How Archaeology Rewrote the History of Tefillin

This piece first ran on our Substack, Reading Jewish History in the Parsha. We're pleased to share it here on our website.

The mitzvah of wearing tefillin is based on four verses in the Torah (Exodus 13:9, 16; Deuteronomy 6:8; 11:18), two of which appear toward the end of Parshat Bo. The practice consists of using leather straps to affix a small leather case onto the arm and a second one onto the head, both of which contain thin slips of animal skin inscribed with the four passages from the Torah ("*parshiyot*") within which the above-cited verses appear.

Dozens of ancient tefillin discovered in several caves throughout the Judean Desert represent the earliest physical remains of tefillin observance known to date. These finds include tefillin cases, inscribed slips, and straps. In what follows, I will present a brief overview of these finds and of the scientific research currently underway to study these extraordinary artifacts.

The Discoveries

The first ancient tefillin were discovered by archaeologists in 1949, in the same cave near the ancient ruins of Qumran (close to the shore of the Dead Sea in the northern Judean Desert) where the first of the Dead Sea Scrolls had been found a year and a half prior. More tefillin were uncovered during the 1950s, by both archaeologists excavating in other caves elsewhere in the Judean Desert as well as by Bedouin looters who later sold the tefillin to archaeologists. Some of these tefillin were found in caves immediately adjacent to Qumran, while others were found in caves further to the south. (Contrary to urban legend, no tefillin have yet been found at Masada).

Altogether, a total of 44 inscribed slips were found, along with more than 27 leather tefillin cases. Of these, 12 slips remain to be unfolded and/or deciphered. In most instances, the slips were discovered outside of their cases (they had probably fallen out), but in five examples slips remained in their original case. Leather tefillin straps survived on only three of the tefillin cases; the others had apparently fallen out or else disintegrated over time.

The tefillin cases are all extremely small (usually only around 2 centimeters wide), as are the tefillin slips that they held. The inscriptions on the tefillin slips were written with minuscule letters, with very little space between letters and lines, and with almost no margins.

Torah Passages in the Tefillin

As a collection, the Judean Desert tefillin can be classified into two groups with regard to their content. The first group contains exactly the same Torah passages that are stipulated in rabbinic halacha and that we continue to include in our tefillin today: (1) Exodus 13:1–10; (2) Exodus 13:11–16; (3) Deuteronomy 6:4–9; (4) Deuteronomy 11:13–21. The second group contains these same passages, but also additional passages immediately adjacent to these: (1) Exodus 12:43–51; (2) Deut. 5:1–6:3; (3) Deut. 10:12–11:12. Included among these additional passages is the Ten Commandments!

All of the tefillin belonging to this second group were found in caves located near Qumran. This may be significant, as the residents of Qumran belonged to a separatist sect which apparently observed the laws of the Torah according to its own system of interpretation, different in many details from what we find in rabbinic halacha. Quite possibly, the tefillin with the additional passages may represent the practices of this particular sect and may not be representative of Jewish observance more broadly.

Rashi or Rabbeinu Tam?

Famously, two medieval sages—Rashi (Rabbi Shlomo Yitzḥaki) and his grandson Rabbeinu Tam (Rabbi Ya'akov ben Meir)—debated about the position that the two Deuteronomy passages are to be placed within the tefillin case: According to Rashi, Deuteronomy 11:13–21 ("*Vehayah 'im shamo'a*") is to be placed at the far left whereas according to Rabbeinu Tam, Deuteronomy 6:4–9 ("*Shema*'") is to be placed at the far left. Among the ancient tefillin, notions of "right" and "left" are applicable only with regard to head tefillin, where each of the four slips is placed within its own cell of the tefillin case, one next to the other. Arm tefillin, on the other hand, are all written in a single column form, one passage below the former (unlike our arm tefillin today which are written in four columns, each passage next to the former, from right to left). Accordingly, it could be interesting to examine whether any of the ancient head tefillin correspond with the opinion of either of these two medieval sages.

Because this problem involves the precise placement of the slips within the tefillin case, we will need to examine instances where the slips survived in situ within the case. As noted above, this was rare; only in two instances were slips found still in their case, and the slips were then removed, unfolded, and deciphered. In both instances (both from caves near Qumran), the order of the passages matched neither Rashi's opinion nor Rabbeinu Tam's.

Recent and Future Research

In recent years, I have directed a new research project which brings together a team of specialists in order to analyze various aspects of the Judean Desert tefillin that have never been studied before. For example, we have conducted microscopic and spectroscopic analyses to examine the skin material on which the tefillin were written in order to identify which layers of skin were used, what side of the skin was written upon, and whether or not the skin was tanned—all matters of halakhic significance. We have also employed these and other analytic methods to examine the black color on the tefillin cases, the forms of the cases, and the stitching materials used in sewing the cases closed. This study will be published in a forthcoming article coauthored by myself, Theresa Emmerich Kamper, and Naama Sukenik.

Another important aspect of our study involves characterizing the letter forms of the scripts used to inscribe the tefillin slips, which has crucial ramifications for dating the artifacts. And finally, updated readings of the tefillin slips will be published on the basis of new multispectral images taken of the inscriptions. In summary, the project brings state-of-the-art science to the study of an extraordinarily ancient practice, a tradition that—after thousands of years—is still with us today.