderKam assumed – this did not happen in the 2nd century BC, in the background of the conflict between the Maccabees and the Seleucids, but probably much earlier; due to the lack of sources it is difficult to define the beginnings of this conflict.⁸⁰ Despite the criticism, VanderKam upheld his hypothesis in the following years⁸¹ since it was the best explication of the calendar controversy that can be seen in the writings of the Qumran community. But do these texts really show the calendar polemic as one of the main reasons for the community's foundation?

4. The 364-day Year – Qumran Community vs. Calendar Polemic

The following texts are most frequently shown as evidence that the events related to the departure of a group of Jews to the Judean Desert concerned the calendar polemic: 1QpHab XI,4-8; CD III,12-15; VI,11b-19; 1QS I,13-15; 4QpHos^a (4Q166) II,14-17 and 4QMMT A 19–21 (=4Q394 3-7 i,1-3).⁸²

The key textual witness is the Habakkuk Peshar (1QpHab XI,4-8), in which the author, commenting on the text of Hab 2:15, recalls a dramatic incident in which the Wicked Priest, connected with the temple in Jerusalem, arrived at the “house of the exile” of the Teacher of Righteousness (i.e. Qumran) on the Day of Atonement, and taking advantage of the time of fasting and repose, as ordered by the Mosaic Law (Lev 23:27.29.32), wanted to seize him suddenly and perhaps even to kill him. This incident was to confirm that the Wicked Priest celebrated the Day of Atonement on a different day than the Teacher of Righteousness, which means that both of them observed different calendars. Talmon, who considers this explanation only possi-

⁷⁸ Davies, “Calendrical Change,” 88. Perhaps Roger T. Beckwith (“The Essene Calendar,” 457–466) is right claiming that if the 364-day calendar was ever put into practice, it was quickly abandoned due to the year-to-year increase in difference to the actual solar year. This disparity could have been the subject of the theological reflection behind *1 Hen* 80:2-8.

⁷⁹ Here Philip Davies refers to Jerome Murphy-O'Connor's paper (“The Essenes and Their History,” 221–222), in which the latter suggests the origin of the Essene group from the Babylonian diaspora.

⁸⁰ Davies, “Calendrical Change,” 88–89.

⁸¹ VanderKam, *Calendars in the Dead Sea Scrolls*, 84–86.

⁸² Talmon, “Calendar Controversy in Ancient Judaism,” 379–395; *idem*, “Calendars and Mishmarot,” 115–116; Fraade, “Theory, Practice, and Polemic,” 161–171; Milik, *Ten Years of Discovery*, 64–70. A contrary view: Stern, “The ‘Sectarian’ Calendar of Qumran,” 39–62.

ble,⁸³ might assume that the Wicked Priest, as an (alleged) high priest, would not have violated the Day of Atonement if he had actually celebrated it on the same day as the Teacher of Righteousness who was hostile to him. However, the title “Wicked” does not support such a conviction.

An important expression in the text under discussion is “(on) *their* Sabbath of repose” (1QpHab XI,8), where the suffix of the personal pronoun “their” refers to the community at Qumran in contrast to the Wicked Priest, for whom it was not a time appointed for rest since he did not deliberately sanctify it, and consequently, he did not make it his repose. According to Stern, even if we assumed that the Wicked Priest observed the Day of Atonement on another day, the difference could not have been more than one day and could have resulted from observing the “new” moon at another time, which was relatively common in antiquity; however, this does not mean that they both used different calendars.⁸⁴ Moreover, if the Teacher of Righteousness kept a calendar that differed from the one used by the Wicked Priest it should be noted that the text does not show this disparity as a subject of controversy since the aim of the text is to interpret Hab 2:15, which includes the motive of wrath *המה* and the set time *מועד*.⁸⁵

Another text (CD III,12-15a) concerns all those who held fast to God’s commandments (III,12) and with whom God made his everlasting covenant for Israel (III,13), by virtue of which he revealed to them things that were to be hidden to others, things concerning which Israel had gone astray (III,13-14), including holy sabbaths and festivals (III,14-15). At this place, we need to explain that the community at Qumran divided God’s laws as revealed (*נגלה*) and hidden (*נסתר*), the former were available to all Israel, whereas the latter were revealed only to the community and were forbidden to be revealed to anyone outside the community.⁸⁶ Therefore, while the sabbaths and festivals ordered in the Law of Moses were revealed and known to all Israel, the knowledge concerning their dating – based on the 364-day calendar – belonged to the hidden things that God revealed only to the community. The analysis of CD III,12-15 leads to the view that members of the Qumran community regarded the observance of a calendar other than the 364-day one as a departure from God’s covenant, and this was one of the main reasons for separating themselves from the worship performed in Jerusalem.

This interpretation would be supported by CD VI,11b-19, which states that all who were brought into the covenant (the community) should follow the exact in-

⁸³ Talmon, “Calendar Controversy in Ancient Judaism,” 388.

⁸⁴ Stern, “The ‘Sectarian’ Calendar of Qumran,” 51; *idem*, “Qumran Calendars and Sectarianism,” 244–245; *idem*, *Calendars in Antiquity*, 370–371.

⁸⁵ In TM the subject of the verb *נבט* is the noun *מועד* – “nakedness,” but the aforementioned pesher has the noun “festival, set time” – *מועד*; moreover, in the first text, the noun is preceded by the preposition *על*, while in the second text – by the preposition *לא*.

⁸⁶ Schiffman, *The Halakhah at Qumran*, 22–32.

terpretation of the Mosaic Law (VI,14) so that they would be able to distinguish between unclean and clean and to differentiate between the sacred and the profane (VI,17-18), that they keep the rules of the Sabbath day, and that they observe the festivals and fasts in accordance with the commandments of those entering the new covenant in the land of Damascus (VI,18-19). Here again, the ability to determine the day of the festival is to be related to keeping a different calendar, which only all those who are brought into the covenant will learn.

Although these texts do testify to the difference in the approach to the celebration of the sabbath days and other festivals between the community of Qumran and the rest of Israel, they do not necessarily show that it was due to the usage of different calendars. Thus, in the text CD III,12-15, apart from the problem of whether the hidden things concerning which Israel goes astray, actually include sabbaths and festivals,⁸⁷ the polemic focuses not so much on the time of their observance but rather on the *manner* of their celebration, in the sense that people outside the community, to whom God has not revealed the hidden things of the Law, misinterpret the rules pertaining to the celebration of festivals, and therefore, they observe them in a wrong way. There is no indication, however, that this inappropriateness lies in the wrong dates of their observance. CD VI,17-18, which speaks of keeping the Sabbath like “its explanation” כפרושה,⁸⁸ and of the festivals and fasts “in accordance with the commandments” כמצאת, can be interpreted in a similar way. The required ability to distinguish holy from profane, which is mentioned in the same text, is understandable in view of the situation of the community, which, after separating itself from the temple worship, is solely dependent on itself in setting the temple rhythm.

The Community Rule asks those who have entered into the “covenant of grace” not to advance the appointed times nor postpone the prescribed seasons (1QS I,14-15). This order is interpreted as an allusion to all who follow the lunisolar calendar. However, the order is actually universal in its sense, and it can theoretically apply to anyone who follows any calendar. If a polemical tone was intended here, it would rather concern the reprehensible practice that may well apply to the 364-day calendar if it were then used in the official cult. It seems that at this point the author simply expresses his concern about the accurate recognition of a festival day because, as mentioned before, the community, being separated from the official worship and in addition, living in the desert, was solely dependent on itself in calendar reckoning. In this context, we should not forget that some members of the community lived in nearby caves, and they had to be vigilant as to what festivals should be observed and when they should gather for common celebrations within their community.

⁸⁷ In line III,14 there is a small blank space that raises doubt as to the interpretation of the whole sentence: להם נסתרות אשר תעו בהם כל ישראל [] שבתות קדשו ומועדי

⁸⁸ In the texts of the Qumran community, the word פרוש refers to the proper explication of the rules of the Mosaic Law, which is guaranteed by God's disclosure of נסתרות – “hidden things.” All the translations of sentences or phrases from the Qumran texts in the present article are my own, unless otherwise stated.

In turn, the author of the Hosea Peshet (4Q166 II,14-17) interprets the text of Hosea 2:13 in reference to an unidentified group of Jews who follow pagan festivals (II,16). Therefore, he is convinced that the festive joy of this group will sooner or later be turned into mourning (II,17). The expression “make the feasts go according to the appointed times of the nation” יוֹלִיכוּ בְּמוֹעֲדֵי הַגּוֹיִם (II,16) brings to mind the almost identical expression from *Jub.* 6:35, which made Bernstein conclude that both texts criticise the same group that celebrated Jewish festivals at wrong times.⁸⁹ Without excluding the possibility of a relationship between these two texts, it should be noted that their criticism was first of all directed against those who in any way participated in the pagan festivals. This, in turn, poses a completely different problem concerning the Hellenization of a certain group of Jews who did not follow the Jewish calendar, be it a 364-day calendar or a lunisolar calendar.

Interpreting these texts, Talmon adds another argument: he begins with the rabbinic concept מוֹלֵד, which is a technical term for “the birth of the new moon” (e.g. *Tg. Ps.-J. Gen* 1:14), after the previous moon was “pregnant,” i.e. full moon.⁹⁰ According to him, an example of the term מוֹלֵד thus understood, found in the Qumran texts is 1Q27 I I,5-7, where the expression מוֹלְדֵי עוֹלָה “birth of evil/sources of evil” (1 I,5) is in contrast with וְהַצְדִּיק יִגְלֶה כְּשֶׁמֶשׁ “righteousness will be manifest like the sun” (1 I,6), where the moon represents evil, while the sun – righteousness. In Talmon’s opinion, the author of this text predicts a future elimination of the “evil new moons” which constitute the lunisolar calendar observed in the official worship of Jerusalem, and at the same time he heralds a future victory in which righteousness will shine like the sun, which henceforth will guide time through the solar calendar (this is how Talmon defines the 364-day calendar). However, this argument lies on two assumptions that cannot be proved: firstly, that there was a conflict between the advocates of the solar and lunisolar calendars; secondly, that in the Second Temple period, the term מוֹלֵד was a designate for the “birth of a new moon.”

In recent years, the arguments in favour of the alleged calendar polemic have included the scroll 4QMMT,⁹¹ which is a letter the Qumran community probably addressed to the ruler of Judah. It criticises the conduct of the priests while showing the right interpretation of the Mosaic Law. The document is moderately polemical because its authors assume that the addressee will change his behaviour and will influence the priests in Jerusalem. The first part of the document includes a 364-day calendar. Yet, it is not certain whether the calendar was part of the document from the beginning or was rather attached to it at a later stage of the community’s

⁸⁹ Bernstein, “Walking in the Festivals,” 21–34.

⁹⁰ Talmon, “Anti-Lunar-Calendar Polemic,” 29–40.

⁹¹ Especially Shemaryahu Talmon (“Calendar Controversy in Ancient Judaism,” 389–395) satisfactorily accepted 4QMMT as another argument proving his hypothesis, thus being even more convinced that his hypothesis was valid.

existence.⁹² Regardless of that, the mere presence of the calendar in the polemical text does not seem to be accidental. Assuming that the calendar was in the original version of the work that was created at the early stage of the community at Qumran (mid-2nd century BC),⁹³ its placement may testify to a real calendar conflict with the superior of Judah and the caste of the temple priests, as a result of which the Qumran community was founded.⁹⁴ Since there exists no evidence that the 364-day calendar was used in the temple cult from the mid-2nd century BC, the writing of the Qumran community could not have received a positive response; hence the community separated itself from the official cult.

Apart from the problem of the primary or secondary presence of the 364-day calendar in 4QMMT, there is the question of its residual presence in the preserved scroll 4Q394. After the affiliation of the scroll 4Q394 1-2 to 4QMMT⁹⁵ has definitely been negated, what was left from the calendar was only its conclusion,⁹⁶ which, although allowing us to identify it as a 364-day calendar, makes it impossible to establish its exact relationship with other calendrical texts from Qumran. Moreover, while in the scroll 4Q394, the halakhic part immediately follows the calendar, in the scroll 4Q395, preserving the beginning of the halakhic section, there is no trace of any text preceding it; on the contrary, the wide margin on the right side (17.5 mm) suggests that the opening fragment of 4Q395 was the beginning of a new scroll.⁹⁷ Thus,

⁹² Callaway, "4QMMT and Recent Hypotheses," 19–20; Strugnell, "MMT: Second Thoughts," 57–73; *idem*, "Appendix 3. Additional Observations," 203–204; VanderKam, "The Calendar, 4Q327, and 4Q394," 184–187; Schiffman, "The Place of 4QMMT," 81–98; von Weissenberg, *4QMMT. Reevaluating*, 33–37, 129–133.

⁹³ Qimron – Strugnell, *Qumran Cave 4, V*, 119–121.

⁹⁴ VanderKam, "The Calendar, 4Q327, and 4Q394," 179: "[...] the first copy of 4QMMT began with a calendar seemed to confirm the centrality of the subject in Qumran polemics."; Chyutin, "The Controversy of the Calendars," 209–214; According to Lawrence H. Schiffman ("The Place of 4QMMT," 85) the redactor of 4QMMT added the already existing calendar fragment to its original form since this calendar clearly differs in its literary form from the rest of the work. If indeed a calendar was added later, it means that for the redactor of 4QMMT this issue must have been so important that he could not imagine that it would not find its place in a work that was so fundamental to the identity of his community. Perhaps the redactor decided to add the already existing calendar to 4QMMT to show the calendar issue as the main reason for his community's separation from the so-called mainstream Judaism while remaining within it. In this way, the redactor would include in the content of 4QMMT issues that were absent in the original version of the work, which, however, does not exclude that there was a calendar polemic at that time.

⁹⁵ Talmon – Ben-Dov – Glessmer, *Qumran Cave 4, XVI*, 159–161.

⁹⁶ 4Q394 3–7 I, 1–3: [] is a Sabbath. Unto it (i.e. the twelfth month), after [the] Sab[bath, Sunday and Monday, a day is to be ad]ded. And the year is complete—three hundred and [sixty-four] days. This calendar could theoretically contain 360 days, thus constituting the ideal Babylonian year, but it is unlikely since no text links the 360-day ideal year with the Sabbath, an especially with an extra day added at the end of the fourth quarter, i.e. at the end of the year.

⁹⁷ Qimron – Strugnell, *Qumran Cave 4, V*, 203. According to VanderKam ("The Calendar, 4Q327, and 4Q394," 184), there are not enough data to put forward such an unambiguous thesis because it may well be assumed that in this case the blank space between the columns was slightly larger than usual, and so there is no trace of any calendar section that could have preceded it. This is more likely especially that the right margin of the scroll 4Q395 (17.5 mm) is similar to that of 4Q394 3–7 I and 4Q394 1–2

the calendar section would only be attested on one of the two preserved scrolls, that is to say that at some stage it was not very significant for this work.

As previously indicated, apart from the residual presence of the calendar in 4QMMT, without any commentary at its end,⁹⁸ there is neither a mention nor even an allusion to it throughout the document, which means that it was not significant enough to be considered as the main subject of the polemic between the author of the work and the Jerusalem priests. Further, if there were any controversy, as suggested by the mere presence of the calendar in this polemical work, it must not have concerned the conflict between the 364-day calendar and the lunisolar calendar; the conflict might also have been related to the celebration of festivals and sabbaths within the same 364-day calendar. It is not surprising that these doubts have led some authors to propose a different, non-polemical, justification for the presence of the calendar in 4QMMT.⁹⁹

In view of these objections, it must be stated that on the basis of the Qumran texts, it cannot be proved that in the first half of the second century BC there was a calendar polemic between the supporters of the 364-day calendar and those of the lunisolar calendar, and consequently, that such a polemic was the main reason for the emergence of the community at Qumran.¹⁰⁰ In addition, the presence of the 364-day calendar scheme in the copies of the Songs of the Sabbath Sacrifice

(12–16 mm). However, the weakness of VanderKam's argument is the fact that it assumes sizes that cannot be confirmed because no data concerning the distance of the remaining columns coming from these scrolls were provided.

⁹⁸ Although a commentary or introduction to the calendar could have been placed before it, according to Elisha Qimron and John Strugnell (*Qumran Cave 4*, V, 203), if we managed to reconstruct the whole calendar on the basis of other calendrical texts from Qumran, it would turn out that that the incipit of the calendar would hardly fit on the skin since it must at least have been preceded by the title of the entire work.

⁹⁹ According to Steven D. Fraade ("To Whom It May Concern," 522–523), the calendrical part of 4QMMT, like the halachic part that follows it, was to be a kind of explanation and at the same time, a guide for the neophytes and/or candidates who could have struggled with adhering to the new requirements. Thus, the calendar would have had an instructional character. Another proposal was made by Hanne von Weissenberg (*4QMMT. Reevaluating*, 129–133), who saw the theology of covenant as a key to understand the place and meaning of the calendar in 4QMMT. She begins with the observation that the calendar question has a considerable meaning in the covenant theology of *The Book of Jubilees* (*Jub.* 6), the Damascus Document (CD III,12b-15a; VI,17b-21), and also the Community Rule (1QS I,13b-15a). The redactor of 4QMMT, referring to the theology of the covenant, would have added a 364-day calendar to the document with the intention of including it in the content of the covenant, so as to present it as normative as it was done in the case of the list of the ordained holidays in Exod 23:14-17 and Deut 16:1-17. The latter would constitute for the redactor of 4QMMT a parallel at the conceptual level. Yet, George Branch-Trevathan ("Why Does 4Q394 Begin with a Calendar?," 923–933) discerns the reason for the presence of the calendar in 4QMMT in the alleged influence on the author of utopian Hellenic literature, in which the idea of an ideal state symbolised by the sun appears (the assumption of his argument is based on the incorrect identification of the 364-day calendar as a solar one).

¹⁰⁰ A similar conclusion was also reached by H. Jacobus ("Calendars in the Qumran Collection," 241) and by Davies ("Calendrical Change," 88).

found at Masada, i.e. a work that was probably written in the 3rd century BC, not a product of the Qumran community,¹⁰¹ proves that the 364-day calendar was not necessarily closely related only to this community,¹⁰² let alone being its invention.¹⁰³ It is much more likely that the community adopted this calendar¹⁰⁴ because of its divisibility by number 7 and the possibility of adopting it to the sabbath cycle, and due to the fact that it does not contradict the biblical tradition.¹⁰⁵ Naturally, the calendar could have been modified and developed by the community at a later stage; thus the community made it a sign of its identity.

According to Stern, the mere fact that the 364-day calendar differed significantly from the one prevailing in Judea, the Jewish diaspora and in the entire Middle East was a sufficient reason to consider it to some extent sectarian.¹⁰⁶ At the same time, he points out that the status of being “sectarian” does not necessarily result from a polemic with the outside world, in this case with the Judean elite.¹⁰⁷ Further, calendar discrepancies were not uncommon in the ancient Near East, and no one called this practice “sectarian” for this reason; the believers themselves were not called “apostates” since the differences were not disputed. On the contrary, the calendrical differences were inevitable and might have been approached with sheer indifference.¹⁰⁸ It seems that the essential thing was not the day of observance but rather whether

101 Newsom, *Angelic Liturgy*, 4–5. Also, U. Glessmer (“Calendars in the Qumran Scrolls,” 256) refers to the copies of the Songs of the Sabbath Sacrifice found at Masada as evidence that the 364-day calendar was known outside the Qumran community.

102 Newsom, “‘Sectually Explicit’ Literature from Qumran,” 177.

103 This is what Talmon claimed from the very beginning (“Qumran Studies,” 28). Yet, he refined his position stating that the Qumran community preserved the old tradition of the 364-day calendar rooted in the biblical times; with time the Jerusalem priesthood abandoned this tradition.

104 Étienne Nodet’s hypothesis is rather less likely (“On the Biblical »Hidden« Calendar,” 583–597). It says that the Qumran community discovered the old calendar, subtly “hidden” in the biblical texts, and later it decided to restore its old form. In Nodet’s opinion, the official restoration of the old calendar could have taken place on 23 March 156 BC due to the rare phenomenon when the astronomical instant of the equinox happened to be very close to the instant of the full moon (cf. Gen 1:16), the equinox was at 9:08 p.m., while the full moon was at 10:48 p.m. Since it fell on a Wednesday, it was a perfect day to begin a 364-day year. Moreover, the year 156 AD coincides with the *intersacerdotium* (159–152 BC) between the reigns of Alkimos and Jonathan, which means that the restoration of the calendar fits in the time when the conflict was increasing, which led to the rise of the Qumran community. In Nodet’s opinion, this is an argument that makes his hypothesis probable.

105 In this context, Beckwith (“The Significance,” 54–66) agrees with Jaubert and VanderKam claiming that the 364-day calendar corresponded to the content of the Hebrew Bible in the sense that if its structure is applied to it, the Sabbath will not be violated almost in all of the books. As he notes, the only book that does not meet this criterion is the Book of Esther (9:15.17.19.21), and it is this book that was not recognised among the texts from Qumran. According to Beckwith, this may prove that the 364-day calendar could have influenced the shape of the canon of the Hebrew Bible in the Qumran community.

106 Stern, “The ‘Sectarian’ Calendar of Qumran,” 46.

107 Stern, “The ‘Sectarian’ Calendar of Qumran,” 55.

108 Stern, “Qumran Calendars and Sectarianism,” 250.

a festival was celebrated at all and whether its source was the Mosaic Law, and finally, whether it was observed in strict compliance with the law.

While it cannot be ruled out that the high priest controlled and supervised the proper observance of the calendar at the temple itself, no one could have expected that Jews outside Judea would be able to synchronise their festivals with the central worship in Jerusalem.¹⁰⁹ So it could have happened that, for astronomical reasons, Jews from the Alexandrian, Antiochian and Zoar diasporas celebrated the Passover with a difference of a few days.¹¹⁰ However, no one considered an “unsynchronised” community to be “sectarian” for this reason. Similarly, no one paid attention to the different calendar of the Qumran community.¹¹¹ This may explain why Josephus and Philo of Alexandria, characterising the Essene community, did not mention a calendar that would be their distinctive feature. This fact in turn would lead to the assumption that the Qumran community was an Essene fellowship, which is not certain. Nevertheless, it is still the best hypothesis that has been proposed so far.

Also, Glessmer stresses the fact that the 364-day calendar tradition was very diverse, at the same time noticing its non-linear development and lack of a monolithic form. This diversity seems to be a significant counterargument against the rather schematic and simplified juxtaposition between the “Qumran calendar” and the Jerusalem calendar. Moreover, it suggests a much more complex development of this tradition than a simple transition from a fully formed calendar to another calendar, which allegedly occurred during the time of Antiochus IV.¹¹² The adoption of different calendrical traditions in the then Israel explains the diversity found at Qumran to a greater extent, and their presence in the Qumran library may not so much indicate the polemic that existed at that time, but rather a desire to systematise and synthesise the chosen tradition.

5. Conclusion

Along these lines, the only witness to a distinct calendrical polemic against the lunar-based calendar is *The Book of Jubilees*. Although copies of this book are attested in the Qumran library, and the Damascus Document reveals that the calendar was already known (CD XVI,3-4), the Qumran texts themselves do not share a hostile attitude towards lunar phenomena, nor do they favour the sun or impose their tradition of the 364-day calendar. It is not known, therefore, whether the calendar con-

¹⁰⁹ Stern, “The ‘Sectarian’ Calendar of Qumran,” 59.

¹¹⁰ Stern, *Calendar and Community*, 72–79, 87–98, 146–153.

¹¹¹ Stern, “The ‘Sectarian’ Calendar of Qumran,” 60.

¹¹² See Glessmer, “Calendars in the Qumran Scrolls,” 233, 274.

trovsky caused the emergence of the Qumran community, nor is it known whether the adoption of this tradition (not later than in the 3rd century BC) was related to any polemic at all. What is certainly known is that this calendar took on a liturgical form in the Qumran community, and after the community had ceased to exist, the 364-day calendar disappeared from Judaism once and for all. Conclusively, it was a calendar that distinguished the Qumran community, but there is little indication that this uniqueness was seen as a departure from other Jewish groups. Nonetheless, some texts seem to suggest that there may have been disputes over the incorrect observance of the Sabbath and some festivals, which is probable since the halakhic texts show the Qumran community as extremely radical in interpreting the Mosaic Law.

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