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THE SAMARITAN PENTATEUCH AND THE DEAD SEA SCROLLS

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In Memoriam Gary N. Knoppers (1956–2018)

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DEAD SEA SCROLLS PALAEOGRAPHY AND THE SAMARITAN PENTATEUCH

Michael Langlois

Seventy years after their discovery, the Dead Sea Scrolls continue to shed light on the Samaritan Pentateuch. In this contribution, I would like to focus on palaeography and explore two ways in which the study of the scribal hands that copied the scrolls may be relevant to the history of the Samaritan Pentateuch (𝔖). In the first part, we will examine the scripts of biblical Dead Sea Scrolls allegedly close to 𝔖 and date their copy on the basis of their palaeographical features. These dates will be used as boundaries for various stages of the redaction history of 𝔖 or its ancestors. In the second part, we will examine the so-called "Palaeo-Hebrew" script used by a few Dead Sea Scrolls. Taking into account other attestations of this script, we will outline its development and conclude as to the history of the Samaritan script.

1. The scripts of biblical Dead Sea Scrolls related to the Samaritan Pentateuch

In their recent synthesis, Anderson and Giles[1] mention the following Dead Sea Scrolls as preserving a possible pre-Samaritan text: 4Q17 (4QExod-Lev^{f}); 4Q22 (4QpaleoExod^{m}); 4Q27 (4QNum^{b}); 4Q158 and 4Q364–367 (4QRP); and perhaps 4Q26 (4QLev^{d}). They also refer to 4Q37 (4QDeut^{j}), 4Q38 (4QDeut^{k1}), and 4Q41 (4QDeut^{n}), whose relation to 𝔖 is debated. I will refrain, at this stage, from discussing the alleged relationship of these manuscripts to 𝔖, but rather focus on their palaeographical features. I will also add to this list 4Q45 (4QpaleoDeut^{r}), which is one of the closest scrolls to 𝔖 for the book of Deuteronomy, according

[1] Robert T. Anderson and Terry Giles, *The Samaritan Pentateuch: An Introduction to Its Origin, History, and Significance for Biblical Studies*, Resources for Biblical Study 72 (Atlanta: Society of Biblical Literature, 2012), 46–47.

to Ziemer.[2] Unless stated otherwise, the analyses presented below are based on the examination of high-resolution photographs provided by the Israel Antiquities, either on their dedicated website[3] or directly to me upon special request.[4] I refrained from consulting previous palaeographical studies of these scrolls in order to avoid any bias. My conclusions were then (and only then) compared to previous studies, and their differences (if any) are briefly discussed below. The thirteen manuscripts will now be presented according to their inventory numbers.

4Q17 (4QExod-Lev^{f})[5]

The script of this manuscript is rather naïve. The calamus is not beveled, and the letters are quite big, with an average caliber of 2.5±0.5 mm. Several features indicate a pre-Hasmonaean period: the absence of medial forms for כ and נ, the narrow ל, etc. Compared to an ostracon from Maresha dated to 136 of the Seleucid era (*i.e.* 176 BCE),[6] some letters seem to be drawn with an older ductus, such as the ת with a longer left leg and the absence of final ם and medial נ. I conclude that this manuscript was probably copied around the second half of the third century BCE. Cross dates it "to the mid-third century CBE",[7] which is possible, but I would not go much earlier.

4Q22 (4QpaleoExod^{m})

This manuscript is one of the few Dead Sea Scrolls that have been copied using the so-called "Palaeo-Hebrew" script; it will therefore be dealt with in the second part of this study. As we will see, it may have been copied sometime in the second half of the second century BCE or during the early first century BCE.

[2] See his contribution to this volume pp. 127ff.
[3] The Leon Levy Dead Sea Scrolls Digital Library, http://www.deadseascrolls.org.il/.
[4] I want to thank Pnina Shor, Oren Ableman, Orit Rosengarten-Kuslansky, Shai Halevi and Yael Barschak for their kindness and support.
[5] Frank Moore Cross, "17. 4QExod-Lev^{f}," in *Qumran Cave 4. VII. Genesis to Numbers*, Discoveries in the Judaean Desert XII (Oxford: Clarendon Press, 1994), 133–44.
[6] Esther Eshel and Amos Kloner, "An Aramaic Ostracon of an Edomite Marriage Contract from Maresha, Dated 176 B.C.E.," *Israel Exploration Journal* 46.1/2 (1996): 1–22.
[7] Cross, "17. 4QExod-Lev^{f}," 134.

4Q26 (4QLev^{d})[8]

4Q26 is one of the scrolls whose relation to 𝔐 is debated.[9] It is preserved by a few damaged fragments, which complicates the palaeographical analysis. The hand is confident; the script is formal, spacious, regular. ה features a thick protruding traverse; the top of ל is thickened, and some ל have an angular hook; ג is symmetrical; ב is drawn without lifting the pen; ת features an angular foot.

Overall, no clear Herodian features can be detected. I conclude that this scroll was copied sometime in the middle of the first century BCE. The *DJD* editor does not discuss the palaeographical features, whereas Eshel qualifies the script as "early Herodian" to be dated "between 30 BCE and 20 CE," pointing similarities with 4QNum^{b}.[10] But as we will see below, 4QNum^{b} is more at home in the mid-first century BCE or shortly after; I believe it may also be the case with 4QLev^{d}, though its fragmentary condition prevents a more accurate dating.

4Q27 (4QNum^{b})[11]

The hand of the scribe who copied this scroll is skilled, confident, and consistent. י and ו are penned in a similar way and can easily be confused, which is typical of first century BCE scripts. The head of ל is thickened. ב is drawn without lifting the pen, as opposed to the two-step ductus (with a left-to-right base protruding to the right) that develops in the Herodian period. Final ם features a triangular ornament at the left, which suggests further development from Hasmonaean hands. א sometimes has a tick at the bottom of the left leg as well as that of the diagonal; this is also indicative of a late Hasmonaean to early Herodian period. ג, on the contrary, features symmetrical legs, unlike the later Hasmonaean shape.

I conclude that this scroll was copied around the mid-first century BCE, preferably in the third quarter, but not much later. Jastram mentions Cross' dating between 30 BCE to 20 CE, but adds that in a personal communication Cross expressed a "preference for the earlier portion of that range," a

[8] Emanuel Tov, "26. 4QLev^{d}," in *Qumran Cave 4. VII: Genesis to Numbers*, Discoveries in the Judaean Desert XII (Oxford: Clarendon Press, 1994), 193–95.

[9] See, in this volume, the contribution by Michaël van der Meer pp. 41ff.

[10] Esther Eshel, "4QLev^{d}: A Possible Source for the Temple Scroll and *Miqṣat Ma'aśe Ha-Torah*," *DSD* 2.1 (1995): 1.

[11] Nathan Jastram, "27. 4QNum^{b}," in *Qumran Cave 4. VII. Genesis to Numbers*, Discoveries in the Judaean Desert XII (Oxford: Clarendon Press, 1994), 205–67.

conclusion that Jastram adopts.[12] Not only was Cross right in preferring the earlier portion of his range, but I believe that the third quarter would even be better given the relatively few Herodian features.

4Q37 (4QDeut^{j})[13]

This is one of the scrolls whose relation to 𝔐 is debated and complicated by its composite nature.[14] It was copied by a trained scribe in a formal script; several Herodian features can be observed: the upper arm of א is sometimes ornamented; ב is penned in two steps, with the base drawn from left to right and protruding to the right; ג is made up of a slanted vertical and an oblique left leg. ד features two horns: the left horn is a slightly slanted tick, while the right horn is sometimes drawn as a triangular loop joining the traverse and the leg. ל has a fully developed hook, but little or no upper tick. ק features a triangular loop joining the vertical and the traverse.

All these features are consistent with a typical developed Herodian formal script. Few late Herodian features are detected, which leads me to conclude that this scroll was probably copied in the first half of the first century CE, preferably around the second quarter. Cross dates it to *ca*. 50 CE, which is possible, but I want to emphasize that the script is not as typologically "late" as other late Herodian scrolls.[15]

4Q38 (4QDeut^{k1})[16]

4Q38 is one of the scrolls whose relation to 𝔐 is debated and complicated by its composite nature.[17] The *DJD* edition consists of one large fragment and four small fragments. My analysis is based on frag. 2, which was copied by a somewhat inconsistent hand; the strokes are not

[12] Jastram, "27. 4QNum^{b}," 211.

[13] Julie Ann Duncan, "37. 4QDeut^{j}," in *Qumran Cave 4. IX. Deuteronomy, Joshua, Judges, Kings*, ed. Eugene C. Ulrich et al., Discoveries in the Judaean Desert XIV (Oxford: Clarendon Press, 1995), 75–91.

[14] See the contributions by Benjamin Ziemer and Emanuel Tov in the present volume, pp. 127ff and 19ff respectively.

[15] Frank Moore Cross, "The Development of the Jewish Scripts," in *The Bible and the Ancient Near East. Essays in Honor of William Foxwell Albright*, ed. G. Ernest Wright (London: Routledge & Kegan Paul, 1961), 139.

[16] Julie Ann Duncan, "38. 4QDeut^{k1}," in *Qumran Cave 4. IX. Deuteronomy, Joshua, Judges, Kings*, ed. Eugene C. Ulrich et al., Discoveries in the Judaean Desert XIV (Oxford: Clarendon Press, 1995), 93–98.

[17] See the contributions by Benjamin Ziemer and Emanuel Tov in the present volume, pp. 127ff and 19ff respectively.

always very precise, and the ductus can vary. The script is semiformal and exhibits cursive features as well as a tendency to add curved ornamentations (see for instance ע, ש, sometimes א, and so on). ל features a rounded hook of varying size, sometimes almost closed. ה features a double traverse, while ש has a descending left stroke.

These features can already be observed in semicursive scripts in the Hasmonaean period, and it is difficult to know when they impregnated formal hands. But since no typical Herodian development can be observed, I conclude that this fragment was likely copied in the second half of the first century BCE. The *DJD* editor dates it to *ca*. 30–1 BCE,[18] which is possible, though I would not exclude a slightly earlier date due to the influence of semicursive ductus.

4Q41 (4QDeut^{n})[19]

The relation of this beautiful scroll to 𝔐 is likewise complicated by its composite nature.[20] It contains two sheets; the first one contains one column, while the second contains five columns. They have been copied by the same scribe. The script is quite small, partially regular; the size of final ך and ם are reminiscent of a second-century BCE ductus, but most features are otherwise in line with first-century Hasmonaean scripts. ע is quite developed, as is י which can easily be confused with ל. ו features thickening at its top by means of a forward loop. The left leg of א sometimes joins the diagonal at its top, but is not drawn together with it. ב is drawn without lifting the pen. ת features a sometimes longer right leg, especially (but not exclusively) in final position.

All these characteristics lead me to conclude that this manuscript was copied around the first half of the first century BCE, preferably around the second quarter. The *DJD* editor dates it to *ca*. 30–1 BCE,[21] but she is mislead in her palaeographical analysis: א does not use "the 'inverted-v' form"; when the left stroke joins the diagonal at its top, it is nonetheless

[18] Duncan, "38. 4QDeut^{k1}," 94.

[19] Sidnie White Crawford, "41. 4QDeut^{n}," in *Qumran Cave 4. IX. Deuteronomy, Joshua, Judges, Kings*, ed. Eugene C. Ulrich et al., Discoveries in the Judaean Desert XIV (Oxford: Clarendon Press, 1995), 93–98.

[20] Elizabeth Owen, "4QDeut^{n}: A Pre-Samaritan Text?," *Dead Sea Discoveries* 4.2 (1997): 162–78; Sidnie White Crawford, "A Response to Elizabeth Owen's '4QDeut^{n}: A Pre-Samaritan Text?,'" *Dead Sea Discoveries* 5.1 (1998): 92–94. See also the contributions by Benjamin Ziemer and Emanuel Tov in the present volume, pp. 127ff and 19ff respectively.

[21] White Crawford, "41. 4QDeut^{n}," 117–18.

drawn separately. Likewise, the base of ב is not "penned from left to right." I agree with her that ו and י can sometimes be confused, which is usually indicative of the second half of the first century BCE, but I would not consider it "a sure sign of an early Herodian hand." My preference for the second quarter rather than the first is in part due to this confusion of ו and י, but the last third of the century is typologically too late.

4Q45 (4QpaleoDeut^{r})

This manuscript is one of the few Dead Sea Scrolls that have been copied using the so-called "Palaeo-Hebrew" script; it will therefore be dealt with in the second part of this study. As we will see, it may have been copied sometime in the second half of the second century BCE or during the early first century BCE.

4Q158 (4QRP^{a})[22]

The hand of the scribe who copied 4Q158 is skilled and confident. Few Herodian features can be observed, such as the forward triangular thickening on top of ל that develops from the late Hasmonaean thickening and anticipates the late Herodian tick. The ductus of מ with a left oblique tick rather than a loop is also indicative. ג features an asymmetrical shape, but other shapes are more conservative: א, ע, final ך, etc. I conclude that this scroll was probably copied around the last third of the first century BCE. Allegro does not discuss the palaeography of this scroll; in his review article, Strugnell qualifies the hand as "formelle, hérodienne ou légèrement préhérodienne."[23] The conservative shapes of some letters, which I mentioned above, probably led him to consider a possible pre-Herodian dating; but the presence of more developed shapes favors the early Herodian period.

4Q364 (4QRP^{b})[24]

As I worked on the upcoming volume *Gleanings from the Caves*, I studied a small fragment labeled MS 5439/1.[25] Very few letters were attested,

[22] John Marco Allegro, *Qumrân Cave 4. I (4Q158–4Q186)*, Discoveries in the Judaean Desert of Jordan V (Oxford: Clarendon Press, 1968), 1–6.

[23] John Strugnell, "Notes en marge du volume V des « Discoveries in the Judaean Desert of Jordan »," *Revue de Qumrân* 7.2 (26) (1970): 168.

[24] Emanuel Tov and Sidnie White, "364. Reworked Pentateuch^{b}," in *Qumran Cave 4. VIII. Parabiblical Texts, Part 1*, Discoveries in the Judaean Desert XIII (Oxford: Clarendon Press, 1994), 197–254.

[25] Michael Langlois, "Palaeographical Analysis of the Dead Sea Scrolls in The Schøyen Collection," in *Gleanings from the Caves. Dead Sea Scrolls and Artefacts from The*

but they all were consistent with a second-century BCE palaeographical dating. Later, this fragment was identified as belonging to 4Q364. I was thus able to study the shape of letters that were not attested on the fragment; some of them were slightly more developed, which led me to conclude that this scroll was copied in the second half of the second century BCE. The date suggested by the editors of 4Q364, "late Hasmonean or transitional,"[26] is too late. Puech wrongly attributed this fragment to 4Q1, but his dating "de la deuxième moitié du II^{e} siècle avant J.-C."[27] is correct.

4Q365 (4QRP^{c})[28]

The script of this manuscript is naïve and semi-formal. The pen is not beveled; the scribe likes refined, recurved strokes. ש has an angled right stroke; ע features an elbow and horizontal base; ג is symmetrical (unlike the later Herodian ductus); פ has a large curled head; ל has a thickened top. ב is sometimes penned without lifting the pen, with a concave right-to-left base, and sometimes in the new two-step ductus; ו and י are both short and can easily be confused.

I conclude that the scroll was copied around the second half of the first century BCE. I agree with the *DJD* editors who qualify the script as "transitional between the late Hasmonaean and early Herodian periods."[29]

This scroll may have been tested for radiocarbon dating:[30] according to Doudna, the "Pentateuchal paraphrase" tested in Zurich[31] is an "Additional

Schøyen Collection, ed. Torleif Elgvin, Kipp Davis, and Michael Langlois, Library of Second Temple Studies 71 (London: Bloomsbury T&T Clark, 2016), 81–82.

[26] Tov and White, "364. Reworked Pentateuch^{b}," 201.

[27] Émile Puech, "Un nouveau fragment 7a de 4QGn-Ex^{a} = 4QGn-Ex 1 et quelques nouvelles lectures et identifications du manuscrit 4Q1," *Revue de Qumrân* 25.1 (2011): 105.

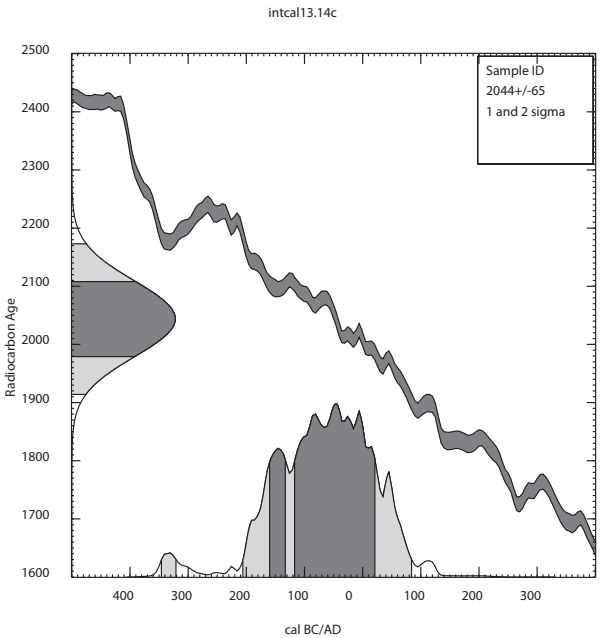
[28] Emanuel Tov and Sidnie White, "365. Reworked Pentateuch^{c}," in *Qumran Cave 4. VIII. Parabiblical Texts, Part 1*, Discoveries in the Judaean Desert XIII (Oxford: Clarendon Press, 1994), 255–318.

[29] Tov and White, "365. Reworked Pentateuch^{c}," 260.

[30] Two sets of radiocarbon tests were performed on Dead Sea Scrolls: Georges Bonani et al., "Radiocarbon Dating of Fourteen Dead Sea Scrolls," *Radiocarbon* 34.3 (1992): 843–49; Timothy A. J. Jull et al., "Radiocarbon Dating of Scrolls and Linen Fragments from the Judean Desert," *Radiocarbon* 37.1 (1995): 11–19. See recently Johannes van der Plicht and Kaare L. Rasmussen, "Radiocarbon Dating and Qumran," in *Holistic Qumran: Trans-Disciplinary Research of Qumran and the Dead Sea Scrolls. Proceedings of the NIAS-Lorentz Center Qumran Workshop, 21-25 April 2008*, ed. Jan Gunneweg, Annemie Adriaens, and Joris Dik, Studies on the Texts of the Desert of Judah 87 (Leiden: Brill, 2010), 99–121.

[31] Bonani et al., "Radiocarbon Dating of Fourteen Dead Sea Scrolls," 845.

Frg. 3, assigned to 4Q365 (?)";[32] it has been dated 2139±32 BP. I used the calibration data set IntCal 13.14c to calibrate this result:



The 1σ (68.3 % confidence) ranges are 344-324 BCE, 205-148 BCE, or 141-112 BCE. Even the latest range (141-112 BCE) seems too early. The 2σ (95.4 % confidence) ranges are 353-294 BCE, 229-219 BCE, 213-84 BCE, or 80-55 BCE. The latest range is possible, in which case some of the palaeographical features previously thought to appear in the second half of the first century BCE should now considered to have appeared earlier. But other explanations are possible: (1) the sample may have been contaminated; (2) the calibration curve should be corrected; (3) the fragment that was tested does not belong to 4Q365,[33] in which case my new dating for 4Q364(4QRP^{b}) would perfectly fit the third 1σ range.

[32] Greg Doudna, "Dating the Scrolls on the Basis of Radiocarbon Analysis," in *The Dead Sea Scrolls after Fifty Years: A Comprehensive Assessment, Volume One*, ed. Peter W. Flint and James C. VanderKam (Leiden / Boston / Köln: Brill, 1998), 468.

[33] See Emanuel Tov, ed., *The Texts from the Judaean Desert. Indices and an Introduction to the Discoveries in the Judaean Desert Series*, Discoveries in the Judaean Desert XXXIX (Oxford: Clarendon Press, 2002), 366 n. 48.

4Q366 (4QRP[d])[34]

The hand of the scribe who copied this manuscript is confident; the script is simple and semi-formal. The narrow ל with no wide hook and thickening at the top is at home in the Hasmonaean period. The partially developed ע is also at home in the Hasmonaean period, and tends to become more angular, yet not as much as later Herodian hands. ג is almost symmetrical; א is drawn in three strokes; ב is drawn without lifting the pen, unlike the later two-step ductus; י has a nice triangular shape; final ך is quite simple, semi-cursive.

I conclude that 4Q366 was copied around the second half of the first century BCE. I agree with the *DJD* editors who qualify the script as "a late Hasmonaean formal hand."[35]

4Q367 (4QRP[e])[36]

The hand of the scribe who copied this manuscript is confident and consistent. The calamus is not beveled; the script is semiformal. א is drawn in three steps, and not according to the new two-step ductus. ב is drawn in one step, and not according to the new two-step ductus. ע is quite simple and unsophisticated, unlike later ductus. Overall, this is a typical developed Hasmonaean script without any of the new features that are commonly associated with the Herodian period.

I conclude that this scroll was copied around the first half of the first century BCE. The *DJD* editors date the script to the "mid- or late-Hasmonaean"[37] period, that is, "125-50 BCE" according to the *DJD* index volume.[38] My conclusion is in line with their dating.

Synthesis

The dates derived from the palaeographical analysis of the thirteen manuscripts under consideration can be summed up as follows:

[34] Emanuel Tov and Sidnie White, "366. 4QReworked Pentateuch[d]," in *Qumran Cave 4. VIII. Parabiblical Texts, Part 1*, Discoveries in the Judaean Desert XIII (Oxford: Clarendon Press, 1994), 335–43.

[35] Tov and White, "366. 4QReworked Pentateuch[d]," 336.

[36] Emanuel Tov and Sidnie White, "367. 4QReworked Pentateuch[e]," in *Qumran Cave 4. VIII. Parabiblical Texts, Part 1*, Discoveries in the Judaean Desert XIII (Oxford: Clarendon Press, 1994), 367.

[37] Tov and White, "367. 4QReworked Pentateuch[e]," 346.

[38] Tov, *The Texts from the Judaean Desert. Indices and an Introduction to the Discoveries in the Judaean Desert Series*, 358.

2nd half of 3rd c. BCE	4Q17 (4QExod-Lev^{f})
2nd half of 2nd c. BCE	4Q364 (4QRP^{b})
2nd half of 2nd c. BCE or early 1st c. BCE	4Q22 (4QpaleoExod^{m})
	4Q45 (4QpaleoDeut^{r})
1st half of 1st c. BCE	4Q367 (4QRP^{e})
1st half of 1st c. BCE (pref. 2nd quarter)	4Q41 (4QDeut^{n})?
mid-1st c. BCE	4Q26 (4QLev^{d})?
mid-1st c. BCE (pref. 3rd quarter)	4Q27 (4QNum^{b})
2nd half of 1st c. BCE	4Q365 (4QRP^{c})
	4Q366 (4QRP^{d})
	4Q38 (4QDeut^{k1})?
end of 1st c. BCE	4Q158 (4QRP^{a})
1st half of 1st c. CE (pref. 2nd quarter)	4Q37 (4QDeut^{j})?

These dates call for a few observations:

(1) The so-called "Proto-Samaritan"[39] or "pre-Samaritan" text-type is already attested in the third century BCE with 4Q17 (4QExod-Lev^{f}). Cross even states that it is, "along with 4QSam^{b}, the earliest of the manuscripts found in the caves of Qumran."[40] Of course this does not mean that the pre-Samaritan text-type is the earliest, as there may have been manuscripts of other text-types that are now lost; as a matter of fact, the second part of the present essay will suggest that there are, indeed, older biblical manuscripts among the Dead Sea Scrolls. But this date confirms that the textual character of the pre-Samaritan type already existed in the third century BCE and cannot be attributed to the political and religious history of Judea in the Hasmonaean period.

(2) The broad chronological distribution of these manuscripts, ranging from the late third century BCE to the late first century BCE, calls for a detailed comparative study of their textual features in order to document the development of the pre-Samaritan text-type over the centuries. Is it, for instance, a coincidence that one of the latest scrolls under consideration, 4Q158 (4QRP^{a}), appears to have a stronger exegetical character than even those other scrolls that have been called "reworked Pentateuchs"?[41]

[39] Cross, "17. 4QExod-Lev^{f}," 136.
[40] Cross, "17. 4QExod-Lev^{f}," 134.
[41] Michael Segal, "4QReworked Pentateuch or 4QPentateuch?," in *The Dead Sea Scrolls Fifty Years After Their Discovery. Proceedings of the Jerusalem Congress, July 20-25,*

(3) The dates that were previously ascribed to those scrolls are sometimes too late. This is, for instance, the case for 4Q364 (4QRP^{b}), which turns out to be a century older than previously thought, or for 4Q41 (4QDeut^{n}), which is half a century older. Several of the scripts had been qualified as Herodian but, as I explained, no developed or late Herodian features were found, except in 4Q37 (4QDeut^{j}). Indeed, these scrolls exhibit very few features that require a date far into the Herodian period. Radiocarbon dating (cf. 4Q365 [4QRP^{c}]) might even lead us to ascribe earlier dates to some features traditionally thought to have appeared in the Herodian period.

In fact, the last manuscripts in our list – 4Q365 (4QRP^{c}), 4Q366 (4QRP^{d}), 4Q38 (4QDeut^{k1}), 4Q158 (4QRP^{a}) and 4Q37 (4QDeut^{j}) – are excerpted scrolls or exhibit further textual development than the pre-Samaritan text-type,[42] so that the latest scroll of (or close to[43]) the pre-Samaritan text-type (4Q27 [4QNum^{b}]) was copied at the end of the Hasmonaean period, and not in the Herodian period as Cross initially thought.

In conclusion, the new palaeographical dates proposed here and the resulting chronological distribution of these manuscripts show that, by the end of the Hasmonaean period, the pre-Samaritan text-type had been abandoned by the scribes of the Dead Sea Scrolls, except for such works as excerpted manuscripts or so-called "reworked pentateuchs." By the Herodian period, this text-type was no longer in use for the copy of biblical scrolls.

2. The scripts of "Palaeo-Hebrew" Dead Sea Scrolls and that of the Samaritan Pentateuch

While most Dead Sea Scrolls use the so-called "Jewish"[44] script, which is a local evolution of the Aramaic script, a few manuscripts were copied using the so-called "Palaeo-Hebrew" script, that is, the script

1997, ed. Lawrence H. Schiffman et al. (Jerusalem: Israel Exploration Society / The Shrine of the Book, Israel Museum, 2000), 398. See also the contribution to this volume by Emanuel Tov, pp. 19ff.

[42] See the contribution by Emanuel Tov to this volume, pp. 19ff.

[43] According to Emanuel Tov, the text-type of 4Q27 (4QNum^{b}) is transitional between the common source of 𝔊.𝔏𝔛𝔛 and pre-Samaritan scrolls; see his contribution to this volume, pp. 19ff.

[44] See *e.g.* Cross, "The Development of the Jewish Scripts." I would argue that, at least until the end of the second century BCE, there is no typical "Jewish" or "Judaean" script, since the same script is used in Samaria and Idumaea, for instance.

used by Hebrew inscriptions during the first half of the first millennium BCE. Most of them are biblical scrolls:[45] 1Q3 (1QpaleoLev and 1QpaleoNum), 2Q5 (2QpaleoLev), 4Q11 (4QpaleoGen-Exod^{l}), 4Q12 (4QpaleoGen^{m}), 4Q22 (4QpaleoExod^{m}), 4Q45 (4QpaleoDeut^{r}), 4Q46 (4QpaleoDeut^{s}), 4Q101 (4QpaleoJob^{c}), 6Q1 (6QpaleoGen), 6Q2 (6QpaleoLev), and 11Q1 (11QpaleoLev^{a}). A few non-biblical scrolls have also been found: 4Q123 (4QpaleoParaJosh), 4Q124 (4QpaleoUnid1), 4Q363a (4QcryptC, which uses the Palaeo-Hebrew script with additional "cryptic" signs), 11Q22 (11QpaleoUnid), Mas1o, and Mur 17 (a palimpsest, hence the two inventory numbers Mur 17A [Mur papLetter] and Mur 17B [Mur papList of Personal Names]). I leave aside the new "Jerusalem" papyrus, whose authenticity is debated and which will be dealt with in another study.[46]

In what follows, we will survey the palaeographical features of most of these scrolls and compare them to other uses of the Palaeo-Hebrew script in order to outline the development of this script and conclude as to its relation with the Samaritan script.

a. A Typology of the Palaeo-Hebrew Script in the Dead Sea Scrolls

Few scholars have attempted to establish a typology of the Palaeo-Hebrew script attested in the Dead Sea Scrolls. To my knowledge, the best study so far is an unpublished dissertation by McLean.[47] Yet, there are several important features that McLean overlooked and which lead me to outline a new typology. Since a full study is beyond the scope of the present volume, I will limit myself to some of the main typological developments that I have observed on the photographs available to me:[48]

[45] Emanuel Tov, *Scribal Practices and Approaches Reflected in the Texts Found in the Judean Desert*, Studies on the Texts of the Desert of Judah 54 (Leiden: Brill, 2004), 246.

[46] See my preliminary analysis in Michael Langlois, "How a 2,700-Year-Old Piece of Papyrus Super-Charged the Debate over UNESCO and Jerusalem," *The Huffington Post*, 15 November 2016, http://www.huffingtonpost.com/the-conversation-global/how-a-2700-year-old-piece_b_12982154.html. I have since examined Mur 17 and the new "Jerusalem" papyrus together in Jerusalem and will publish my assessment in a forthcoming study.

[47] Mark David McLean, "The Use and Development of Palaeo-Hebrew in the Hellenistic and Roman Periods" (Harvard University, 1982). Other studies are much more limited in scope and/or depend upon McLean; see e.g. Hanson's palaeographical analysis in David Noel Freedman, K. A. Mathews, and Richard S. Hanson, eds., *The Paleo-Hebrew Leviticus Scroll (11QpaleoLev)* (Philadelphia: American Schools of Oriental Research, 1985).

[48] Thanks are, once again, due to Pnina Shor and her team, cf. n. 4 above.

(1) In earlier Palaeo-Hebrew inscriptions, letters rest on a virtual base line and words are separated by dots drawn on the baseline. This can still be seen on a few Palaeo-Hebrew Dead Sea Scrolls, but most of them hang letters on a ceiling line, which probably betrays an influence from the Aramaic script. In at least two scrolls (4Q45 and 4Q124[49]), words are no longer separated by dots. McLean did not take into account these important aspects.

(2) Speaking of vertical alignment,  (= ס) initially features large horizontal strokes that are drawn high above the line, like  (= ל); with time, (= ס) shifts down so as to align with other letters. McLean did not pay attention to this evolution, perhaps because he mainly deals with coins, where constraints of space do not allow for an ideal vertical placement of letters.

(3)  (= צ) has a short (sometimes very short) left stroke slanted in opposition to the right strokes, usually counterclockwise. With time it tends to become taller and more vertical. The letter as a whole also tends to become taller and/or narrower.

(4)  (= ק) features a right hook that tends to grow with time; in cursive scripts it can be drawn together with the left hook (in which case it is closed), or separately and become wide open. It can also join the shaft at a lower point, sometimes even at the bottom of the shaft. Those two types seem to develop in parallel, since one is attested in 4Q22 and the other in its repair sheet.

(5)  (= ט) is composed of a circle surrounding an inner cross. The circle tends to open with time, which can lead to a new shape with a V-shaped head (see for instance 4Q22 and 4Q45).

(6)  (= ו) features a head composed of a left half-circle followed by a horizontal stroke which rests on a shaded vertical shaft. The half-circle can become more angular, made up of two strokes forming an acute angle to the left. A more cursive ductus also develops, in which the half-circle and shaft are drawn together, while the horizontal stroke is penned last. The earlier ductus does not disappear, as can be seen in scrolls that use the two types.

[49] Tov mentions only 4Q45, cf. Tov, *Scribal Practices*, 133. Indeed, the editor of 4Q124 in *DJD* has doubts as to the use of word-separating dots, see Patrick W. Skehan, Eugene C. Ulrich, and Judith E. Sanderson, "124. 4QpaleoUnidentified(1)," in *Qumran Cave 4. IV. Palaeo-Hebrew and Greek Biblical Manuscripts*, Discoveries in the Judaean Desert IX (Oxford: Clarendon Press, 1992), 206. He mentions a few possible occurrences, but this does not change the fact that the general practice of this scroll is to separate words by spaces.

(7) 𐤭 (= כ) has a horizontal traverse whose left end is pointing either downwards or upwards. In the first case, the left stroke rests on it, and in the latter case it hangs from it. A more cursive ductus develops, in which the traverse has a chevron shape; the left stroke may even disappear. The two types can coexist in the same scroll.

b. A Palaeographical Dating of the Palaeo-Hebrew Dead Sea Scrolls

Dating the Palaeo-Hebrew Dead Sea Scrolls is complicated by several factors. First, their number is limited, and so is their typological development compared to that of the Jewish script. Second, outside these scrolls, there are very few inscriptions that use the Palaeo-Hebrew script in the Persian, Greek and Roman periods: most inscriptions are in Aramaic and thus use the Aramaic script, with very few exceptions. Hebrew inscriptions are rare, but they are usually written in the Palaeo-Hebrew script.[50] Coins are by far the largest corpus; there are also numerous tags from Masada (on pottery sherds or column drums), but they are of little help.

The use of coins for dating is problematic for several reasons. First, there is a gap of more than a century between Hasmonaean coins and those produced during the Judaean War. Second, many letters of the alphabet are not attested on Hasmonaean coins. Third, the miniature size of letters on coins may have led engravers to forego features attested in contemporary scripts. Fourth, coins do not necessarily represent all the possible contemporary script types: they represent positive evidence confirming the use of a given ductus but cannot be used as negative evidence proving that a given ductus was not in use at the time; a good example is the use of a type of 𐤉 (= ו) in Mount Gerizim inscriptions[51] which McLean believed to have appeared in the first century CE, more than a century after the destruction of the Mount Gerizim complex. Fifth, the absence of comparative material before Hasmonaean coins makes it difficult to establish a *terminus post quem*; there are, however, a few exceptions, notably the Mount Gerizim inscriptions mentioned above.

[50] For a study of the Palaeo-Hebrew script in the Persian period, see *e.g.* Martin Peilstöcker and Benjamin Sass, "A Hebrew Seal from Jaffa and the Hebrew Script in the Post-First Temple Period," *'Atiqot* XLII (2001): 199–210; Gordon J. Hamilton, "Paleo-Hebrew Texts and Scripts of the Persian Period," in *"An Eye for Form" : Epigraphic Essays in Honor of Frank Moore Cross*, ed. Jo Ann Hackett and Walter Emanuel Aufrecht (Winona Lake: Eisenbrauns, 2014), 253–90.

[51] Yitzhak Magen, Haggai Misgav, and Levana Tsfania, *Mount Gerizim Excavations Volume I: The Aramaic, Hebrew and Samaritan Inscriptions*, Judea and Samaria Publications 2 (Jerusalem: Staff Officer of Archaeology, Civil Administration for Judea and Samaria, 2004).

Bearing these caveats in mind, let us establish chronological anchors for some of the typological developments of the Palaeo-Hebrew script based on dated inscriptions:

(1) Mildenberg coin 15, bearing the inscription 𐤉𐤄𐤃 (= יהד) and dated 340–331 BCE,[52] features a 𐤉 (= י) with a lower horizontal stroke that protrudes to the left and which is similar to some early Palaeo-Hebrew Dead Sea Scrolls (4Q12, 6Q2, 2Q5, 4Q11, 1Q3). This ductus later disappears in coins, as well as in later Palaeo-Hebrew Dead Sea Scrolls.

(2) Mildenberg coin 16, also dated 340–331 BCE, features a 𐤄 (= ה) in which the second and third horizontal strokes join to the left, forming a triangle. This triangular ductus also appears on a coin mentioning 𐤉𐤇𐤆𐤒𐤉𐤄 𐤄𐤐𐤇𐤄 (= יחזקיה הפחה) "Hezekiah the governor"[53] dated to the end of the Persian period, in the second half of the fourth century BCE. In fact, it already appears on a few jar handles from Gibeon (nos. 1, 5, 14, 20, 42, 52) that could be dated to the early Persian period, in the sixth or fifth century BCE.[54] This ductus becomes popular on Hasmonaean coins in the early first century BCE.

(3) Coins from the Judaean War use two forms of 𐤅 (= ו): an angular form in which the half-circle and diagonal have become a series of three strokes, and a cursive form in which the half-circle is drawn with the shaft. Coins from the Bar-Kokhba period only use the second type and exhibit further development.[56] The second type is already attested in Hasmonaean coins[57] and in at least one Hebrew inscription from

[52] McLean, "Palaeo-Hebrew in the Hellenistic and Roman Periods," 36–37 and pl. 2.6.

[53] Ya'akov Meshorer, *A Treasury of Jewish Coins: From the Persian Period to Bar Kokhba* (Jerusalem: Yad Ben-Zvi, 2001), 199 no. 22.

[54] Frank Moore Cross, "Epigraphical Notes on Hebrew Documents of the Eighth-Sixth Centuries B. C.: III. The Inscribed Jar Handles from Gibeon," *BASOR*.168 (1962): 21, 23. For a summary of the discussions surrounding the dating of these finds, see Charles E. Carter, *The Emergence of Yehud in the Persian Period: A Social and Demographic Study*, Journal for the Study of the Old Testament Supplement Series 294 (Sheffield: Sheffield Academic Press, 1999), 119–22. These discussions are not over; I am not convinced by van der Veen's recent argument and conclusion that these handles "may now be safely attributed to the reigns of Hezekiah and Manasseh in historical terms (i.e. 726-697/6 and 697/6-642 BC respectively)"; see Peter van der Veen, "An Inscribed Jar Handle from Ras El-ʿAmud. A New Reading and an Absolute Date," *KUSATU* 11 (2010): 109–21.

[55] Meshorer, *Treasury of Jewish Coins*, 132.

[56] Meshorer, *Treasury of Jewish Coins*, 163.

[57] See e.g. John Hyrcanus I (134–104 BCE) coins in group Ab in Meshorer, *Treasury of Jewish Coins*, 201.

Mount Gerizim (no. 385),[58] to be dated before 111–110 BCE when the city and its sanctuary were destroyed by John Hyrcanus.[59]

(4) Mildenberg coin 19 uses a  (= ק) in which the right hook has grown and the left hook has almost totally disappeared. Coins from the Judaean War keep the left hook, changing it into a slanted upper tick on top of a protruding left traverse. A similar evolution can be observed in some of the latest Palaeo-Hebrew Dead Sea Scrolls (4Q22, 4Q45, 11Q1).

(5) All Hebrew inscriptions discovered on Mount Gerizim (nos. 382–389) are written with letters hanging from a virtual or real ceiling line, including  (= ס) (no. 384 and 389).

On the basis of this comparative material, we can now sketch a chronological framework for some of the Palaeo-Hebrew Dead Sea Scrolls.

4Q46 (4QpaleoDeut^s)

The ductus of 4Q46 (4QpaleoDeut^s) has slowly evolved from Iron Age scripts and shares some (though not all) of the features attested on Hebrew seals from the later half of the Achaemenid period. 4Q46 would thus be at home in the fifth or fourth centuries BCE; an earlier date is not impossible but lacks clear parallels, whereas a date in the third century is possible but unnecessary. Several letters of the alphabet are not attested, however; this absence prevents a more specific dating. I should emphasize that typological development is not linear[60] and indeed appears to be very slow in the Palaeo-Hebrew script of the Persian and early Hellenistic periods.[61] McLean dates this scroll to the "second half of the third century" BCE;[62] although this date is possible, no comparative material allows for such a precision, and the manuscript may well have been copied earlier.

If I may move away from palaeography for a minute, I am pleased to note that this scroll happens to witness one of the oldest text-types of Deuteronomy according to Ziemer.[63] My analysis was based on

[58] Magen, Misgav, and Tsfania, *Mount Gerizim Excavations Vol. I*, 256.

[59] Yitzhak Magen, *Mount Gerizim Excavations Volume II: A Temple City*, Judea and Samaria Publications 8 (Jerusalem: Staff Officer of Archaeology, Civil Administration for Judea and Samaria, 2008), 171.

[60] Contrary to the underlying principle used for instance by Solomon A. Birnbaum, *The Hebrew Scripts. Part One: The Text* (Leiden: E. J. Brill, 1971).

[61] See *e.g.* Peilstöcker and Sass, "A Hebrew Seal from Jaffa," 202–6; Hamilton, "Paleo-Hebrew Texts and Scripts of the Persian Period," 259, 269.

[62] McLean, "Palaeo-Hebrew in the Hellenistic and Roman Periods," 57.

[63] See his contribution to the present volume, pp. 127ff.

palaeographical features only, without prior knowledge of the textual character of this scroll, but the fact that its early date fits Ziemer's stemma is telling.

4Q12 (4QpaleoGen^{m})

4Q12 (4QpaleoGen^{m}) shows little development from 4Q46 – see  (= ו), (= י) or (= כ) for instance – and would also be at home in the fifth or fourth centuries BCE, perhaps in the third century should the development of the script be slow. McLean dates 4Q12 to the "middle of the second century" BCE;[64] such a late date is unnecessary.

2Q5 (2QpaleoLev)

2Q5 (2QpaleoLev) features more curved letters, as can be seen in some  (= ו), the  (= כ), and the base of (= מ) for instance. A similar tendency might be reflected in the descender of  (= ד), which tends to lengthen. The script also uses the new ductus for (= י) with three parallel strokes, which was only nascent in 4Q12. It is difficult to pinpoint the birth of this ductus, but this manuscript could be at home in the fourth or third centuries. McLean dates it to ca. "150 to 75 BCE"[65] which seems unnecessarily late.

6Q2 (6QpaleoLev)

6Q2 (6QpaleoLev) is close to 2Q5 and exhibits the same ductus for (= י) with further development. The single occurrence of  (= ג) exhibits an unusual shape, with thickening at the left and at the bottom. Overall, 6Q2 may also have been copied around the fourth or third centuries BCE. McLean acknowledges the affinities between 6Q2 and 2Q5 and ascribes them both the same unnecessarily late date between 150 and 75 BCE.

4Q11 (4QpaleoGen-Exod^{l})

4Q11 (4QpaleoGen-Exod^{l}) exhibits further development; the letters are clearly hanging from a ceiling line – a phenomenon also attested on

[64] McLean, "Palaeo-Hebrew in the Hellenistic and Roman Periods," 60.
[65] McLean, "Palaeo-Hebrew in the Hellenistic and Roman Periods," 100.

Mount Gerizim inscriptions – and  (= ק) features a large right hook joining the shaft at its base. The descender of  (= מ) has moved to the left. These developments suggest that 4Q11 may have been copied around the third century, though earlier and later dates are possible. McLean dates it to "the first half or first three-quarters of the first century BCE,"[66] but what he views as late features, such as the non-protruding stroke of  (= ה) or the width of  (= ג), cannot be confined to a specific period, as can be seen by the absence of those features in manuscripts he ascribed to that period.

1Q3 frags. 1–15 (1QpaleoLev; 1QpaleoNum)

1Q3 (frags. 1–15, 1QpaleoLev) has affinities with 6Q2 and 2Q5 but is typologically later: the letters are clearly hanging from a ceiling line and (= ס) is drawn lower. (= צ) features a taller left stroke, while the right hook of  (= ק) sometimes joins the base of the shaft. Although a date in the fourth century is possible, 1Q3 is probably more at home in the third century, like 4Q11. McLean's dating between "150 to 75 BCE"[67] is, once again, probably late, while Birnbaum's dating "*ca.* 440 B.C.E."[68] is too early, flawed by his methodology which supposes a linear evolution of the script with 12 new features corresponding to 150 years.

6Q1 (6QpaleoGen), 4Q101 (4QpaleoJob^{c}) and 4Q123 (4QpaleoParaJosh)

Another group of manuscripts, made up of 6Q1 (6QpaleoGen), 4Q101 (4QpaleoJob^{c}) and 4Q123 (4QpaleoParaJosh), is also typologically slightly later than 2Q5 and 6Q2 but does not feature the three-stroke (= י) attested by 4Q12, 6Q2, 2Q5, 4Q11 and 1Q3. These three manuscripts (6Q1, 4Q101 and 4Q123) may have been copied around the third century BCE. McLean dates 4Q101 "between 225 and 150 BCE,"[69] and 6Q1 and 4Q123 to the "last half of the second century" BCE[70]; these ranges are possible but too narrow and a bit late.

[66] McLean, "Palaeo-Hebrew in the Hellenistic and Roman Periods," 66.
[67] McLean, "Palaeo-Hebrew in the Hellenistic and Roman Periods," 100.
[68] Birnbaum, *The Hebrew Scripts. Part One: The Text*, col. 69.
[69] McLean, "Palaeo-Hebrew in the Hellenistic and Roman Periods," 52.
[70] McLean, "Palaeo-Hebrew in the Hellenistic and Roman Periods," 65–66. The paragraph that starts at the last line of p. 65 is obviously misplaced; it likely belongs before the discussion of 4QpaleoSn44^{a} (= 4Q123) at the bottom of p. 63.

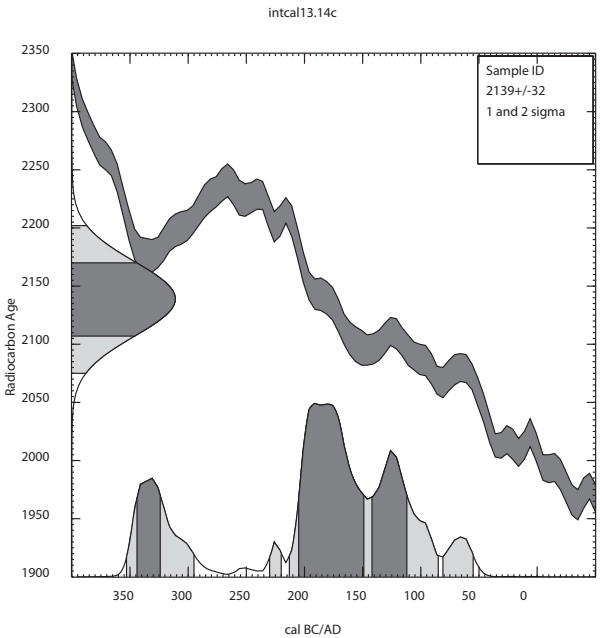
11Q1 (11QpaleoLev[a]), 4Q22 (4QpaleoExod[m]) and 4Q45 (4QpaleoDeut[r])

The scripts of 11Q1 (11QpaleoLev[a]), 4Q22 (4QpaleoExod[m]) and 4Q45 (4QpaleoDeut[r]) are much more developed. Letters are not shaded and shafts tend to be vertical rather than slanted. 𐤑 (= צ) is more compact. 𐤒 (= ק) is wide open with a left horn.

The hand of 11Q1 (11QpaleoLev[a]) is more hesitant and has affinities with some of the Mount Gerizim Hebrew inscriptions: the shaft of 𐤀 (= א) does not protrude to the top (compare Mount Gerizim inscription no. 387); 𐤅 (= ו) has a curved head drawn together with the shaft while the diagonal is drawn after (compare inscription no. 385); and 𐤈 (= ט) has a "+" sign at its center instead of the usual "×" (compare inscription no. 385). The date of 11Q1 thus depends on that of the Mount Gerizim inscriptions; the latter may either belong to the first precinct, which was in use from the Persian period until the late third century BCE, or to the new precinct, which was built in the early second century BCE.[71] In any case, 11Q1 is at home in the second century BCE; McLean dates it "between 1 and 50 CE,"[72] pointing for instance to some types of 𐤅 (= ו) attested on coins from the Judaean War, but this ductus is now attested on Mount Gerizim inscriptions. Hanson dates it "around 100 B.C.E.,"[73] which is possible but a bit late given the new evidence from Mount Gerizim.

4Q22 (4QpaleoExod[m]) and 4Q45 (4QpaleoDeut[r]) have affinities with 11Q1; moreover, they feature a new ductus for 𐤈 (= ט). They may be slightly later, which means that 4Q22 would be more at home in the latter half of the second century BCE or the early first century BCE – depending, again, on the date of 11Q1 and of the Mount Gerizim inscriptions. McLean dates 4Q22 to "the first half to three quarters of the first century BCE"[74]; this range is indeed possible but too narrow and perhaps late. Hanson's dating "around 100 B.C.E."[75] is correct. Now, 4Q22 has been radiocarbon-dated to 2044±65 BP.[76] I used intCal 13.14c to produce calibrated dates:

[71] Magen, *Mount Gerizim Excavations Volume II: A Temple City*, 143.
[72] McLean, "Palaeo-Hebrew in the Hellenistic and Roman Periods," 87.
[73] Freedman, Mathews, and Hanson, *The Paleo-Hebrew Leviticus Scroll (11QpaleoLev)*, 23.
[74] McLean, "Palaeo-Hebrew in the Hellenistic and Roman Periods," 78.
[75] Freedman, Mathews, and Hanson, *The Paleo-Hebrew Leviticus Scroll (11QpaleoLev)*, 23.
[76] Jull et al., "Radiocarbon Dating of Scrolls and Linen Fragments from the Judean Desert," 14.



The 1σ-calibrated ranges are 159-132 BCE and 117 BCE-21 CE, while the 2σ-calibrated ranges are 346-321 BCE or 206 BCE-84 CE. There is no need to resort to 2σ-calibrated dates, since 1σ-calibrated dates ascribe the copy of 4Q22 between the mid-second century BCE to the turn of the era, which is consistent with our date, albeit much broader.

4Q45 (4QpaleoDeut^{r}) is very close to 4Q22 but does not use dots to separate words, a practice also attested in Mount Gerizim inscriptions. 4Q45 would thus be at home in the later half of the second century BCE or the early first century BCE.

Before moving on to the next scrolls, and although I grouped these three scrolls – 11Q1 (11QpaleoLev^{a}), 4Q22 (4QpaleoExod^{m}) and 4Q45 (4QpaleoDeut^{r}) – on the sole basis of their scripts, it is tempting to look at their textual character since they exhibit more palaeographical affinities with the Mount Gerizim inscriptions than other scrolls. Indeed, 4Q22 (4QpaleoExod^{m}) is known to belong the pre-Samaritan text-type. What about the other two? It turns out that the stemma of Deuteronomy prepared by Benjamin Ziemer for the present volume identifies 4Q45 (4QpaleoDeut^{r}) as a direct "sister" of 𝔏𝔵𝔵.[77] And as for 11Q1 (11QpaleoLev^{a}), its editors

[77] See his contribution pp. 127ff.

disagree: Freedman advocates a "proto-Samaritan"[78] text-type, while Mathews concludes that 11Q1 has "no clear textual affiliation."[79] He agrees in this respect with Tov,[80] while Puech insists that the agreements with 𝔊 are more numerous than acknowledged.[81] Although the paucity of palaeographical evidence at our disposal prevents us from qualifying the script of the Mount Gerizim inscriptions – and even more so that of these three scrolls – as Samaritan, I would not be surprised if a stemma of Leviticus revealed that 11Q1 is closer to 𝔐 than previously thought, as was the case for 4Q45. Speaking of 4Q45, its palaeographical dating correlated to its direct relation to 𝔐 in Ziemer's stemma indicates that their parent cannot be dated later than the second century BCE.

4Q124 (4QpaleoUnid1)

The absence of separating dots is also noticeable in 4Q124 (4QpaleoUnid1), which may also have been copied in the later second century BCE or in the early first century BCE. Also noticeable is the presence of a leftward curve on top of 𐤋 (= ל), which develops the concave ductus of earlier scrolls (*e.g.* 6Q1 and 4Q101, see also some Hasmonaeans coins;[82] compare the leftward tick on some coins from the Judaean War[83]). McLean dates 4Q124 to "the first half or first three-quarters of the first century BCE,"[84] which is possible but a bit narrow.

4Q22 (4QpaleoExod^{m}) repair sheet

The curve observed on top of 𐤋 (= ל) in 4Q124 is even more developed on the repair sheet of 4Q22. Other letters there enjoy a curved ductus, such as 𐤄 (= ה), 𐤅 (= ו), 𐤐 (= פ) and 𐤓 (= ר). This repair sheet is therefore probably at home in the first century BCE. It has been

[78] David Noel Freedman, "Variant Readings in the Leviticus Scroll from Qumran Cave 11," *The Catholic Biblical Quarterly* 36.4 (1974): 533.

[79] K. A. Mathews, "The Leviticus Scroll (11QpaleoLev) and the Text of the Hebrew Bible," *The Catholic Biblical Quarterly* 48.2 (1986): 198. He agrees in this respect with Emanuel Tov, "אופייה הטקסטואלי של מגילת ויקרא ממערה 11 בקומראן (The Textual Character of the Leviticus Scroll from Qumran Cave 11)," *Shnaton* 3 (1978): 238–44.

[80] Tov, "The Textual Character of the Leviticus Scroll from Qumran Cave 11."

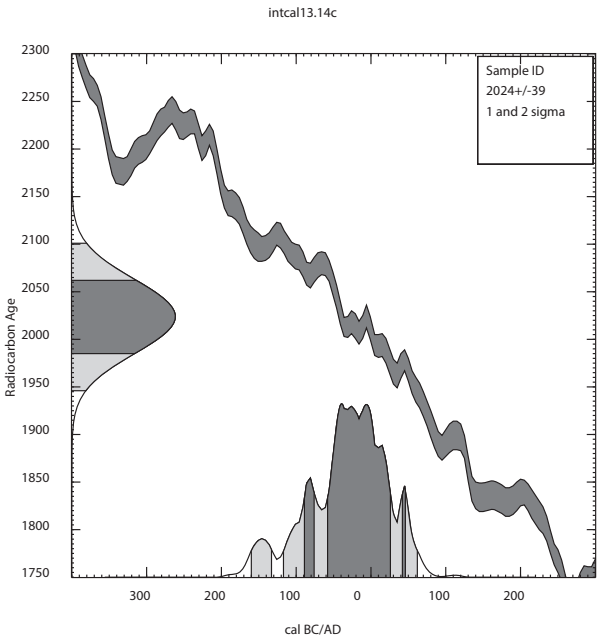
[81] Émile Puech, "Notes en marges de 11QpaléoLévitique. Le fragment L, des fragments inédits et une jarre de la grotte 11," *Revue Biblique* 96.2 (1989): 181.

[82] See for instance ANS 107 (pl. 15.4) and H 136 (pl. 15.13) in McLean, "Palaeo-Hebrew in the Hellenistic and Roman Periods."

[83] Meshorer, *Treasury of Jewish Coins*, 132.

[84] McLean, "Palaeo-Hebrew in the Hellenistic and Roman Periods," 66.

radiocarbon-dated to 2024±39 BP;[85] I used intCal 13.14c to produce calibrated dates:



The 1σ-calibrated ranges are 88-75 BCE and 57 BCE-26 CE, while the 2σ-calibrated ranges are 160-132 BCE or 117 BCE-62 CE. Once again there is no need to resort to 2σ-calibrated dates, since 1σ-calibrated dates ascribe the copy of this repair sheet to the first century BCE or the early first century CE. This dating is in line with my assessment.

c. Synthesis

The dates derived from the palaeographical analysis of Palaeo-Hebrew Dead Sea Scrolls can be summed up as follows:

ca. 5th or 4th c. BCE	4Q46 (4QpaleoDeut^{s})
	4Q12 (4QpaleoGen^{m})

[85] Jull et al., "Radiocarbon Dating of Scrolls and Linen Fragments from the Judean Desert," 14.

ca. 4th or 3rd c. BCE	2Q5 (2QpaleoLev)
	6Q2 (6QpaleoLev)
ca. 3rd c. BCE	4Q11 (4QpaleoGen-Exod^{l})
	1Q3 frags. 1–15 (1QpaleoLev; 1QpaleoNum)
	6Q1 (6QpaleoGen)
	4Q101 (4QpaleoJob^{c})
	4Q123 (4QpaleoParaJosh)
ca. 2nd c. BCE	11Q1 (11QpaleoLev^{a})
ca. 2nd half of 2nd c. or early 1st c. BCE	4Q22 (4QpaleoExod^{m})
	4Q45 (4QpaleoDeut^{r})
	4Q124 (4QpaleoUnid1)
ca. 1st c. BCE	4Q22 (4QpaleoExod^{m}) repair sheet

I emphasize that these dates are approximate, due (1) to the slow evolution of the Palaeo-Hebrew script – not only at that time, but from the eighth century BCE onward – and (2) to the paucity of witnesses, both among and outside the Dead Sea Scrolls. However approximate they may be, these new dates are nonetheless telling:

(1) Many Palaeo-Hebrew scrolls seem to have been copied before scribes began to use the Aramaic script to write Hebrew texts, that is around the second half of the third century BCE, as seen for instance with 4Q17 (4QExod-Lev^{f}), studied above in the first part of the present essay. The use of the Aramaic script to write a Hebrew text is indeed quite uncommon; for instance, only one Hebrew inscription from Mount Gerizim uses the Aramaic script (no. 150),[86] which points to the turn of the second century BCE for the adoption of the Aramaic script to write Hebrew texts. A few other Mount Gerizim inscriptions use the Aramaic script with occasional Palaeo-Hebrew letters, which may indicate that this adoption was nascent or gradual.

(2) Likewise, the strong development exhibited by 11Q1 and later Palaeo-Hebrew Dead Sea Scrolls might be explained by the fact that these manuscripts were copied when the Aramaic script came to be used for Hebrew texts. This would also explain the absence of separating dots in the latest Palaeo-Hebrew Dead Sea Scrolls.

[86] Magen, Misgav, and Tsfania, *Mount Gerizim Excavations Vol. I*, 141–42.

(3) After this transitional period, the Palaeo-Hebrew script was apparently abandoned by the scribes of the Dead Sea Scrolls around the first century BCE. An exception is the repair sheet of 4Q22, but one would not expect a scribe to use the Jewish script to produce a repair sheet for a Palaeo-Hebrew scroll.

(4) As a corollary, it is precisely at that time that scribes began to use Palaeo-Hebrew letters to write the tetragrammaton and other divine names or titles in manuscripts that were otherwise copied using the Jewish script. Indeed, this practice is only attested in manuscripts of the first centuries BCE and CE.[87]

d. The Samaritan script

The new chronology that I suggest here has repercussions for Samaritan studies. Since the topic of this paper is palaeography, let us focus on the Samaritan script, whose origins are debated.

According to Samaritan tradition, it is the very same script that was used by ancient Israelites. The Abisha scroll is even believed to have been penned by Abishua, the great-grandson of Aaron. At the other extreme, Barag recently concluded that the Samaritan script is a "conscious creation of a related but different alphabet" in the fourth century CE.[88] His conclusion is based on the absence of any inscription using the Samaritan script earlier than the fourth century BCE. He is both right and wrong. On the one hand, I agree with him that the Samaritan script, as we know it around the fourth century CE, is not attested earlier. But its origins can now be traced thanks to the Palaeo-Hebrew Dead Sea Scrolls and to some palaeographical features mentioned above.

Indeed, some of the Palaeo-Hebrew Dead Sea Scrolls witness the development of a new ductus for 𐤉 (= י), in which the base protrudes to the left of the shaft, eventually becoming an independent third left stroke.

[87] There are 29 such manuscripts according to Tov, *Scribal Practices*, 242–43. They can all be dated to the first centuries BCE and CE: 1Q11 (1QPs^{b}), 1Q14 (1QpMic), 1QpHab, 1Q15 (1QpZeph), 1Q27 (1QMyst), 1QH^{a}, 1Q35 (1QH^{b}), 2Q3 (2QExod^{b}), 3Q3 (3QLam), 3Q14 (3QUnclassified Fragments), 4Q20 (4QExod^{j}), 4Q38a (4QDeut^{k2}), 4Q57 (4QIsa^{c}), 4Q161 (4QpIsa^{a}), 4Q165 (4QpIsa^{e}), 4Q171 (4QpPs^{a}), 4Q173 (4QpPs^{b}), 4Q180 (4QAgesCreat A), 4Q183 (4QHistorical Work), 4Q258 (4QS^{d}), 4Q267 (4QD^{b}), 4Q268 (4QD^{c}), 4Q406 (4QShirShabb^{g}), 4Q413 (4QComposition concerning Divine Providence), 4Q26b (4QLev^{g}), 6Q15 (6QD), 6Q18 (6QpapHymn), 11Q2 (11QLev^{b}), and 11Q5 (11QPs^{a}).

[88] Dan Barag, "Samaritan Writing and Writings," in *From Hellenism to Islam: Cultural and Linguistic Change in the Roman Near East*, ed. Hannah M. Cotton et al. (Cambridge: Cambridge University Press, 2009), 319.

This phenomenon is nascent in 4Q12 (4QpaleoGen^{m}) and developed in 2Q5 (2QpaleoLev), 4Q11 (4QpaleoGen-Exod^{l}), 1Q3 (1QpaleoLev; 1QpaleoNum) and even more in 6Q2 (6QpaleoLev).[89] These manuscripts were copied around the fourth and third centuries BCE. Other manuscripts of the same period – 6Q1 (6QpaleoGen), 4Q101 (4QpaleoJob^{c}) and 4Q123 (4QpaleoParaJosh) – exhibit another development and do not feature this kind of 𐤉 (= י). Later, none of the Palaeo-Hebrew Dead Sea Scrolls from the second century or early first century BCE uses this kind of 𐤉 (= י). The same is true of scrolls in Jewish or Greek scripts from the first centuries BCE and CE that use Palaeo-Hebrew letters to write divine names and titles. Likewise, coins from the Hasmonaean period or the Judaean War, or even from the Bar-Kokhba period, do not use this 𐤉 (= י) either, nor do the few inscriptions found in Jerusalem or the Masada tags. It appears only in a small scrap of papyrus from Masada (Mas 1039-320 = Mas1o),[90] but guess what: this papyrus mentions Mount Gerizim and may thus be of Samaritan origin! The later use of this ductus for 𐤉 (= י) in the Samaritan script suggests that it was alive and well throughout those centuries, though not in Judaean inscriptions.

The alternative explanation, namely that the same ductus was invented again in the fourth century CE by chance, is very unlikely, especially given the fact that its only attestation at the turn of the Christian era is in a text related to Mount Gerizim (Mas1o). Even if we were to accept Barag's hypothesis of a conscious creation in the fourth century CE, the Palaeo-Hebrew script on which the Samaritan script was based must have featured this type of 𐤉 (= י). The likeliest explanation is that this Palaeo-Hebrew script derived from the one attested in such manuscripts as 6Q2 (6QpaleoLev) and developed on its own from the second century BCE, while another branch gave rise to the late Palaeo-Hebrew script attested in such manuscripts as 11Q1 (11QpaleoLev^{a}).

Interestingly enough, this first branch of the Palaeo-Hebrew script – *i.e.* the ancestor of the Samaritan script, so to say – is not attested in the rare

[89] For a previous observation that the script of 1Q3 (1QpaleoLev) might be at the origin of the Samaritan script, see Esther Eshel and Hanan Eshel, "Dating the Samaritan Pentateuch's Compilation in Light of the Qumran Biblical Scrolls," in *Emanuel: Studies in the Hebrew Bible, the Septuagint, and the Dead Sea Scrolls in Honor of Emanuel Tov*, ed. Shalom M. Paul et al. (Leiden / Boston: Brill, 2003), 224.

[90] Yigael Yadin, "The Excavation of Masada – 1963/64: Preliminary Report," *Israel Exploration Journal* 15.1/2 (1965): 109; Shemaryahu Talmon and Yigael Yadin, *Masada VI, Yigael Yadin Excavations 1963–1965 Final Reports: Hebrew Fragments from Masada; The Ben Sira Scroll from Masada* (Jerusalem: Israel Exploration Society / The Hebrew University of Jerusalem, 1999), 138–49.

Hebrew inscriptions from Mount Gerizim. It is therefore not specifically Samaritan in origin, at least in the third and early second centuries BCE. From the second century BCE onwards, it developed on its own, but perhaps not in Judaea, given the absence of evidence for this script. The one exception, Mas1o, is perhaps not an exception at all, since it mentions Mount Gerizim and could actually be Samaritan.

e. Conclusions

Until new inscriptions are found, and taking into account the latest epigraphical evidence, the following conclusions can be drawn:

(1) Contrary to rabbinical tradition, there is no evidence that the Hebrew script was replaced by the Aramaic script to write the Torah (or more generally Hebrew texts) at the time of Ezra, that is, in the early Persian period.[91] And contrary to modern academic usage, there is no need to call this script "Phoenician"[92] or "Palaeo-Hebrew"[93] or "Neo-Hebrew"[94] or "Neo-Palaeo-Hebrew";[95] it is just the Hebrew script.

(2) The earliest use of the Aramaic script for Hebrew texts is attested in the late third century BCE, both at Qumran and on Mount Gerizim, but remains exceptional at the time. The use of the Hebrew script in early Dead Sea Scrolls is therefore not, as Cross and many others thought, "an archaistic survival from the book hand of Israelite times."[96] It

[91] The tradition, preserved in m. Yadayim 4:5, that scrolls using the Hebrew script do not make hands impure, is likewise later and perhaps anti-Samaritan since, as the evidence suggests, a branch of the Hebrew script remained in continuous use among the Samaritans. The rabbinic tradition was also known to Christians; Epiphanius of Salamis thus states that the change of script was made at the time of Ezra, who "desired to make Israel different from the other peoples" and abandoned the Hebrew script "because that form was already in the possession of the Samaritans"; *De XII gemmis rationalis sacerdotis Hebraeorum liber* (Migne, Patrologia, vol. 43, p. 356), quoted by Birnbaum, *The Hebrew Scripts. Part One: The Text*, cols. 73–74.

[92] *e.g.* Dominique Barthélemy, "3. Lévitique et autres fragments en écriture 'phénicienne,'" in *Qumran Cave I*, ed. Dominique Barthélemy and Józef Tadeusz Milik, Discoveries in the Judaean Desert I (Oxford: Clarendon Press, 1955), 51–54.

[93] *e.g.* Cross, "The Development of the Jewish Scripts."

[94] *e.g.* Magen, Misgav, and Tsfania, *Mount Gerizim Excavations Vol. I*.

[95] *e.g.* Birnbaum, *The Hebrew Scripts. Part One: The Text*.

[96] Cross, "The Development of the Jewish Scripts," 189 n. 4.

was, on the contrary, perfectly normal that a Hebrew text should use the Hebrew script.[97]

(3) Around the second century BCE, the use of the Aramaic script for Hebrew texts becomes the norm at Qumran. The Hebrew script is progressively abandoned, and from the first century BCE on it is only used sporadically, *e.g.* for divine names or cryptic scripts.

(4) This desertion is not global. From the second century BCE onward, a branch of the Hebrew script is used in Samaritan circles, while another branch is used elsewhere in Judea in the first centuries BCE and CE, as attested on coins, tags,[98] and a few inscriptions (including an Aramaic one[99]).

(5) Contrary to the minimalist theory of Barag, the branch of the Hebrew script used in Samaritan communities evolves naturally throughout the Roman period. It eventually becomes the so-called "Samaritan" script in the Byzantine period.

These conclusions, based solely on palaeographical evidence and taking into account the latest epigraphical discoveries, stand in sharp contrast with both the maximalist theory of the Samaritan tradition and the minimalist theory of Barag. It also has ramifications for the history of Judaism and Samaritanism in the Second Temple period: what are the historical reasons behind the first use of the Aramaic script for Hebrew texts sometime around the third century, both at Qumran and on Mount Gerizim? Why was the Hebrew script abandoned around the second century BCE by the scribes of the Dead Sea Scrolls? Was it a natural evolution[100] or a reaction against other movements, such as the Sadducees[101] or the

[97] *Contra*, *i.a.*, William M. Schniedewind, "Aramaic, the Death of Written Hebrew, and Language Shift in the Persian Period," in *Margins of Writing, Origins of Cultures*, ed. Seth L. Sanders, Second Printing with Postscripts and Minor Corrections, Oriental Institute Seminars 2 (Chicago: The Oriental Institute of the University of Chicago, 2007), 141, 143.

[98] Yigael Yadin, Joseph Naveh, and Yaacov Meshorer, *Masada I, The Yigael Yadin Excavations 1963–1965 Final Reports: The Aramaic and Hebrew Ostraca and Jar Inscriptions; The Coins of Masada* (Jerusalem: Israel exploration society / The Hebrew University of Jerusalem, 1989). Those tags are the product of workers, not learned scribes; the Hebrew script is therefore not confined to academic circles at the time.

[99] Joseph Naveh, "An Aramaic Tomb Inscription Written in Paleo-Hebrew Script," *Israel Exploration Journal* 23.2 (1973): 82–91.

[100] This is the opinion of Naveh, who connects this shift to the development of a "Jewish" flavor of the Aramaic script in the late third century BCE; cf. Naveh, "An Aramaic Tomb Inscription Written in Paleo-Hebrew Script," 90. But the so-called "Jewish" script is now attested outside of Judea, especially in Samaria and Idumaea.

[101] See *e.g.* Diringer, who believed that the Sadducees used the Hebrew script; David Diringer, "Early Hebrew Script Versus Square Hebrew Script," in *Essays and Studies Presented to Stanley Arthur Cook*, ed. David Winton Thomas (London: Taylor's Foreign Press, 1950), 35–49.

Samaritans? If the Hebrew script used by the Samaritans evolved on its own from that period on, can the same be said about their textual tradition of the Scriptures? These are some of the questions raised by mere palaeographical analysis.

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