In addition to epigraphic and numismatic evidence, the manuscript discoveries in the Judaean Desert since the late 1940s have significantly contributed to our knowledge of scribal practices and the scripts in use during the Persian, Hellenistic, and Roman periods (Cross 1961, 1998; Yardeni 2000, 2002; Tov 2004).

Most Hebrew and Aramaic texts were written in a script that we know as the square script, which originated as the Aramaic script. In addition, Greek literary manuscripts (and perhaps also a few documentary manuscripts) were found in Caves 4 and 7 near Qumran, and Greek documentary and also a few literary texts appear at other Judaean Desert sites. Ostraca and papyri from Masada belonging to the Roman army were written in the Latin script. A few manuscripts from some Judaean Desert sites were written in Nabatean.

Fifteen manuscripts of the Dead Sea Scrolls were written in the older Hebrew script (paleo-Hebrew or old-Hebrew); these are mainly copies of the books of Moses (Genesis to Deuteronomy) and Job. The use of paleo-Hebrew is also evinced on Yehud coins from the Persian period, on Hasmonean coins from the second and first centuries BCE, and also on so-called revolt coins from the First Jewish Revolt and the Bar Kokhba Revolt in the first and second centuries CE. Paleo-Hebrew may have been in continuous use with some groups after the Neo-Babylonian period or was brought back into use in the Hasmonean period in the second century BCE.

Completely unexpected was the discovery of several script systems among the Dead Sea Scrolls, which were unknown until then. They have been conveniently named the “cryptic” scripts. Only Cryptic A has been deciphered, and from the Cryptic B and C scripts only a few fragments have been preserved.

A unique manuscript from Qumran, 4Q186, combines several scripts: square, paleo-Hebrew, Greek, and Cryptic A. Moreover, it is written in reverse order: from left to right. The combination of several scripts also appears on ostraca from Masada (Popović 2007: 227–230).
Another fascinating phenomenon which we did not know about before the discovery of the Dead Sea Scrolls is the spelling of the divine name. In some scrolls the four letters of the Hebrew name for God (the letters YHWH) are not written in the square script—maybe out of respect or to prevent the name from accidentally being spoken when reading the text aloud—but in the paleo-Hebrew script, as in the Psalms Scroll (11Q5) and the Pesher Psalms (4Q171). The manuscript 4QTestimonia (4Q175) illustrates another way to represent the Tetragrammaton by using four dots. And then there is the late first-century BCE Greek Minor Prophets Scroll from Nahal Hever which is entirely in Greek but has the Tetragrammaton in paleo-Hebrew. Scholars normally understand “the use of palaeo-Hebrew characters for the divine name . . . to be exclusive and characteristic for texts written according to the ‘Qumran scribal practice’ within the corpus” (Tigchelaar 2010: 199–200), often seen as a typical sectarian or Qumran phenomenon. However, the 28 fully or partially preserved occurrences of the Tetragrammaton in paleo-Hebrew in the Greek Minor Prophet Scrolls from Nahal Hever suggest that we need not perceive of this practice of writing the divine name in paleo-Hebrew in a limited sense as restricted to Qumran-specific manuscripts.

Today, we are familiar with differences between printed text, handwritten letters or scribbled notes. Similarly, there are differences between the various handwritings found in the Judean desert. For precious manuscripts with important texts, people used a meticulous script, also known as the formal script. The letters are mostly separate, some have been decorated and they are all about the same size. For letters and contracts a much easier script was used, the cursive script, in which the letters were connected to each other, giving them another form and making them more difficult to read. Many of the texts from Qumran have been written in a form we conveniently call semiformal or semicursive, a script which also has characteristics of the informal cursive script.

Even now there are great differences between the writing styles of different generations. The ways letters are formed and written are experiencing constant development, which can be used as an indicator for dating texts. Texts which bear their own internal date, like a date on a letter or a legal document, can be used to date other texts which were written in the same style of script, but do not have such
an internal date. Scholars have used these dated manuscripts to develop a dating system for the Dead Sea Scrolls, which consist mostly of literary texts without internal dates. Because texts in the common square script are available in sufficient numbers, scholars have observed a development that may allow for dating by specific style characteristics. For the common square script several periods are recognised, such as the Archaic (about 250-150 BCE), Hasmonean (about 150-40 BCE), Herodian (about 40 BCE until 70 CE), and post-Herodian (after 70 CE).

As to the material used to write on, the major part of the Dead Sea Scrolls was written on the skins of goats, sheep or members of the deer family, along with some calves. The skins were scraped clean, stretched, and dried, then tanned like leather, resulting in a product with mixed characteristics somewhere between parchment and leather. The hides were then cut into rectangular sheets, which were sewn together to construct scrolls. Sometimes a sharp object was used to impress horizontal and vertical lines to demarcate the columns and the lines from which the writer then hung the letters. About 10 percent of the manuscripts from Qumran were written on papyrus. The other find sites from the Judaean Desert have a greater percentage written on papyrus, as most of those texts are of a documentary nature. The Copper Scroll from Qumran Cave 3 is unique as it is the only text on copper. The copper, of a very high purity (99%), has been beaten to a thickness of less than a millimetre, and the scroll as such must have been of great value. The letters seem to have been beaten into the sheets, several times per letter, resulting in the letters showing through on the other side of the copper in relief.

We do not know much about the pens used to write the Dead Sea Scrolls because they were not preserved. They were probably calamus “reed” pens, which were also used throughout the ancient Mediterranean. The Dead Sea Scrolls were written mostly with black ink. As far as we know two kinds of black ink were used in Antiquity: ink based on coal (soot or ‘lampblack’) and iron gall ink based on ferrous sulphate (green vitriol), which contains sulphuric acid. It is not exactly clear which black ink was used to write the Dead Sea Scrolls. However, it is clear that different kinds of ink have been used as is evident from the state of the manuscripts. In many cases the ink is in good condition but in some cases the ink has corroded and eaten into the manuscript. In a few cases, red ink was also used. The red ink was probably
made with cinnabar (mercuric sulphide). This material may have come to Judea via Rome from Spain. It was an expensive material and the few manuscripts from Qumran in which red ink was used show that the ink was of a high quality.

Bibliography


