CHAPTER 5

LUNAR PHASES IN THE MIŠMAROT SCROLLS AND LATE BABYLONIAN ASTRONOMY

Three mišmarot scrolls exist which record lunar phases during a sexennial cycle. The lunar data forms an integral part of the mišmarot corpus in general, appearing alongside other typically Jewish elements of the calendrical tradition such as festivals and priestly courses. Three central concepts appear in the combined evidence provided by these particular scrolls:

(a) an unnamed lunar phenomenon, designated “X” by modern scholars

(b) the number of days that have passed since the previous X

(c) a lunar phenomenon named dwq

None of the three items are mentioned together in any one scroll. 4Q320 records items (a) and (b), while 4Q321 and 4Q321a refer to (a) and (c). All three lunar texts connect the lunar phases to the 364DY, the year beginning simultaneously with the lunar phenomenon X. Since the 364DY begins at the spring equinox (cf. 1 En 72:6, 75:2), the lunar texts from Qumran tie the lunar phases to the schematic march of the seasons. Following a general analysis of the pertinent Qumran manuscripts, we shall investigate the lunar data contained in them in detail.

1 Mišmarot is the common Hebrew term for the priestly courses which served in the Temple. For the meaning of the term and data on periods of service, see U. Glessmer, “Calendars in the Qumran Scrolls” in The Dead Sea Scrolls After Fifty Years (ed. P.W. Flint and J.C. VanderKam; Leiden: Brill, 1999), 240–43; J. Ben-Dov, “Mishmarot,” in Dictionary of Early Judaism (forthcoming, with the bibliography cited there); and in great detail, U. Glessmer, Die ideale Kultordnung: 24 Priesterordnungen in den Chronikbüchern, den kalendarischen Qumrantexten und in synagogalen Inschriften (Habilitationschrift, Hamburg University, 1995).

2 The current interpretation of lunar phases in the mišmarot texts differs from that presented in DJD XXI, 30–34. It will be illuminated further below.
This scroll is dated, on the basis of its script, to the end of the second century B.C.E. (125–100). It is the oldest of the calendrical scrolls. The penmanship is relatively good: letters are executed similarly throughout the scroll and the scribe used fixed spaces between the lines and columns. 4Q320 does not display any distinctive Qumran scribal practices—such as, for example, full orthography or multiple corrections. A peculiar trait of this scroll is the variable quality of its parchment. While frags. 1–2 are penned on normal-sized good quality sheets of parchment, other fragments attest to parchment of inferior quality. 4Q320 also contains some of the narrowest columns in the entire Qumran corpus, several of which appear singly on an extremely narrow piece of parchment. Column 3 i contained no more that 17 letter-spaces in each line (based on the nearly complete line 12). The composite frg. 4 comprises several exceptionally narrow columns—such as column 4 ii, the width of whose lines is no longer than fourteen letter-spaces. Frg. 4 was created from three separate pieces of parchment, each of which contains two narrow columns—or even a single narrow column, as in the case of 4 iii. This circumstance suggests that 4Q320’s scribe possessed only limited resources at his disposal, compelling him to assemble low-quality pieces of parchment.

4Q320 is the longest and most elaborate of the miṣmarot scrolls, rivaled only by the wealth of material in 4Q319. It is a compendium of various calendrical lists, only one of which relates directly to the lunar phases; other lists pertain to the festivals, lengths of months, and otoṭ—i.e., solar-lunar concordances occurring at the beginning of each triennial cycle. 4Q320 is unique in its insertion of short literary passages into the calendrical lists. Such a passage occurs elsewhere only at the beginning of the otoṭ list in 4Q319—i.e., at the transition

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5 See Tov, Scribal Practices, 80. The situation is similar in other calendrical scrolls, such as 4Q323 and 4Q329a.