

# JOURNAL OF ROMAN ARCHAEOLOGY

SUPPLEMENTARY SERIES NUMBER 37

AN INTERNATIONAL JOURNAL

ISBN 1-887829-37-7

ISSN 1063-4304 (for the supplementary series)

Copyright © 1999 Journal of Roman Archaeology® L.L.C. Printed by Thomson-Shore, Dexter, Michigan

This and other supplements to the *Journal of Roman Archaeology*® may be ordered from:  
JRA®, 95 Peleg Road, Portsmouth, RI 02871, U.S.A.

Telephone (USA) 401 683 1955 telefax (USA) 401 683 1975 e-mail: jra@wsii.com

Web site: [JournalofRomanArch.com](http://JournalofRomanArch.com)

# **ROMAN BATHS AND BATHING**

**Proceedings of the  
First International Conference on Roman Baths  
held at Bath, England, 30 March - 4 April 1992**

## **PART 1: BATHING AND SOCIETY**

**edited by**

**J. DeLaine and D. E. Johnston**



**PORTSMOUTH, RHODE ISLAND  
1999**



# Herodian bath-houses

Ehud Netzer

This paper will be limited to a comparative survey of the bath-houses uncovered within the various building projects of Herod the Great (fig. 1), all of which were actually integrated within his palaces or palatial fortresses. Herod, a client king of Judea and other parts of Palestine, was appointed monarch by the Roman Senate in 40 B.C. and continued to rule until his death in 4 B.C.<sup>1</sup> His reign symbolizes the transition from Hellenistic to Roman culture in Israel. The bath-houses in Herod's palaces and palatial fortresses are today perhaps the most vivid archaeological remains of those building projects. Although all were built on the initiative of one man and within a limited period of time, no two of them have the same plan.

It is significant that this group of 11 baths are, with one possible exception,<sup>2</sup> the first Roman-style bathing facilities to be revealed in Palestine, all apparently being built between c.35 and 15 B.C. — a relatively short period. Two of them are at Herodium;<sup>3</sup> four in the Winter Palaces at Jericho;<sup>4</sup> two at Cypros;<sup>5</sup> one at Machaerus;<sup>6</sup> and two on top of Masada.<sup>7</sup> Three other small Roman-style bath-houses uncovered in the vicinity of, and undoubtedly connected with, the palaces at Herodium and Jericho are omitted from the discussion since they do not form an integral part of these palaces.<sup>8</sup>

It may be assumed that the newly-appointed king, who no doubt had enjoyed such facilities during his first visit to Italy in 40 B.C.,<sup>9</sup> introduced these baths into his kingdom, if only into his palaces. No Roman-style Herodian bath-houses which might have served the general public have yet been discovered.

- 1 See E. Schürer, *The history of the Jewish people in the age of Jesus Christ* 1 (Edinburgh 1973) 287-329.
- 2 The exception is the bath at Tell Anafa. The only pre-Herodian bath-house (c.80 B.C.) with a hypocaust was discovered at Tel Anafa in northern Israel, but it does not contain all the technical features typical of Roman baths. See S. C. Herbert, *Tel Anafa* Li (JRA Suppl. 10.1, 1994) 62-69.
- 3 One is on the hill, inside the Mountain Palace-Fortress: see V. Corbo, "L'Herodion di Giabal Fureidis," *LibAnn* 17 (1967) 65-121; id., *Herodion. Gli edifici della Reggia Fortezza* (Publicazioni della Studium Biblicum Franciscanum 20.5, Jerusalem 1989) 46-48, Documentazione Fotografica 77-85, Tav. 9-10. For the other at Lower Herodium, see E. Netzer, "Herodium," *Qedem* 13 (1981) 47-49. For the most up-to-date report on Lower Herodium, see Netzer, *Herodium*.
- 4 The first is in Herod's First Winter Palace: see J. B. Pritchard, "The excavation at Herodian Jericho, 1951," *AASOR* 32-33 (1958) 4-12. The second is in Herod's Second Winter Palace: see E. Netzer, "Tulul Abu el 'Alayiq. Exploration since 1973," in *The Encyclopedia of archaeological excavations in the Holy Land* 3 (Jerusalem 1993) 687; id., "Recent discoveries in the Winter Palace of Second Temple Times at Jericho," *Qadmoniot* 15 (1982) 22-29 [Hebrew]; id., "Architecture in Palestine prior to and during the days of Herod the Great," in *Akten XIII Int. Kongr. Klassische Archäologie, Berlin 1988* (Mainz 1990) 44-45. The final two are in Herod's Third Winter Palace, the largest one in the N wing, and the second one apparently in the basement floor of the building which stood on top of an artificial mound south of Wadi Qelt: see the previously cited article and id., "The Hasmonean and Herodian Winter Palaces at Jericho," *IEJ* 25 (1975) 89-100.
- 5 See E. Netzer, "Cypros," *Qadmoniot* 8 (1975) 55-61 [Hebrew].
- 6 For Machaerus, see V. Corbo, "La Fortezza di Macheronte," *LibAnn* 28 (1978) 217-31; id., "Macheronte. La Reggia-Fortezza Erodianna," *LibAnn* 29 (1979) 315-26; id., "La Fortezza di Macheronte (Al Mishnaqa)," *LibAnn* 30 (1980); and for the baths, id., "Nuove scoperte alla Fortezza di Macheronte," *LibAnn* 31 (1981) 257-86.
- 7 Both are related to the Northern Palace: see Netzer, *Masada* 76-110 (for the large bath-house) and 164-70 (the small bath-house).
- 8 The one at Jericho (unpublished) was found close to Herod's Second Winter Palace and the other two at Lower Herodium: see Netzer, *Herodium* 35 and plan on p.31, and id., "Herodium," *Qedem* 13 (1981) 47-49.
- 9 Jos., *BJ* 1.280-85; *AntJ* 14.377-89.



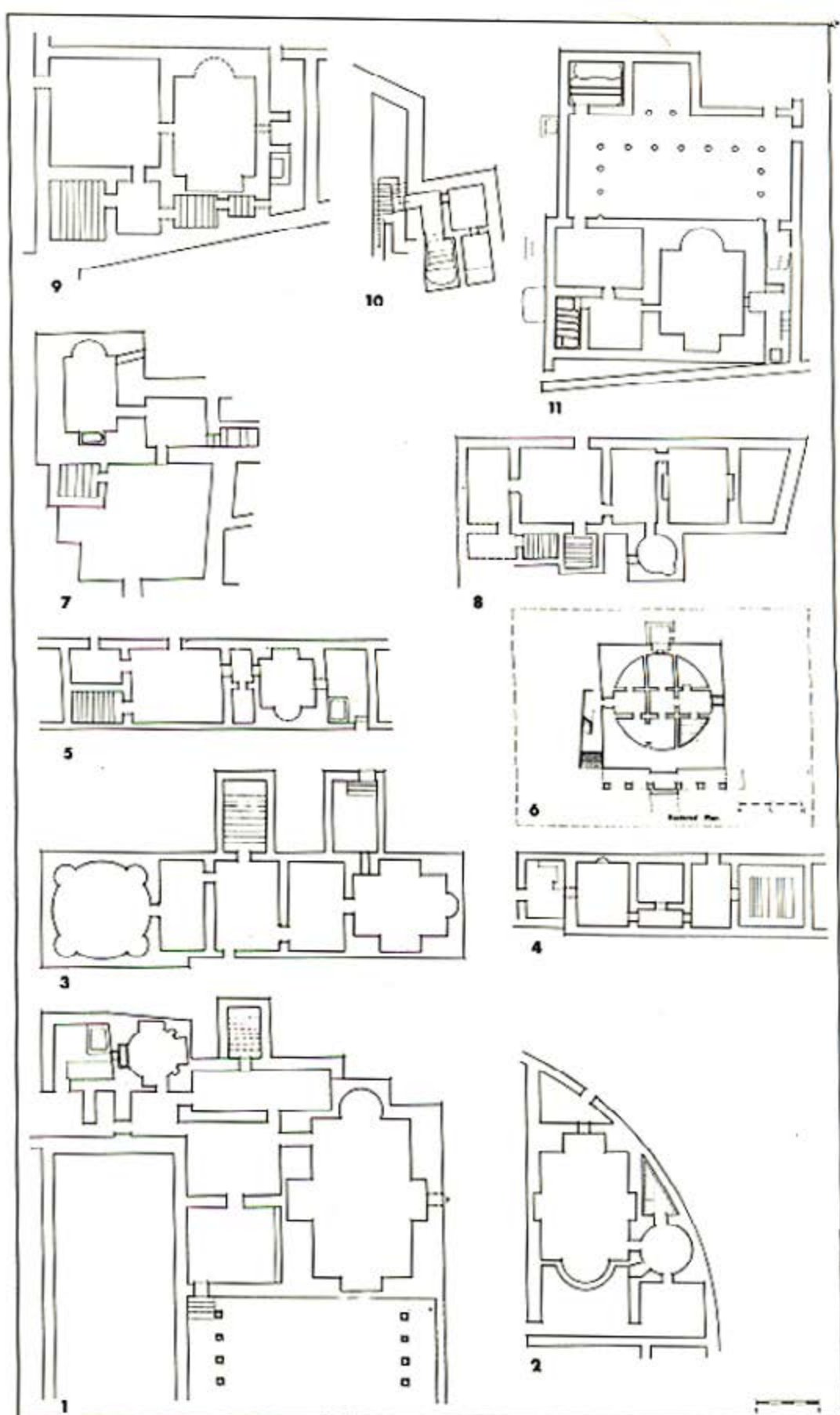


Fig. 1. Herodian bath-houses (all to same scale).

**HERODIUM:** situated at edge of Judean desert, c.15 km south of Jerusalem, the complex built by Herod functioned as a large summer palace, a capital of the district (toparchy), and a fortress, and provided a memorial and burial place for Herod.

**1.** Lower Herodium main baths, situated next to the garden complex, planned around a huge pool (70 x 45 m) and containing palatial wings, service facilities, and dwellings (for the officers in charge of the district), two of which included small Roman-style baths.

**2.** Mountain Palace-Fortress baths, part of the highly decorated palace wing built within the spectacular circular structure, 63 m in diameter and 25-30 m high, with one round and three semicircular projecting towers. The whole structure, partly concealed by a cone-shaped fill, created a sort of artificial mountain which served as palace, fortress, and monument, visible from afar.

**JERICO:** a complex of winter palaces was developed south of the city and close to Wadi Qelt, first by the Hasmonean kings, then by Herod, who built three palaces here during his reign.

Fig. 1 caption (continued)

3. Third Winter Palace, main baths, built in the main N wing of the largest and most elaborate among the three Herodian palaces, also called the "opus reticulatum" palace from the construction technique used in places by the Roman architects and builders involved in its construction.

4. Second Winter Palace baths, forming a separate wing of this group of structures, built on top of Hasmonean ruins but incorporating two of the earlier swimming pools.

5. First Winter Palace baths, part of a large rectangular building designed around a peristyle courtyard, to the south of Wadi Qelt. There was also a second bathing facility which appears to have been used only for ritual immersion.

6. Third Winter Palace secondary bath-house, the existence of which has been postulated in the basement of a reception hall which stood on top of an artificial mound south of Wadi Qelt.

CYPROS: one of a series of fortified palaces or desert fortresses, first built by the Hasmonean dynasty and later enlarged or rebuilt by Herod. Cypros is situated on top of a hill, west of Jericho and adjacent to the road from there to Jerusalem. Herod extended the site to a plateau c.30 m below the top of the hill.

7. Upper Cypros baths. Although much of the building (palatial rooms and services) has been eroded, the bath-house is relatively well preserved.

8. Lower Cypros baths. Only part of the lower site has been excavated, revealing palatial rooms and a well-preserved bath-house.

MACHAERUS: a desert fortress east of the Dead Sea, consisting of an upper fortified palace on top of a hill, and an adjacent lower section on a steep slope, also surrounded by walls. This latter, only small sections of which were uncovered, was probably populated by soldiers and/or citizens.

9. Upper Machaerus baths. The bath-house, situated close to a central peristyle court, is one of the best preserved elements.

MASADA: the most famous of the desert fortresses, located west of the Dead Sea on top of a huge rock with a relatively flat summit. The site, built by Herod in three phases, included several palace wings. The best-known is the northern palace built on three terraces at the extreme edge of the summit.

10. Northern Palace, lower terrace baths. A secondary small bath-house was built at the bottom of the terraced structure, in the basement of the lower terrace consisting mainly of a large *triclinium*.

11. Northern Palace, main baths. Built as a separate structure adjacent to the palace.

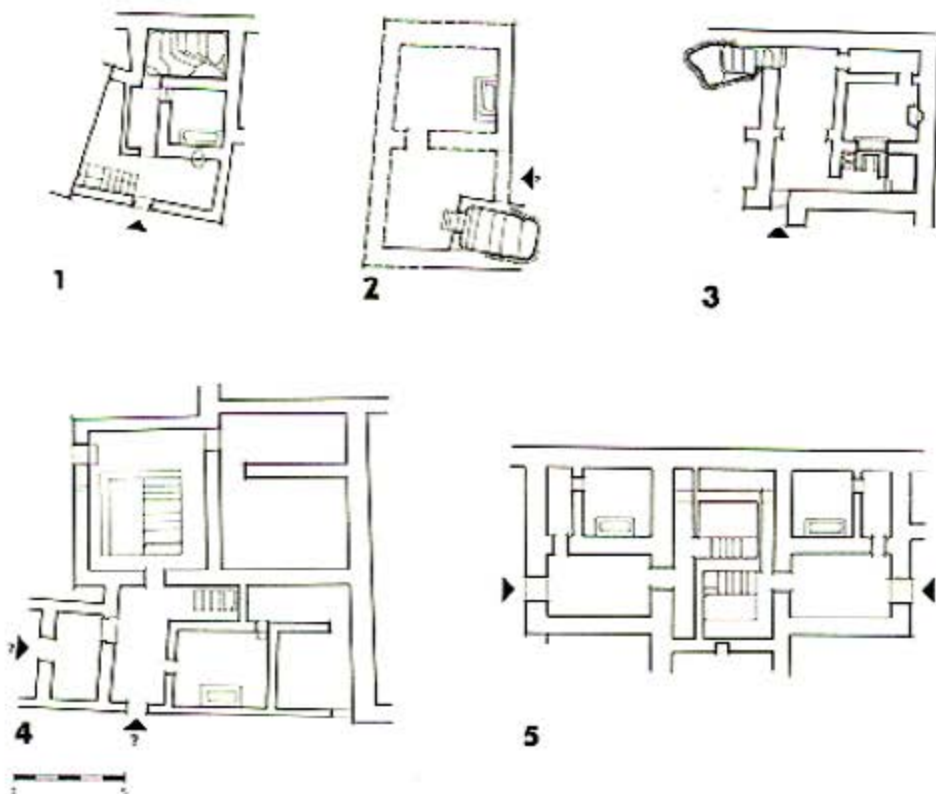


Fig. 2. Bath-houses in the Judeo-Hellenistic style (all to same scale).

1. Masada, small bath-house attached to Tower 223, south of the storeroom complex; Herodian third building phase.

2. Masada, the "abandoned bath-house" at the E side of the storeroom complex; Herodian first(?) building phase.

3. Masada, the nucleus of the western palace; Herodian first building phase.

4. Jericho, bath-house from the end of the Hasmonean period, west of the pool complex.

5. Jericho, the bath-houses in the Twin Palaces.



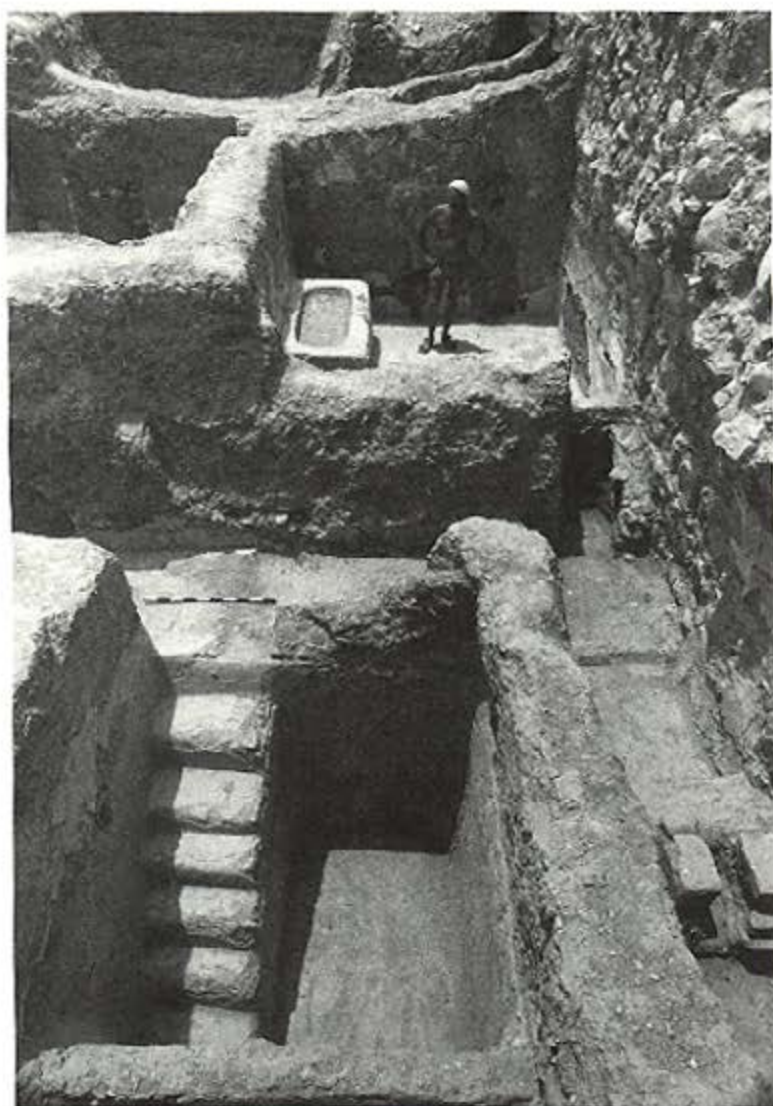


Fig. 3. Hasmonean Twin Palaces, Jericho (bath-house of the western mansion), stepped pool in front.

#### Bathhouses in the Judeo-Hellenistic style

The Judeo-Hellenistic bath-houses which existed in Judea prior to Herod's time and built by his predecessors, the Hasmonean kings, are well known. Three have been discovered within the Hasmonean Winter Palaces' complex at Jericho (fig. 2, nos. 4-5).<sup>10</sup> Although a similar bath-house located in the nucleus of Masada's Western Palace was most probably built by Herod,<sup>11</sup> it seems that the architect who designed it had been active at the Hasmonean court since the architecture of the palace greatly resembles that of the Hasmonean twin palaces at Jericho.<sup>12</sup> The Western Palace at Masada, however, was built during a very early stage of Herod's reign, probably prior to the introduction of the new technology from Italy. It is worth noting, however, that another bath-house in the Judeo-Hellenistic style was built adjacent to the storerooms complex at Masada, at a much later stage when Roman-style baths were already widely used by Herod.<sup>13</sup>

<sup>10</sup> One existed west of the two swimming pools (fig. 2, no. 4) and two were integrated into the twin palaces, dated to c.75 B.C. (fig. 2, no. 5); see Netzer, *Die Paläste der Hasmonäer und Herodes' des Großen* (Mainz 1999) 24-27 and 30-31.

<sup>11</sup> See Netzer, *Masada* 251-62.

<sup>12</sup> Ibid. 599-602.

<sup>13</sup> Ibid. 181-83.



The planning of the bath-houses in the Hasmonean palaces could have been developed either by those monarchs or by the Jewish aristocracy of the time. Each of the bath-houses included a bathroom, c.3 x 3 m, containing a single plastered bathtub. In two cases, at Jericho's twin palaces, entrance to the bathroom was via a narrow corridor leading from a central hall, a sort of *apodyterium*. In each of the three baths mentioned above there was a cold room, a sort of *frigidarium*, which consisted of a stepped pool that occupied its entire area (fig. 3). No doubt these stepped pools were not part of the bathing process but served as ritual baths (*miqva'ot*), in accordance with Jewish religious law.<sup>14</sup> In one of these bath-houses there was an additional, much smaller, stepped pool which could be heated.<sup>15</sup> The water was heated in a cauldron built into the side wall of the pool. The heating systems for the rooms were relatively simple, and they lacked hypocausts. Two of these bath-houses were integrated into palatial domiciles;<sup>16</sup> the third, which featured the heated pool, was located in a free-standing structure, adjacent to the magnificent swimming-pool complex built by Alexander Jannaeus as part of the Hasmonean Winter Palaces.<sup>17</sup> Other bath-houses in this style, from both the Hasmonean and the Herodian periods, have been discovered elsewhere, mainly in Jerusalem and Gezer.<sup>18</sup>

Decoration in most of these baths was minimal. A few of the floors were mosaic (two examples in Masada, one in Jericho), while the rest were plastered. Only in one instance (Jericho) are there traces of painted wall-plaster but here too only in the bathing room. In the bath-houses of the Western Palace at Masada and the Twin Palaces at Jericho, a horizontal groove in the plaster c.2 m above floor level and coloured red provided a further decorative element.

### Bath-houses in the Roman style

Nearly all of the 11 bath-houses known from Herod's building projects were not free-standing structures but integrated into wings of palaces, two being part of the substructures. Only at Masada was a bath-house built as what appears to be a free-standing structure. At Jericho and Cypros the baths form a separate wing. Plans of the building, all to the same scale, are presented in fig. 1 together with details of their locations. The characteristic elements of these bath-houses are summarised below and in Table 1.

#### *Apodyterium*

The *apodyterium* is an inseparable part of most if not all the bath-houses. These *apodyteria* are rather large in comparison to other bath-house rooms. Only one example, in Lower Herodium, contained a bench, which was an original feature. In any event, no niches or other means for storing clothing were found; in theory such facilities might have existed in the missing sections of the walls, or may have been of wood.

#### *Frigidarium*

The *frigidarium* usually contained a stepped pool that occupied all or most of its area and apparently also served as a ritual bath (fig. 4). It seems to have lacked any other installations and was not ornamented in any way. Two of the bath-houses contained an additional stepped pool. In the large baths at Masada this extra pool was adjacent to the forecourt, while in the baths of Upper Cypros it was entered via a hall which was probably the counterpart of a courtyard.

14 See R. Reich, *Miqva'ot (Jewish ritual immersion baths) in Eretz Israel in the Second Temple and the Mishnah and Talmud periods* (unpublished Ph.D. diss., Hebrew University, Jerusalem 1990) 109-18 [Hebrew]; Netzer, "Ritual baths"; and E. Regev, "Ritual baths of Jewish groups and sects in the Second Temple period," *Cathedra* 79 (1996) 3-21 [Hebrew].

15 In the baths west of the two swimming pools, see n.10.

16 One or two more bath-houses (only partly exposed) existed in the initial main palace building at the site.

17 Supra n.10.

18 See N. Avigad, *Discovering Jerusalem* (Jerusalem 1980) 139-43 and Reich (supra n.14) 171-252, 266-70.





Fig. 4. Lower Cypros baths, stepped pools of the double *frigidaria*.

### *Tepidarium*

In some of the bath-houses the *tepidarium* is the most difficult one to define. There are great variations in shape, size and number (in five or six cases there is a single *tepidarium*; in two to four cases there are two; and in one case there are three). Only in Herod's Third Winter Palace at Jericho was one of the *tepidaria* heated by means of a hypocaust.

### *Caldarium*

The *caldarium* seems to have been the *pièce de résistance* of all the Herodian bath-houses. The *caldaria* can be divided into two groups: one in which the niches form only a secondary element, and the other in which the niches are deep and large, forming prominent elements. In

TABLE 1: ELEMENTS IN THE CALDARIA

	Vault	Niches		Heating				Floors	
		major	minor	<i>pilae</i>		flues		mosaic	op. sect.
				ceramic	stone	tubuli	chimney		
Jericho 1	?	Y	N	Y	N	Y	N	Y	N
Machaerus	Y	Y	?	Y	N	Y	N	Y	N
Lower Cypros	N	N	Y	N	Y	Y	N	Y	N
Masada, large baths	Y	Y	N	Y	Y	Y	N	Y	Y
Masada, lower terr.	N	N	N	Y	N	Y	N	Y	N
Jericho 2	?	N	Y*	Y	Y	Y	N	Y	N
Upper Cypros	Y	Y	N	Y	Y	Y	N	Y**	Y
Upper Herodium	Y	Y	Y	N	Y	N	Y	Y	N
Lower Herodium	Y	Y	Y	?	?	Y	Y	Y	N
Jericho 3	Y	Y	Y	Y	N	Y	N	N	Y

Y - Yes (present), N - No (not present)

\* at least one small semi-circular niche

\*\* a small section of mosaic next to the bath-tub was either a remnant from an earlier stage or a sort of mat



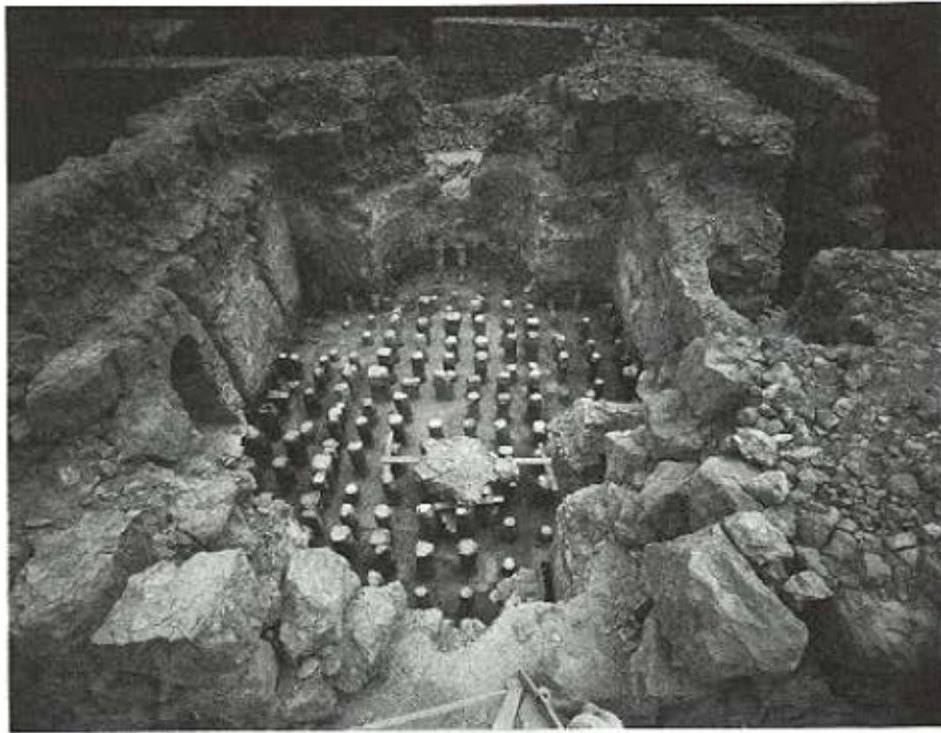


Fig. 5. Masada, large bath-house, *caldarium* with well-preserved *pilae*.

the latter group, at least two opposite walls were thickened in order to support the extra weight of the barrel-vaulted ceiling. The thickness of these walls also made possible the construction of deep niches, semi-circular or rectangular, within them (fig. 5). It seems that the deep, semi-circular niches (*exedrae*) contained a free-standing circular basin (*labrum*) with a water fountain supplying either cold or hot water. The rectangular niches probably contained bath-tubs fed with hot water. Some of these bath-tubs were imported (e.g., the elegantly-shaped quasi-alabaster one discovered in Upper Cyprus), while others were locally made and plastered, as in the large bath-house at Masada. Most of the *labra*, at any rate, seem to have been imported.

#### *Laconicum/sudatorium*

This sweating room has been identified in only a few cases. At Lower Herodium and Machaerus the *laconicum* was clearly an original element, while at Lower Cyprus it was a later addition, eliminating one of the two original *frigidaria*. Two other cases are less certain. The large circular room, 8 m in diameter, in the baths of Herod's Third Winter Palace at Jericho probably served as a *laconicum* (fig. 6). Its floor was not heated, but it was constructed above two concentric deep channels, most probably to prevent loss of heat through the ground; it was probably heated by means of braziers. The bath-house in Herodium's Mountain Palace-Fortress might have contained a *laconicum*, in the room east of the *tepidarium*, which however the excavators believed to have been the *apodyterium*. If our assumption is correct, this room, which has a vaulted ceiling, was also heated by braziers. All of the *laconica* under discussion, with the exception of those at Machaerus and tentatively at Herodium (no. 2), were circular. The bath-house at Machaerus is also exceptional in that it apparently had two *laconica*, located in adjacent small rooms. Herod's First Winter Palace at Jericho possibly had a rectangular *laconicum* occupying one of the two rooms adjacent to the *caldarium*.

#### Heating and water supply

Hypocausts existed in all the *caldaria* and in most of the *laconica* and are generally uniform in character. The lower floor is usually covered with terracotta floor tiles. The *suspensurae* rest on colonnettes, some made of stone, others of circular column bricks (fig. 5). In Herod's Third Palace at Jericho, some of the colonnettes are made of round terracotta tubes, the rest of square bricks; it seems that in this case the hypocaust was not part of the original Herodian structure





Fig. 6. Jericho, Third Winter Palace, main baths, probable *laconicum* in *opus reticulatum*.

but was a later renovation. *Bipedales*, roughly 57 cm square, were placed above the colonnettes and the floor laid on top. In most cases the walls of *caldaria* were covered with rectangular *tubuli* measuring  $c.9 \times 18$  and 30 cm high. All of the *tubuli* had holes punctured in their narrow sides, allowing the free flow of hot air sideways as well. At Herodium's Mountain Palace-Fortress, however, the *tubuli* in the *caldarium* were replaced by chimneys hewn into the walls (fig. 7). In the *caldarium* at Lower Herodium both of these methods were used: chimneys were carved out of the walls and *tubuli* were installed in the niches. However, in the *laconicum* of the same bath-house all of the walls were apparently covered with *tubuli*. Generally the furnaces were located in courtyards adjacent to the *caldaria*, but occasionally they were located inside a room, as for example on the lower terrace of the Northern Palace at Masada. The location of the *praefurnium* has not yet been determined in some cases.

In many cases evidence for water networks based on elevated pools, in order to create pressure, is indicated by the presence of segments of lead pipes or their impressions. Some of these pipes passed through the *praefurnium* and probably supplied hot water to the baths and/or to some of the *labra*. It is possible that some of these pipes led to fountains.

### Construction techniques

No special building methods were identified in the various bath-houses under discussion. In some instances the walls were built of field stones bound by a mud-based mortar. In at least one case, the large baths at Masada, lime-based mortar was used in the walls around the *caldarium*. In contrast, the bath-houses of Herodium's Mountain Palace-Fortress (fig. 7) and that on



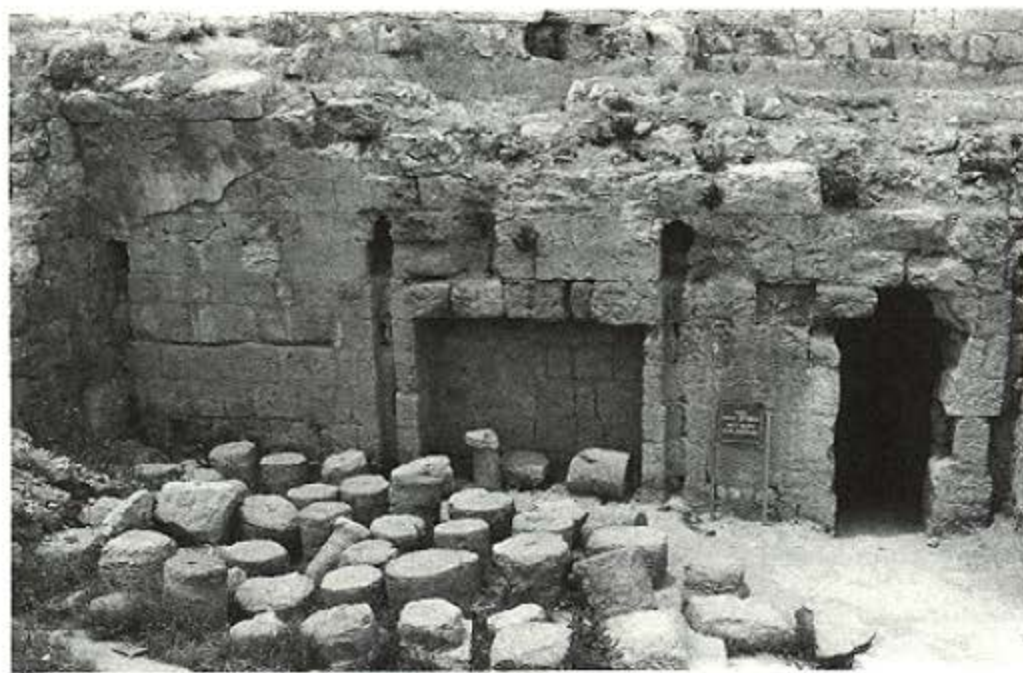


Fig. 7. Herodium, Mountain Palace Fortress baths, *caldarium* in ashlar construction. The springing of the ashlar barrel-vault is visible at the left-hand edge of the photo.

the lower terrace of Masada's Northern Palace were built of ashlar. At Herod's Third Winter Palace at Jericho, most of the bath-house walls were built of Roman concrete faced with *opus quadratum* and *opus reticulatum* (fig. 6), while others were built of mud-brick. Most of the rooms in these bath-houses had flat ceilings laid on wooden beams, but the *caldaria*, which at times would have been filled with steam, usually had vaulted ceilings of cut stone.

### Decoration

Unlike the Hasmonean bathing facilities, the Herodian ones were highly decorated. The four main decorative elements were mosaic and *opus sectile* for the floors, frescoes for the walls and in some cases also the ceilings, and stucco; mosaics and frescoes were the most common, but during the course of Herod's reign *opus sectile* in some cases took the place of mosaic for the floors.

In the First Palace at Jericho evidence for decorated mosaic floors was found *in situ*, while fragments of fresco were found in the débris in some of the bath rooms.<sup>19</sup> Mosaic floors *in situ* were also found in the bath-house of the Second Palace, as well as fragments of fresco and stucco, including a piece of fresco *in situ*. On the other hand, only a few fragments of fresco decoration were found in the bath-house of the Third (*opus reticulatum*) Palace, and none *in situ*, but an analysis of the whole northern wing, of which the bath-house is a part, suggests that there is a good chance that practically all of its rooms were decorated with such wall-paintings. The floors here are of *opus sectile*. Both bath-houses at Herodium had mosaic floors and wall-paintings.

In the bath-house at Upper Cypros, one mosaic, white in colour, was revealed in the *tepidarium*, whereas the *caldarium* was paved in *opus sectile*.<sup>20</sup> At Lower Cypros, there were decorated mosaic floors, although no remains of wall-painting,<sup>21</sup> though fragments of decorated stucco were found. Despite the bad state of preservation, the bath-house at Machaerus also produced clear remains of mosaic floors and wall frescoes, and the existence of stucco is docu-

<sup>19</sup> In Room 9; see Pritchard (*supra* n. 4) 57-58.

<sup>20</sup> A similar phenomenon to that at Masada, where an *opus sectile* floor replaced one of mosaic, cannot be excluded.

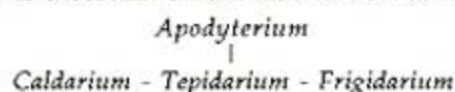
<sup>21</sup> It should be noted that evidence of wall-painting was found in many rooms at Lower Cypros.



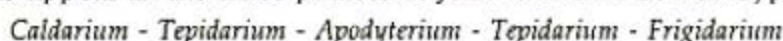
mented.<sup>22</sup> In contrast, at the large baths at Masada evidence survives not only for decorated floors in the *palaestra* and walls decorated with frescoes but also for stucco decoration, as well as *opus sectile* floors, replacing mosaics which had been destroyed to make way for them. Only one undecorated mosaic floor survived in the *tepidarium* of the small bath-house at the bottom of the Northern Palace at Masada, but the floor which must have covered the *caldarium* (now totally eroded away) might have been decorated.

### The organisation of the floor plan

Despite the numerous common features shared by all the bath-houses in Herod's palaces, no two are identically planned. In one of the common layouts, the *apodyterium* lies at one end of the bath-house and the passage leading to all the other rooms generally runs through the *tepidarium*. This layout was employed in two cases at Masada, in Herodium's Mountain Palace-Fortress, in Upper Cypros, and to a certain extent also at Lower Herodium:



In another popular layout, the *apodyterium* is located at the centre of the bath-house (slightly different variations appear in the three palaces at Jericho and at Lower Cypros):



In both of these typical layouts, entrance to the *caldarium* is through the *tepidarium*. The bath-house at Machaerus seems to be a combination of these two layouts, with the *caldarium* apparently being entered directly from the *apodyterium*. Generally, entry into the *frigidarium* was also through the *tepidarium*, except in the Second and Third Palaces at Jericho and in Lower Cypros.

The bath-house at Lower Herodium is the largest and most complex in any of Herod's palaces. It contained three *tepidaria*; the largest one, offering direct access to the *caldarium*, is located next to the *apodyterium*.

As for the bath-house at the Mountain Palace-Fortress, the *apodyterium* to our mind (and contrary to the opinion held by the excavators) should be recognised in the room east of the *caldarium*. The circular room, with its outstanding cupola of ashlar voussoirs, most probably served as the *tepidarium*, while the purpose of the rectangular room to its east (which could also be entered from the *apodyterium*) remains unclear; it might have served as a *laconicum*.

### Daily life in the Herodian bath-house

The large number of Roman-style bath-houses discovered in all of Herod's palaces indicates the extensive use of these facilities. Masada and Jericho in particular provide us with an insight into how they functioned. The construction of the Northern Palace at Masada was the main reason for building the large bath-house next to it. On account of the presence of other palaces on the mount, this bath-house was not built inside the Northern Palace but adjacent to it. In this way, members of the king's family and his friends were able to use the large bath-house at times when the king sought isolation in his main Northern Palace. The small bath-house, constructed in the substructures of the lower terrace, the lowest point of the palace, provides another indication of the frequent use of these installations: the king preferred to have a bath-house at hand while hosting entertainments at Masada's most outstanding point, the lower terrace. A similar phenomenon is encountered in Herod's Third Palace at Jericho, where a second smaller bath-house is located below the magnificent circular banqueting hall, to the south of Wadi Qelt. Worthy of note are three additional small bath-houses (fig. 8) which were exposed in some sort of private dwellings affiliated with the palaces: two at Herodium

22 See Corbo 1979 (supra n. 6) 322-24.



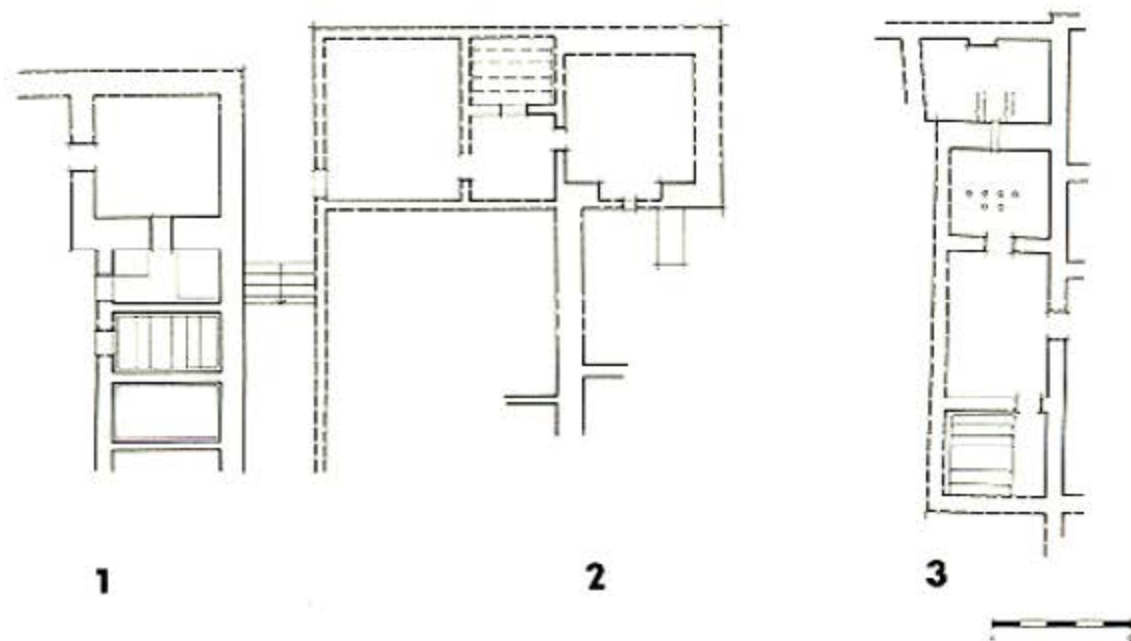


Fig. 8. Minor Roman-style bath-houses adjacent to Herodian palaces.

1. Herodium, the northern area, north of the pool complex.
2. Herodium, the northern area, north of the pool complex.
3. Jericho, east of Herod's Second Palace.

(apparently residences of high officials, responsible for the local district); and one at Jericho (area AK), probably also for a high official. The above evidence shows the popularity of bathing among the courtiers and friends who would have belonged to the aristocracy.

Institute of Archaeology, The Hebrew University, Mount Scopus, Jerusalem