Relationship to Other Dead Sea Scrolls. The text of Miqtsat Ma'asei ha-Torah has much in common with various documents of the Qumran corpus. Its appearance along with the 364-day sectarian calendar of solar months and solar years gives the impression that the authors of MMT accepted this calendar. MMT shares a variety of sacrificial laws and the same ritual calendar with the Temple Scroll. These parallels are no doubt to be traced to the common Sadducean legal substratum that they share, although these texts are not literarily interdependent. The Damascus Document also shares many common principles with the legal section of MMT. Here again, no literary relationship can be shown, only a relationship of content.

The Florilegium from Cave 4 also preserves some common legal rulings with Miqtsat Ma'asei ha-Torah, although they are not literarily dependent on one another. Miqtsat Ma'asei ha-Torah exhibits no parallels with the Rule of the Community or other such documents representing the teachings of the sect after it reached maturity.

These conclusions are consistent with the view that Miqtsat Ma'asei ha-Torah reflects the formative period of the Qumran sect. It therefore shares legal rulings with the sources of the Temple Scroll and the early laws of the Damascus Document. At the same time, it reflects the ideology of parts of the Temple Scroll. While the earlier Miqtsat Ma'asei ha-Torah and the Temple Scroll lack the language of sectarian antagonism, this tone is found in the Damascus Document, which was completed after the split was final and which reflects the sectarian animus that would characterize the later documents of the Qumran group.

Language. Another important area of research regarding discovery, which stems from the fact that 4QMMT represents the early history of the Qumran sect, is the analysis of its language. Milik, in discussing the Hebrew of the Copper Scroll, identified the language of this text as being Mishnaic Hebrew (Discoveries in the Judaean Desert, 3, p. 222), as a result of the large number of nouns found in it that are known from tannaitic usage. In actuality, this is an oversimplification, since the morphology and syntax resemble in many respects that of the Qumran sectarian texts. Accordingly, we can state that this document indicates that much of the halakhic vocabulary known from later tannaitic texts was already known in this period, even to those who used Qumran linguistic forms, and that certain of the characteristic elements of Mishnaic Hebrew already existed at an earlier period and influenced the usage even of the sectarians.

BIBLIOGRAPHY

Baumgarten, Joseph M. "The Pharisaic-Sadducean Controversies about Purity and the Qumran Texts." *Journal of Jewish Studies* 31 (1980), 157–170. The first study to identify a parallel between MMT and Sadducean law.

Baumgarten, Joseph M. "The 'Halakha' in Miqsat Ma'ase ha Torah (MMT)." *Journal of the American Oriental Society* 116 (1996), 512–516. Review essay on Qimron and Strugnell, *Qumran Cave 4, V. Discoveries in the Judaean Desert, 10*

Qimron, Elisha, and John Strugnell. "An Unpublished Halakhic Letter from Qumran." In *Biblical Archaeology Today: Proceedings of the International Congress on Biblical Archaeology, Jerusalem, April 1984*, edited by Janet Amitai, pp. 400–407. Jerusalem, 1985. First announcement of the character and significance of MMT.

Qimron, Elisha, and John Strugnell. "An Unpublished Halakhic Letter from Qumran." *Israel Museum Journal* 4 (1985), 9–12. Popular report on Miqtsat Ma'asei ha-Torah and its importance.

Qimron, Elisha, and John Strugnell. *Qumran Cave 4, V: Miqsat Ma'ase ha-Torah* Discoveries in the Judaean Desert, 10. Oxford, 1994 Official edition and thorough study of the text, its law, language, and historical significance

Reading 4QMMT: New Perspectives on Qumran Law and History, edited by John Kampen and Moshe J Bernstein. SBL Symposium series, 2. Atlanta, 1996. Volume of important studies showing direction in which research on this text can be expected to go.

Schiffman, Lawrence H. "Miqsat Ma'ase ha-Torah and the Temple Scroll." *Revue de Qumrân* 14 (1990), 435–457. Detailed comparison of parallel laws in 4QMMT and 11QT showing the shared halakhic heritage of these works.

Schiffman, Lawrence H. "The New Halakhic Letter (4QMMT) and the Origins of the Dead Sea Sect." *Biblical Archaeologist* 53 (1990), 64–73. Significance of Miqtsat Ma'asei ha-Torah for history of the Qumran sect

Shanks, Hershel. "Publisher's Forward." In *A Facsimile Edition of the Dead Sea Scrolls*, prepared with an introduction and index by Robert H. Eisenman and James M. Robinson, pp. xii–xlv. Washington, D.C., 1991 Publication of 4QMMT in the edition of Qimron and Strugnell without permission or attribution to Qimron, sparking lawsuit.

Sussman, Yaakov. "Heqer Toledot ha-Halakhah u-Megillot Midbar Yehudah: Hirhurim Talmudiyim Rishonim le-'Or Megillat Miqtsat Ma'ase ha-Torah." *Tarbiz* 59 (1989/90), 11–77 Pioneering study of the *halakhah* of Miqtsat Ma'asei ha-Torah and its significance for history of Jewish law in the Second Temple period. English translation in Discoveries in the Judaean Desert, 10, pp. 179–200.

LAWRENCE H. SCHIFFMAN

MIQVA'OT. Man-made installations constructed according to several regulations, *miqva'ot* ("ritual baths"; singular, *miqveh* [literally, "a gathering of water"]) were made to enable the observant Jew to purify himself, when necessary, through full immersion (*tevilah*) of the nude body in water. This ritual act was different from the simple process of washing or cleansing the body (which was performed in a bathtub situated in the bathroom), although at a certain time, washing of the body before the *tevilah* became a prerequisite, as a measure taken in order to keep the immersion waters as clean as possible.

The earliest practical regulations concerning ritual purity are presented, in a somewhat condensed manner, in *Leviticus* (especially chapters 11–15), dating perhaps to early postexilic times. As the requirements for purifica-

tion were limited and the population small, natural water sources, like springs and sporadic water concentrations that formed after heavy rains, satisfied the needs of the Jewish population. About the mid-second century BCE, when these purification locations were not sufficient, the *miqveh* was introduced in Judea.

The main written sources for this subject in the rabbinic (Pharisaic) literature are the tractates *Miqva'ot* in the Mishnah and Tosefta. These *halakhot* ("laws") are not composed as a manual to instruct the builder of a *miqveh* but are discussions of solved problems relating to the use of these installations.

Physical Characteristics. Attention was drawn to this type of installation in the excavations carried out in the Jewish quarter of Jerusalem (1969 onward), where in the bathrooms located in the basements of every private house, plastered and stepped water installations were discovered, dated to the first centuries BCE and the first century CE, down to 70 CE. My recent study has demonstrated their identification with the *miqva'ot* known from the rabbinic literature.

So that the waters of the *miqveh* would possess the intrinsic power of purification, they had to meet a number of regulations. The waters had to be gathered in the *miqveh* without direct human intervention (waters from "divine hands"). This implies rainwater flowing by gravity from the roof and courtyard of a house into a *miqveh*. Rainwater drawn with a bucket from a nearby cistern and poured into a *miqveh* does not qualify for purification, as it is in the "hands of man." For this reason, *miqva'ot* were cut or built into the ground and were not precast vessels. A minimum water volume of 40 *se'ah* (estimates fall between 0.5 and 1.0 cubic meters) was required with a minimum depth of 3 cubits (approximately 1.2 to 1.5 meters [4.0 to 4.9 feet]).

That the waters in the *miqveh* should be stationary, that is, not flowing, implied that no leakage through cracks in the walls should have occurred. This last requirement was clearly met with multiple coatings of plaster, so typical of the excavated *miqva'ot*. Tractate *Miqva'ot* neither refers to the provision for steps (which are, in fact, a common architectural element in the excavated installations, as such a requirement is self-evident) nor mentions any hint of a fixed number of steps.

Rainwater with a volume greater than 40 *se'ah* was regarded by the Pharisaic *halakhah* as possessing the power to purify people, vessels (with the exception of pottery vessels), and even impure (i.e., drawn) waters. This regulation is of a somewhat axiomatic nature, and it meant that these waters were not susceptible to any sort of impurity as long as they maintained the natural features of water and their volume did not diminish below 40 *se'ah*.

A man-made water installation is one in which the lower part is cut in bedrock while the upper part is built and roofed over with a barrel-shaped vault, or, alternatively, hewn completely out of bedrock. Its average measurements are 2 by 4 meters (6.6 by 13.1 feet). The steps, which usually occupy the entire width of the installation, have a comfortable height of approximately 25 to 30 centimeters (9.8 to 11.7 inches), with the exception of the lowest step, which descends to the bottom and has a height of 60 to 70 centimeters (23.4 to 27.3 inches). To overcome this elevation, one, two, or three small auxiliary steps were provided at the bottom. The tread of the steps varies in depth. In many cases, a deep step of 0.5 to 0.7 meters (1.6 feet to 2.3 feet) alternates with two or three steps of normal (0.3 meter [1 foot]) depth. Another type of installation (common at Jericho) has a narrow staircase attached to one or two sides of the basin. Rainwater was collected from the roof or stone-paved courtyard and diverted directly into these installations, either through the opening or by means of a gutter that pierced the built vault. Another means of providing a *miqveh* on a permanent basis was by spring waters, as in Hasmonean Jericho, or with winter runoff rain water as in Qumran, both using an aqueduct as means of conveyance. [*See* Qumran, *article on* Archaeology.]

A certain type of stepped and plastered water installation has been excavated in large numbers (over three hundred known, over one hundred fifty of them from Jerusalem) in sites dating to the Second Temple period. Domestic *miqva'ot* excavated in Jerusalem have been found in each private house. Others have been revealed in the palaces and mansions of the Hasmonean and Herodian dynasties in Jericho, Masada, and Herodium, as well as in other locations. [*See* Herodium; Masada, *article on* Archaeology.] Also in Jerusalem a large number of *miqva'ot* were found adjacent to the gates located on the southern and western walls of the Temple mount, made for the public who were entering the mount on the Jewish holidays and were obliged to do so in compliance with the purity regulations. [*See* Jerusalem.]

Another location in which *miqva'ot* were anticipated, in the light of rabbinic sources, was within rural areas with evidence of agricultural industry. Indeed, stepped installations are often discovered in very close proximity to ancient oil or wine presses dating to the Second Temple period. It is the strict observance of regulations related to the handling of fruits that calls for extreme purity: fruits that were picked and pressed to yield fluids (oil, wine) become susceptible to ritual impurity. Also, priestly families could consume tithes only in a state of purity.

In addition to the standard *miqveh*, several variant types evolved, one of which deserves special mention: a

miqveh that was equipped with two adjacent openings, instead of the normal single opening and/or a low partition (10 to 30 centimeters [3.9 to 11.7 inches] high), built or cut from bedrock, dividing the staircase into two lanes separating the descending impure person from undesired contact with the ascending pure person (cf. M. *Sheq.* 2.8).

The chief operational problem in maintaining a *miqveh* was to guarantee a constant supply of pure waters for immersion throughout the year. With a long rainless season prevailing at least from April to November, this poses a very grave difficulty in the Land of Israel. The *miqva'ot* are filled with rainwater during the first rainstorms of the year. However, as a minimal volume of 40 *se'ah* has the intrinsic power to purify persons, most utensils, and also drawn waters, an easy solution to maintain the pure waters was simply to add drawn waters to the *miqveh* on occasion, provided that the water level at the moment of addition was higher than 40 *se'ah*. In this case, any new amount of drawn, and therefore impure, waters would have been purified instantaneously. It is my opinion that this was the common way to tackle this problem, although it is not evident in the archaeological record.

When the waters of a *miqveh* became dirty or stagnant (which does not necessarily imply that they are impure) to such an extent that even the addition of drawn water would not improve their quality, they had to be changed. As there is no direct way to feed an empty *miqveh* with pure waters drawn from a nearby cistern (although the cistern water is in effect rainwater), this becomes an acute problem. In the large private houses and mansions in Jerusalem, which usually included several *miqva'ot*, a defiled *miqveh* did not raise any problem. The other installations would have sufficed through the dry season.

In several sites in the Judean Desert, which could afford only a small number of *miqva'ot*, an operational device was introduced based on the principle mentioned in the Mishnah that any body of water linked to the waters of a valid *miqveh* becomes equally pure. In several sites (Masada, Herodium, Jericho, and a few cases in Jerusalem) a pair of *miqva'ot* were excavated, linked at their rim by a pipe or channel initially filled with pure rainwater. One installation was not used for ritual immersion (in later times this installation was termed *otsar* ["treasury"]). When the waters of the other frequently used installation became filthy, they were simply drawn out of the *miqveh*. Clean waters were drawn from a nearby cistern and poured into the *miqveh*. The moment the stopper was pulled from the pipe connecting the installations and a momentary contact occurred between the two bodies of water, the *miqveh* became valid. It was the waters of the treasury, which possess the power to purify additional amounts of drawn waters, that purified the freshly drawn waters. This procedure could be repeated as often as required. It made it possible for those who used *miqva'ot* regularly in an arid area to use waters that were as clean and pure as possible. This method, which was only rarely used in the Second Temple period, is obligatory today.

As common as *miqva'ot* were in private houses of the Second Temple period, they were completely absent in contemporary non-Jewish private houses of the same period. Apart from Jewish inscriptions and symbols, the *miqveh* was the only architectural element within the private house that might point to the Jewish identity of the owners.

After the destruction of Jerusalem and the Temple in 70 CE, the needs for ritual purity were minimized considerably, resulting in the sharp decline in the number of *miqva'ot* in use, as attested by the archaeological record. From an average frequency of two to three installations per private house, as found in Jerusalem, the number declined to one to two *miqva'ot* per village or neighborhood. This relatively small number also was present later, in the Jewish neighborhoods in the towns of medieval Europe.

Miqva'ot at Khirbet Qumran. The architectural element at Khirbet Qumran that catches the eye more than anything else is the seeming abundance of water installations, sealed with watertight plaster. These installations were fed with runoff waters collected in the winter from the nearby Wadi Qumran and diverted to the settlement by an aqueduct. [*See* Water Systems.]

De Vaux, in the French edition of his book on Qumran (1961), defined all water installations as functioning for storage. In the English edition (1973) he concluded that installations 138 and 68 (following de Vaux's numbers) were used as baths but not for a ritualistic immersion. All the rest were still considered installations for storage. Wood (1984) has demonstrated that the volume of the stepless installations (numbers 58, 91, and 110) was sufficient to support a population of approximately two hundred persons and their livestock, and he has concluded that the stepped installations were constructed for a "nonutilitarian purpose," that is, cultic immersion. [*See* Cisterns and Reservoirs.]

At least ten stepped water installations were excavated in Qumran, six of which (138, 118, 117, 56, 48, and 71) are very similar (in plan, architectural details, and workmanship) to installations found in Jerusalem, Judea, and Galilee that undoubtedly served as *miqva'ot*. This analogy proves clearly that the Qumran installations were a local type or adaptation of the standard *miqveh*. Moreover, the Qumran installations resemble more closely the Jerusalem type than the type frequently used in the neighboring town of Jericho, meaning that they follow a Jerusalem architectural tradition.

Despite the resemblance there are some technical dif-

ferences. The Qumran installations are considerably larger (at least twice the volume) than the Jerusalem installations, and some are provided with two to four vertical, parallel, small partitions on the upper part of their staircases (versus a single central partition, if at all, in Jerusalem). Four other installations (85, 83, 68, and 69) are also stepped installations but of a smaller size and somewhat irregular shape. They might have been used for ritual immersion of a different type (of household utensils?).

The abundance of installations is not unique to Qumran. It is of the same order of magnitude found in Jerusalem (in the private houses of the Upper City and near the gates of the Temple mount). It should also be taken into account that not all installations were used simultaneously but reflect a long period of time in which they were built and might have been used consecutively (e.g., number 48 went out of use due to the severe crack caused by an earthquake).

In the event that Qumran was indeed the site of the sect of the scrolls, it should be stressed that few *halakhot* mentioned in the scrolls refer directly to the practical and perhaps technical aspects of ritual immersion. The Rule of the Community (1QS v.13) mentions the use of water purification, and the verb used, *bo'* (to "enter" the water), alludes to a total immersion. The Damascus Document (CD x.10–11) regulates that a ritual immersion (using the root *rḥts*) is prohibited in filthy water. It also requires that the immersion be total (the body should be covered), which differs from the Pharisaic requirement that included definite minimal measurements of water for purification. It further prohibits the use of "vessel waters" (i.e., water drawn with the help of a vessel) and suggests that immersion was carried out in waters gathered in a natural cavity (*geve'*; CD x.11–12). The different types of waters mentioned in the Rule of the Community (1QS iii.4–5) might indicate that in addition to the waters of seas and rivers, the purification waters were termed *mei raḥats*. [*See* Damascus Document *and* Rule of the Community.]

[*See also* Archaeology.]

BIBLIOGRAPHY

Avigad, Nahman. *Discovering Jerusalem*. Nashville, 1983. See especially pages 139–143. Describes the *miqva'ot* discovered in the private houses of the Upper City of Jerusalem from the Second Temple period.

de Vaux, Roland. *L'archéologique et les manuscrits de la Mer Morte*. London, 1961.

de Vaux, Roland. *Archaeology and the Dead Sea Scrolls*. London, 1973.

Netzer, Ehud. "Ancient Ritual Baths (Miqva'ot) in Jericho." *Jerusalem Cathedra* 2 (1982), 106–119. Describes the ritual baths found in the Hasmonean and Herodian palaces excavated in Jericho.

Reich, Ronny. "The Hot Bath-House (*balneum*), the Miqweh and the Jewish Community in the Second Temple Period." *Journal of Jewish Studies* 39 (1988), 102–107. Describes the introduction of both institutions, bathhouse and ritual bath, into the Jewish community and their interrelations.

Reich, Ronny. *Miqwa'ot (Jewish Ritual Immersion Baths) in Eretz-Israel in the Second Temple and Mishnah and Talmud Periods*. Jerusalem, 1990 (3 vols., in Hebrew with English abstract). First comprehensive study on the subject, including corpus of installations. Ph.D. dissertation.

Wood, B. G. "To Dip or to Sprinkle? The Qumran Cisterns in Perspective." *Bulletin of the American Schools of Oriental Research* 256 (1984), 45–60. Offers a quantitative analysis of the water installations of Qumran in relation to its population, and defines some of these as used for cultic purposes.

RONNY REICH

MIRD, KHIRBET. The name of a ruin located on top of an isolated hill in the Judean Desert, 248 meters above sea level and some 200 meters above Buqeia, Khirbet Mird (el Mird [Ar.]) is approached from the west along a saddle that was narrowed by rock cutting. The saddle carried a path and an aqueduct. The literary designation of el Mird is a corruption of the Syriac-Aramaic word *marda*, meaning "fortress," synonymous with the Greek Kastellion, the name of a famous Byzantine monastery erected in the late fifth century over the ruined Hasmonean-Herodian fortress of Hyrcania. This fortress gave the ruin its later names: Kastellion, Marda, and el Mird. The Greek Kastellion is derived from *castellum*, the Latin term for "fortress." The identification of Khirbet Mird with Hyrcania and Kastellion was first suggested by K. Furrer in 1880 and was accepted by most scholars.

History. Hyrcania is first mentioned by Josephus (*Jewish Antiquities* XIII, 417) as one of the three fortresses retained by Shelamzion Alexandra (r. 76–67 BCE). It may have been erected by Alexander Jannaeus or perhaps even in the time of his father, John Hyrcanus I, after whom the fortress was named. It was destroyed by Gabinius, the Roman governor of Syria, in 57 BCE (*Antiquities* XIV, 89; *The Jewish War* I, 160–170); Herod captured the fortress in 34 BCE, rebuilt it, and made it into a detention site for his political opponents, many of whom were executed and buried there, including his son Antipater (*The Jewish War* I, 364,664; *Antiquities* XV, 365–367, XVI, 13). The name Hyrcania does not appear in the literary sources after the death of Herod.

In 492 CE a *coenobium* ("monastery"), called Kastellion, was erected on the site by Saint Sabas. [*See* Monasteries.] Our chief sources for the history of this monastery in the late fifth and sixth centuries are the hagiographies, mainly *The Life of Euthymius* and *The Life of Sabas*, written by Cyril of Scythopolis (died ca. 559). Kastellion was a dependency of the Great Laura of Saint Sabas (today Mar Saba) in the Kidron Valley (Wadi en-Nar), and it was headed by an administrator (*dioiketes*) and his assistant,