The Library of King Herod in the Northern Palace of Masada*

Yizhar Hirschfeld

Introduction

Masada is one of the best-known archaeological sites in Israel and its Northern Palace, hanging from the edge of the cliff at the mountain's summit, commands our respect as one of the architectural wonders of the builder-king Herod. Josephus devoted a fairly detailed description to the palace, whose remains were uncovered in the comprehensive excavations conducted by Y. Yadin at the site in the 1960s.¹ After the excavations the palace was reconstructed and its remains were opened to the public; it is the destination of thousands of visitors each year.

However, despite Masada's fame, very few people, whether scholars or laymen, are aware of the existence of a library on what is known as the palace's middle terrace. On this terrace are the remains of a circular structure in front of a wall containing five large niches built against the cliff wall (hereafter 'the wall of niches'). As we shall see, the niches served as bookcases and the circular building as an office and reading room. Since, unlike the Western Palace that fulfilled more official functions, the Northern Palace was Herod's private domicile, it seems likely that the library served Herod's personal needs while he was in residence at Masada.

The proposed identification of the library is not new. As early as 1981, the German scholar V.M. Strocka, in a comprehensive article devoted to the libraries of the Roman period, suggested that the wall of niches at Masada should be identified as a library.² This was an innovative suggestion, since the researchers of Masada in the 1950s and 1960s believed otherwise. M. Avi-Yonah and his colleagues, who led the expedition that discovered the Northern Palace, concluded that the niches played a cultic role (a common conclusion at that time).³ On the other hand, Yadin saw the niches as a purely constructive element intended to support a ceiling.⁴ However, the identification as a library was adopted by later researchers of Masada, such as I. Nielsen in her book on the palaces of the Hellenistic period⁵ and G. Foerster in his analysis of the architectural and

^{*} I am most grateful to Gideon Foerster, who drew my attention to the existence of the library at Masada and encouraged me to study the subject.

¹ Josephus' description of the Northern Palace appears in *The Jewish War* VII.289-91 (ed. H.St.J. Thackeray, 587). For a summary of the excavation results, see Y. Yadin, 'Masada', in: *NEAEHL* III (Jerusalem 1993), 973-84.

² V.M. Strocka, 'Römischen Bibliotheken', Gymnasium 88 (1981), 308-9, n. 27.

³ M. Avi-Yonah et al., 'The Archaeological Survey of Masada, 1955-1956', *IEJ* 7 (1957), 32. In the 1950s archaeologists frequently assigned cultic significance to unfamiliar finds. A typical example of this is the interpretation given by R. de Vaux to the remains of Khirbet Qumran.

⁴ Y. Yadin, 'The Excavations of Masada — 1963/64 Preliminary Report', IEJ 15 (1965), 20.

⁵ I. Nielsen, Hellenistic Palaces — Tradition and Renewal (Aarhus 1994), 192.

artistic finds of Masada.⁶ E. Netzer, in his major volume describing in detail the remains of Masada, including the Northern Palace, disregarded the possible existence of a library.⁷ However, in his later book on the palaces of the Hasmonean dynasty and Herod the Great, Netzer noted, albeit briefly, that the niches served for the storage of books.⁸

In the studies of Strocka, Nielsen, Foerster and Netzer the library of Masada is mentioned only in passing, without a detailed description of the remains or analysis of their significance. Consequently, the existence of the library has received very little attention, despite its importance as a structure that reflects the lifestyle of King Herod and the type of activity that took place within the walls of his palace.

The present article will attempt to fill the void. It comprises a description of the remains of Masada's library, including a proposed reconstruction of its various elements. For this purpose a detailed survey was conducted at the site, during which we discovered some previously unknown details that assist us in reconstructing the library.⁹

The remains of the library

The wall of niches is located between two rooms on its east and west at the rear of what is known as the middle terrace (Fig. 1). Since the wall abuts the cliff face, it is almost perfectly preserved; it is 5.3 m long and 3.2 m high from floor level (Fig. 2). The upper limit of preservation of the wall probably indicates the level of the ceiling that ran above it between the two side rooms.

The five niches themselves comprise the most convincing evidence that the wall served as a library. These are large niches, occupying the entire length of the wall. The niches are all similar (though not identical, as we shall see below) and careful planning is evident in their construction. Their base is 0.5 m above the floor (Fig. 3). Each niche is 0.7 m wide and 2.7 m high. Their depth (0.5 m) is consistent, as is the width of the walls that divide them (0.45 m). From the time of Augustus onwards, such niches were customarily fitted with wooden bookcases containing shelves (*armaria*) for the storage of scrolls.¹⁰ Similar wall niches were found in private libraries, such as that of Augustus in his palace on the Palatine Hill, and in public libraries in large cities like Rome, Athens and Ephesus.¹¹ In Palestine, libraries of the Roman period have recently been

⁶ G. Foerster, Masada V: Art and Architecture (Jerusalem 1995), 179.

⁷ The most detailed description of the Northern Palace, including the wall of niches, is in Netzer's final report on the architectural finds at Masada: E. Netzer, *Masada* III: *The Buildings* (Jerusalem 1991), 148-58.

⁸ E. Netzer, *The Palaces of the Hasmoneans and Herod the Great* (Jerusalem 2001), 92.

⁹ The survey was conducted on 28 December 2001 with the assistance of Israel Vatkin and Dov Porotsky (surveyors), whose experience made a great contribution to the understanding of the site. The drawings that accompany this article are by Dov Porotsky.

¹⁰ On the innovations in the design of libraries in the days of Augustus, see L. Casson, *Libraries in the Ancient World* (New Haven and London 2001), 81-3.

On the library of Augustus on the Palatine Hill, see I. M. Barton, 'Palaces', in: I.M. Barton (ed.), Roman Domestic Buildings (Exeter 1996), 110-11. On private and public libraries, see L. Adkins and R.A. Adkins, Handbook to Life in Ancient Rome (New York 1994), 210-11. On Jewish libraries and books, see L. Avrin, Scribes, Script and Books: The Book Arts from Antiquity to the Renaissance (Chicago and London 1991), 118-20.

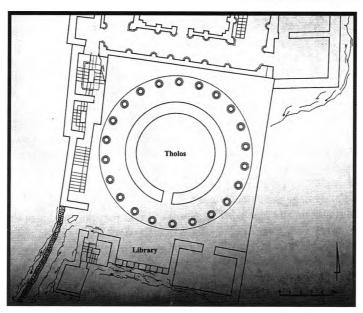


Fig. 1. Plan of the remains of the wall of niches and the circular structure in the Northern Palace at Masada (after Netzer, *Masada* III, 151, Plan 11).

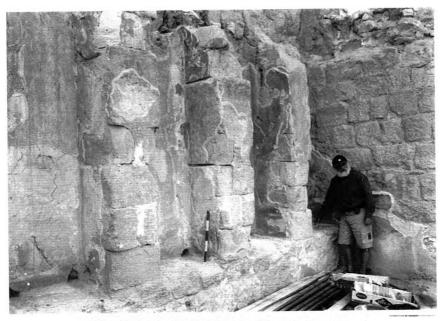


Fig. 2. The wall of niches, looking southwest.

discovered at Caesarea and probably at Sepphoris.¹² These parallels support the assumption that the wall of niches at Masada served as a library.

The construction technique of the wall of niches is in keeping with its proposed function as a library. The wall and those of the adjacent rooms are built of ashlars coated with three layers of white plaster: a coarse underlayer whose thickness varies with the surface of the rock at the back of the niche, an intermediate layer of consistent thickness (1.5 cm) and a very thin upper layer (2-3 mm), which is carefully smoothed. Plaster of this quality is characteristic of cisterns and reservoirs, implying that here it was intended to prevent dampness. In his treatise on architecture, Vitruvius recommends that libraries be situated on the eastern side of Roman villas, so that 'the books in libraries will not decay'.¹³ The builders of the library at Masada also seem to have been aware of the fact that damp might damage the valuable books.

Some additional details that have been preserved in the wall of niches assist in reconstructing the library structure. In each of the first three niches from the east, two pairs of parallel grooves may be discerned (Fig. 4); the two western niches, however, preserve no traces of grooves, despite their excellent preservation. The grooves were almost certainly intended for the insertion of wooden shelves, two in each niche. The grooves are some 3 cm deep and their length (0.48 m) is a little shorter than the depth of the niches (0.5 m)(Fig. 5). They are fairly high (3-5 cm), making it possible to insert one end of a shelf into its groove with a diagonal motion and the other end with a horizontal motion.

The vertical space between the assumed shelves is about 0.9 cm. As we shall see below, this indicates that the number of books in Herod's library was not large.

In the bases of four of the niches, pairs of holes were found (Fig. 6); these were lacking, however, in the westernmost niche, which also lacks grooves for shelves. The holes are fairly large (ca. 10 cm in diameter) and roughly made. Judging from their unfinished state, they may have been intended for the insertion of wooden nails (which have not been preserved) into mortar.¹⁴ These nails could have been used by the builders to fix a thick plank in the bases of the niches for the attachment of wooden doors. Though the planks themselves have not been preserved, diagonal grooves at a consistent distance of 8 cm from one another are discernible in the plaster of the bases (Fig. 6).¹⁵ These grooves were probably created during the fixing of the plank onto the plaster while it was still damp. During removal of the debris that covered the floor below the wall of niches, the excavators found numerous pieces of charred wood and large quantities of ash and organic materials.¹⁶ These remains support the assumption

¹⁶ Netzer (ibid.).

¹² On the remains of a library discovered at Caesarea, see J. Patrich, 'The Warehouse Complex and Governor's Palace', in: K.G. Holum, A. Raban and J. Patrich (eds.), *Caesarea Papers* II (Portsmouth, RI 1999), 104. In the excavations of Sepphoris a monumental structure of the second to third centuries containing large adjoining niches was discovered. I am grateful to the excavator, Zeev Weiss, for drawing my attention to this discovery.

¹³ Vitruvius, On Architecture VI.4.1 (ed. and trans. F. Graner, 35). According to Vitruvius, the source of damp is the moist air that is prevalent in Italy. In the dry desert conditions of Masada, the only possible source of damp would have been cracks in the rock.

¹⁴ This detail is noted by Netzer (above, n. 7), 156.

¹⁵ Netzer (ibid.) saw these grooves as decorative impressions in a chessboard pattern.

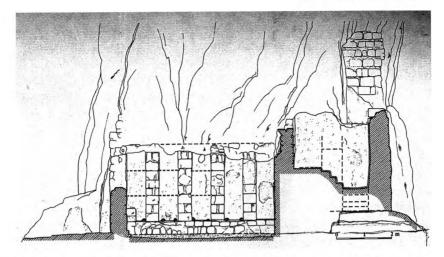


Fig. 3. Cross-section of wall of niches and two adjacent rooms, looking south.

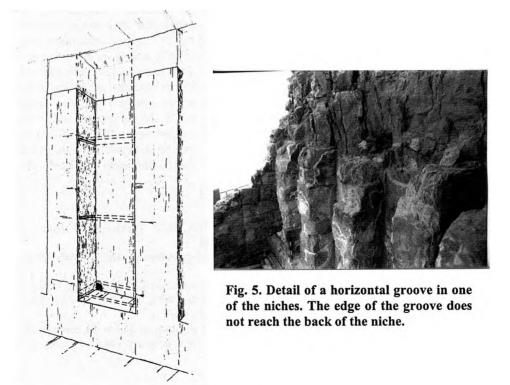


Fig. 4. Partial reconstruction of one of the three niches containing grooves.

that the wall of niches served as the basis for a bookcase consisting of wooden shelves and doors.

Reconstruction of the library

Support for an attempted reconstruction of the bookcase at Masada is provided by a work of art from the Roman period. A relief on a third-century stone sarcophagus from Asia Minor shows a man (probably a doctor) seated on a wooden chair and reading a scroll (Fig. 7).¹⁷ Near the man is an open bookcase. The bookcase has two doors and its internal space is divided by two shelves. On the top shelf, scrolls are laid in a pyramidal fashion, an arrangement minimizing the weight borne by the scrolls in the bottom layer.¹⁸

This depiction, together with the remains of libraries found at Pompeii and Herculaneum, enables us to reconstruct the library at Masada (Fig. 8).¹⁹ The scrolls were protected by the wooden doors and the ceiling at the top of the niche. Scrolls, made of parchment or papyrus, were 22 cm wide on average in antiquity; they could easily have been laid on the deep shelves and on the plank at the base of the niche.²⁰ Scrolls were customarily marked with a tag recording the author and title.²¹

The number of scrolls that could have been stored in the library depended on the length of the sheet, which varied considerably.²² If we assume that the average diameter of the rolled scrolls at Masada was 10 cm, a shelf that was 0.7 m long could have contained seven scrolls in the bottom row, six in the row above it, and so on up to the topmost scroll, a total of 28 scrolls on each shelf. In each of the three niches that contained grooves there were three storage shelves, and thus we arrive at a number of 84 scrolls for each niche (3 x 28) and a total of 252 scrolls. If, however, we assume a smaller average diameter, for example 7 cm, the number for each niche is 155 and the grand total is 465. In any case, the number of books in Masada's library was not large: 1800 scrolls were discovered at the Villa of the Papyri at Herculaneum,²³ and the library of Qumran, which probably originated in Jerusalem, contained more than a thousand works.²⁴ The

¹⁷ For a photograph of the relief, see Casson (above, n. 10), 83; P. Veyne (ed.), A History of *Private Life* (Cambridge, Mass. and London 1987), 224.

¹⁸ Scrolls were stored on wooden shelves or in special cylindrical boxes; M. Avi-Yonah, Ancient Scrolls (London 1973), 21.

¹⁹ On the library of the Villa of the Papyri, see Casson (above, n. 10), 74; M. Grant, Cities of Vesuvius: Pompeii and Herculaneum (Harmondsworth 1971), 109, 137-8; J.R. Deiss, Herculaneum: Italy's Buried Treasure (New York 1966), 53-5.

²⁰ The width of scrolls in antiquity was a more or less constant 20-23 cm. In contrast, the length of the sheets varied considerably, from 3 m to 10 m or more; Avrin (above, n. 11), 144-5.

²¹ Casson (above, n. 10), 38-9.

²² Above, n. 20.

²³ Above, n. 19.

²⁴ F.M. Cross, *The Ancient Library of Qumran* (New York 1958). For more details on the Dead Sea Scrolls, see E. Tov, 'Scribal Practices and Physical Aspects of the Dead Sea Scrolls', in: J.L. Sharpe III and K. von Kampen (eds.), *The Bible as Book: The Manuscript Tradition* (London 1998), 9-34.



Fig. 6. A pair of holes in the base of one of the niches. Note the diagonal lines in the plaster at the base of the niche.

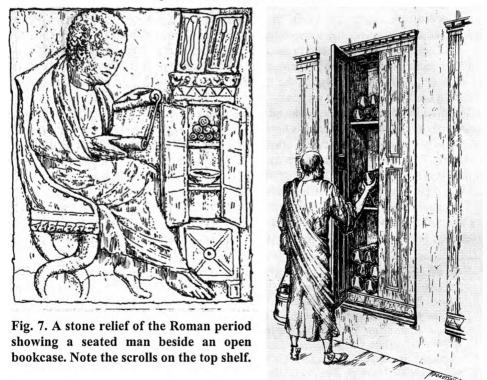


Fig. 8. Proposed reconstruction of a bookcase at Masada. In his left hand the librarian is holding a cylindrical box for the storage of scrolls. The scrolls lying on the shelves are marked with tags recording the author and title.

apparently small number of books in the library of the Northern Palace at Masada may be explained by the remote location of the site. It is likely that the library of the palace in Jerusalem, if there was one, was much larger and more varied.²⁵

The fact that grooves for shelves were found in only three of the niches indicates that the two niches at the western end of the library wall were not used for the storage of books. In the library of Augustus' palace in Rome and in other libraries there were niches in which statues were placed, but the display of graven images in Herod's palace seems unlikely. Purely as a hypothesis, one might suggest that the niches lacking shelves were used for sheets of unusually large size on which were maps or drawings, which were frequently used in antiquity.²⁶ In view of the extensive building activity that characterized the whole of Herod's reign, it is not inconceivable that the library of Masada was used not only for reading, but also for the planning of some of Herod's building projects.

The library structure, which is characteristic of the Roman period, also contained storage rooms, a reading room and a colonnade, an open space with a roof supported by columns in which one could read by daylight.²⁷ Remains of these elements, in my opinion, may be discerned on what is known as the middle terrace of the Northern Palace. Opposite the wall of niches and about 4.5 m from it is a circular structure set on an artificial podium (Fig. 1). The podium is square $(17 \times 17 \text{ m}, 290 \text{ m}^2)$ and its retaining walls are preserved to a height of 9 m. Of the circular structure, the two stone circles of its foundations are preserved: the outer circle is 15.3 m in diameter and the inner circle 8 m (Fig. 9). The excavators proposed to reconstruct the remains as a peripteral tholos, i.e. a circular structure surrounded by columns, with its entrance on the south facing the wall of niches (Fig. 10). The interior of the building was spacious (about 50 m²) and could have been used for a variety of purposes.

The question of the function of the circular structure is debated. Yadin suggested that it was a pavilion whose function was decorative.²⁸ Foerster, on the other hand, proposed that it was a symposium hall and an observatory for viewing the magnificent landscapes of Masada.²⁹ In view of the identification of the wall of niches as a bookcase, one may suggest that the circular tholos-like structure surrounded by a colonnade was used by Herod and his associates as an office and reading room.

The square between the circular structure and the wall of niches may be reconstructed as a kind of vestibule to the library building. This is a fairly spacious area (about 25 m^2), which was partly roofed by the roof over the wall of the niches. The square was richly

²⁵ On the library of Herod and his activities in the intellectual sphere, see D.W. Roller, *The Building Program of Herod the Great* (Berkeley and London 1998), 55-6; A. Schalit, *King Herod: Portrait of a Ruler* (Jerusalem 1964), 211 (in Hebrew).

On the use of maps and drawings in the classical period, see O.A.W. Dilke, Greek and Roman Maps (New York 1985), passim; J.J. Coulton, Greek Architects at Work (London 1977), 70-2. Thus, for example, it has been suggested that the depictions of the military campaign that appear on Trajan's Column were based on sketches made during the campaign; J.M.C. Toynbee, The Art of the Romans (London 1965), 58-9. It is likely that the exact measurements given by Josephus for structures at Masada, such as the length of the wall, derive from plans and drawings to which he had access in Rome.

²⁷ Casson (above, n. 10), 50-2, 81-3.

²⁸ Yadin (above, n. 4), 20.

²⁹ Foerster (above, n. 6), 179.

decorated, as attested by the remains of a fresco in black, red and green found on the walls of the rooms and on part of the wall of niches.³⁰ Yadin rightly stressed the climatic advantages of this square, which was shaded during most of the day and sheltered from the harsh southerly winds of the Judean Desert.³¹

Access to the square was through a wide entrance on the west, reached via a rock-cut path that arrives here from the southwest. Above the path are remains of a *mikveh* and a reservoir that provided the palace's water supply.³² The path originates at the 'Water Gate' in the casemate wall, which in my opinion was the main entrance of the palace.³³ From the square's entrance one could descend to the structures of the lower terrace by means of a well-preserved staircase tower.

The security of the library square was enhanced by the presence of a tower-like room on each side of the wall of niches.³⁴ The larger eastern room (estimated size 4 x 6 m) perhaps served as a storeroom for books and other items connected with the library. The western room, in the center of which are stairs built around a central pillar, was a staircase. The stairs led to at least one upper storey and to another rock-hewn room, perhaps a guardroom.

The excavators of Masada believed that this rock-hewn room was the first of a series of constructed and rock-hewn staircases that led to the upper part of the palace.³⁵ However, despite the good preservation of the room's floor, there is no sign of the central pillar that appears in the other staircases of Masada.³⁶ In view of the preservation of the wall of niches and the rooms flanking it, it is difficult to accept the claim that the staircases that led to the mountain's summit have been utterly destroyed.³⁷ In my view, it is more likely that the upper and middle terraces were never connected.

³⁰ Though the colours of the frescoes are preserved to this day, during excavation they made a stronger impression; Yadin (above, n. 4), 19. Netzer suggested that there were two columns in front of the wall of niches and between the two flanking rooms in a *distyle in antis* arrangement, but no evidence for this was found on the hewn rock floor; Netzer (above, n. 7), 583.

³¹ Y. Yadin, Masada: Herod's Fortress and the Zealots' Last Stand (London 1966), 72.

³² On the *mikveh* and the reservoir to the southwest of the Northern Palace, see Avi-Yonah et al. (above, n. 3), 32-3. The paved path leading to the *mikveh* and reservoir is mentioned by Netzer (above, n. 7), 149.

³³ My survey of the Northern Palace of Masada led me to the conclusion that the palace was built on the two natural terraces below the northern edge of the summit. If this is correct, the approach to the palace was probably through the so-called 'Water Gate', about 80 m southwest of the palace. I will elaborate these conclusions elsewhere.

³⁴ Netzer (above, n. 7), 583.

³⁵ This assumption is shared by the generations of Masada scholars: Avi-Yonah et al. (above, n. 3), 34-5; Yadin (above, n. 4), 18-19; Netzer (above, n. 7), 156.

³⁶ Netzer (above, n. 7), 157.

³⁷ This suggestion was originally made by the first expedition that studied the remains of the Northern Palace and has been adopted by subsequent scholars; Avi-Yonah et al. (above, n. 3), 34.

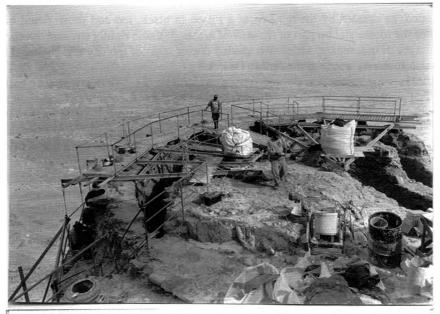


Fig. 9. The stone foundations of the circular structure, looking north.

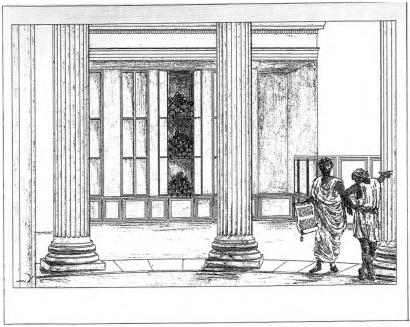


Fig. 10. Proposed reconstruction of the square between the circular structure and the wall of niches (drawing: Anna Yamim).

Summary

The existence of a library at Masada fits well with what is known of libraries in the Hellenistic and Early Roman periods. The library was a standard element in royal palaces and the houses of the wealthy. The great library of Alexandria was founded in the 3rd century BCE as part of the palaces of the Ptolemies. At Pergamon, Eumenes II (197-160) built a library on the acropolis next to his palace to rival that of Alexandria.³⁸

Hellenistic kings built libraries not only in their official palaces but also in the pleasure palaces located in various parts of their kingdoms. Thus, for example, we hear of the library of Ptolemy IV (221-205) on his floating palace *Thalamegos*, built for pleasure cruises on the Nile.³⁹ In Rome there were private libraries of the social elite in both the urban *domus* and the rural villa. In the Villa of the Papyri on the Bay of Naples, as mentioned above, there was a private library containing 1800 scrolls.⁴⁰

At the transition between the Hellenistic and Roman periods, a development took place in the design of libraries. In the libraries of the Hellenistic period such as those of Alexandria and Pergamon and in the library of the Villa of the Papyri, the scrolls were kept in closed rooms on open shelves or in cylindrical boxes.⁴¹ The scrolls were generally read in colonnades, i.e. in partially open architectural spaces in which it was possible to read in daylight. The innovation in the design of libraries took place in the days of Augustus, when libraries began to include reading rooms containing bookcases in niches (*armaria*).⁴² From this time and up to the present day, the bookcase has been an integral part of both private and public libraries.

The existence of a library at Masada and perhaps at Herod's other palaces is thus quite natural. Herod was an avid consumer of Roman technological innovations. During his stay in Rome in 40 BCE, Herod struck up a friendship with Asinius Pollio, who established the first public library in Rome.⁴³ Herod followed his patron Augustus in encouraging scholars and intellectuals, such as Nicholas of Damascus, who took up residence in the royal court in the capital Jerusalem.⁴⁴ The library was thus an essential element in the palaces of the king.

The identification of the library at Masada implies that the king and his entourage were frequent visitors to the palace. Additional hints of this were found in the gastronomic sphere. Yadin's excavations at Masada uncovered more than a dozen amphorae inscribed with Herod's name and the type of wine, imported specially for him from Italy.⁴⁵ Other jars contained imported foods such as fish sauce (*garum*) and apples from

³⁸ Casson (above, n. 10), 31-4 (Alexandria), 49-50 (Pergamon); Nielsen (above, n. 5), 25, 80.

³⁹ Foerster (above, n. 6), 179; Casson (above, n. 10), 136.

⁴⁰ Above, n. 19.

⁴¹ On the storage of scrolls in antiquity, see above, n. 18.

⁴² Casson (above, n. 10).

⁴³ Roller (above, n. 25), 24-5.

⁴⁴ Ibid., 54-6.

⁴⁵ On the wine amphorae discovered at Masada, see H.M. Cotton and J. Geiger, *Masada* II: *The Greek and Latin Documents* (Jerusalem 1989), 140-58; iidem, 'Herod and Masada: The Written Finds', in: G. Hurvitz (ed.), *The Story of Masada: Discoveries from the Excavations* (Provo, Utah 1997), 78-82.

Cumae in Italy.⁴⁶ During his stays at Masada, the king received his guests in official receptions that most probably took place in the Western Palace. Less formal meetings may have been held in the Northern Palace, where the king and his more intimate companions could relax in the round structure, or in the shady colonnade surrounding it, to read or to plan new projects to develop the kingdom. Afterwards, in the peristyle courtyard of the lower terrace, they could eat and drink their fill of the choicest foods and wine. I believe that only King Herod could have provided himself and his guests with the finest fruits of Roman culture in such a remote, wild and isolated spot.

The Hebrew University of Jerusalem

⁴⁶ On fish sauce (and remains of bones) at Masada, see H.M. Cotton, O. Lernau and Y. Goren, 'Fish Sauces from Herodian Masada', *JRA* 9 (1996), 223-38. On apples from Cumae, see Cotton and Geiger (above, n. 45, *Masada* II), 82-3.