# REVISITING QUMRAN CAVE 1Q AND ITS ARCHAEOLOGICAL ASSEMBLAGE

# JOAN E. TAYLOR D, DENNIS MIZZI AND MARCELLO FIDANZIO

Qumran Cave 1Q was the first site of Dead Sea scroll discoveries. Found and partly emptied by local Bedouin, the cave was excavated officially in 1949 and published in the series Discoveries in the Judaean Desert (Volume 1) in 1955. Contents of the cave are found in collections worldwide, and in different institutions in Jerusalem and Amman. While the scrolls are the most highly prized artefacts from this cave, in archaeological terms they are part of an assemblage that needs to be understood holistically in order to make conclusions about its character and dating. This study presents all of the known items retrieved from the cave, including those that are currently lost, in order to consider what we might know about the cave prior to its emptying and the changes to its form. It constitutes preliminary work done as part of the Leverhulme funded International Network for the Study of Dispersed Qumran Caves Artefacts and Archival Sources [IN-2015-067].

Keywords: Qumran, Dead Sea Scrolls, Cave 1Q, assemblage, scroll jars

In 2014, the successful Qumran caves conference organised by Marcello Fidanzio in Lugano re-examined the evidence for caves in the region of the north-western Dead Sea, where the Dead Sea Scrolls were found. Chapters from the present authors in the conference volume (Fidanzio 2016) highlight aspects of the discovery and contents of numerous caves in the region (Mizzi 2016; Taylor 2016b; Fidanzio and Humbert 2016). However, at this conference, it was also noted by the present authors that work on understanding each cave has been impeded by the fact that not all information about the contents of the caves is readily available. Regionally, the artefacts are dispersed in collections in Jerusalem and Amman (i.e., the Rock-efeller Museum, the Shrine of the Book at the Israel Museum [SHR], the Israel Antiquities Authority [IAA], the Hebrew University of Jerusalem, the Jordan Archaeological Museum, the Department of Antiquities of Jordan [DAJ], and the École biblique et archéologique française de Jérusalem [ÉBAF]), but, even more importantly, some of the artefacts were sent to collections around the world very early on, either gifted or sold. Within the regional context, finding and making connections between artefacts in different depositories can be difficult, especially for local researchers who find cross-border movements problematic.

While the scrolls are of course the treasure that has been of key interest to the world, to archaeologists the scrolls are material objects that should be understood in relationship to other artefacts at a particular discovery site: they are part of an assemblage. The dispersal of the non-textual artefacts, therefore, is a serious problem because it makes it harder to understand the total assemblage in a given cave.

Recognition of the importance of the assemblage is standard in archaeological methodology, as all students learn (Renfrew and Bahn 2016, 128–9; Joyce and Pollard 2010). It is by determining the repertoire of an assemblage that locations may be identified as domestic or industrial, cultic or secular, palatial or deprived. In the case of the Dead Sea caves, a consideration of the repertoire asks us to think numerically about the artefacts: what types of artefacts are dominant? Might they all relate to the same activity? Are there largely personal or nonpersonal items? Can we separate out different repertoires of objects within an assemblage?

Address correspondence to: Joan E. Taylor, King's College London, Department of Theology and Religious Studies, 22 Kingsway, London, UK, WC2B 6LE, joan.taylor@kcl.ac.uk

© Palestine Exploration Fund 2017

Might the assemblage arise from a single time, or be created as a result of multiple times of locational use?

However, one of the fundamental problems we have is a lack of good data for the assemblages of the Qumran caves when they were first discovered. With a view to gathering together the information on the cave assemblages in a holistic way, in 2016 the present authors successfully won funding from the Leverhulme Trust for a three-year project entitled the 'Network for the Study of the Dispersed Qumran Caves Artefacts and Archival Sources', based at King's College London in collaboration with the Faculty of Theology at Lugano and the University of Malta. The purpose of this international network is to seek out dispersed materials from the caves, so as to contribute to providing a comprehensive description of the cave artefacts, in order to ensure that scholarly progress is no longer hampered by lack of information regarding the profile of each cave's contents. It focuses on material that has found its way to various collections worldwide, linking this with what is available in Amman and Jerusalem, and will contribute in part to a publication series on the Qumran caves under the auspices of the ÉBAF in collaboration with the Faculty of Theology at Lugano and led by Fr. Jean-Baptiste Humbert and Marcello Fidanzio.

In this article, we present our current knowledge about the assemblage in Cave IQ and identify where there is crucial missing information. This provides us with a benchmark as we pursue our research, and allows us to make a call to the scholarly community for any information not included here.

A focus on Cave IQ is a good starting point, simply because it was the first manuscript cave to be found, for which we have testimony of Bedouin and their associates as well as archaeologists. The questions here concern the Bedouin's initial finding of Cave IQ artefacts and the nature of the artefacts when taken together and viewed holistically. If we look at all the evidence, without prioritising any given items, what can we determine regarding Cave IQ and its repertoire? In addition, we ask what happened to these artefacts subsequent to their finding, because not all the objects mentioned as existing in Cave IQ in the years 1947–49 — including those from the official excavation — are now locatable.

#### I. THE ASSEMBLAGE OF CAVE IQ

Even at the best of times, assemblages can be difficult to assess. While careful notes taken at the time of the discovery of artefacts *in situ* furnish archaeologists with full information, the initial awareness of the assemblage can be lost subsequently. If the original notes are incomplete, this is particularly a problem. Archaeological reports publish artefacts in sections of the report determined by their constitution, and separate assemblages into large and small finds, so that a holistic view can be obscured.

While Cave 1Q is then a published site, its publication falls short of what would be considered archaeologically thorough by today's standards. There was no focus on the artefact assemblage or find spots, and some objects were not fully described or even recorded. In terms of the publication of Cave 1Q artefacts, these were accordingly arranged in terms of pottery, linen, and scrolls in the official publication of DJD 1. However, miscellaneous objects, such as the phylacteries and wooden artefacts, only got a brief mention (Harding 1955). Artefact discoveries by Bedouin, known to come from the cave, were not included.

Additionally, the current holding arrangements of the artefacts from Cave 1Q make it difficult for researchers. The usual curatorial practice of the division of artefacts for storage is made in terms of their composition: wood, stone, pottery, metals, glass, fabric, and so on. In the case of the Qumran caves as a whole, holdings have also been confused by changes in politics. At present we have a situation in which anything scroll-related from Cave 1Q is either in the SHR, the IAA or the DAJ at Amman; further 1Q scroll fragments are found at the

296

## REVISITING QUMRAN CAVE IQ

Bibliothèque nationale de Paris, the Schøyen Collection in Norway, and the private collection of Athanasius Samuel (see the details in Tov 2010, 6–20). Organic material is in the Organic Remains Unit of the IAA, or at the ÉBAF, or in the DAJ, or else on display at the SHR. Hard objects (i.e., pottery, stone, metal and wooden objects) from the excavations of 1949–56 overall remain in the Rockefeller Museum stores, but under the authority of the ÉBAF, given the incomplete publication of the Qumran excavations, despite the publication of most of the caves. Some of these objects are also on display at the SHR. Hard objects from more recent excavations of nearby caves (which are useful for comparison) are housed in the IAA archaeological storerooms in Beth Shemesh and those of the Hebrew University. As far as material specifically from Cave 1Q is concerned, pottery and linen have also been scattered all over the world.

In order to understand the repertoire of objects in a cave assemblage, the sorting out into categories of objects in storage facilities and their dispersal needs to be *undone*: the aim here is to put everything back in the cave, conceptually, so we can get a real sense of what was in the cave when it was found, ultimately in order to understand what it was like over the centuries, even at the time of the deposit(s) of the surviving assemblage. In this exercise, each object needs to be given due attention, so that some objects — including scrolls as physical artefacts — are not unduly privileged over others.

## 2. CAVE IQ: ITS MORPHOLOGY AND REPORTS OF ITS CONTENTS

To begin with, before we can try to conceptualise the assemblage, we will consider what we know of the discovery and the morphology of the cave. Cave 1Q is located just over half a kilometre north-north west of Khirbet Qumran. Originally known as the 'Ain Feshkha Cave' (see Taylor 2002), the history of its discovery and initial exploration is well known and has been told many times over. The shepherd Muhammad ed-Dhib, looking for a lost goat, discovered this cave one day in early 1947 (or late 1946). While an element of legend has crept in to the many retellings, the Bedouin reports are reasonably consistent (see Trever 1977; Fields 2009).

In terms of what we might glean from these reports, the Bedouin first entered the cave through a small, high opening (de Vaux 1949b, 586), which they distinguished as the only entrance to the cavity. They saw that the cave had partially collapsed, with a pile of rubble in the centre which had smashed ceramic jars underneath (Trever 1977, 192). The plan of the cave in DJD 1 (FIG. 1) shows a narrow natural cave just over 2 metres wide at its maximum and 8 metres long, with a maximum height of about 3.8 metres above the original soil (see Figure 1 here). It has a central standing area at the front, with a very narrow longer cleft at the end, like a thin, low tail. The standing area of the cave is only about 2 metres wide and 5 metres long.

The dimensions of the original opening are not provided, and it is described by Harding (1955, 6) only as 'a small hole fairly high in the wall'. Before the archaeologists identified the cave, the Bedouin had either created or expanded on a lower entrance; de Vaux considered it expanded ('élargie' [de Vaux 1949a]; 'aggrandi' [de Vaux 1949b, 586]), while Harding (1949b, 112, Pl. XVII, FIG. 2) thought it was 'made by the plunderers' and noted 'there may have been a lower entrance that collapsed anciently but this is not certain ... the nature of the rock does not lend itself to cutting and dressing' (Harding 1955, 6). Both entrances involved difficulties of access. Early photographs (e.g. Humbert and Chambon 1994, 418–19) suggest that the high opening was <1.2 metres from ground level and <45 centimetres wide, therefore only large enough to pass a jar through on its side, not upright (see Figure 1, 4). The lower entrance, if it existed in antiquity (which is unverifiable) and even with its expansion by the Bedouin, involved people crawling through on all fours: 'une ouverture au ras du sol par où un homme ne pouvait passer qu'en râmpant' (de Vaux 1949b, 586). Any original opening

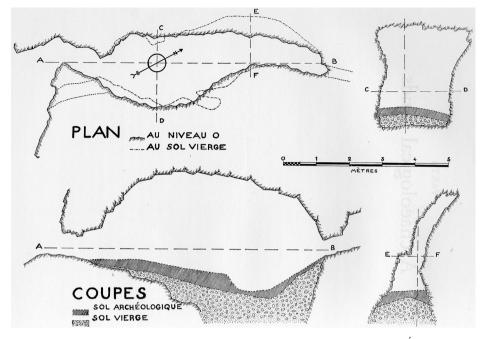


Fig. 1. Plan of Cave 1Q from DJD 1. Image reproduced courtesy of JBH Humbert, ÉBAF; and Oxford University Press.

would have been smaller, though large enough to allow the entry of rats (see below). The plan of DJD 1 only shows the lower, expanded entry, and even still it is only <60 centimetres high and wide, again only large enough to pass a jar through on its side.<sup>1</sup>

According to the reports, the Bedouin identified numerous smashed and whole jars, at least some of which had lids intact. There are slightly different reports on how many whole jars there were. Allegro indicated that there were some 7-8 whole ones in rows on each side of the cave (Allegro 1956, 16-17). The official report has five on one side and three on the other, some of which had lids (Harding 1955, 5; Trever 1977, 192). Milik (1959, 12) mentions 'eight unbroken jars with their lids still on'. According to an account published by William Brownlee (1957), based on an interview that Najib S. Khoury made with someone who claimed to be Muhammad ed-Dhib, there were ten jars, a claim which many have doubted (e.g., Cross, quoted in Fields 2009, 521 [n. 7], 534-35 [n. 59]; Trever 1961; and see the rebuttal of Brownlee [1962], although he concedes that there may be elements in the story that are unreliable or pure elaborations). The most glaring problem in this account is probably ed-Dhib's claim that he broke all ten jars (see Brownlee 1957, 236-37), which is clearly not the case. However, Brownlee shows convincingly that the Arabic verb ed-Dhib uses could also mean 'to break open' (Brownlee 1962, 488); in other words, ed-Dhib did not break the jars but simply removed their lids. The Bedouin also mention a wooden pole, about 3 inches (7.6 centimetres) wide (Trever 1977, 192).

Collapsed caves are quite common in the area because of the frequent seismic activity, so this explains the crumbled roof and smashed jars in the middle of the cave. But this was quite a small and narrow space and, so, given the notion of one side, another side, and a central area of smashed jars, we can assume that only the ones remaining at the edges, by the walls or the back,



Fig. 2. Jar QY, Israel Museum / The Hebrew University of Jerusalem. Shrine of The Book. Photo © The Israel Museum, Jerusalem.

survived the central cave ceiling collapse. The wooden pole is not frequently noted, and we will return to it presently.

In terms of what reports indicate regarding the whole jars, we learn that, in the breaking apart or opening the tops of some of these, one jar seemed to be full of red earth (Trever 1977, 192, cf. Brownlee 1957, 263), which looked to the Bedouin like red seeds (Fields 2009, 25). Red earth does not indicate decomposed scrolls because these turn to black, at one time mistaken for bitumen (see Taylor 2014, 384). However, the clay itself used for the jars is quite red, and red earth would be consistent with a decomposed clay jar stopper, which was typical of this era. Notwithstanding the lids, it is stated that some jars were indeed sealed with clay (Brownlee 1957, 236; Fields 2009, 25). Jar stoppers have been found at the site of Qumran in the tower (Gunneweg and Balla 2003, 19) and in two 'graves' containing buried sealed jars in the cemetery adjacent to the site (Magen and Peleg 2007, 45–47, FIGs. 46–47). In the excavations close to Cave 3Q, Joseph Patrich and Benny Arubas found a cave in which there were five clay jar stoppers (Patrich and Arubas 1989). Unfortunately, in 1Q, this red earth is long gone and cannot be analysed. What is more interesting, of course, is that at least one of the jars contained scrolls.

Mohammed edh-Dhib affirmed that there were three scrolls found in an intact jar and further scrolls were retrieved later (see Trever 1977, 100–1, 192–93; Fields 2009, 23–89). One of the Bedouin informants, Khalil Musa, told Trever that four scrolls were removed from the cave from 'under the debris on the floor of the cave' on a later visit he made with George Isaiah (Trever 1977, 101), but this is not corroborated by Isaiah. No other Bedouin PALESTINE EXPLORATION QUARTERLY, 149, 4, 2017

informant indicates whole scrolls were discovered in the debris, only in the jars, and Musa may have been referring to fragments.

Two whole jars were taken away to Bethlehem, along with scrolls. They remained with the dealer Ibrahim Ijha for one month, but the situation of the jars (and lids) then becomes unclear (see Taylor 2016a). In terms of the forms of the whole jars in the cave, the reports indicate that the two jars the Bedouin first removed had three handles (Trever 1977, 192). The remainder of the jars and lids were left in the cave, and brought out at different times (Trever 1977, 228). When George Isaiah visited the cave with Khalil Musa later in the year 1947 he saw one whole jar, fragments of others, manuscript fragments, linen, and the wooden pole, still lying there (Burrows 1955, 7). A priest of St. Mark's Monastery (Father Yusif) likewise went to the cave in August 1947 and saw 'one of the jars in which the scrolls had been found, and many fragments of broken ones. Also, there was a pile of small fragments and cloth wrappings which the Bedouins had tossed aside as worthless' (Trever 1977, 69). So, at this point the seven or eight (or ten? — see above) whole jars in the cave had been reduced to one, but there was still a considerable amount of material remaining in the cave.

In late November 1947, Eliezar Sukenik came to Bethlehem and met the dealer Salahi (Trever 1977, 100, 197; Fields 2009, 522, n. 21). Soon after he bought three scrolls and two jars for the Hebrew University (Trever 1977, 102, 108, 198). These two jars are now in the holdings of the SHR at the Israel Museum, loaned from the Hebrew University (see Figures 2 and 3).



Fig. 3. Jar QX, Israel Museum/The Hebrew University of Jerusalem. Shrine of The Book. Photo © The Israel Museum, Jerusalem.

300



Fig. 4. Mohammed ed-Dhib and companion outside Cave 1Q, 1949. Photograph from Qumran archive, courtesy of JBH Humbert of ÉBAF.

Despite what is commonly assumed, the first two jars brought from the cave were apparently being used as water jars in early 1948 (Trever 1977, 70), after Sukenik's purchase, though Harding at that point wondered if Metropolitan Samuel had smuggled jars out of the country (Fields 2009, 25, 255). According to a personal letter to his wife, Brownlee was hopeful of finding these first jars in March 1948 (Fields 2009, 75), after Sukenik's purchase of two jars. Whatever jars were bought by Sukenik in November 1947, now in the Israel Museum (SHR), these were then not the first two jars, but others taken from the cave. One of these has loop handles, one does not (see Taylor 2016a).

At the same time, the Bedouin famously removed and sold on two lots of manuscripts, well preserved in jars they opened: the first one being the great Isaiah Scroll, the Pesher Habakkuk, and the Community Rule/Serekh ha-Yaḥad (IQIsa<sup>a</sup>, IQpHab, and IQS), and the second lot being the Genesis Apocryphon, the Rule of the Congregation, the second Isaiah Scroll, and the Hodayot Scroll (IQapGen ar, IQSa, IQIsa<sup>b</sup>, and IQH<sup>a</sup>) (see Fields 2009, 23–113).<sup>2</sup>

After the cave was discovered by Captain Akkash of the Arab Legion for the Jordanian authorities, in January 1949, Gerald Lankester Harding, Chief Inspector of the DAJ, invited Father Roland de Vaux of the ÉBAF in Jerusalem to conduct excavations of the cave with him. They excavated with a small team of three workers, two 'trained men' from the Palestine Archaeological Museum — the third institution involved in the excavations — and one from Amman, with an Arab Legion guard outside with a truck. The excavation took place between February 15 and March 5, 1949 (Harding 1955, 6; Trever 1977, 148), and is described not only by Harding (1949) and de Vaux (1949b) in separate articles and jointly in the publication in DJD 1 (Harding 1955; de Vaux 1955), but also helpfully by the director of the American School, Ovid Sellers (Sellers 1949), who took a number of photographs. In recording the pottery, de Vaux (1949b, 586) noted the proximity of the site of Qumran and labelled items with the prefix 'Q' followed by a number (Q1, Q2, Q3 etc.), for which see below.

While the notes and photographs of the excavation are fairly minimal as published in DJD I and volume I of the official Qumran final report (Humbert and Chambon 1994, 343, photos 417–420), we have discovered tinted photographs taken by Sellers freely available on the internet, catalogued in the Oberlin College collection as the Ain Feshkha Cave, from the Professor Herbert G. May Teaching Collection on Biblical Archaeology and the Bible, duplicating four of the pictures published by Sellers (1949), but including others. Three of these are reproduced here. Figure 5 shows Captain Akkash with two of the team outside the cave, with one man crawling out through the lower entrance. Sellers (1949, 7) confirms how very small and cramped the cave was, and states, 'Digging was done by hand with small instruments, mostly knives. Generally there was room for only two men to be working simultaneously', and indeed Figure 6 shows the cramped conditions inside the cave, now in University College London's Institute of Archaeology, there are some photographs of this expedition which show the team about to begin, and at work just outside the cave entrance, digging under rocks (Figures 8 and 9).

These pictures are invaluable in clarifying key elements not described by Harding or de Vaux. For example, comparing these early images to later ones, it can be seen that in the course of excavations the lower entrance was much expanded and the cave exterior was dug away.<sup>4</sup> The two early (post-Bedouin) openings and original entrance level are clearly seen in Sellers' picture (Figure 5), but in 1952 further work removed rocks and soil from the



Fig. 5. Photograph of Captain Akkash and colleagues outside Cave 1Q. Photo: Ovid Sellers. Courtesy of Oberlin College Library Special Collections and American Schools of Oriental Research: Sellers 1949, available on JSTOR.



Fig. 6. The excavation team inside Cave IQ with de Vaux. Note the very cramped conditions. Photo: Ovid Sellers. Courtesy of Oberlin College Library Special Collections and American Schools of Oriental Research: Sellers 1949, available on JSTOR.

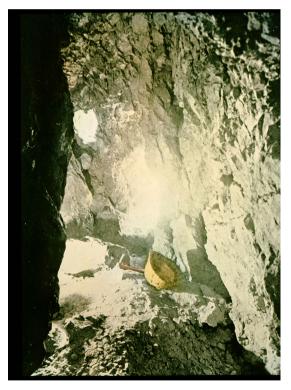


Fig. 7. The front (and main) area of Cave IQ with original entry to the left and new/expanded entry to the right. Note the basket which shows scale, the narrowness of the cave and unevenness of the cave walls and debris on the ground. Courtesy of Oberlin College Library Special Collections, tinted image from DJD I, Pl. I:2. Reproduced courtesy of Oxford University Press and Oberlin College.



Fig. 8. Photograph of Cave 1Q excavation team, 1949. Photo: Gerald Lankester Harding. 1949. Photograph supplied and reproduced courtesy of UCL Institute of Archaeology, London.



Fig. 9. Photograph of excavation team working on rocks in front of Cave 1Q entrance. Photo Gerald Lankester Harding, 1949. Photograph supplied and reproduced courtey of UCL Institute of Archaeology. London.

entrance area, so that afterwards the original entrance seems higher up than it was at the time the Bedouin found the cave.

Inside the cave, the 1949 excavation team found that the ground had been already dug up in part by Bedouin searching for scroll fragments, and this is indicated in part in Figure 1, where there is a dip in the layer of archaeological debris. Famously, Harding and de Vaux's team (Figures 8–10) still found a large number of manuscript fragments in the debris. They confirmed the cave collapse that had cracked the jars in the centre of the cave, with about 50 centimetres of fill and rocky collapse there. In addition, there were 15 centimetres of animal dung in the central part of the cave (Harding 1949), including 'several large lumps of

## REVISITING QUMRAN CAVE IQ



Fig. 10. Gerald Lankester Harding in his office, early 1950s, with unidentified jar and cord (John A. Carruthers). Courtesy of UCL Institute of Archaeology, London.

coagulated animal droppings' (Harding 1955, 6) under which there was linen and a fragment of papyrus (Harding 1949, 115), indicating rodents ate the spilled 'skin' contents of the jars (avoiding the plant-based materials of linen and papyrus) and left their dung on top (Crowfoot 1955, 18). Manuscript damage indicated that both rodents and white ants had fed on the manuscript leather (Harding, 1949, 114), exposed when the jars had smashed as a result of the collapse.

De Vaux notes that elements of at least 50 jars were preserved (de Vaux 1055, 8). This figure is remarkable given the small size of the cave. Along with linen scroll wrappers and packing, there were phylactery cases, other small items of pottery (bowls, lamps, a cooking pot and juglet), olive and date pits, and two fragments of a wooden comb (Harding 1955, 7; Pl. I. 4). The excavation team found cast outside a big piece of jar with linen and a piece of manuscript adhering to it (Harding 1955, 7, 12; Pl. I, 8–10).<sup>5</sup> This importantly shows the connection between these three materials, and is preserved in the present holdings of the scrolls in the Israel Antiquities Authority (990e). Sellers also notes that 'some of the manuscript bits were stuck to the cloth' (Sellers 1949, 8).

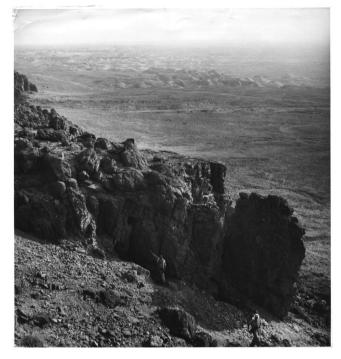


Fig. 11. Picture showing cave 1Q after the additional excavation work outside the entrance (in 1952) cut into the space in front of the cave, so that the entrance seems much higher than it was originally. Photo by Lucas Grollenberg, 'Prof. Delorme pointing at Cave 1'. Reprinted courtesy of NPAPH (http://npaph. com/sites/khirbet-qumran/), used with permission.

## 3. SCROLLS AND OTHER ARTEFACTS

There is an increasing awareness of assemblages in regard to the scrolls alone, with the work of Stephen Pfann (2007), Daniel Stökl Ben Ezra (2007, 2010, 2011), Devorah Dimant (1995, 2006), Florentino García Martínez (2010a, 2010b, 2016), and Charlotte Hempel (2013, 303–37), in particular, who consider the types of scrolls deposited in the caves and their palaeographical features, with proposals presented about the dating of the scrolls deposits and their character. This makes it even more important that the total artefact repertoires of individual caves be considered carefully, especially in terms of pottery typologies.

In terms of the manuscript artefacts of Cave 1Q, see the contents list published by Fitzmyer (2008: 14–24) and Tov (2010, 6–20). The following list, largely of fragments, illustrates the nature of the texts deposited in this cave.

1QIsa <sup>a</sup> : Isaiah	1Q1: Genesis
1QIsa <sup>b</sup> : Isaiah	1Q2: Exodus
1QpHab: Habbakkuk	1Q3: Paleo-Leviticus
1QH <sup>a</sup> : Hodayot [Hymns]	1Q4: Deuteronomy
1QS: Serekh [Community Rule]	1Q5: Deuteronomy

1Q6: Judges	1Q26: Wisdom Apocryphon
1Q7: Samuel	1Q27: Mysteries
1Q8: Isaiah	1Q28a: Rule of the Congregation
1Q9: Ezekiel	1Q28b: Rule of the Blessings
1Q10: Psalms	1Q29: Liturgy of Three Tongues of Fire
1Q11: Psalms	1Q30: liturgical text
1Q12: Psalms	1Q31: liturgical text
1Q13: Phylactery text	1Q32: New Jerusalem
1Q14: Pesher Micah	1Q33: War Scroll (=1QM)
1Q15: Pesher Zephaniah	1Q34: liturgical prayers
1Q16: Pesher Psalms	1Q35: Hodayot (Hymns)
1Q17: Jubilees	1Q36: hymns?
1Q18: Jubilees	1Q37: hymns?
1Q19: Noah	1Q38: hymns?
1Q20: Genesis Apocryphon	1Q39: hymns?
1Q21: Levi (Aramaic)	1Q40: hymns?
1Q22: Moses	1Q41–70: unclassified
1Q23: Enoch	1Q71: Daniel
1Q24: Enoch	1Q72: Daniel
1Q25: Apocryphal Prophecy	

We do not wish to enter the discussion about the textual assemblage here, but will simply note that there is a large quantity of fragments of scriptural texts (15 examples), as well as previously unknown texts, including interpretations that quote biblical material (4 examples), texts that may have been considered to have been scripture by those that placed them in the cave (e.g. Jubilees, Enoch), liturgical material (4 examples) and hymns (7 examples), texts defining order, present and eschatological, for a particular group referencing themselves as the *Yahad* (1QS, 1Q28, 1QM), which also quote scripture, and fragments still not identified or which are poorly understood. However we may see them, the scrolls need to be situated within the total repertoire of artefacts in Cave 1Q. They are not just texts, they are also objects, and the nature of these indicate nothing documentary or secular, but rather all are religious.

A key question is their dating, where palaeographical studies have also been supported by radiocarbon tests. Radiocarbon dating was used early on in order to broadly confirm that the texts belong to the period of the Second Temple. This was the test undertaken on the Isaiah Scroll (IQIsa<sup>a</sup>) which definitively proved it was not medieval (Libby 1950), but rather dated to the period 167 BCE–233 CE. Subsequently, more refined radiocarbon dating has been employed on scrolls from the cave (see Carmi 2000; van der Plicht 2000; van der Plicht 2007; van der Plicht and Rasmussen 2010). Noteworthy tests were run at Zurich (Bonani et al 1992) and Arizona (Jull et al 1995). For IQ texts, IQIsa<sup>a</sup> was dated at 2 sigma (95.4% confidence) as 351–295 or 230–53 BCE (Tucson) and 351–296 or 230–48 BCE (Zurich), IQPHab as 160–148 or 111 BCE–2 CE (Tucson), 344–323 or 203 BCE–122 CE (Tucson), IQGenAp as 89 BCE–118 CE (Zurich), IQH 47 BCE–118 CE (Tucson).

These dates need to be considered along with the palaeography of the Cave 1Q scrolls for more specificity. When this is reviewed, it is clear that virtually all hands date to the 1st century BCE. Stökl has therefore identified this as an 'old cave', in terms of its contents (like Cave 4Q), in contrast to a cave such as Cave 11Q, which he defines as a 'new cave', in that the palaeographic dates are considerably later in range (Stökl Ben Ezra 2007).

The problem here is that the date of the manufacture and writing of the scrolls may not correlate closely with the dates(s) of deposit. Thus the dating of the other cave deposits (e.g. pottery and linen) is a key issue. From the assemblage and the conditions apparent at the time of discovery we can determine that the scrolls decomposed (and were eaten) in the cave environment, and were preserved relatively intact only (so far as we know) because they were wrapped in linen within sealed jars from which the Bedouin extracted them. That any pieces of scrolls – viewed as vulnerable archaeological objects — survived at all in debris, probably with infiltrations of rain water at different times, remains remarkable.

## 4. TEXTILES, WOODEN OBJECTS, AND OTHER ORGANIC REMAINS

There were a variety of other organic remains in the cave. These comprised linen, olive and date pits, palm fibre, and wood.

# 4.1. Linen

Numerous items of linen were found by the archaeologists both in the cave and outside it (strewn by the Bedouin). This was carefully washed and examined by the textile expert Grace Crowfoot, and published in a preliminary study and DJD 1 (Crowfoot 1951; 1955). Three items of linen from the cave were discovered by one of the present authors over ten years ago stored in the Palestine Exploration Fund, labelled as coming from the 'Ain Feshkha Cave' (Taylor et al. 2005), and identified according to Crowfoot's system as nos 20, 23 and 25. These were part of a set of 36 pieces mounted in perspex (apparently done with the assistance of Dr. Bushnell of the Museum of Ethnology and Archaeology, Cambridge). Enquiries made at the present Cambridge Museum of Archaeology and Anthropology in July 2016 brought to light a further piece of textile, gifted to the museum, with an accompanying letter from Harding dated 27 July, 1951 (accession no. 1952.21).<sup>6</sup> This can be identified as no. 59 on the list, though re-measuring showed that there is a printing error in DJD 1 (Crowfoot 1955, 37) where the measure 6.5 cm should read 9.5 cm. The Ashmolean Museum possesses one piece, though it cannot at the moment be examined as it is misplaced. There is a further piece of linen in the British Museum (WA 131444), which can be identified as no. 60.<sup>7</sup> One is in the Louvre Museum (AO20149; Dlugosz 2005), probably 61 or 66. Other linen pieces are in the IAA Organic Materials Unit in Jerusalem: IAA531297 can be identified as no. 30; IAA 578620 as no. 22; IAA 351288 as no. 15. There are apparently a number of pieces of linen in the Amman Archaeological Museum. Nevertheless, the locations of most of these pieces of linen today remain unknown. Part of the mystery may be solved by reference to the radiocarbon experiment undertaken in 1950. Since Harding handed over 4 ounces (113 grams) of 'scrap' linen to be destroyed in order to confirm the dating (Libby 1951; Sellers 1951). Even still, more linen should be in collections somewhere.

A total of 77 items of linen were published by Crowfoot; however, two of these (nos 11 and 12) were upon analysis identified as modern. This is because, as noted, part of the linen was found thrown out of the cave entrance by the Bedouin (Harding 1949, 113), and therefore could be intermixed with contemporary material. Of the remaining 75 pieces some should really be matched, as Crowfoot noted: no. 18 belongs with no. 28, and no. 6 with 19. Crowfoot

308

#### REVISITING QUMRAN CAVE IQ

estimated in the end that the linen came from between 40 and over 50 whole cloths (Crowfoot 1955, 19). In addition to linen identified as scroll wrappers, especially those with either fringes (2, 3, 4, 7, 13, 17, 20, 30, 31, 35, 37, 57, 59, 72, 75) or blue lines (nos 6, 9, 10, 14, 16, 18, 19, 22, 25, 27, 28, 34, 41–52, 71, including a kind of fringe in nos. 1, 19, 42), there were packing pads (e.g. no. 30), pieces of linen string (Crowfoot 1955, 19), and also jar covers distinguished by twisted corners, sometimes with string (e.g. nos 15, 26, 32, 37, 38–40, 51, 69). Some of the linen was underneath the 15-centimetre layer of dung within the cave (Harding 1949, 115).

The jar covers are particularly interesting in indicating that the jars' contents were not only protected by ceramic lids, and possibly clay jar-stoppers, but also linen covers. Packing pads indicate a concern to ensure that the contents of the jars fitted snugly and did not move around. In terms of how a scroll was wrapped, as noted in Taylor et al. (2005, 162), in the case of a (plain) cloth with three hemmed edges and one selvedge found *in situ* (Crowfoot 1955, 18, Pl. 1, 8–10), it was doubled, folded again and wrapped around the scroll with the corners in the centre (i.e. not as shown in Bélis 2003, 236. Fig. 4). In other words it was wrapped as an envelope, with two corners tucked in.

The linen of Cave IQ is then all related to the jars and the scrolls. Given the need to consider the time of the deposit, not just the time of the manufacture of the scrolls, it was considered that the linen could be closer to this time. Therefore, the linen discovered in the Palestine Exploration Fund, no. 23 in Crowfoot's catalogue, was sent for radiocarbon dating at the Gröningen AMS Laboratory, which yielded a result of 1985+/-30 BP, calibrated to 40 BCE to 50 CE at 1-sigma (68% probability; see Taylor et al. 2005).

# 4.2. Miscellaneous Food Waste, Palm Fibre, and Wood

Harding noted in the cave that there were 'a quantity of olive-stones, date-stones, palm-fibre and small and large pieces of wood' (Harding 1955, 7). Olives and dates are long-standing snack foods, and they could have been deposited in Cave 1Q at any time. Unfortunately, their relationship to the rest of the assemblage cannot be ascertained and their locations today are not known. These organic objects could be radiocarbon dated and the results could potentially provide information about other possible visits made to the cave, as well as one(s) related to the scrolls deposit(s). Similarly, the large pieces of wood are of great interest as they could be radiocarbon dated, but their whereabouts are also unknown.

Some IQ palm fibre survives and has been identified as cord. It was included in the travelling Dead Sea Scrolls exhibit, defined in the catalogue as: 'Fragment A: Cord Palm leaves IQ and 2Q Diameter 3 mm (I/8 in.) Technique: 2-ply cable, final twist in "S" direction (z2s)'.<sup>8</sup> This is distinct from linen cord used for tying up the linen wrappers and jar covers, and it is important evidence which may suggest that the lids were tied down to the jars by this type of cord. The handles on the jars — where evident — would suggest this to be the case, as in jars found in Deir el-Medineh (Pfann 2002, 168) though in fact even in jars without handles the high central 'button' knobs of the lids seem to be designed for winding cord around that could then be passed around the neck of the jars.<sup>9</sup> It should be noted that the linen jar covers would have been tied around the neck by linen cord.

# 4.3. A Wooden Pole

The wooden pole about 3 inches (7.6 centimetres) wide is clearly attested in the Bedouin accounts (Trever 1977, 192) and may be understood by comparanda. Items of wood that may be defined as small and large were found in the cave expedition of 1952 in collapsed cave GQ17 (Baillet, Milik and de Vaux, 1962 [DJD 3], 9; Pl. VII.3), in which there were several jars and other smashed pottery. Some of these poles are also around 7–8 centimetres

310

wide. They are normally understood to be tent poles, but there is then the question of whether anyone using the caves actually camped in tents, which remains open (see the conversation between Broshi and Eshel 1999 and Patrich 2000).

The function of the wooden pole in Cave 1Q may possibly become more evident if considered in the light of the actual artefacts we have in the cave: largely cylindrical jars and lids, containing scrolls wrapped in linen and packing pads, and understood with a view to the carriage and deposit of the jars in caves. Overall, one might imagine the ancient occupants of Oumran carrying jars as we might, hugging them to our chests or carrying them in a pack on our backs. However, in antiquity, as in quite modern times, this was not the usual way that jars were carried. While we are familiar with images of women with water pots on their heads, the common method was by means of a voke or pole over the shoulders or shoulder, sometimes involving two people (Figure 12), a method also used by employing pack animals. Yokes were not necessarily shaped, and it therefore seems possible that this pole simply represents such a device used for the carrying of the heavy jars. We do not know how long it was, but its width would be appropriate for a pole that needed to be strong enough to hold a jar. We also do not know the state of the wooden pole, but the fact that it was left in the cave might indicate that it had been in some way cracked or damaged, for it not to be retrieved. It is also relevant to consider how the (fully packed) jars came to be taken into the cave if the only entrance was the high opening. A wooden pole may have been used in some way.<sup>10</sup>

# 4.4. Leather Items: Phylactery Cases

According to Harding there were four leather phylactery cases in this cave (Harding 1955, 7):

- 1. One with two parts stitched together, with four compartments, for the head (Pl. 1.5)
- 2. Part of another four part phylactery, for the head (Pl. 1.5)
- 3. One compartment of a phylactery for the arm (Pl. 1.6),
- 4. Remains of a further three cases like that of 3 (Pl. 1.7).



Fig. 12. Street sign in Pompeii Reg. VII Ins IV, showing two men with poles transporting jar. Photo: Marcello Fidanzio.

## REVISITING QUMRAN CAVE IQ

Unfortunately, these items are currently lost. Enquiries of numerous museums and collections have proven fruitless in tracking down the whereabouts of these important artefacts. The phylactery cases were found in the cave, with tiny pieces of parchment (1Q13), which may indicate that they were placed in jars, as with other scrolls. These are religious, but also personal items.

## 4.5. Wooden Comb

While the comb of Cave IQ is also currently lost, it is clearly a rare and very important discovery. It is unusual in being a single-sided comb, not a double type with one side comprising a fine-toothed nit comb. It is actually reproduced life-size in DJD I (Pl. 1.4, Figure 13) next to life-size phylactery cases (Figure 12). From this picture, it is possible to reconstruct its original dimensions, and form. It would have been 4 centimetres wide (3 centimetres surviving), and 2.2 centimetres long from the top, not counting the handle. It has 18 surviving teeth, but would have originally had 24.

The two combs allegedly from Qumran, 349874 (light) and 349875 (darker), on display at the SHR in the Israel Museum, have widths of 9.5 centimetres and 8 centimetres respectively, and are the usual double sided type. Overall, in the Judaean Desert caves, combs tend to be larger than the Cave 1Q comb. However, small examples are also found. Of two boxwood combs found by Nahman Avigad in the Cave of the Pool (Avigad 1962), one is single sided, 3 centimetres wide, and has a plain area for a hand grip, so that it is 7 centimetres in length with 15 teeth, 6 per centimetre. Lice were found in the teeth of this comb (Mumcuoglu and Hadas 2011). In fact, in one study lice were found in 8 out of 11 examples of boxwood combs from Judaean caves (Mumcuoglu and Zias 1988), especially in the case of fine-toothed combs (5–15 teeth per centimetre). Another example of a small comb has now been found when apprehending looters in the so-called Cave of the Skulls, in Nahal Se'elim, which preserves a fine-toothed side but only a tiny residue of the other.<sup>11</sup> A double-sided comb from Masada (IAA Number: 2007–9021) is 3 centimetres wide and 5 centimetres long.<sup>12</sup> In addition, there

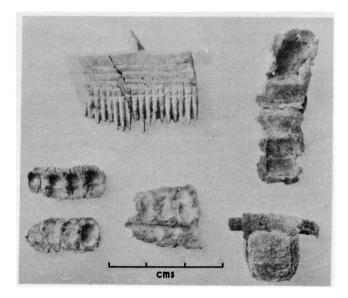


Fig. 13. Comb and phylactery cases as printed in DJD 1, Pl. 1:4-7. Original photograph currently lost. Reproduced courtesy of Oxford University Press. Clockwise from top right: 1.6, 1.7, 1.5, 1.4.

are three small combs found in Murabba'at: Mur 340 (3 centimetres wide), 340/1 (2.8 centimetres), and the tiny Mur 340/2 (1.8 centimetres wide).<sup>13</sup> All of these are double sided, however, and broken, so their total length is not clear. What is interesting about these small combs is that two of them have the same marking as the lost comb from 1Q: 4 parallel lines (Mur 340) and two sets of 4 parallel lines (340/2). The parallel lines decoration is also found on a large comb (Mur 341) in three separate bands (see DJD 2, Pl. XIV).

The Cave IQ comb has a loop handle shaped like a semi-circle, and it would have allowed the comb to be worn around the neck with a string tie. Some other combs also have holes in them which would allow a comb to be tied to a string and worn for easy use (see DJD 2, Pl. XIV.9). Given this, it may be a either a lice or beard comb or both. Only further study would allow these hypotheses to be tested, and without the artefact in question this is impossible to undertake. The key characteristic of the comb in terms of the assemblage, however, is that it is a secular, personal item. The question is whether or not it relates to the scrolls deposit (s), or whether it was dropped during an earlier or later visit made to Cave IQ. The wood could be radiocarbon dated, but only if it is found.

#### 5. POTTERY ITEMS

Finally we return to the ceramic material, largely the jars and lids. The pottery is the easiest category of objects to examine, since de Vaux kept records, including a handwritten card index/inventory with descriptions, drawings and photographs of 57 objects (see Fidanzio and Humbert 2016), though it is not entirely a straightforward process to study these. From the official excavations a number of jars and lids were reconstituted, and while some remain in the Qumran holdings of the Rockefeller Museum, Jerusalem, the best examples were sold to museums worldwide. The archaeological team published their final report in DJD 1. Documentation of the ceramic material was recorded by de Vaux, including photographs, for archival records, and it was then considered appropriate for the Jordanian government to sell or gift the restored jars and lids. This was done with the help of Roland de Vaux, who was placed in charge of the pottery items by Harding. However, in DID 1 photograph captions do not list the inventory numbers (given the prefix 'Q'). When the photographs of the archival handlist are compared with DID I it is possible to determine these (see Fidanzio and Humbert 2016), but only 45 photographs were conserved of the 57 objects, and the lid illustrated in DJD I, Pl. III.3 does not match any photograph now in the inventory. In addition, as noted by Fidanzio and Humbert (2016) there can be discrepancies between the description of an artefact and its apparent typology: Q31 is identified with Q17, but the description of Q31 corresponds to Q19 and not Q17; Q25 is identified with Q19, but the description matches Q18; Q29 is compared with Q12, but the description matches Q11; Q23 is compared with Q13 but the description matches Q9. One official IQ jar and lid photograph only exists in Harding's archive in UCL, which we can identify as O<sub>51</sub> (Figure 14).

Clearly the pottery needs detailed re-examination. We have been able to determine where most of these examples are now. With the published handlist, as well as the preliminary reports of de Vaux, different versions of Volume 1 of the Qumran archaeology final reports (Humbert and Chambon 1994, German version edited and translated by Ferdinand Rohrhirsch and Bettina Hofmeir 1996; see Taylor 2016a), and internet resources, we have been able to synthesise the current information (see Table 1), and undertake some preliminary study of these, though not all the museums are aware that they have important jars from the first manuscript cave 1Q, and further study is in progress as part of the project.

Also, it needs to be noted that while the official excavation determined that there were at least 50 jars evidenced (Harding 1949, 113; de Vaux 1955, 8), only 12 jars were reconstructed. A total of 35 (or 36 if a bowl is identified as a cover) lids were reconstructed,



Fig. 14. Photograph of jar Q51 and lid Q37(?). Harding archive, Photo supplied and reproduced courtesy of UCL Institute of Archaeology.

giving a total of 47–8 jars and lids together. Additional sherds were not kept. In fact, with the help of Felicity Cobbing. PEF Curator, and Sandra Jacobs, DQCAAS Researcher, we were able to find sherds gifted to the Palestine Exploration Fund by Harding, including parts of a jar rim and disk base, which we will publish fully in a forthcoming article, though note here that the rim would indicate a narrower neck than other jars (11.75 centimetres internal diameter). We do not doubt the assessment that there were the remains of at least 50 jars, but we have only a small number that have been reconstructed, with a greater number of lids. We need also to remember that at least 4 whole jars were taken away by the Bedouin.

Despite publication (in de Vaux 1949b, 587; 1955, 8–17, Pl. II-III; Humbert and Chambon 1994, 343) the pottery typology of Cave IQ has not been entirely clear, since de Vaux produced a representative selection for DJD I and his preliminary article, rather than a comprehensive presentation that we might expect in modern archaeological reports.

In regard to the morphology of the cave and its contents, and evidence of the total assemblage as it was found *in situ*, it is reasonable to assume that the cave was densely packed with

No.	Object	RB 56 (1949)	DJD 1	Published elsewhere or on web	Dimensions provided by de Vaux (DV) or others.	Current location/owners and accession numbers
Qı	bowl	Fig. 2.1; Pl. XIV.1	Fig. 2.1; Pl. III.a.1		7.8 h. x 14.2 w. uncertain h. x 14.5 w.	IAA Rockefeller Museum
$Q_2$	bowl					
$Q_3$	bowl		Fig. 2.3		6.6 h.x 17.5 w.	IAA Rockefeller Museum
Q4	plate lid		Fig. 2.2; Pl. II.2		2.2 h.; 17.5 w.; base 5 w.	IAA Rockefeller Museum
$Q_5$	lid		Fig. 3.6		7.5 h; 18.7 w.; knob 7 w.	
Q6	lid	Fig. 2.7; Pl. XIV.7	Fig. 2.4		7.1 h; 17.7 w.; knob 4.2 w.	
Q7	lid	Fig. 2.2; Pl. XIV.2	Fig. 2.5		5.5 h; 17.1 w.; knob 7.5 w.	IAA Rockefeller Museum
Q8	lid				6.7 h; 18.2 w.; knob 7.5	IAA Rockefeller Museum
Q9	lid	Fig.2.5; Pl. XIV.5	Fig. 3.8; Pl. II.5		7.5 h.; 18.5 w.; knob 7 w.	IAA Rockefeller Museum
Q10	lid	Fig.2.3; Pl. XIV.3	Fig. 2.6; Pl. II.4		6.9 h.; 17.8 w.; knob 6.8 w.	
QII	lid		Fig. 2.7		7.5 h.; 17.8 w.; knob 7 w.	IAA Rockefeller Museum
Q12	lid	Fig. 2.4; Pl. XIV.4			6.5 h; 18.5 w.; knob 6.8 w.	IAA Rockefeller Museum
Q13	lid		Fig. 2.9; Pl. II.1	http://cartelfr.louvre.fr/cartelfr/visite? srv=car_not_frame&idNotice=37415; Długosz 2005	DV: 7.5 h.; 18 w.; knob 7 w. Długosz: 7 h.; 18 w.	Louvre Museum A020148
Q14	lid	Fig.2.8; Pl. XIV.8			7.6 h; 17.5 w; knob 4.5 w.	

 TABLE I:
 Ceramic items from Cave  $IQ = GQI_4$  — based on published material and handlist (Fidanzio and Humbert 2016), with results of searches thus far.
  $\overset{\circ}{\overset{}_{+}}$ 

Q15	lid				5.4 h; 17 w; knob 7 w.		RE
Q16	lid			http://www.britishmuseum.org/ research/collection_online/ collection_object_details.aspx?objectId= 369615&partId=1	DV: 6.9 h.; 17.2 w.; knob 7.8 w.; JT: 7.7 h; 18.2 w.; inner 16.7; knob 8.4 w.	British Museum, London	EVISITING
Q17	lid				DV 6.9 h; 17.8 w.; knob 6.8 w.; JT: 8 h.; 18.5 w.; inner 17.3 w.; knob 6.7 w.	University of Madrid, Dean's Office display	QUMRAN
Q18	lid		Fig. 3.7	Kraeling 1952; https://oi-idb.uchicago .edu/id/ff1ab5da-12ea-4eaa-a133- 545141455ee1	DV 6.7 h.; 18 w.; knob 7.8 w.; Kraeling: 6.4 h.; 18.7 w.; top knob being like a flat inverted base 7.5 w.	Chicago Oriental Institute; Reg: A 29304 A; Accession Number: 3120	AN CAVE
Q19	lid				7.7 h; 18.4 w.; knob 7.2 w.	IAA Rockefeller Museum	E I
Q20	lid (broken)			http://art.thewalters.org/detail/29930	6.8 h.; 17.5 w.; knob 7.5 w.	Walters Art Museum, Baltimore 48.2058	õ
Q21	lid	Fig.2.6; Pl. XIV.6	Fig. 2.8; Pl. III.a.5		6.9 h.; 17 w.; knob 4.7 w.	IAA Rockefeller Museum	
Q22	lid				7.6 h.; 18.5 w.; knob 8 w.		
Q23	lid				7.8 h.; 17.5 w,; knob 7.6 w.		
Q24	lid		Pl. II.3		7.7 h.; 19 w.; knob 6.6 w.		
Q25	lid				7.1 h.; 17.5 w.; knob 6.9 w; Liverpool: 7.5 h.; 18 w.	Liverpool Museums: World Museum, Inv. no. 5 <sup>2.43</sup>	
Q26	lid				6.8 h.; 17.5 w.; knob 6.8 w.		
Q27	lid				8 h.; 15.8 w.; knob 5 w.		
Q28	lid				7 h.; 17.5 w.; knob 8 w.		
Q29	lid				7.2 h.; 17.8 w.; knob 68 w.		
Q30	lid		Pl. III.a.6		7.4 h.; 18.6 w.; knob 7.5 w.		
Q31	lid				6.8 h.; 18.2 w.; knob 7.2 w.	IAA Rockefeller Museum	သျ
						Continued	5

Continued

				TABLE I. Continued			$3^{I}$
No.	Object	RB 56 (1949)	DJD 1	Published elsewhere or on web	Dimensions provided by de Vaux (DV) or others.	Current location/owners and accession numbers	0
Q32	lid				8 h.; 17 w.; knob 8 w.		
Q33	lid				7.5 h.; 16 w.?; knob ? [fragments]		
Q34	lid				6.8 h.; 17.4 w.; knob 8.2 w.	IAA Rockefeller Museum	
Q35	lid		Pl. III.a.4		6.8 h.; 17.7 w.; knob 8.3 w.		ΡA
Q36	lid				5.4 h; 17.5 w.; knob 7.2 w.		PALESTIN
Q37	lid				6.7 h.; 19 w.; knob 7.2 w.		STT.
Q38	lid				7.1 h.; 18 w.; knob 4.1 w.		N F
Q39	lid				6.7 h.; 17 w.; knob 6.9 w.		E Z
Q40	jar (broken)		Fig. 2.10	http://images.metmuseum.org/ CRDImages/an/original/hb64_26a_b .jpg	DV: 64.5 h x 27 w.max; mouth 14.5 w.; MOMA.: 62 h.	Metropolitan Museum of Art, New York Gift of Hashemite Kingdom of Jordan, 1964 Accession Number: 64.26a, b	XPLORATION
Q41	jar (broken)	Fig.1; Pl. XV	Fig. 2.11		64 h; 25 w.; mouth 16 w.; base 11.5 w.	IAA Rockefeller Museum	QUA
Q42	jar (broken)		Fig. 2.12 Pl. II.6		58.5 h x 27 w.max; mouth 13.5 w.; base 12 w.	IAA Rockefeller Museum	AKTERL
Q43	lamp	Pl. XVI.b	Fig. 3.4; Pl. III.b.3	Mlynarczyk 2013	4.2 h.; 14.2 l.; 9 w.	IAA Rockefeller Museum	кгү,
Q44	lamp	Pl. XVI.b	Fig. 3.5; Pl. III.b.1	Mlynarczyk 2013	4.1 h.; 14.3 l.; 9 w.	IAA Rockefeller Museum	149,
Q45	jar (broken)			Kraeling 1952; https://oi-idb.uchicago .edu/id/ff1ab5da-12ea-4eaa-a133- 545141455ee1	DV: 66.5 h.; 24.8 w.; mouth 16.6; base 13.2 w.; Kraeling: 71.7 h; 24.7 w.; base 13.1 w., mouth 16.5 w.	Oriental Institute of the University of Chicago, Reg: A 29304 A; Accession Number: 3120	, 4, ×01

TABLE I: Continued

ပာ

Q46	jar (broken)	Fig. 3.10; Pl. II.7	http://cartelfr.louvre.fr/cartelfr/visite? srv=car_not_frame&idNotice=37415; Długosz 2005	DV: 61.4 h.; 25 w.; mouth 14.8 w.; base 12.4 w. Louvre: 63 h; 25.6 w.; mouth 14.6 w.	Louvre Museum A020147	REVISITING
Q47	jar (broken)			DV: 62.4; 26.5 w.; mouth 16.2; JT: 61.5 h.; 25 w., interior mouth 14.4 w.; exterior mouth 16 w.	Ashmolean Museum, Oxford AN1951.477	ng Qumran
Q48	jar (broken)			60.7 h.; 25 w.; mouth 15.8; base 11.6 w; Liverpool: 64 h.; 27 w.	Liverpool Museums: World Museum Inv. no. 52.43.	
Q49	jar (broken)	Fig. 3.11	http://www.britishmuseum.org/ research/collection_online/ collection_object_details.aspx?objectId= 369615&partId=1	54.7 h.; 25 w.; mouth 14.8 w.; base 11.7 w.	Sold to the 'Zion Research' museum but whereabouts currently unknown.	CAVE IQ
Q50	jar (broken)	Fig. 3.9		DV: 55.7 h.; 25.9 w; mouth 15 w; base 13.5 w. JT: 54.5 h.; 25.5.; 15.2 w. mouth ext.; mouth interior 13.7 w; base 13.5 w.	British Museum, London	
$Q_{5^{I}}$	jar (broken)			68.5 h.; 23.4 w.; base 13 w.	IAA Rockefeller Museum	
Q52	jar (broken)			DV: 64 h.; 27.2 w.; mouth 15.4; base 11.4 w. JT: 62 h.; 24 w.; mouth ext. 15.5 w.; mouth int. 13.9; base 11.3 w.	University of Madrid, Dean's Office	
Q53	jar (broken)		http://art.thewalters.org/detail/29930	68 h.; 25.9 w.; mouth 15.4; base 12.8 w.	The Walters Art Gallery, Baltimore 48.2058	
Q54	cooking pot	Fig. 3.2; Pl. III.a.2		19.5 h.; max 23 w.; opening 9.4 w.	IAA Rockefeller Museum	
Q55	juglet	Fig. 3.3; Pl. III.b.2		12.5 h.; max 8.5 w.; opening 2 w.	IAA Rockefeller Museum	

Continued 317

No.	Object	RB 56 (1949)	DJD 1	Published elsewhere or on web	Dimensions provided by de Vaux (DV) or others.	Current location/owners and accession numbers	818
Q56	lamp (broken)		Fig. 3.1	Mlynarczyk 2013	11, in length, when reconstructed	IAA Rockefeller Museum	
Q57	lamp (fragment)			Humbert and Chambon 1994, 343			
QX	jar (whole) and lid			'Shrine 2' drawing in Pfann 2002	47.5×26.5 cm,	Israel Museum/The Hebrew University of Jerusalem Accession number: 96.46/236	PALES
QX	lid						TINE
QY	jar (whole)			'Shrine 1' drawing in Pfann 2002	65.7 h.; 25 w.	Israel Museum/The Hebrew University of Jerusalem Accession number: 96.46/235	NE EXPLOR
QY	lid						RATIC

TABLE I: Continued

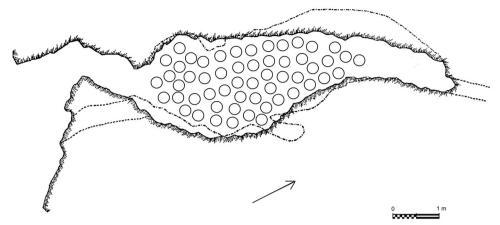


Fig. 15. Plan of cave with suggested distribution of jars arranged in the area of containment. Drawing: J. E. Taylor.

>54 jars containing scrolls wrapped and packed in linen, probably with clay jar stoppers (on at least some), linen jar covers and bowl-shaped lids. On the basis of the normative width of these jars being 25 centimetres, with only a few being larger, their distribution in the available space of the cave is indicated in Figure 15. Jars are only positioned in places where the cave interior permits them, correlating with the archaeological debris layer as defined in Figure 1. It will be seen from this that it would be hard to squeeze many more than 55 jars into the limited space of the cave, allowing no spare space for any subsequent activity after their deposit.

#### 5.1. Utilitarian Pottery

What remaining space there was contained some smaller items of pottery, namely a cooking pot (labelled by de Vaux Q54), a round-bodied juglet (Q55), three small round bowls (Q1, 2 and 3), and a plate (Q4), though this may have been used on top of a jar. This assemblage is quite finely made, unlike the cylindrical jars. These vessels were originally designed for utilitarian purposes associated with food, but they could have been re-purposed for some other use (such as jar covers in the case of the bowls and plate). If used for food, once the cave was packed with jars there would have been no space for anyone to sit and eat except perhaps right at the entrance. There is no indication in the published records about where exactly these items were found in the cave context, but they may have been found in the middle of the cave, where seismic collapse smashed the ceramic material, since they were all in pieces.

The cooking pot, Q54 (DJD 1, Fig. 3.2; Pl. IIIa.2), is defined by Lapp (1961, 187–8) as identical to others published by de Vaux, namely KhQ77 from Locus 6 (de Vaux 1953, Fig. 3.11) and KhQ477 from Locus 30 (de Vaux 1954, Fig. 4.15). The latter comes from the destruction layer dating to ca. 68 CE and seems to have been found in the same context as the plastered elements that fell from the upper storey (see Humbert and Chambon 1994, 302: entry dated to 19 March 1953, which is the date of registration of KhQ477). The context of KhQ77 is difficult to determine. Typologically, the cooking pot fits with types common in late 1<sup>st</sup> century BCE and 1st century CE contexts.

The juglet (Q55: DJD 1, Fig. 3.3; Pl. III b.2), of a type 31.D1 (Lapp 1961, 162-3), is evidenced at the site of Qumran (see de Vaux, 1953, Fig. 3.1 and cf.3.3: KhQ35 and KhQ32

respectively from Locus 2, otherwise associated with examples provided by Lapp from the 1st century BCE (and see D<sub>5</sub>, evidenced in de Vaux 1954, 4.9, KhQ229, found in Locus 40). However, juglets are not very reliable indicators for dating purposes because their shape does tend to remain consistent over long periods.

A juglet would normally have held water or oil, and a cooking pot is usually associated with food. Thus this group of objects would cohere well with the evidence of dates or olives that we find consumed in the cave, even though we cannot absolutely ascertain that these belong to the same time as represented by the pottery. Along with the religious texts of the assemblage, there are items then that may be grouped in a personal category, normally connected with food.

Juglets, cups, bowls and/or cooking pots are not found along with cylindrical jars in most of the other caves around Qumran, though they can be. In the 21 jar caves defined in the 1952 caves survey (Baillet, Milik and de Vaux 1962 [DJD 3]), we find that in GQ3 there was a cup and a cooking pot. GQ8 (= 3Q, a large cave) had a cup, two tops of juglets, and a lamp. GQ12 had one bowl, as also GQ15 and GQ26 (= 6Q). GQ17 had several bowls, a cooking pot, a juglet, and a lamp. GQ 19 (= 2Q) had 3 bowls. GQ29 had a lamp and a plate which might have been used as a lid. GQ31 had 3 bowls, and GQ39 had a large bowl. Patrich's Cave 24 contained one cylindrical and one bag-shaped jar, together with eight unclassified jars, as well as six cooking pots, one bowl, one jug, five juglets, and a lamp (Patrich 1994, 90). Bowls are then by far the more common feature of this type of assemblage in the Qumran caves with jars, and it is not implausible that some bowls could have been repurposed as jar covers.

More significantly, associated with the utilitarian assemblage, there are in Cave 1Q four lamps, which have now been carefully analysed by Jolanta Mlynaczyk (2013). She has determined that that lamps Q43 and Q44 (DJD 1, Fig. 3.4 and 5) may be classified as type 033.1 and 33.2, and dated on the basis of comparable examples to before the middle of the 1st century BCE (Mlynaczyk 2013: 105–6), the Hellenistic or Hasmonean period. According to her study, all of types 032–035 are defined as being in the range of 104–63/56 BCE, and this would place these lamps in what de Vaux would have defined as Period Ib. While Bar Nathan suggests the continuation of such Hasmonean lamps (J-LP3) into Herodian period (Bar-Nathan 2002, 110–12), Mlynaczyk (2013) considers that these may represent residual forms in Jericho, and notes their association in Qumran with the oldest pottery in Locus 130.

However, there is another type of lamp, a wheel-made 'Herodian' lamp, evidenced by item Q56 and paralleled by another fragment of such a lamp (Q57). These belong to a general category of lamps that started to circulate at the end of the 1st century BCE and became especially common in 1st century CE contexts. The 1Q examples belong to a relatively rare subcategory made of grey ware.<sup>14</sup> At least one of the specimens also has a ribbed loop handle.

This evidence of four lamps (two Hasmonean, and two Herodian), may suggest that there was more than one manuscript deposit in Cave 1Q: one dated to the middle of the 1st century BCE, and another later on (cf. Taylor 2016a), *if* the lamps relate to the deposits. However, we cannot know the number of times it was possible to enter the cave in antiquity with or without manuscripts. Different scenarios may be presented to account for the final assemblage, each requiring detailed argumentation for plausibility.

In terms of how many times the cave was used, it is then any number equal to or over two times. The earliest and latest dating minimally coheres with what we may determine to be the dating for the pottery. This needs careful re-examination, utilising the latest typological refinements.

## 5.2. Jars and Lids

So we come to the jars and lids as excavated, and consider them in the light of what we know from Bedouin activity. In de Vaux's presentation of the pottery in DJD I he tended to differentiate the jars in ways that may not be correct. From what is evident, in Cave IQ it is possible to determine a strongly uniform type of jar, in the 'classic' cylindrical jar: Q41, Q45, Q46, Q47, Q48, Q49, Q50, Q51, Q52 and QY (see Figure 2). While they appear in DJD 1 as having slight differences, the jars we have studied thus far indicate that they are actually of the same type, despite appearing somewhat different in photographs that require different lighting, and because of the degree to which the thick white-cream slip has been eroded. They are all reconstructed except for QY in the Israel Museum, bought whole by Sukenik. They are roughly made and not necessarily that regular in shape, but they are united by having very similar widths, around 25 centimetres wide, a straight up collared rim and heavy foot, shaped to match the collar, rounded shoulder and bottom, and an elongated cylindrical form that is overall symmetrical. They have flat turning marks, not ribbing, and a quite heavy creamy coloured slip and a light wash. They are most differentiated by height, rather than anything else, and this makes each one slightly different from the other. You could line them up and they would be like a pan pipe, a height range from 55 to 72 centimetres.

This is what people often consider the definitive scroll jar, and tiny replicas can be bought at the Israel Museum Shop.<sup>15</sup> As noted, while they vary in height, they are almost entirely of the same width, varying only slightly in a range 24.4–25.5 centimetres, with most being about 25 centimetres. The only very distinctive difference between these jars is that in Q51 there is a jar with a sharp rather than a round shoulder.

There are, however, jars that do not conform to this type, which are represented by: Q40, Q42 and QX (see Taylor 2016a and Figure 3). They do not have such strong features in common aside from relatively wide mouths, a thin white wash, which is largely rubbed off, even redder clay, a slightly more bulging shape (up to 27 centimetres wide), and a smaller foot. They all have loop handles. They too are of different heights, but also their body shape is not entirely the same. However, their shoulders are quite sharp, more rounded in QX, which has three handles, the others four. QX also has quite a high foot. These are then three distinctive jars, with both common and diverse features, and they warrant much closer study. While their diverse features mean that they cannot be grouped as one type, in the same way as the 'classic' cylindrical jars, they do have similar shaping, and similar red clay with a very light wash rather than a slip, as well as loop handles, and they remain more similar to each other than to the main group of cylindrical jars in Cave IQ. The question is then whether they derive from a different time of deposit, whether they come from a different place, or whether they were repurposed for scroll storage. Some old types could have become mixed with new ones in the storage rooms of the settlement, before they were eventually repurposed for scroll storage but they may also represent newer forms.

## 5.3. Unprovenanced Jars

Finally, we should mention the unbroken jars that have arrived in international collections as a result of the antiquities market. One or more of these may possibly come from Cave IQ and each one needs careful assessment (cf. Taylor 2016a). In the publication of the excavation in DJD I, Harding expressed the view that 'after the two intact jars acquired by the Hebrew University were removed the remainder were apparently broken up, for we found nothing but sherds' (Harding 1955, 7); however, this was pure supposition and probably wrong. In fact, from the evidence we have now available, it seems more likely that most whole jars remained whole, with only the lids smashed to remove the contents. The jars were considered useful, at

PALESTINE EXPLORATION QUARTERLY, 149, 4, 2017

least as water containers (see above). Furthermore, in an active antiquities market, once they proved of interest to collectors, remaining jars would have been preserved. Bedouin testimony indicates that they were taken from the cave in ones and twos. According to Burrows, when Father Yusef visited with the Bedouin, he reported: 'The idea of removing the whole jar still in the cave was considered but abandoned, because the jar was too heavy to carry in the intense summer heat of the region' (Burrows 1955, 7). This statement indicates a concern to preserve this jar intact, and to carry it off at a time when it could be transported some distance, perhaps to the same Bethlehem antiquities dealers that the Bedouin had already been working with. What happened to such a jar remains anyone's guess.

There is the question about whether any whole jars from Cave 1Q survive in private collections. For example there is the so-called Schøyen jar (Taylor 2016a), originally sold to John Allegro, though analysis shows that it is more likely to come from another Qumran cave. Other unprovenanced whole jars are in the Musée de la Bible in Paris, in the collection of Judith Brown — the Allegro Jar — and in the Harvard Semitic Museum, donated by Frank Moore Cross. They all have some strong correlations in form with certain published examples from the Qumran 1952 cave survey, but it is impossible to undertake a full typological examination on the basis of what has been published.

#### CONCLUSIONS

If we return to the first finding of the artefacts of Cave 1Q, we now have a better understanding of what was actually in the cave in 1947. Our research network has already tracked down a number of artefacts, and we are searching for more. Anyone with information is urged to be in contact with the authors of this paper.

A critical issue behind this is to understand the nature of the assemblage. The current repertoire does highlight overall the lack of personal items, and there is an overwhelming focus on artefacts associated with religious scrolls. Jars and linen were all connected with the storage of these objects, and the wood is likely to have been connected with the transport or positioning of the jars. The utilitarian items of the three bowls, juglet and cooking pot may be associated with the food remains. The lamps derive from two different time periods. A comb and the phylacteries are the only objects that can be defined as personal. There is a main type of cylindrical jar in the cave, but also some not of this type. There were originally over 54 jars put here via a high and small opening in the rock (or possibly a small, low opening). The transportation of the jars would have been difficult and their depositing in the narrow cave through a small entrance cannot have been easy. After the jars were deposited the cave was full of these artefacts.

This study shows that we need to think holistically, and value every item in an assemblage, if we are to uncover the maximum amount of evidence about the past.

#### NOTES

<sup>1</sup> Note that the plan of DJD 1 also rather tantalisingly indicates a possible passage at the back of the cave (at the point labelled B), but this may be de Vaux's speculation.

speculation. <sup>2</sup> While Fields (2009) has done an excellent job in documenting the evidence, his final conclusions that there may have been scrolls from a different cave that has been confused with Cave 1Q seems unnecessary to us, and creates complexity as a result of affording weight to less reliable anecdotes. <sup>3</sup> The collection is found on the website of Oberlin

<sup>3</sup> The collection is found on the website of Oberlin College at http://dcollections.oberlin.edu/cdm/ singleitem/collection/palestine/id/5168 to http:// dcollections.oberlin.edu/cdm/singleitem/collection/ palestine/id/5182. This collection also includes a picture of de Vaux reconstructing lids (5173), a man holding jar Q42 (5174), another jar (5175) and a piece of linen (5182) as well as an interesting image of Trevor photographing 1QS (5176), Trevor and Metropolitan Samuel examining the scrolls (5178) and the Genesis Apocryphon before unrolling (5179/rec/1).

<sup>4</sup> This can be seen by reviewing successive images from the 1950s.

<sup>5</sup> In the later caves expedition, Reed (1954, 8–13) mentioned linen within a broken jar in Cave GQ12, though the scrolls themselves had perished into dust, and this is illustrated in the discussion of linen by Bélis (2003, 257; Pl. IV, no. 2).

## 322

#### REVISITING QUMRAN CAVE IQ

<sup>6</sup> We are very grateful to curator Imogen Gunn for going to the trouble to search for the textile and the letter, as well as the catalogue record which mistakenly classified it as belonging to the 'Prehistoric' period and made of cotton. An additional identification, 'wrapping from Biblical scrolls', led to the search.

Note that the dimensions as given on the BM website are incorrect. It can nevertheless be viewed online via our website, www.dqcaaas.com, which links to the BM collection database.

http://www.ibiblio.org/expo/deadsea.scrolls .exhibit/Community/basketry.html.

In the parallel in Deir el-Medina two cylindrical jars, with similar dimensions as the ones from Oumran, were filled with papyrus rolls, sealed with a cup, and tied to the latter with cord. The jars were found inside a house (see Vandorpe 2009, 223; Fig. 10.3).

<sup>10</sup> Questions about whether there might have been the use of a wooden pole as a yoke or device for manoeuvre may be proven or disproven by experimental archaeology, requiring weights equivalent to packed scroll jars (and at present we do not have information about the total weight of an average filled jar).

See http://www.antiquities.org.il/article\_eng.aspx? sec\_id=25&subj\_id=240&id=4088.

http://www.antiquities.org.il/t/item\_en.aspx? CurrentPageKey=4&indicator=38&shalemid=627.

We are grateful to Naama Sukenik, IAA Organic Materials Unit, for a viewing of these combs. Mur 340, 340/1 and 340/2 are not illustrated in DID 2.

Most 'Herodian' lamps are made of brown wares (see Adan-Bayewitz et al. 2008, 40).

http://www.judaicawebstore.com/-the-dead-seascrolls-adaptation-P660.aspx.

#### ORCID

*Joan E. Taylor* b http://orcid.org/0000-0001-8254-3735

#### BIBLIOGRAPHY

- Adan-Bayewitz, D., Asaro, F., Wieder, M., and Giauque, R. D., 2008. 'Preferential Distribution of Lamps from the Jerusalem Area in the Late Second Temple Period (Late First Century B.C.E.-70 C.E.)', Bulletin of the American Schools of Oriental Research 350, 37-85.
- Allegro, J., 1956. The Dead Sea Scrolls. Harmondsworth: Penguin.
- Allegro, J., 1965. Search in the Desert. Edinburgh: Smith and Ritchie.
- Avigad, N., 1962. 'The Expedition to the Judean Desert, 1961, Expedition A Nahal David,' IE7 12, 169-83, pls. 15-22.
- Baillet, M., Milik, J. T., and de Vaux, R., 1962. Les 'petites grottes' de Qumrân: Exploration de la falaise; Les grottes 2Q, 3Q, 5Q, 6Q, 7Q à 10Q; Le rouleau de cuivre (DJD 3), Oxford: Clarendon.
- Bar-Nathan, R., 2002. Hasmonean and Herodian Palaces at Jericho: Final Reports of the 1973–1987 Excavations: Volume III: The Pottery. Jerusalem: Israel Exploration Society; Hebrew University.
- Barthélemy, D., and Milik, J. T., 1955. *Qumran Cave 1* (DJD 1), Oxford: OUP. Bélis, M., 2003. 'Des Textiles: Catalogues et Commentaires', in Jean-Baptiste Humbert and Jan Gunneweg (eds), Khirbet Qumran and 'Ain Feshkha II: Études d'anthropologie, de physique et de chimie (Novum Testamentum et Orbis Antiquus, Series Archaeologica 3), Fribourg/Göttingen: Academic Press Fribourg/Vandenhoeck & Ruprecht,
- 207-76.
  Bonani, G., Ivy, S., Wölfli, W., Broshi, M., Carmi, I., and Strugnell, J., 1992. 'Radiocarbon Dating of Fourteen Dead Sea Scrolls', *Radiocarbon* 34, 843-49.
  Broshi, M. and Eshel, H., 1999. 'Residential Caves at Qumran', *Dead Sea Discoveries* 6, 328-48.

- Brownlee, W. W., 1957. 'Muhammed ed-Deeb's Own Story of his Scroll Discovery', Journal of Near Eastern Studies 16,
- 236-39. Burrows, M., 1955. The Dead Sea Scrolls. New York: Viking. Carmi, I., 2000. 'Radiocarbon Dating of the Dead Sea Scrolls', in Schiffman, Lawrence H., Tov, Emanuel, and VanderKam, J. C. (eds), The Dead Sea Scrolls: Fifty Years after their Discovery, 1947-1997, Jerusalem: Israel Exploration Society and The Shrine of the Book, 881-888.
- Crowfoot, G. M., 1951. 'Linen Textiles from the Cave of Ain Feshkha in the Jordan Valley', *PEQ* 83, 5–31. Crowfoot, G. M., 1955. 'The Linen Textiles', in Barthélemy and Milik (DJD 1), Oxford: Clarendon Press, 18–38. Dimant, D., 1995. 'The Qumran Manuscripts: Contents and Significance', in Devorah Dimant and Lawrence H.
- Schiffman (eds.), Time to Prepare the Way in the Wilderness: Papers on the Qumran Scrolls by Fellows of the Institute for Advanced Studies of the Hebrew University, Jerusalem, 1989–1990 (Studies on the Texts of the Desert of Judah 16), Leiden: Brill, 23–58. Dimant, D., 2006. 'The Composite Character of the Qumran Sectarian Literature as an Indication of its Date and
- Provenance', Revue de Qumran 22, 615-30.
- Długosz, D., 2005. 'Qumrán au Musée du Louvre,' Revue de Qumran 22/1, 121–9. Fidanzio, M., 2016. The Caves of Qumran: Proceedings of the International Conference, Lugano 2014 (STDJ XX), Leiden: Brill.
- Fidanzio, M. and Humbert, J.-B., 2016. 'Finds from the Qumran Caves: Roland de Vaux's Inventory of the Excavations (1949–1956)', in Fidanzio 2016, 263–332. Fields, W. W., 2009. The Dead Sea Scrolls: A Full History: Volume One, 1947–1960. Leiden: Brill.
- Fitzmyer, J. A., 2008. A Guide to the Dead Sea Scrolls. Grand Rapids, MI: Eerdmans.

- García Martínez, F., 2010a. 'Cave 11 in Context', in Charlotte Hempel (ed.), The Dead Sea Scrolls: Texts and Contexts (Studies on the Texts of the Desert of Judah 90), Leiden: Brill, 199-209.
- García Martínez, F., 2010b. 'Reconsidering the Cave 1 Texts Sixty Years after their Discovery: An Overview', in D. K. Falk, S. Metso, D. W. Parry, and E. J. C. Tigchelaar (eds), *Quarran Cave 1 Revisited: Texts from Cave 1 Sixty Years* after their Discovery: Proceedings of the Sixth Meeting of the IOOS in Liubliana (Studies on the Texts of the Desert of Judah 91), Leiden: Brill, 1–13.
- Gunneweg, J. and Balla, M., 2003. 'Neutron Activation Analysis: Scroll Jars and Common Ware', in J.-B. Humbert and J. Gunneweg (eds), Khirbet Qumran and 'Ain Feshkha II: Études d'anthropologie, de physique et de chimie (Novum Testamentum et Orbis Antiquus, Series Archaeologica 3), Fribourg/Göttingen: Academic Press Fribourg/

- Vandenhoeck & Ruprecht, 3–53. Harding, G. L., 1949. 'The Dead Sea Scrolls,' *Palestine Exploration Quarterly* 81, 112–16. Harding, G. L., 1955. 'Introductory,' in Barthélemy and Milik (DJD 1), Oxford: Clarendon Press, 3–7. Henpel, C., 2013. *The Quarta Rule Texts in Context: Collected Studies* (Texts and Studies in Ancient Judaism 154). Tübingen: Mohr Siebeck.
- Humbert, J.-B. and Chambon, A., 1994. Fouilles de Khirbet Qumrân et de 'Ain Feshkha I: Album de photographies. Repertoire du fonds photographiques. Synthèse des notes de chantier du Père Roland de Vaux (Novum Testamentum et Orbis Antiquus, Series Archaeologica 1). Fribourg/Göttingen: Academic Press Fribourg/Vandenhoeck & Ruprecht.
- Joyce, R. A. and Pollard, J., 2010. 'Archaeological Assemblages and Practices of Deposition', in M. C. Beaudry and D. Hicks (eds), The Oxford Handbook of Material Culture Studies, Oxford: OUP, 291-309.
- Jull, A. J. T., Donahue, D., Broshi, M., and Tov, E., 1995. 'Radiocarbon Dating of Scrolls and Linen Fragments from the Judean Desert', Radiocarbon 37/1, 11-19.
- Lapp. P. W., 1961. Palestinian Ceramic Chronology 200 B.C. A.D. 70, New Haven: American Schools of Oriental Research.
- Libby, W. F., 1951. 'Radiocarbon Dates II,' Science 114, 291-96.
- Magen, Y. and Peleg, Y., 2007. The Qumran Excavations, 1993–2004: Preliminary Report (Judea and Samaria Publications 6). Jerusalem: Staff Officer of Archaeology Civil Administration of Judea and Samaria; Israel Antiquities Authority.
- Milik, J. T., 1959. Ten Years of Discovery in the Wilderness of Judea. Translation by John Strugnell. (Studies in Biblical Theology 26). London: SCM. Mizzi, D., 2016. 'Miscellaneous Artefacts from the Qumran Caves: An Exploration of their Significance', in
- M. Fidanzio (ed.), *The Caves of Qumran*, Leiden: Brill, 137–60. Mlynarczyk, J., 2013. 'Terracotta Oil Lamps from *Qumran*: The Typology,' *Revue Biblique* 120–1, 99–133. Mumcuoglu, K.Y. and J. Zias., 1988. 'Head lice, Pediculus humanus capitis (Anoplura:Pediculidae) from hair combs
- excavated in Israel and dated from the first century B.C. to the eighth century A.D.', J. Med. Entomol. 25, 545-47. Mumcuoglu, K. Y. and Hadas, G. 2011. 'Head Louse (Pediculus humanus capitis) Remains in a Louse Comb from the
- Roman Period Excavated in the Dead Sea Region', *Israel Exploration Journal* 61, 223–39. Patrich, J. and Arubas, B., 1989. 'A Juglet containing Balsam Oil (?) from a Cave near Qumran', *Israel Exploration* Journal 39, 43–59. Patrich, J., 2000. 'Did Extra-Mural Dwelling Quarters Exist at Qumran?'', L. H. Schiffman, E. Tov, and J. C.
- VanderKam (eds.), The Dead Sea Scrolls: Fifty Years After Their Discovery: Proceedings of the Jerusalem Congress, July 20-25, 1997, Jerusalem: Israel Exploration Society; The Shrine of the Book, Israel Museum, 720-27.
- Pfann, S. J., 2002. 'Kelei Demà: Tithe Jars, Scroll Jars and Cookie Jars', in G. Brooke and P. R. Davies (eds), Copper Scroll Studies Sheffield: Sheffield Academic Press.
- Pfann, S. J., 2007. 'Reassessing the Judean Desert Caves: Libraries, Archives, Genizas and Hiding Places', Bulletin of the Anglo-Israel Archaeological Society 25, 147–70
- Reed, W. L., 1954. 'The Qumran Caves Expedition of March, 1952', Bulletin of the American Schools of Oriental Research 135, 8-13.
- Renfrew, C. and Bahn, P., 2016. Archaeology: Theories, Methods and Practices, 7th edition, London: Thames and Hudson.
- Sellers, O. R., 1949. 'Excavation of the "Manuscript" Cave at 'Ain Feshkha', Bulletin of the American Schools of Oriental Research 114, 5–9. Sellers, O. R., 1951. 'Date of Cloth from the 'Ayn Feshka Cave', Biblical Archaeologist 14, 29.
- Stökl Ben Ezra, D., 2007. 'Old Caves and Young Caves: A Statistical Reevaluation of a Qumran Consensus', Dead Sea
- Discoveries 14, 313-33. Stökl Ben Ezra, D., 2010. 'Further Reflections on Caves 1 and 11: A Response to Florentino García Martínez', in C. Hempel (ed.), The Dead Sea Scrolls: Texts and Context (Studies on the Texts of the Desert of Judah 90), Leiden: Brill, 211-23
- Stökl Ben Ezra, D., 2011. 'Wie viele Bibliotheken gab es in Qumran?' in J. Frey, C. Claußen, and N. Kessler (eds), Qumran und die Archäologie: Texte und Kontexte, Wissenschaftliche Untersuchungen zum Neuen Testament 278, Tübingen: Mohr Siebeck, 327–46.
- Taylor, J. E., 2002. 'Nineteenth Century Visitors to Khirbet Qumran and the Name of the Site', Palestine Exploration Quarterly 134, 144–64. Taylor, J. E., 2011. 'Buried Manuscripts and Empty Tombs: The Genizah Hypothesis Reconsidered', in A. Maeir, J.
- Magness, and L. H. Schiffman (eds), 'Go out and study the Land' (Judg 18:2): Archaeological, Historical and Textual Studies
- in Honor of Hanan Eshel (Supplements to the Journal of the Study of Judaism 148), Leiden: Brill, 269–316. Taylor, J. E., 2014. The Essenes, the Scrolls and the Dead Sea, pb ed. Oxford: Oxford University Press.

324

- Taylor J. E., 2016a. 'The Allegro and Schøyen Jars among the Qumran Jars', in T. Elgvin, K. Davis, M. Langlois (eds), Gleanings from the Caves: Dead Sea Scrolls and Artefacts from The Schoyen Collection, London: Bloomsbury T&T Clark, 393–426. Taylor, J. E., 2016b. 'The Qumran Caves in their Regional Context: A Chronological Review with a Focus on Bar
- Kokhba Assemblages', in Fidanzio 2016, 9-33.
- Taylor, J. E., Rasmussen, K. L., Doudna, G., van der Plicht, J. and Egsgaard, H., 2005. 'Qumran Textiles in the Palestine Exploration Fund, London: Radiocarbon Dating Results", Palestine Exploration Quarterly 137 (2005), 159-67.
- Tov, E., 2010. Revised Lists of the Texts from the Judaean Desert. Leiden: Brill.
- Trever, J. C., 1961. 'When Was Qumrân Cave 1 Discovered?', Revue de Qumran 3, 135-41.
- Trever, J. C., 1977. The Dead Sea Scrolls: A Personal Account, rev. ed. of The Untold Story of Qumran. Grand Rapids, MI: Eerdmans.
- van der Plicht, J., 'Radiocarbon Dating and the Dead Sea Scrolls: A Comment on "Redating", DSD 14, 1 (2007), 77-89.
- van der Plicht, J. and Rasmussen, K. L. 2010. 'Radiocarbon Dating and Qumran', J. Gunneweg, A. Adriaens and J. Dik (cds), Holistic Qumran: Trans-Disciplinary Research of Qumran and the Dead Sea Scrolls, Proceedings of the NIAS-Lorentz Center Qumran Workshop, 21–25 April 2008, Leiden: Brill Academic, 99–121.
- Vandorpe, K., 2009. 'Archives and Dossiers', R. S. Bagnall (ed.), The Oxford Handbook of Papyrology. Oxford: Oxford University Press, 216–55. Vaux de, R., 1949a. 'Post-Scriptum : La cachette des manuscrits Hebreux', *Revue Biblique* 56, 234–37.
- de Vaux de, R., 1949b. 'La grotte des manuscrits hébreux', *Revue Biblique* 56, 586–609. de Vaux, R., 1953. 'Fouille au Khirbet Qumran', *Revue Biblique* 60, 83–106. de Vaux, R., 1954. 'Fouilles au Khirbet Qumrân', *Revue Biblique* 61, 206–36.

- de Vaux, R., 1955. 'La poterie', in Barthélemy and Milik (DJD 1), Oxford: Clarendon Press, 8-17.