CHAPTER NINE

THE COPYING OF A BIBLICAL SCROLL

The copying of biblical scrolls was very similar or identical to that of nonbiblical scrolls (see § 2 below). Much information on this topic can now be distilled from the scrolls found in the Judean Desert.

1. *The Scrolls*[1]

The great majority of the biblical scrolls from the Judean Desert were written on parchment, while only 3–6 biblical texts were inscribed on papyrus. The first stage in the preparation of such parchment was the slaughtering of an animal and the preparation of its hide for the production of the scroll material. According to research carried out so far, the scrolls from the Judean Desert were prepared from hides of the following animals: calf, fine-wooled sheep, medium-wooled sheep, wild and domestic goats, gazelle, and ibex.

The *preparation* of the leather is described as follows by Bar-Ilan: "The hide was removed from the carcass and then soaked in a solution of salt and other agents in order to remove any remaining particles of hair and fat, then stretched, dried, smoothed with a rock, and treated with a tanning solution. This improved its appearance, and perhaps made it easier for the leather to absorb the ink. Next, the hide was cut into the longest possible rectangular sheet to serve as a scroll."[2] However, even the leftovers were used for writing: contrary to practice in later centuries, most of the *tefillin* found at Qumran were written on irregularly shaped pieces that clearly were leftovers from the preparation of large skins. Upon preparation, most skins were inscribed on the (hairy) outside layer (thus *Sof.* 1.8 and *y. Meg.* 1.71d), while 11QT^a (11Q19) was inscribed on the inside of the skin (the flesh side). For parallels in rabbinic literature,

---

[1] Valuable information is found in J. Ashton, *The Persistence, Diffusion and Interchangeability of Scribal Habits in the Ancient Near East before the Codex,* unpubl. Ph.D. diss., University of Sydney, 1999. The present study updates and summarizes my *Scribal Practices*.

[2] M. Bar-Ilan, "Writing Materials," in *Encyclopedia DSS*, 2.996.

see *y. Meg*. 1.71d: "One writes on the hairy side of the skin" (cf. *Massekhet Sefer Torah* 1.4).

The *length* of the composition was calculated approximately before commencing the writing, so that the required number of sheets could be ordered from a manufacturer or could be prepared to fit the size of the composition. Subsequently, the individual sheets were ruled and inscribed and only afterwards stitched together. The fact that some ruled sheets were used as uninscribed handle sheets (e.g. the last sheets of 11QT[a] and 11QShirShabb) and that some uninscribed top margins were ruled (the second sheet of 1QpHab) shows that the ruling was sometimes executed without relation to the writing procedure of a specific scroll. The numbering of a few sheets preserved in the Judean Desert probably indicates that some or most sheets were inscribed separately, and joined subsequently according to the sequence of the numbers (however, the great majority of the sheets were not numbered).

The first step in the preparation of scrolls for writing was that of the *ruling* (scoring) that facilitated the inscription in straight lines; the writing was executed in such a way that the letters hung from the lines. This ruling provided graphical guidance for the writing, horizontal ruling for the individual lines, as well as vertical ruling for the beginning and/or end of the columns. The so-called blind or dry-point ruling was usually performed with a pointed instrument (such instruments have not been preserved), probably a bone, making a sharp crease in the parchment. As a result of this procedure, the leather was sometimes split and even broken off (e.g. 1QapGen ar XXI–XXII; 1QIsa[a] XXXVIII, XLVIII; 11QT[a] [11Q19] XVIII, XXII). It is unclear why some sheets are split more than others; it is not impossible that different materials, different skin preparation methods, or differing amounts of force used with these rulings may account for the differences. In a very few cases, the ruling was indicated by diluted ink.

Almost all Qumran and Masada texts written on leather in the square script had ruled horizontal lines in accordance with the practice for most literary texts written on parchment in Semitic languages and in Greek;[3] this was the continuation of an earlier practice used on cuneiform tablets, in lapidary inscriptions, and in papyrus and leather documents in various Semitic languages.

On the other hand, texts written on papyrus were not ruled (for Qumran, see, e.g. the Greek texts 4QpapLXXLev[b] [4Q120] and 4Qpap

[3] For a general introduction, see J. Leroy, *Les types de reglure des manuscrits grecs* (Paris: Éditions du Centre National de la Recherche Scientifique, 1976); Turner, *Greek Manuscripts*, 4–5.

paraExod gr [4Q127]). Probably the horizontal and vertical fibers provided some form of guidance for the writing. Also, *tefillin* were not ruled; see the *tefillin* from the Judean Desert and the prescriptions in *b. Menaḥ.* 32b; *b. Meg*. 18b.

The ruling was sometimes applied with the aid of guide dots/strokes, or with a grid-like device (see below on 11QT^{a}), while in other instances no device at all was used. These *guide dots* ("points jalons"), or sometimes strokes, were drawn in order to guide the drawing of dry lines. The dots or strokes were indicated in the left margin that followed the last column on a sheet, or in the right margin that preceded the first column as in 4QDeut^{n}, usually about 0.5–1.0 cm from the edge of the sheet; in a few instances they were placed further from the edge, e.g. MasSir V (2.5 cm), 2QpaleoLev (1.5 cm).

The guide dots/strokes were indicated by the persons who manufactured the scrolls rather than by the scribes themselves, who often wrote over them in the left margin (e.g. 4QGen-Exod^{a} frg. 19 ii; 4QIsa^{a} frg. 11 ii). Just as scribes often wrote beyond the left vertical line, they also wrote very close to these dots, on the dots, and even beyond them. As a result, the distance between the dots/strokes and the left edge of the writing differs not only from scroll to scroll, but also within the scroll, and even within the column. On the other hand, dots indicated to the right of the column are always spaced evenly within the manuscript. The guide dots/strokes usually appear level with the tops of the letters, which is the same level as the ruled lines.

Each sheet was ruled separately, usually without reference to the preceding and following sheets; compare e.g. 11QtgJob XXXI (last column of sheet 11) with the next column, XXXII (first column of sheet 12) and 11QT^{a} (11Q19) XLVIII (last column of a sheet) with col. XLIX (first column of a sheet). However in some scrolls a grid-like device ensuring identical spacing in adjacent columns must have been used for one or more sheets. Thus the unequal spacing between the ruled lines of 4QpsEzek^{c} (4Q385b) frg. 1, i–iii, in which the distance between lines 2 and 3 is larger than that between the other lines in all three adjacent columns, shows that all the columns in the sheet were ruled at the same time or with the same device. This pertains also to 11QT^{a} (11Q19) in which several sheets must have been ruled with the same grid (three sheets containing cols. XLV–LVI), while subsequent sheets (two sheets containing cols. LXI–LXVI) were ruled with a completely different grid, leaving more space between the lines. In any event, within each column and sheet, no fixed spaces between the lines were left. See, for example,

the different levels of the lines in some adjacent columns in the same sheet in 1QIsa[a], e.g. in col. XIII compared with cols. XII and XIV.

The technique of ruling, prescribed by Talmudic sources for sacred scrolls, is named שרטוט (*b. Shabb*. 75b; *b. Meg*. 18b). In Palestinian texts it is referred to as "one rules with a reed" (*y. Meg*. 1.71d; *Sof*. 1.1).

The most frequently used system of vertical ruling pertains to both the beginning (right side) and end (left side) of the column. The horizontal margin lines at the end of a column together with the vertical lines to the right of the next column indicate the structure of the columns and the intercolumnar margins. For some examples, see 1QIsa[a], 1QIsa[b], 4QpaleoGen-Exod[l], 4QpaleoExod[m], 4QNum[b], 4QQoh[a], 6QCant, 11QpaleoLev[a], MasPs[a], and MasSir. Usually the vertical lines are more or less perpendicular to the horizontal lines, creating a rectangular shape.

Vertical rules at the left side of the block helped scribes to obtain a straight left margin, but generally scribes writing texts in square characters did not adhere properly to it. Since words were not split in the square script, sometimes other means were devised to obtain a straight left margin, mainly: (1) Leaving wider spaces between words toward the end of the lines (proportional spacing), so that the ends of the lines would be flush with the left marginal line; (2) cramming letters in at the ends of the lines or writing them in a smaller size in the line itself; (3) writing of parts of words at the end of the line, to be repeated in full on the next line.

In a few cases, a *double vertical ruling* was applied to the right of the columns, especially before the first column on the sheet (e.g. 4QNum[b]). Such ruling was performed with two dry lines, spaced a few millimeters apart, while the writing started after the second vertical line. The technique may have been used for purposes of neatness, and in the case of the ruling on the left side it would ensure that the scribe observed the left margin.

The ruling may have been executed by the scribes, but it is more likely that it was applied by the manufacturers of the scroll without reference to the text to be inscribed, as indicated by several discrepancies between the inscribed text and the ruled lines, such as a larger number of ruled lines than inscribed text (see 4QDeut[n]).

Most literary texts from the Judean Desert were ruled, and in the great majority of these texts, the letters were suspended from horizontal lines in such a way that the text was written flush with these lines. In a few Qumran texts, the letters are often written slightly below the lines, e.g. in 11QT[a] (11Q19) cols. XLV–XLVIII and 4QXII[g] leaving a space of 0.1

cm, and 4QHodayot-like Text C (4Q440) at a distance of 0.2 cm. In other texts, scribes disregarded the guidance of the ruled lines.

The preparation of the material for writing included not just the ruling, but also the preparation of the surface for writing in *columns*. The number of columns per sheet and their sizes differed from scroll to scroll, sometimes from sheet to sheet, and they depended much on the size of the sheets and the scroll.

The size of the scroll depended on the contents and the dimensions of the sheets. At Qumran, the length of most sheets of leather varied between 21 and 90 cm. The natural limitations of the sizes of animal hides determined the different lengths of these sheets within each scroll, which varied more in some scrolls than in others. In two instances (MurXII, 11QpaleoLev^{a}), the preserved sheets are more or less of the same length.

The inscribed surface was usually organized in the form of a column; this was always the case in literary compositions. In texts consisting of more than one column, these columns always follow one another. Only one document is known, 4QIncantation (4Q444), in which three tiny fragments of parchment (each containing four lines) were stitched together vertically, but also in this case the groups of four lines constitute a single column. In the case of 4QApocr. Psalm and Prayer (4Q448), the different arrangement of the columns probably derived from the adhesion of a reinforcement tab that necessitated a large margin at the beginning of the scroll (col. A).

There is a positive correlation between the length and the width of columns: the higher the column, the wider the lines, and the longer the scroll.

The *sizes of the columns* differ in accordance with the number of columns per sheet, the measurements of the sheets, and the conventions developed by the scroll manufacturers. The different parameters of the columns pertain to their width and length as well as to the top, bottom, and intercolumnar margins.

In some Qumran scrolls, the height and width of the columns are fairly consistent, while in most scrolls these parameters varied from sheet to sheet as well as within each sheet, in accordance with the measurements of the sheets. Thus the width of some columns in 1QM and 4QLam differs by as much as 50 percent from other columns in the same scrolls. Considerable differences between the width of the columns are visible in 11QT^{a} (11Q19) and 8ḤevXIIgr, while even larger ones are evident in 1QIsa^{a} (cf. col. XLIX [16.3 cm] with LII [8.8 cm]), 1QS (cf. cols. I [9.7 cm] and II [11.5 cm] with other columns measuring 16, 18 and 19

cm) and 4QLam (col. III is almost twice as wide as cols. I and II). At the same time, a degree of regularity in column sizes is noticeable in most scrolls. Usually, the available space in a sheet was evenly divided between the columns, but the unusual sizes of the sheets did not always allow for such uniformity. Columns that are unusually wide or narrow are generally found at the beginning or end of sheets.

The average width of columns in 1QM is 15.0 cm, in 1QH^{a} 13.0 cm, and in 1QS 9.5–15.5 cm. An example of a scroll with very wide columns is 4QJer^{b} with 21–24 cm (115–130 letter-spaces; reconstructed). An example of a scroll with narrow columns is 4QMMT^{a} (4Q394) frgs. 1–2 i–iv with a width of 1.7–2.0 cm (probably reflecting a separate composition, 4QCal. Doc. D[4]). Furthermore, all the poetical compositions presenting the text stichographically with hemistichs, such as most columns of 4QPs^{b} written in units measuring *c.* 3.7–4.5 cm, present narrow columns.

The *average number of lines* per column in Qumran scrolls is probably 20, with a height of approximately 14–15 cm (including the top and bottom margins). Larger scrolls contained columns with between 25 and as many as 60 lines. Scrolls of the smallest dimensions contained merely 5–13 lines and their height was similarly small.

Among the scrolls with a large writing block one finds many texts from Qumran, as well as *all* the scrolls from Masada, Naḥal Ḥever, Sdeir, and Murabbaʿat that can be measured. The latter group of sites contains scrolls that are usually somewhat later than those found at Qumran. The *terminus ad quem* for the Masada texts is more or less identical to that of Qumran, yet the Qumran finds include earlier texts. The texts from Naḥal Ḥever, Sdeir, Murabbaʿat have as their *terminus ad quem* the Second Jewish Revolt. The manuscript evidence from these sites thus may attest to a later practice: MurGen-Num (*c.* 50 lines); MurXII (39 lines); Sdeir Gen (*c.* 40 lines); 8ḤevXIIgr (42–45 lines); as well as all the Masada texts for which such evidence is known: MasSir (25 lines); MasLev^{b} (25 lines); MasShirShabb (26 lines); MasEzek (42 lines); MasDeut (42 lines); MasPs^{b} (44 or 45 lines). The evidence suggests that the scribal traditions at these sites were for writing on scrolls of larger dimensions than the average Qumran scroll. This situation may be connected with specific manufacturing procedures, but more likely the data reflect the finding of *deu*editions of biblical scrolls at these sites, all of which were of a large format.

The same compositions were often written on scrolls of differing sizes, although in some cases a degree of regularity is visible.

[4] See S. Talmon with J. Ben-Dov, *DJD* XXI.

All texts whether written on scraps, single sheets, or scrolls were copied with clearly indicated *margins* on all sides of the text; *tefillin* are the exception, where every available space was used for writing. Even 4Q339 (4QList of False Prophets ar), a very small piece of leather, has very clearly recognizable margins (top, bottom, left).

The margins in the Qumran scrolls are usually the same size within each sheet. There are rare exceptions where the margins differ from column to column within a sheet, and sometimes from sheet to sheet, due to the leather not being uniform in size. In the Qumran leather and papyrus texts, the bottom margins are usually larger than those at the top. However, in some cases the two margins are identical or the top margin is larger. Large margins, especially large bottom margins, enabled easy handling of the scroll and were therefore prescribed for Scripture by rabbinic sources, see *b. Menaḥ*. 30a (cf. *Massekhet Sefer Torah* 2.4). In Qumran scrolls, it is usual for the top margins to measure 1.0–2.0 cm, and the bottom margins 2.0–3.0 cm. Larger margins, especially in late texts, usually are a sign of a *de luxe* format.

All biblical texts were inscribed on one side only, while several nonbiblical texts were inscribed on both sides (opisthographs).

2. *The Scribes*

Little is known about the Qumran scribes and they remain as anonymous as they were two generations ago. Scribes were introduced to their trade over the course of a training period in which they learned writing and the various scribal procedures connected with it (such as writing at a fixed distance below ruled lines and in columns; the subdivision of a composition into sense units; the treatment of the divine names; the correction of mistakes, etc.). Furthermore, scribes had to master various technical skills relating to the material on which they wrote, the use of writing implements, and the preparation of ink.

The abecedaries found at Qumran,[5] Murabba'at,[6] Masada (ostraca 606 and 608), and at many additional sites dating to the period of the First and Second Temples[7] probably witness to such a learning process for

[5] See Kh. Qumran Ostr. 3 published by E. Eshel in *DJD* XXXVIII. Two additional abecedaries, described as deriving from the first century BCE, are displayed in the Israel Museum as "Qumran?"

[6] Some of the abecedaries from Murabba'at were written on parchment (Mur 10B, 11), while others were inscribed on sherds (Mur 73, 78–80), all published in *DJD* II.

[7] See É. Puech, "Abécédaire et liste alphabétique de noms hébreux du début des IIe S. A.D.," *RB* 87 (1980) 118–26; A. Lemaire, *Les écoles et la formation de la Bible dans l'ancien Israël* (OBO 39; Fribourg/Göttingen: Editions universitaires/Vandenhoeck & Ruprecht, 1981) 7–32; M. Haran, "On the Diffusion of Literacy and Schools in Ancient Israel," *VTSup* 40 (1988)

scribes. A learning process is possibly also reflected in such scribal exercises as 4QExercitium Calami A (4Q234), B (4Q360), and C (4Q341) that contain lists of names and other words. Certain Qumran documents, written with very inelegant and irregular handwriting, were considered by some scholars to have been written by apprentice scribes. Thus Milik, *Enoch*, 141 considered 4QEn^{a} ar (4Q201) to be a "school-exercise copied by a young scribe from the master's dictation." Skehan considered 4QPs^{x} (4Q98g) to be a "practice page written from memory,"[8] Milik considered 4QDanSuz? ar (4Q551) to have been written by an apprentice scribe,[9] and Puech suggested that 4QBirth of Noah^{a} ar (4Q534) was written by a child.[10]

It is hard to know how many of the texts found in the Judean Desert were actually produced locally, that is, both their physical preparation and the copying of the manuscripts. Undoubtedly at least some of the leather scrolls were produced locally (as can in due course be proved with DNA analysis comparing the scrolls with hides of local animals, both ancient and present-day), but at present this cannot be ascertained. It is also impossible to know whether the production of papyrus was local (Ein Feschkha or elsewhere in Israel), or whether the papyri were imported from Egypt.

Qumran. If it could be proven that locus 30 at Qumran served as a room in which documents were written (a scriptorium in medieval terminology),[11] the assumption of a Qumran scribal school would receive welcome support, but the reliability of the evidence pointing to the existence of such a scriptorium is questionable. Beyond the archeological relevance of locus 30, most scholars now believe, on the basis of the content of the scrolls, that some, many, or all of the documents found at Qumran were copied locally.

81–95; J. Renz and W. Röllig, *Handbuch der althebräischen Epigraphik* 2 (Darmstadt: Wissenschaftliche Buchgesellschaft, 1995) 22–5; W. Nebe, "Alphabets," *Encyclopedia DSS*, 1.18–20.

[8] P. W. Skehan, "Gleanings from Psalm Texts from Qumran," in *Mélanges bibliques et orientaux en l'honneur de M. Henri Cazelles* (ed. A. Caquot and M. Delcor; AOAT 212; Neukirchen/Vluyn: Neukirchener Verlag, 1981) 439–52 (439).

[9] J. T. Milik, "Daniel et Susanne à Qumrân?" in *De la Tôrah au Messie* (ed. M. Carrez et al.; Paris: Desclée, 1981) 337–59, esp. 355.

[10] *DJD* XXXI, 135.

[11] Thus the majority of scholars ever since the description by R. de Vaux, *L'archéologie et les manuscrits de la Mer Morte* (London: Oxford University Press, 1961) 23–6; idem, *Archaeology and the Dead Sea Scrolls* (The Schweich Lectures of the British Academy; London 1973) 29–33; see also R. Reich, "A Note on the Function of Room 30 (the "Scriptorium") at Khirbet Qumran," *JJS* 46 (1995) 157–60.

Stegemann holds a maximalistic view on this issue, assuming that most Qumran scrolls were written on site.[12] According to him, one of the main occupations of the Qumran community was the preparation of parchment for writing and the mass-production of written texts. These texts were then sold by the Qumran community to the outside world, and Stegemann pinpoints the places in the community buildings in which the scrolls were manufactured, stored, and offered for sale.[13] Golb, expressing a minimalist view, claimed that none of the Qumran documents were written locally.[14]

Masada. There is no reason to believe that any of the Masada texts were penned at Masada itself, even though the Zealots and presumably also the Essenes remained there long enough to have embarked upon such writing. On the other hand, there is apparently some evidence of tanning of hides at Masada, which could imply some scribal activity.[15]

Probably only the Hebrew, Aramaic, and Greek ostraca were written at Masada prior to the destruction of the fortress. The Latin ostraca and some Greek papyri were probably inscribed under the Roman occupation, and other papyrus and leather texts may have been imported.

Because of the lack of external information on the scribes who copied or wrote the documents found in the Judean Desert, our sole source of information about them is the scribal activity reflected in the documents themselves. Whether a text under discussion is a copy of an earlier document or an autograph, the scribal practices reflected in it do provide information that is relevant to the study of these scribal practices. However, in the analysis of these practices it is often difficult to distinguish between the personal input of the scribes and elements transmitted to them. Thus, the division into sense units and the specific layout of poetical units embedded in the Qumran texts probably derive from the first copies of these compositions, although in the transmission of these elements scribes displayed a certain level of individuality. The more closely scribes adhered to the scribal practices embedded in the texts from which they were copying, the less the texts reflected their own

[12] Stegemann, *Library*, 51–5.

[13] This theory was rejected in a detailed analysis by F. Rohrhirsch, *Wissenschaftstheorie und Qumran: die Geltungsbegrundungen von Ausssagen in der Biblischen Archäologie am Beispiel von Chirbet Qumran und En Feschcha* (NTOA 32; Freiburg: Universitatsverlag Göttingen, 1996), and idem, "Die Geltungsbegründungen der Industrie-Rollen-Theorie zu Chirbet Qumran und En Feschcha auf dem methodologischen Prüfstand: Relativierung und Widerlegung," *DSD* 6 (1999) 267–81.

[14] N. Golb, *Who Wrote the Dead Sea Scrolls?: The Search for the Secret of Qumran* (New York: Scribner, 1994).

[15] See E. Netzer, *Masada III*, 634–5.

initiatives. In another case, the number of lines per column probably was determined more by scroll manufacturers than by scribes. Scribes could choose between scrolls of different sizes, and probably ordered a scroll size to fit a specific composition. In the case of small-sized scrolls, such as the copies of the Five Scrolls, it was probably not the individual scribe but rather tradition that determined that short compositions were to be written on scrolls of limited dimensions. On the other hand, some practices and approaches were very much exponents of the individuality of scribes: handwriting, frequency of errors, correction procedures, the indication of sense divisions, scribal markings, use of final and non-final letters, adherence to horizontal and vertical ruling, special layout of poetical units, as well as the choice of the base text.

Several scrolls were penned by more than one scribe, especially among texts presumably written by the Qumran scribal school. It is difficult to know how many long scrolls were written by more than one scribe. Probably the rule was that each scroll, long or short, was written by a single scribe, and the involvement of more than one scribe was the exception rather than the rule. Not only 1QIsa^a, a long scroll, but also 4QApocr. Psalm and Prayer (4Q448), a short scroll, was written by two different scribes. Changes of hand in the middle of the text are recognizable in several documents, but the background of these changes is often not readily understandable. In some cases, both scribes wrote a substantial part of the scroll (1QIsa^a), while in other cases the second scribe wrote very little (1QpHab, 1QH^a scribes A–C, 1QS, 11QT^a).

Whether in these cases the change of hand indicates a collaboration of some kind between scribes, possibly within the framework of a scribal school, is difficult to tell. Sometimes (4QJub^a), the second hand may reflect a corrective passage or a repair sheet. The situation becomes even more difficult to understand when the hand of a scribe B or C is recognized not only in independently written segments, but also in the correction of the work of a scribe A. Thus, according to Martin, scribe C of 1QH^a corrected the work of scribe A, while scribe B corrected that of both scribes A and C.[16]

It is difficult to identify scribal hands solely by an analysis of handwriting and other scribal features, but if our lack of knowledge is taken into consideration, one notes that among the Qumran manuscripts very few individual scribes can be identified as having copied more than one manuscript. It stands to reason that several of the preserved manuscripts were written by the same scribe, but we are not able to easily detect such links between individual texts, partly because of the

[16] Martin, *Scribal Character*, I.63.

fragmentary status of the evidence and partly because of the often formal character of the handwriting. However, convincing evidence is available for a few scribes, such as the scribe who wrote 1QS, 1QSa, 1QSb, and the biblical text 4QSam^{c}, and his hand is also visible in several corrections in another biblical text, 1QIsa^{a} (see chapter 5*, § 3). The identification of this scribal hand also serves to show that, at least in this case, biblical and nonbiblical texts were copied by the same person, and that he treated both texts in the same way. There also is no indication that *tefillin* were copied by different scribes, therefore indicating that the category of scribes who specialized in sacred writings developed later, or only in rabbinic circles.

The existence of *scribal schools* cannot easily be proven. A close relationship among the various manuscripts of the MT family is often surmised by scholars. Whether or not this textual closeness also implies a separate scribal school needs to be established by different types of criteria. Although it is likely that these manuscripts were indeed created by a single scribal school, the relevant criteria for setting these manuscripts apart from other texts still need to be formulated. The proto-Masoretic manuscripts are characterized by minimal scribal intervention and a *de luxe* format. At the same time, the existence of a Qumran scribal school is often surmised.[17] The criteria used for this assumption are in the realm of orthography, morphological features, and special scribal practices. Thus, it can be shown that the employment of cancellation dots, crossing out with a line, scribal signs, and several other scribal features is especially frequent in texts that display specific orthographical and morphological features, and which include almost exclusively all the Qumran sectarian texts as well as some biblical texts. The inclusion of phylacteries with a special non-Rabbinic (and therefore probably Qumran sectarian) content in this group is also remarkable. It has therefore been suggested that a special scribal school wrote these texts at Qumran or elsewhere, although this remains speculative. Nothing is known about the training within this school or scribal cooperation, although there are a few manuscripts that were written within this scribal tradition, and supplemented by a second scribe who also wrote in the same tradition. There are differences in scribal habits within this group, which may indicate that writing was carried out over the course of several periods.

Study of the scribal practices reflected in the texts from the Judean Desert compared with descriptions and prescriptions of such practices in rabbinic literature is helpful as long as it is recognized that the latter refer

[17] See *Scribal Practices*, 261–73 and chapter 27* below.

to the writing of religious texts at a later period, and in circles that only partially overlapped with those that produced the texts found in the Judean Desert. Thus, probably only the biblical texts of Masoretic character, some *tefillin* and *mezuzot*, and possibly the paleo-Hebrew texts from the Judean Desert, which partly overlap with the proto-Masoretic text group, derived from the same or similar circles as those issuing the rabbinic prescriptions.

The rabbinic writing instructions pertaining to very specific details are scattered within the rabbinic literature, while some are combined in small compilations dealing with different topics, such as *b. Menaḥ.* 29b–32b; *b. Meg*. passim; *b. Shabb.* 103a–105a; *b. B. Bat.* 13b–14b. The internally best-organized group of such instructions is found in *y. Meg.* 1.71b–72a, and in the post-Talmudic compilation *Massekhet Soferim*. Many scribal practices reflected in the Qumran texts are covered by instructions or descriptions in the rabbinic sources. A comparison between the Qumran texts and rabbinic literature is hampered by the internal variety within both the Qumran literature and the rabbinic sources. The comparison can be applied only to books to which the rabbinic rules could apply, namely Scripture, *tefillin*, and *mezuzot.*

3. *The Copying Itself*

The ink used for writing the texts inscribed in some scrolls from the Judean Desert has been analyzed. On the basis of examinations carried out on several fragments from caves 1 and 4 in 1995, Nir-El and Broshi concluded that no metal ink was used in writing the Qumran scrolls.[18] These scholars assumed that the copper elements found in the ink used for the papyrus and parchment fragments derived from copper inkwells used by scribes, and that the ink itself was carbon based.

That different types of black ink were used is clear from the differing states of preservation of ink in the manuscripts. While in most cases the ink is very well preserved, on some scrolls it has corroded and eaten through the leather, often creating the impression of a photographic negative. This is the case with 1QapGen ar, 4QpaleoExod^{m}, 4QExod-Lev^{f}, 4QLev^{d}, and 4QDan^{d}. According to Cross, the ink has etched the leather "presumably because of some residual acid in the ink from its storage in a metal inkwell."[19] On the other hand, according to Nir-El and Broshi (see n. 18), this deterioration was caused by the agents used to

[18] Y. Nir-El and M. Broshi, "The Black Ink of the Qumran Scrolls," *DSD* 3 (1996) 157–67.
[19] F. M. Cross, *DJD* XII, 133.

bind the carbon-based ink, such as "vegetable gum, animal size, oil or honey."

In addition, red ink was used in the first lines of Psalm 103 in 2QPs, at the beginning of new paragraphs in 4QNum^{b}, as well as in two nonbiblical compositions. Nir-El and Broshi suggested that the red ink is composed of mercury sulfide (cinnabar), imported to Palestine from Spain through Rome.[20]

Ink was stored in *inkwells*, two of which were found by R. de Vaux in locus 30 at Qumran, the so-called scriptorium, one made of ceramic and one of bronze (both were exhibited in the Jordan Archaeological Museum in Amman in 1997).[21] A third inkwell, made of ceramic and also found by de Vaux, came from locus 31,[22] a fourth one, found by Steckoll, came from an unspecified place at Qumran,[23] and a possible fifth one is mentioned by Goranson, "Inkwell." There are dried ink remains in two of these inkwells.[24]

When writing, the scribe would copy from a written text. It is not impossible that some scribes wrote from dictation[25] or that mass production (dictating to several scribes at the same time) took place, but there is no evidence supporting this view. Phonetic interchange of letters as evidenced in many Qumran texts does not necessarily prove that they were written by dictation, since any scribe copying from a document could make phonetic mistakes or change the orthography, whether consciously or not.[26]

Little is known about the *pens* used for writing the texts from the Judean Desert, as these have not been preserved. The pens used were probably of the *calamus* (κάλαμος) type, made from reed. Pfann notes with regard to the pens used for the texts written in the Cryptic A script: "For the most part a reed pen tip, that had been carefully honed to have a rectangular cut tip, was used, which allowed the scribe to produce

---

[20] Y. Nir-El and M. Broshi, "The Red Ink of the Dead Sea Scrolls," *Archaeometry* 38 (1996) 97–102.

[21] See S. Goranson, "Qumran: A Hub of Scribal Activity," *BAR* 20, 5 (1994) 36–9; idem, "An Inkwell from Qumran," *Michmanim* 6 (1992) 37–40 (Heb.).

[22] R. de Vaux, "Fouilles au Khirbet Qumran: Rapport préliminaire sur la dernière campagne," *RB* 61 (1954) 206–33, esp. 212 and pls. 5, 6, and 10b. For further information on inkwells found in ancient Israel, see Goranson, "Inkwell," 38 (see n. 21).

[23] S. H. Steckoll, "Marginal Notes on the Qumran Excavations," *RevQ* 7 (1969) 33–40, esp. 35.

[24] See further M. Broshi, "Inkwells," *Encyclopedia DSS*, 375.

[25] Thus with regard to 1QIsa^{a}: M. Burrows, "Orthography, Morphology, and Syntax of the St. Mark's Manuscript," *JBL* 68 (1949) 195–211, esp. 196; H. M. Orlinsky, "Studies in the St. Mark's Isaiah Manuscript," *JBL* 69 (1950) 149–66, esp. 165.

[26] Thus already E. Hammershaimb, reacting to the theories regarding 1QIsa^{a}: "On the Method Applied in the Copying of Manuscripts in Qumran," *VT* 9 (1959) 415–8.

strokes with shading (normally vertical or slightly diagonal) depending upon the direction of the stroke. At other times another more or less round or square-tipped pen was used, which produced strokes with little or no shading."[27]

It is unknown in what position the writing was executed, but most probably scribes were seated either on a bench or on the ground, while holding the sheet on a board on their knees, similar to the position of Egyptian scribes. In *locus* 30 at Qumran, archeologists found a table five meters in length, two small "tables," a few small benches fixed to the wall, and several inkwells (cf. PAM 42.865), which were situated either in this room or on a second floor that according to some scholars was situated above this room.[28] However, doubts have been raised with regard to this assumption. Several scholars have claimed that the table is too low (70 cm) for writing.[29] Besides, real evidence for the writing at tables is not available until several centuries after Qumran was abandoned. The so-called "tables" probably were not strong enough to support people either sitting or writing on them.

Scribes writing in the square script wrote a running text with spaces between the words (except for *tefillin*), while in some cases they would join two closely connected words without such spaces. At the same time, in texts written in the paleo-Hebrew script, words were separated by little dots or strokes in accordance with the writing tradition in that script.

Some poetical sections were arranged stichographically in different systems of a special graphical presentation of the stichs and hemistichs indicated by spacing, but most texts, including poetry, were written as prose (running texts). Scribes would also leave occasional spaces for section breaks based on the content: closed sections in the line for smaller breaks, open sections usually for larger breaks, and for even larger breaks a combination of an open section and a completely empty line. As a result, scribes must have had a good understanding of the composition, although often these spaces would have been copied from their sources. Units smaller than sections, known as "verses," such as indicated in the medieval manuscripts, belonged to the oral tradition, and were not indicated in written Hebrew sources, although they were indicated in the contemporary copies of the Greek and Aramaic Bible translations.

---

[27] S. J. Pfann, *DJD* XXXVI, 520.

[28] See M. Broshi, "Scriptorium," *Encyclopedia DSS*, 2.831.

[29] See B. M. Metzger, "The Furniture of the Scriptorium at Qumran," *RevQ* 1 (1958) 509–15; K. G. Pedley, "The Library at Qumran," *RevQ* 2 (1959) 21–41, esp. 35; K. W. Clark, "The Posture of the Ancient Scribe," *BA* 26 (1963) 63–72.

The Qumran scribes had a special approach towards the writing of divine names, especially the Tetragrammaton. In texts written in square characters, especially in texts probably produced by the Qumran scribal school (see n. 17), the use of the Tetragrammaton was usually avoided, but when it was used, it was copied in the paleo-Hebrew script, also in some biblical scrolls. Likewise, אל, אלהים, and צבאות were sometimes written in that script. There are indications that in some scrolls these divine names were written after the scribe of the manuscript completed his task, possibly by a scribe belonging to a higher echelon. In several other texts, four or five dots were used to indicate the Tetragrammaton.

Scribes made all the types of *mistakes* that may be expected from any copyist (omissions of small and large elements, duplication, writing of wrong words and letters, mistakes in matters of sequence). Obviously, some scribes erred more than others. For example, 1QIsa^a contains more errors than most other scrolls. Many of these mistakes were left in the text, while some were corrected by the original scribe, or a later scribe or reader. Letters could not be washed off from leather, as they could from papyrus, so other techniques had to be used: (1) removal of a written element by way of erasure or blotting out, crossing out, or marking with cancellation dots or with a box; (2) addition of an element in the interlinear space or, rarely, in the intercolumnar margin; (3) remodeling (reshaping) of an existing letter to another one; (4) changing the spacing between words either by indicating that the last letter of a word belonged to the next word (beyond the space) or that there should be a space between two words that had been written as one continuous unit. All these procedures together may be named "scribal intervention," which is more frequent in some texts and less so in "luxury scrolls," partly because it was less needed in such carefully written scrolls. However, the exponent of scribal intervention pertains not only to the correction of mistakes, but also to the insertion of scribal changes in the text.

As can be seen clearly, many of the corrections indicated in the manuscripts were inserted by the original scribes in the middle of the copying process. In most cases, however, it cannot be determined who inserted the corrections, and the handwriting is not a good indication in the case of small corrections. Later scribes or readers also must have corrected the texts, either from memory, or by comparison with the text from which the scroll was copied or with another scroll. In the case of the biblical texts, there is no proof that scrolls were corrected on the basis of an authoritative scroll.

All the letters and words added between the lines correct existing elements in the text, mainly by way of addition. The technique of adding explicating glosses or variants was not used in the known scrolls. By the same token, these scrolls exhibit no parallels to the Masoretic *Ketiv*/*Qere* system known from the Talmud and medieval manuscripts (see chapter 14*).

In the course of the correction procedure, scribes used special signs for canceling letters or words (especially cancellation dots, crossing out with a line), and in addition to these signs some manuscripts contain several scribal markings, mainly in the margins. These signs are especially frequent in 1QIsa^{a} and 1QS, and were probably inserted by readers rather than scribes. The scrolls also display additional types of signs. The most frequently used sign, a straight line written mainly in the margin under the last line of a section (*paragraphos*), usually indicates the end of an open section, but occasionally that of a closed section. The varying shapes of these *paragraphoi* show that they were inserted by more than one person. Another such sign resembles an X, and probably designates a paragraph or issue for special attention. A variety of other signs are no longer intelligible, among them letters in the paleo-Hebrew and cryptic-A scripts that were written in the margins of 1QIsa^{a} and a few additional texts. Some of these letters probably carry a sectarian message, but they may also pertain to the public reading from the scroll.

The Qumran scribes wrote in the square script in Hebrew, and there is no certainty that the Aramaic texts and the biblical texts written in the paleo-Hebrew script were also copied by them. These texts may have been imported to Qumran, just like the Greek Bible texts found there; nothing points to the Qumran community's knowledge of Greek apart from the fact that one or more of the members, who probably knew Greek, had brought such texts with them.

4. *After the Writing*

Upon completing the inscribing of the composition, the scribe or manufacturer would join the sheets to form a scroll. When combining the sheets, they made an effort to align adjacent sheets so that the lines of writing would appear at the same level (most of the fifty-four columns in 1QIsa^{a}). However, when the columns were positioned at a slightly different height in adjacent sheets, the lines in these sheets often were not continuous. This explains the differences in height between the columns in the adjacent sheets of 1QS; 4QDeut^{n} sheets 1 (col. I) and 2 (cols. II–VI; in this composition the bottoms of the two sheets were cut evenly after

the two sheets were combined); 11QtgJob VIIB–VIII, XVII–XVIII, XXXI–XXXII, XXXV–XXXVI (however, the writing in cols. XIX–XX is at the same level); 11QpaleoLev[a].

According to rabbinic prescriptions, scroll sheets are to be sewn together with sinews from the same ritually clean cattle or wild animals from which the scroll itself was prepared. Cf. *b. Menaḥ.* 31b ("only with sinews, but not with thread") and *Sof.* 1.1 (see further *y. Meg.* 1.71d). The evidence suggests that most of the stitching material in the Qumran scrolls indeed consists of sinews. However, in his edition of 4QNum[b], Jastram concluded that the unraveling of the thread preceding col. XV (frg. 22b) suggested that it consisted of flax rather than sinews.[30] Further investigation should be able to determine which threads were made of animal sinews and which of flax, in the latter case contrary to rabbinic custom.

The completed document is a *scroll* (roll). In biblical and rabbinic Hebrew, a scroll is named מגילה (e.g. Jer 36:28; Ezek 3:1) or מגילת ספר (Jer 36:2, 4, 6; Ezek 2:9; Ps 40:8). In the Qumran scrolls, this phrase occurs in 4QWays of Righteousness[b] (4Q421) frg. 8 2, while מגילה alone occurs in 4QprEsth[b] (4Q550a), line 5. To the best of our knowledge, scrolls were used from very early times onwards, and therefore the original copies of all books of the Bible must have been written in scrolls. Hence, the insistence in Jewish tradition on this being the earliest form of the *Torah* has much to commend it.

Scrolls of all dimensions could be rolled (גלל, e.g. *m. Yoma* 7.1; *m. Sota* 7.7; πτύσσω Luke 4:17) easily, and upon completion of the reading they could be rolled back to the beginning (ἀναπτύσσω Luke 4:20), so that the first sheet of the scroll or its uninscribed handle sheet remained the external layer. By the same token, when a reader had finished in the middle section of a scroll or in any sheet thereafter, it was easier for him to roll it to the end, so that upon reopening the scroll he could roll it back.

Parchment scrolls were *closed or fastened* in three different ways:

a. Many scrolls were fastened with *thongs* (inserted in reinforcing tabs) or strings tied around them. In the words of Carswell, "The fastening of each scroll appears to have consisted of two elements, a reinforcing tab of leather folded over the leading edge of the scroll and a leather thong slotted through it, one end of which encircled the scroll and was tied to the exterior."[31] A tool such as KhQ 2393 may have been

[30] N. Jastram, *DJD* XII, 217.
[31] J. Carswell, "Fastenings on the Qumran Manuscripts," *DJD* VI, 23–8 (23).

used for this purpose.[32] The thong was connected to a reinforcing tab stuck to the scroll itself, in such a way that the thong was tied either straight or diagonally around the scroll (thus 4QD[a] [4Q266]).

Many detached reinforcing tabs made of coarse leather, differing from the finer leather of the inscribed scrolls, were found in the Qumran caves.[33] In cave 8, archeologists discovered sixty-eight such reinforcing tabs, usually of coarse leather, together with remains of only four manuscripts. Since each reinforcing tab was once attached to a single scroll, this cave probably contained a leather workshop or depository, unless it originally contained an equal number of scrolls and reinforcing tabs, with most of the scrolls having subsequently disintegrated. In only two cases have scrolls with attached reinforcement tabs been preserved, namely, 4QApocr. Psalm and Prayer (4Q448) and 4QD[a].[34]

Scrolls could also be tied with single strings or thongs not connected to a reinforcing tab, and some of these strings could have been passed through holes in the leather of the scroll or a cover sheet. According to Broshi and Yardeni, the tiny fragment 4QList of False Prophets (4Q339) was folded and held together by a string passed through holes that are still visible on the fragment.[35]

b. Several scrolls were protected by *linen wrappings*. Remnants of wrappings that had become detached from the scrolls were found in caves 1 and 11. A part of a scroll was found in cave 1 with its wrapper still around it and with the parchment stuck to a broken jar shard.[36] Some of the linen fragments found in the same cave probably derived from such wrappings. 1QIsa[a] was also once covered with a linen wrapping.[37]

The linen fragments from this cave are both dyed and non-dyed, and both with and without rectangular patterns. The use of linen wrappings for scrolls is referred to in *m. Kil.* 9.3 and *m. Kel.* 28.4 ("wrappers for scrolls") and in *y. Meg.* 1.71d ("cover"), for which Crowfoot mentioned some parallels from the classical world. The references in the Talmudic literature pertaining to wrappers with figures portrayed on them may be

---

[32] See *DJD* VI, 25.

[33] See Carswell, "Fastenings," *DJD* VI, 23–8 and pl. V.

[34] See *DJD* VI, pls. IVa–IVb and *DJD* XVIII, pls. I, XIV. Even if only two thongs were found attached to the scrolls, there is still much evidence of their use, visible in the imprint of the thongs or strings on the leather itself, creating a horizontal fold in the middle of most columns of 1QpHab, 1QS, 1QSa, 1QSb, 1QIsa[a].

[35] M. Broshi and A. Yardeni, *DJD* XIX, 77.

[36] *DJD* I, pl. I, 8–10.

[37] See the evidence quoted by G. M. Crowfoot, *DJD* I, 18–19.

similar to some of the linen fragments from cave 1 (rectangular patterns and blue elements).[38]

c. In a combination of the two aforementioned systems, some scrolls were both wrapped with linen and tied with a leather thong. One of the linen fragments from cave 4 (Israel Museum photograph X94.920) was attached to such a leather thong and together they must have surrounded a scroll. This system is not otherwise known from the literature. If the evidence mentioned under systems *1* and *2* for 1QIsa^{a} is correct, that scroll was also tied with a combination of two systems.

Various practices were employed at the *beginnings and ends* of scrolls. The beginnings, or parts thereof, of a number of texts from Qumran (fifty-one or 5.5% of all the preserved scrolls) and from the other sites in the Judean Desert (2 scrolls) have been preserved. The ends of a smaller number of scrolls have been preserved (twenty-nine from Qumran [3.1% of the total scrolls from that site] and two from Masada). It is probably no coincidence that for a large percentage of the texts from cave 11 (six of the twenty-one texts from that cave, disregarding the small unidentified fragments), one of the two extremities has been preserved, in this case always the ending. This implies that there were relatively favorable storage conditions in that cave (see chapter 27*).

At the beginning of the first sheet, the scribe often left an uninscribed area for handling the scroll (see 4QGen^{b}), which was always larger than the intercolumnar margin (usually 1.0–1.5 cm), and sometimes as wide as a whole column. This blank area at the beginning of the scroll was generally unruled, although in eight instances the surface was ruled up to the right edge. This system was imitated in the Copper Scroll (3Q15), in which the first column was preceded by a handling area 6.0 cm in width. In other cases, a separate uninscribed handle sheet (protective sheet, *page de garde*) was often stitched onto the first inscribed sheet; it is unclear whether in such cases a handle sheet was also attached to the last inscribed sheet (at least in 1QIsa^{a} this was not the case). Remnants of an attached initial handle sheet have been preserved only for 4QBarkhi Nafshi^{b} (4Q435); in all other instances the evidence is indirect, indicated by stitches at the right edge of the leather of the first inscribed sheet.

The final column of the text was usually ruled beyond the last inscribed line of the composition as far as the end of the column, e.g. 1QpHab, 1QIsa^{a}, 11QtgJob, 11QPs^{a}. Beyond the last inscribed column, the end of the scroll was indicated by one of the following systems: (1) the final column was often followed by an uninscribed surface, either ruled or unruled, that was often as wide as a complete column: 1QpHab;

[38] See n. 37.

11QpaleoLev[a]; 11QPs[a]; 11QtgJob; (2) a separate (ruled or unruled) uninscribed handle sheet (protective sheet) was often stitched onto the last inscribed sheet; (3) sometimes both systems were combined. In one case, there is evidence for the existence of *wooden bars, rollers* (עמודים) for handling the scrolls: 11QapocrPs (11Q11, ascribed to 50–70 CE).

The main evidence for the indication of titles pertains to nonbiblical scrolls, while there is one doubtful case of the name written on the verso of a biblical scroll, 4QGen[h-title] (4Q8c).

When a scroll was torn before or after being inscribed, it was often stitched. *Stitching* sewn prior to the writing in a scroll made it necessary for the scribe to leave open segments in the middle of the text, which were frequently as extensive as two complete lines. Stitching that was executed after the writing necessarily rendered some words illegible (e.g. 4QJer[c] XXIII). Accordingly, when the stitching appears in the middle of an inscribed area it can usually be determined whether it was done before or after the writing. When the stitching appears in the uninscribed margins, as in most instances, it cannot be determined when the scroll was sewn.

Wear and tear to a scroll in antiquity, in both inscribed and uninscribed areas, was sometimes repaired by sewing a patch onto the scroll. Most such patches were not inscribed (e.g. the back of 11QT[a] [11Q20] XXIII–XXIV[39] and the front of col. XXVII), while there is some evidence for inscribed patches. The only known inscribed patch from Qumran was once attached to col. VIII of 4QpaleoExod[m].[40]

Inscribed (4QUnclassified Fragments [4Q51a]) and uninscribed papyrus strips were attached in antiquity to the back of the leather of 4QSam[a] for support. Likewise, Trever, who was the first to study several scrolls in 1948, writes on 1QS: "A fairly large piece of this white leather (or parchment?) was glued to the back of columns 16 and 17, and another along the top back edge of column 19. The bottom edge had a similar treatment in several places where needed (cols. 3, 4, 7, and 12, where dark brown leather was used; and cols. 47 and 48, where a very light leather was used)."[41]

It is unclear how many words in the texts from the Judean Desert were *re-inked* in antiquity when the ink had become faint. Some examples are listed by Martin, but it is difficult to evaluate their validity.[42] The

---

[39] Yadin, *Temple Scroll*, pl. 12*.

[40] See *DJD* IX, 84–5 and pl. XI.

[41] J. C. Trever, "Preliminary Observations on the Jerusalem Scrolls," *BASOR* 111 (1948) 3–16 (the quote is from p. 5).

[42] Martin, *Scribal Character*, II.424.

final column of 1QIsa[a] was probably damaged in antiquity, possibly since it did not have a handle sheet or an uninscribed section for handling; as a result, the ends of lines 1–4, 6, 7, 9, 10 were re-inked.

At the other end of the spectrum are found several beautiful scrolls that can definitely be designated as *de luxe* editions. Large *de luxe* editions, in scrolls from 50 BCE onwards, were prepared mainly for biblical scrolls, especially of MT. This category possibly coincides with the "exact copies" (ἠκριβωμένα) of Scripture that were fostered by the temple circles in Lieberman's description, based on statements in rabbinic sources.[43] The assumption of such *de luxe* editions is based on the following data: (1) Large margins usually accompany texts with a large format. (2) The great majority of the scrolls written in *de luxe* format reflect the medieval text of MT.[44] Since the *de luxe* format was used mainly for the scrolls of the Masoretic family, we assume that many of them were produced in Jerusalem, the spiritual center of Judaism, the same center that subsequently formulated the rules for writing that were transmitted in the Talmud and *Massekhet Soferim*. (3) As a rule, *de luxe* rolls are characterized by a low level of scribal intervention, as may be expected from scrolls that usually were carefully written, and therefore had fewer mistakes that needed correction. However, the exponent of scribal intervention pertains not only to the correction of mistakes, but also to the insertion of scribal changes in the text.

There is no evidence that *large compositions* were written on more than one scroll, except for the books of the Torah. 1QIsa[a] was written by two scribes and their sheets were subsequently sewn together. Hence, the custom of subdividing large compositions into different scrolls probably derives from later times. Thus, while 4QSam[a] contains both 1 and 2 Samuel, later manuscripts divided the book into two segments.

Long texts naturally required longer scrolls, which are recognizable by their length and the height of the columns. It is unclear what the size of the maximum scroll was in the period when the Qumran scrolls were written. At a later period, *b. B. Bat.* 13b makes reference to large scrolls containing all the books of the Torah, Prophets, *or* Writings, and even a scroll containing all of these together ("bound up"), but the Qumran evidence neither supports nor contradicts the existence of such large scrolls. The evidence from the Judean Desert includes possible proof of a complete Torah scroll (Mur 1: Genesis-Exodus and possibly Numbers), as well of some combinations of books of the Torah in six different scrolls: Genesis-Exodus, Exodus-Leviticus, and Leviticus-Numbers.

[43] Lieberman, *Hellenism*, 20–27.
[44] For a list, see *Scribal Practices*, 125–9.

It is thus likely that several of the scrolls found at Qumran contained more than one book of the Torah, and possibly all of the Torah, in which case they would have measured 25–30 meters. According to *Sof.* 3.4, two of the books of the Torah were not to be combined if there was no intention of adding the other three books to them. If this rule had been followed in the scrolls found at Qumran, every occurrence of two attached books of the Torah must have been part of a longer Torah scroll. However, it is unknown whether this rule was followed in the Judean Desert scrolls.

Little is known about the *storage* of scrolls. Caves 1 and 3 at Qumran held large numbers of cylindrical jars, several of which were probably used for storing scrolls. These jars may have been sealed with pieces of linen, as suggested by Crowfoot.[45] Although it is not known which scrolls were stored in these jars, the jars in cave 1 probably contained the scrolls that remained fairly well intact, namely, 1QIsa^a, 1QM, 1QS, 1QapGen ar, and 1QH^a.

Any *damage*, including natural wear and tear incurred by frequent handling, required the discontinuation of the use of scrolls for cult service and their storage in a special area (*genizah*). There is no evidence for such *genizot* at Qumran, but at Masada there is ample evidence for this custom, since a scroll of Deuteronomy and one of Ezekiel were buried under the floor of the synagogue, in two separate *genizot*. Why these specific scrolls were buried there, and not others, remains unknown since only fragments of the scrolls have been preserved. But it stands to reason that these scrolls or segments of them were damaged at an earlier stage, making them unfit for public reading, and therefore religious storage became mandatory. These scrolls were probably buried by the Zealots during their stay at Masada (thus providing us with a *terminus ante quem* for the copying and storage, namely 73 CE). Their burial in separate pits shows that the scrolls were discarded at different times.

5. *Special Procedures for Biblical Texts?*

In the wake of the rabbinic instructions for the writing of biblical texts, especially those included in the late *Massekhet Soferim* collection, it is usually claimed that sacred writings were copied carefully with specific scribal conventions or, in any event, more carefully than nonsacred literature. However, the corpus of texts from the Judean Desert, when taken as a whole, shows that the scribes made little distinction when

[45] G. M. Crowfoot, *DJD* I, 19, 24.

copying sacred and nonsacred manuscripts, and more specifically biblical and nonbiblical manuscripts. In some circles a limited or even rigid distinction was made between these two types of manuscripts (see, for example, the regulations in rabbinic literature for the writing of sacred texts). However, this distinction is not reflected in the Judean Desert texts when taken as a whole. At the same time, paleo-Hebrew biblical manuscripts and many proto-Masoretic texts were singled out by certain circles for careful copying.

The Pharisees (and probably also the Sadducees) probably developed special rules for the writing of sacred texts. However, it cannot be said that these circles distinguished between the writing of sacred and nonsacred manuscripts, as they probably did not generate any nonsacred literary writings. When reading the instructions in rabbinic literature regarding the writing of sacred texts, the impression is created that these instructions are specific to sacred texts, but from the Qumran texts it is now evident that in most instances identical procedures were also applied to nonsacred texts.

The only differences between the copying of biblical and nonbiblical texts that are visible in the texts from the Judean Desert are:

- Biblical texts from the Judean Desert were almost exclusively written on parchment (thus also the rabbinic prescriptions for the writing of biblical texts in *m. Meg.* 2:2; *y. Meg.* 1.71d).
- Biblical texts were inscribed on only one side of the parchment unlike an undetermined (small) number of nonbiblical opisthographs from the Judean Desert.
- A *de luxe* format was used especially for biblical scrolls.
- A special stichographic layout was devised for the writing of several poetical sections in many biblical scrolls, as well as in one nonbiblical scroll.

In this study, the procedures followed during the last few centuries BCE and the first centuries CE for the copying of biblical scrolls were scrutinized. These procedures involved the various technical preparations made for the copying, a discussion of the identity of the ancient scribes, a detailed discussion of the copying itself, the production of the scroll after the completion of the writing, and a discussion of whether or not the production of biblical scrolls differed from that of nonbiblical scrolls. Continued analysis of these procedures on the basis of the finds from the Judean Desert will further illuminate aspects of the transmission of ancient texts.