

BATHING CULTURE IN HELLENISTIC DOMESTIC ARCHITECTURE

The study of private bathrooms is often neglected in favor of a focus on public baths that seem, at first sight, so much more varied, intriguing, and revealing, both from an architectural and socio-cultural point of view¹. This is unjustified, however, because the history of private bathrooms in all cultures and époques is closely intertwined with that of their public equivalents, and a study of bathing culture or of bathing as a case study for culture therefore has to take both into account. Both private and public baths are determined by cultural concepts and attitudes towards important aspects such as nudity, the body, modesty, shame, cleanliness, and beauty; the examination of both private and public baths consequently reveals these same determining factors. The relationship between private and public baths is often complex and may range from a parallel development, where both flourish alike and share common standards, to a clearly distinct development, where both have different equipments and functions and one dominates or even substitutes for the other. For example, in the modern western world, private bathrooms prevail in number and importance and are the setting for the daily routine of grooming and cleansing the body while public baths mainly provide leisure facilities for physical exercise, pleasure and entertainment, relaxation and health regimens. Private bathrooms did not become a standard feature of dwellings before the second half of the 20th c., however, and even today, basic features such as the size, equipment, and concept of bathrooms, as well as the number of bathrooms per house or inhabitants of a living unit vary enormously across different countries and social levels. While the bathroom was, for a long time, a purely or predominantly utilitarian room, its prestige has greatly increased in recent years, and it has been promoted to a stylish living room for extended agreeable stays². This development occurred parallel to and was probably stimulated and influenced by the emergence of new types of public baths: luxury spas and large water fun parks that are, however, not (yet?) predominant among public baths.

When examining the development of private bathrooms in antiquity as part of bathing culture or culture in general, one is confronted with scanty and fragmentary evidence. It is still possible and highly revealing, however, to explore private bathrooms from a multi-faceted point of view and to trace important aspects such as crucial changes and varieties, as well as their relationship to contemporary public baths. Such an endeavor benefits significantly from cross-cultural studies and comparisons that help to assess and interpret the fragmentary ancient evidence. Based on this approach, this paper aims to provide the first comprehensive overview of the development of private domestic bathing culture in the Mediterranean world. Although the focus is on the Eastern Mediterranean in the Hellenistic period, in correspondence with the topic of this conference, it will be necessary to include a brief discussion of earlier examples (6th through 4th c. BC) and of the evidence from the Western Mediterranean, particularly Sicily, in order to fully assess the development

¹ I would like to thank the conference organizers for inviting me to this very stimulating and interesting conference and for their hospitality. I am also very grateful to the other participants at the conference for comments and discussions; to M. Osanna, Th. Schäfer, and F. Schön for information about the sweat bath in Pantelleria; and to E. Robinson for improving my English text. My travel to Vienna was generously supported by the ›Fund for Excellence‹, donated by J. Alexandre to the University of North Carolina at Chapel Hill.

Popular cross-cultural studies such as P. GRILLI, *Furo. The Japanese bath* (Tokyo 1985); S. CLARK, *Japan. A View from the Bath* (Honolulu 1994); BONNEVILLE 1998; WRIGHT 2000, and ASHENBURG 2007 all include a discussion of private bathrooms, but largely focus on public baths. For studies on Greek baths, see below note 5. For counter-examples, however, see A. SILBERMANN, *Der (West-)Deutschen Badezimmer* (Cologne 1991) and A. SILBERMANN, *Badezimmer in Ostdeutschland. Eine soziologische Studie* (Bielefeld 1993) who focuses entirely on sociological studies of private bathrooms, and EVELEIGH 2002 who examines the story of domestic sanitation in England from the late 18th c. onwards.

² When people can afford it and care for it, that is, when they embrace the changed underlying values and attitudes towards bathing; see BONNEVILLE 1998, 120–169; EVELEIGH 2002, 159–174; ASHENBURG 2007, 263–300.

of private bathing culture in the Hellenistic Eastern Mediterranean. This investigation of domestic baths is part of a larger book project on Greek bathing culture and is largely based on fieldwork³. While a catalog of public bathing facilities can reasonably aim at completeness, such an endeavor is hardly achievable in terms of domestic baths because of the already high and constantly increasing number of excavated houses.

In the following, it will be shown that:

- bathing culture in domestic architecture underwent a significant change in quality in the Hellenistic period with the introduction of new, relaxing bathing forms. While this phenomenon has already been variously recognized⁴, it has not yet been systematically studied for the Eastern Mediterranean world, let alone comparatively for the whole Mediterranean world. Three recent monographs on Greek baths all focus exclusively on public establishments⁵.
- in Hellenistic domestic architecture, the innovative relaxing bathing forms were a prerogative of top-quality houses and could be used for major social events such as the reception of guests.
- in terms of relaxing bathing, customs began to diverge remarkably in different regions of the Mediterranean. At present, three geographical zones with distinctive relaxing bathing habits can be identified: the Northeastern Mediterranean, the Southeastern Mediterranean, and the Western Mediterranean.
- despite the change in quality, there was no general change in the quantity of bathing facilities in Hellenistic houses, both in individual cities and throughout the entire Mediterranean; notwithstanding the equipment with simple cleansing or sophisticated relaxing bathing forms, in most cities bathrooms never became a standard feature, not even in top-quality houses.
- no general conclusions can be drawn concerning the crucial and intriguing relationship between public and private bathing facilities in the Hellenistic period; at best, cautious assessments can be attempted for individual cities and can then be compared.

After a brief summary of domestic bathing standards before the Hellenistic period, an overview of relaxing bathing forms available in Hellenistic domestic architecture will be presented first, and then their distribution and context will be discussed, addressing the following aspects: 1. chronological, geographical, and social distribution of each bathing form⁶; and 2. context, location, accessibility, and use of each bathing form within the houses. It is beyond the scope of this paper to discuss fully other important aspects of these bathing forms such as decoration and technical equipment, or the specific socio-historical context of each site or region. The conclusion includes a comparative assessment of the distribution of relaxing bathing forms in the Mediterranean, a brief quantitative and qualitative evaluation of the general development of bathing culture (including all private bathing facilities, cleansing and relaxing) in this period, and a brief discussion of the relationship between private domestic bathrooms and public bathing facilities.

Domestic Bathing Standards in the Archaic and Classical Periods: Cleansing Bathing Forms

Cross-cultural studies allow for the establishment of a clear hierarchy of ancient domestic bathing forms and their location within the house⁷. A bathing form is defined here as an installation that involved the use of water or a structure that was clearly designed for the process of sweating; in contrast, the many unspecified anterooms, through-rooms, or distributive rooms with possible bench furnishings are not considered as

³ For preliminary results, see TRÜMPER 2006; TRÜMPER 2008, 225–275; and TRÜMPER 2009.

⁴ By scholars who worked on sites that give evidence of this phenomenon, namely Eretria, Delos, Monte Iato, and the Vesuvian area. FABBRICOTTI 1976; BROISE 1991; BROISE 1994; BROISE 2001, 79–91; BROISE 2004, 91–110; DE HAAN 1992; DE HAAN 1993; DE HAAN 1997; DE HAAN 2001; DALCHER 1994, 158 f.; REBER 1998, 137–139; TRÜMPER 1998, 64–67; DICKMANN 1999, 256–267; PAPI 1999; BÜRGE 2001; ISLER 2001.

⁵ They do not go beyond R. GINOUVÉS' assessment of Greek bathing culture in his magisterial monograph of 1962: HOFFMANN 1999; GILL 2004; K. LUTS, *Griekse publieke baden. Chronologische ontwikkeling, typologie en functie* (Licentiaat thesis Leuven 2006). – Unfortunately, G. LADSTÄTTER, *Balaneion. Untersuchungen zur Form, Funktion und Entwicklung der griechischen öffentlichen Badeanlagen vom V. bis in das II./I. Jh. v. Chr.* (Diss. Universität Innsbruck 1993) was never accessible to me, but he also seems to focus on public bath buildings.

⁶ When, in which regions, and in which types of houses they were installed.

⁷ See note 1.

separate bathing forms. The most basic form consisted of basins or vessels that could be placed anywhere in the house and could be used for washing with cold or hot water. These were certainly utilized throughout antiquity in all different cultures and house types⁸. Hip-bathtubs (or sitz-bathtubs) for cleansing shower baths with cold or hot water stand in contrast to these, and constituted a major improvement, because:

1. they provided more comfort, especially when equipped with a seat; 2. the spilling of water when washing the whole body could be better controlled; and 3. water collected in the lower part of the bathtub could be reused several times, a feature that was particularly important for hot water baths (fig. 1). These bathtubs were commonly made of stone or terracotta or were built from different materials (e.g. small stones or fired bricks) and covered with waterproof stucco; they were usually provided with a larger rear part for the upper body and a smaller front part for the legs, which included a hemispheric cavity or basin for collecting and scooping up water. While many bathtubs included fixed seats, others either had no seats or only had seats of perishable material such as wood; although most examples conformed to a standard size of 1.00–1.25 m in length by a maximum of 0.70–0.75 m in width, measurements could range beyond this spectrum⁹. The portability of the monolithic hip-bathtubs is commonly overestimated given their considerable weight and, above all, the shape of their bottom; this was often stepped and required a permanent setting such as insertion into the floor or into a built-up support. Fragments of hip-bathtubs, particularly those made of terracotta, are recorded for numerous sites all over the Mediterranean and many well-preserved examples are visible today in Mediterranean museums (particularly in Sicily and South Italy). This suggests that this bathing form was much more common than is usually assumed. Hip-bathtubs were used from the late 6th c. BC through the Hellenistic period, and in some regions they were even used well into the Roman Imperial period¹⁰.

Those examples found *in situ* reveal a hierarchy of location: hip-bathtubs could be set up in multifunctional rooms that were not necessarily provided with waterproof equipment, a placement seen particularly in small modest houses (fig. 3)¹¹. Alternatively, they were placed into a separate and usually small bathroom with waterproof equipment (fig. 4)¹². These bathrooms were generally provided with one single bathtub; consequently, buildings that included more than one hip-bathtub were identified as public or semi-public edifices such as clubhouses¹³. The advantages of a separate bathroom are manifold: the room can be specifi-

⁸ For different forms of basins in Greek bathing culture, see GINOUVÈS 1962, 51–99.

⁹ ROBINSON – GRAHAM 1938, 200; GINOUVÈS 1962, 29–49; HOFFMANN 1999, 73–76; TRÜMPER 2006, note 20. – While the terms sitz baths and hip baths are used indiscriminately for ancient bathtubs, they are usually differentiated in the later history of bathing; see WRIGHT 2000, 168–171 and EVELEIGH 2002, 66 f.: »... the hip bath in which the bather's hips were immersed in a round or oval basin tapering downwards with a base which tapered outwards for stability and a high rounded back. The lower legs and arms extended somewhat uncomfortably outside the bath, although many had arm rests on the rim. Sitz baths were similar but had a seat in the back and no flared base«. Both bathtub types were popular in 19th c. England; they were small and portable, were typically made of tinned sheet iron or, more rarely, copper, and hardly allowed the experience of total immersion. – Ancient hip-bathtubs without seats probably allowed a slightly deeper immersion than their equivalents with seats, but were certainly less comfortable. The existence of a seat notwithstanding, there is no evidence that the lower legs of the bathers ever extended outside the bathtubs. The few available images of bathers in hip-bathtubs always show them crouched with their legs inside the tub; see GINOUVÈS 1962, figs. 10, 11; M. TRÜMPER, Grobschlächlige Arbeiter oder durchtrainierte Athleten? Zur singulären Darstellung einer Badeszene auf einer spätarchaischen schwarzfigurigen Lekythos, AA 2002, 45–64; U. KREILINGER, Anständige Nacktheit. Körperpflege, Reinigungsriten und das Phänomen weiblicher Nacktheit im archaisch-klassischen Altertum, Tübinger Archäologische Forschungen 2 (Rahden 2007) figs. 249–253, 255, 304.

¹⁰ Particularly in Egypt; see TRÜMPER 2009.

¹¹ See, for example, several houses in Classical Olynthos where bathtubs were found in the corners of large rooms, most of which had earth floors and no plaster: A v 4, room b; A v 5, room c; A vii 5, room c; B ii 3, room without denomination; B vii 2, room h; E.S.H. 6; see ROBINSON – GRAHAM 1938, 199, 204. – See also two small modest houses in Late Hellenistic Delos where terracotta hip-bathtubs were found *in situ*: Maison du Quartier de l'Aphrodision I, room c, which had neither a paved floor nor a drain (here fig. 3), and Maison δ, groupe ε, room XVII which was paved with gneiss slabs; TRÜMPER 1998, 314 f. cat.-no. 88 fig. 56; 316 cat.-no. 90 fig. 58. – Even in the 19th and the early 20th c., bathtubs often were set up not in a separate bathroom, but in other available or convenient rooms such as the kitchen, the bedroom, or even the hallway; EVELEIGH 2002, 61–81 esp. 72 f.; ASHENBURG 2007, 161–227. These bathtubs were portable, however, and could be stored away after use.

¹² See, for example, houses of Olynthos, ROBINSON – GRAHAM 1938, 198–204 (here fig. 4); houses of Kerkouane, FANTAR 1985, 305–358; and houses of Delos, TRÜMPER 1998, 64–67.

¹³ These buildings commonly include additional significant features such as large banquet rooms and a lack of living rooms. See, for example, a recently discovered building in Aigeira from the mid-4th c. BC that is still under excavation; it was probably transformed into a private house around 200 BC when it had only one single hip-bathtub in its bathroom left; G. LADSTÄTTER,

cally designed and equipped for its one single or main purpose; it guarantees privacy, prevents interference with and from other activities and thus allows an individual to take a bath at any time of the day or week; its location can be carefully chosen according to individual needs: while in ancient houses technical aspects such as the availability of and proximity to water, wastewater disposal, and heating largely determined the placement of bathrooms, with the improvement of technology other culturally defined criteria, such as the social context, the convenience for users, and aspects of accessibility and privacy, became prevalent in the choice of appropriate locations¹⁴.

Domestic Bathing Standards in the Hellenistic Period: New Relaxing Bathing Forms

In the Hellenistic period, several alternatives to the still-prevalent simple cleansing bathing forms became available. These were all relaxing and required heat and time; this, in turn, entailed an advanced technology and a certain monetary expense to provide the necessary heat, and an individual, if not a common societal endorsement of leisure, pleasure, and indulgence.

1. Individual bathtubs for immersion baths in warm water (figs. 7. 9): the average size was about 1.40–1.80 m by 0.50–0.70 m, with a depth of about 0.50 m; this conforms to the standard size of modern bathtubs. Operating these bathtubs required a stove to heat a considerable amount of water, a sufficient water supply, and a method of wastewater disposal.

2. Individual bathtubs for immersion baths, heated by a hypocaust system to keep the water warm (figs. 11. 14. 15). A prolonged stay in the heated bathtub was certainly much more comfortable and pleasant than a stay in the first bathing form, but the construction and operation costs of the heated bathtubs were higher, since expenses for more fuel, a *praefurnium*, and a flue system in the bathroom had to be covered.

Usually, both unheated and heated bathtubs could be built of different types of materials (e.g. small stones, fired bricks) and covered with waterproof stucco; both were also set up in bathrooms with waterproof equipment. The bathtubs could be complemented by other pieces of furniture such as basins, braziers, or benches. The decoration of these bathrooms ranged from simple functional pavements and plain waterproof plaster to elaborate mosaic floors and figured wall paintings and stucco decorations.

3. Round sweat baths that were most often heated by external sources such as hot stones or braziers (figs. 5. 20–22. 24. 26); some kind of experimental floor heating with hot water, which clearly differs from the well known hypocaust systems that operated with hot air, can be observed in only two cases. The size of these round sweat baths ranged from a diameter of 1.55 to 4.25 m, but was, on average, 2.40 m. These rooms were provided with one single narrow entrance to minimize the loss of heat, one central opening or several small openings in the roof, as well as simple waterproof stucco and pavement; also, they most likely had benches for seating that were rarely built up and were mostly wooden. Due to the small number and size of the openings, these rooms were certainly quite dark and only poorly ventilated, at least during the sweating process when the doorway was preferably closed with a flexible device such as a curtain. Depending on the amount of water utilized during the sweating process, these rooms could be used for dry sweat baths as well as steam baths. Given their size and the presumably considerable expense of heating them, the sweat baths

Grabung Aigeira, *ÖJh* 72, 2003, 330–332; G. LADSTÄTTER, Grabung Aigeira, *ÖJh* 73, 2004, 388–390; G. LADSTÄTTER, Grabung Aigeira, *ÖJh* 74, 2005, 367 f.; and the Maison N, Îlot III, Quartier du théâtre in Delos, which was originally a private house but was transformed into a public bath or club building with bathing facilities most likely shortly before 88 BC; TRÜMPER 1998, 277–279 cat.-no. 63 fig. 46; TRÜMPER 2006. – The Centaur bath in Corinth was probably also originally a private house that was altered around 320 BC into a club building or semi-public multifunctional building with bathing and banqueting facilities; see CH. K. WILLIAMS II – J. E. FISHER, *Corinth*, 1975: Forum Southwest, *Hesperia* 45, 1976, 99–162 esp. 109–111; CH. K. WILLIAMS II, *Corinth* 1976: Forum Southwest, *Hesperia* 46, 1977, 40–81 esp. 45–53; CH. K. WILLIAMS II – O. H. ZERVOS, *Corinth*, 1990: Southeast corner of Temenos E, *Hesperia* 60, 1991, 1–58 esp. 3 f.; TRÜMPER 2006, note 174.

¹⁴ This was particularly the case in the 19th and early 20th c. when, for example, bathrooms could be moved from a technically motivated ground floor location to upper floors, where they were most often placed next to bedrooms. In modern American houses bathrooms with bathing facilities are commonly located next to bedrooms, on ground and upper floors, while ›half‹ bathrooms with only toilets or water closets are often situated in more ›public‹ areas next to rooms such as the main entrance, the kitchen, the living room, or the family room.

were most likely used collectively, by several persons at a time; this clearly distinguished them from the two previous relaxing bathing forms.

The most expensive of these bathing forms in terms of construction, maintenance, and operation was most likely the individual immersion bathtub with hypocaust that required heating, water supply, and wastewater disposal. Roofing of the round sweat baths might have been challenging and costly, but water was not used in large quantities in these rooms. Although the sweat baths were the only truly collective bathing form of the new relaxing bathing forms, in which people really bathed together, bathrooms with individual immersion bathtubs could also have been used by several people at a time who took turns using the bathtub or waiting and relaxing on benches or stools. These bathrooms most likely granted better illumination, better communication, and better visibility than the small, dark sweat baths.

All these relaxing bathing forms were also established in public bathing facilities of the Hellenistic period, which probably served as models for the new private bathing standard. Public baths, however, additionally included two bathing forms that were more elaborate than the equivalents in domestic facilities: large collective immersion pools heated by hypocausts, which simply could not be installed and operated in a private domestic context because of their size; and collective round sweat baths heated by hypocausts, which were a more sophisticated and costly version of the sweat baths mentioned above¹⁵.

Three hybrids of cleansing and relaxing bathing forms are only mentioned here, but are not further discussed. The first are simple small hip-bathtubs that were heated by a hypocaust system or by a heating wall system next to the stove for the boiling of the water, where hot gases circulated from the stove behind one wall of a room to the flue. Examples were found in two houses at Eretria, in a presumably private bathroom in Delphi, and in several small public baths in Egypt¹⁶. Although the additional heat provided by these devices would certainly have made the bathing experience more pleasant, nevertheless, a bath in a small hip-bathtub can hardly be considered truly relaxing. Second, some hip-bathtubs were partially closed on top so that only the bather's head and shoulders would have been seen (fig. 2). These bathtubs allowed for the use of more water than the common open hip-bathtubs and thus probably allowed for immersion baths, and they also kept the warmth; but they were not sufficiently closed to allow for steam or vapor baths. Most of the few known examples of this bathtub type were not any larger than open hip-bathtubs; consequently, they were not more comfortable than open hip-bathtubs and thus were still inappropriate for really pleasant relaxing baths¹⁷. The third is an example that is currently unique; it comes from the large peristyle house of Tel Anafa (LHSB, third or fourth quarter of the 2nd c. BC), a building that included an extended bath suite with three rooms in

¹⁵ For these see in detail TRÜMPER 2008, 258–274; TRÜMPER 2009.

¹⁶ Eretria: house IA, room m, and house IB, room A (after 198 BC); see REBER 1998, 47 f. 55–57. 137–139. – Delphi: isolated private (?) bathroom (3rd/2nd c. BC); see R. GINOUVÈS, Une salle de bains hellénistique à Delphes, BCH 76, 1952, 541–561. – Egypt: small bath in Edfou (end of 1st c. AD? or earlier); see B. BRUYÈRE – J. MANTEUFEL – K. MICHALOWSKI – J. SAINTE FARE GARNOT, Tell Edfou 1937, Fouilles Franco-Polonoises 1 (Cairo 1937) 65–82; A. EL-KHASHAB, Ptolemaic and Roman Baths of Kom el Ahmar, ASAE Suppl. 10 (Cairo 1949) 31 f.; J. SCHWARTZ – H. WILD, Fouilles Franco-Suissees. Rapports I, Qasr-Qarun/Dionysias 1948 (Cairo 1950) 62 note 1 pl. 15; GINOUVÈS 1962, 180 note 9; and small South Bath of Tebtynis (1st c. BC); see G. HADJI-MINAGLOU, L' établissement thermal de Tebtynis (Fayoum), in: BOUSSAC – FOURNET – REDON 2009, 181–190.

¹⁷ GINOUVÈS 1962, 44 f. figs. 25–26: three examples from Thera (today at an unknown location in Athens: 0.95 × 0.46 m, 0.60 m deep), Marseille (Musée Borély: 0.90 × 0.65 m), and Agrigento (Palermo, Archaeological Museum: 1.54 × 0.64 m, 0.71 m deep) are listed; a fourth example was probably found in a house in Lousoi, see V. MITSOPOULOS-LEON, Lousoi 1990–1991, ÖJh 61, 1991/1992, 25–29 esp. 27 fig. 3 (no measurements are given, but it is mentioned that it was smaller than the common open hip-bathtub found in an adjacent house). – BROISE – LAFON 2001, 85 notes 100–101 fig. 141 cite four more examples: one from a house in Monte Iato (without references); one from the House of the birds in Cosa (southeast corner of room 3, Augustan period; no measurements are given for the restored bathtub, but it clearly differs in form and depth from the other examples; see V. J. BRUNO – R. T. SCOTT, The Houses, Cosa 4 [Philadelphia 1993] 39. 180 f. pls. 19–21); one from a shipwreck that was found in the vicinity of Marseille (second quarter of 2nd c. BC, no measurements are given); and one from a building in Castiglione di Paludi (second half of 3rd c. BC, no measurements are given). The examples from Cosa and Lousoi are the only ones whose context is known. Their integration in ›ordinary‹ houses speaks against a specific function such as the use for medical purposes, as cautiously proposed by GINOUVÈS 1962, 45 for one of the parallels. The Augustan date of the example from Cosa shows that the use of this bathtub type was not confined to the Hellenistic period. – For modern parallels that are called slipper bath, boot bath, or sabot and which were particularly known, though never really popular, in 18th/19th c. France, see WRIGHT 2000, 172 f.; ASHENBURG 2007, 147. – For various models of portable one-man vapor and steam baths that were invented in the 19th c., see WRIGHT 200, 160–164: these were all hermetically closed so that only the head of the occupant stuck out.

its eastern wing (fig. 6): an anteroom (17) with an *opus tessellatum* mosaic, stucco decoration in masonry style, and a drain; the bathroom proper (16) with a similarly elaborate decoration, a large plaster basin (2 × 3.2 m), and a drain; and the service room (15) with two heating installations, which probably functioned as a heating room for both the bath and the kitchen at the same time. The central room (16) was provided with a simple hypocaust installation under the floor of the entire room, heated from an installation in the northwest corner of the service room (15). The heated basin was only 0.03 to 0.13 m deep, however, and thus »must have served as a place for the bather to stand and have water poured rather than as a bath tub«¹⁸. Given the size, lavish decoration, and comparatively advanced hypocaust system of this bathing suite, the single bathing form of a heated basin for simple (but possibly collective) shower-baths or ablutions seems astonishing and cannot be classified or further evaluated due to the lack of parallels¹⁹.

Distribution and Context of Relaxing Bathing Forms in Hellenistic Domestic Architecture

When both the distribution and context of the three relaxing bathing forms in Hellenistic domestic architecture are analyzed, the following picture emerges.

Evidence for the first type, individual immersion bathtubs, is provided by a few examples in Egypt, several Hasmonean and Herodian palaces in Palestine, and some villas in Italy. The barely published Egyptian examples cannot be fully assessed, as their precise date and context are unknown; furthermore, it is particularly difficult to distinguish between domestic baths and the small public baths that are idiosyncratic to this region²⁰. The baths that are identified here as domestic facilities all contain one hip-bathtub and one immersion bathtub, and thus combine the traditional cleansing bathing form with an innovative relaxing bathing form (fig. 7). Nothing is known about their accessibility, the location in the house, the water management, or decoration²¹.

¹⁸ HERBERT 1994, 17 notes 36–37. 62–71 esp. 68.

¹⁹ The pavements of the northern half of room 16 and of the basin were on almost the same level, and the partition wall between room and basin was interrupted in the west for an access to the basin that was paved at the same level as the room and basin (see HERBERT 1994, balk 30 pls. 35. 38. 40B); this shows that the basin never could have held larger amounts of water for immersion baths; the southeast corner of the basin was pierced by a lead pipe, however, whose function is not explained in the publication (HERBERT 1994, 68), but which most likely served for the adduction of water. These inconsistencies cannot be explained here. It can only be cautiously assumed that, despite the luxurious decoration, this room was probably conceived as some kind of sweat or steam bath with facilities for ablutions. – HERBERT 1994, 17 notes 36–37 compares this unusual bath suite to examples from »the 2nd c. BC Graeco-Bactrian site at Ai Khanoum in Afghanistan and 4th to 3rd c. BC Punic houses in North Africa and Sicily«, and more precisely in note 37 to the sites of Kerkouane and Monte Iato (Peristyle house 1); Hellenized Phoenicians from Tyre could have built this house with its peculiar bath suite. The comparisons are not entirely convincing, however, because the bathing facilities in Punic houses usually consist of one single small room with a hip-bathtub (see, for example, Selinunt, Kerkouane) and also are earlier (4th/3rd c. BC); for the bathing suite in Peristyle house 1 of Monte Iato, see below; the best comparison is probably the large bath suite in the palace of Ai Khanoum, which was equipped with drains and a kind of pebble mosaic, but where no traces of a clearly identifiable bathing form were found: it included an anteroom (74) with a figurative pebble mosaic and a heating device (vaulted niche); the bathroom proper (65) with a waterproof pavement of stone slabs, drain, and heating device (vaulted niche); and a service room (66) with a waterproof pavement of stone slabs and three small ovens in vaulted niches, one of them for the heating of water; see P. BERNARD, Campagne de fouilles 1974 à Ai Khanoum (Afghanistan), CRAI 1975, 167–197 esp. 173–180 who assumes (p. 175) that »Le bain se pratiquait donc de la façon la plus rudimentaire, par simple aspersion«. In contrast to this, NIELSEN 1994, 125–127. 232 note 234 proposes that portable bathtubs might have been set up in this suite. For other similarly designed bath suites in the palace area of Ai Khanoum, see P. BERNARD, Campagne de fouilles 1975 à Ai Khanoum (Afghanistan), CRAI 1976, 287–322 esp. 291 f. (rooms 95. 98. 99); HOFFMANN 1999, 23 f. 105–108 cat.-no. 4.

²⁰ For this problem and a list of small baths, see TRÜMPER 2009, 149 notes 36. 37 table 5.

Small baths can be identified by their accessibility and architectural-urban context, and usually have more than one hip-bathtub, but their combination of immersion and hip-bathtubs is also a characteristic of some domestic baths as well as several large public baths.

²¹ Examples: Borg el-Ramleh: E. BRECCIA, Di alcuni bagni nei dintorni d'Alessandria, BSAA 19, 1923, 142–151 esp. 147 pl. 16, 2; Kom Trougah: A. EL-KHASHAB, Les Hammams du Kom Trougah, ASAE 54, 1956, 119–140; A. BERNARD, Le Delta égyptien d'après les textes grecs 1. Les confins libyques, MIFAO 91 (Cairo 1970) 888–891. Tabiet el-Ramleh: P. GALLO, Un bain à la grecque dans l'île de Nelson, in: BOUSSAC – FOURNET – REDON 2009, 69 fig. 2. Whether one of the many baths that were identified in Hermopolis Magna (e.g. the bath in F11) belongs to this category must remain open, because only one of them (a public bath) survives today, while three others were recently identified as vats used for some industrial activity: H. BALCZ – K. BITTEL

Most of the Hasmonean palaces in Jericho and Herod's first palace in Masada (Western palace) were provided with extended bath suites that included an anteroom, a Jewish ritual bath (stepped cold water pool; *mikveh*), a bathroom with an unheated immersion bathtub, and facilities to heat water for the bathtubs. These suites always formed separate units that were mostly included in residential buildings and accessible from the central courtyard of these buildings. Their design and equipment are recognized as a negotiation between two different cultures, the Greek-Hellenistic and the Jewish²². These palaces, which also stand out because of their large recreational swimming pools, provide the best-preserved and best-known evidence of bathing facilities in Hellenistic royal palaces; they are among the latest examples of this category, however, and thus cannot claim a pioneering role in the development of private domestic and palatial bathing culture.

Bath suites with unheated immersion bathtubs are also found in some Italian villas, such as the Villa Prato at Sperlonga whose construction is dated to the second half of the 2nd c. BC (figs. 8. 9). Its richly decorated bathing suite comprised an anteroom with a *labrum* and a basin that was most likely installed subsequently, and a room with an immersion bathtub and a narrow hip-bathtub that was closed at the front. The bathing program, that is the sequence of the four different bathing facilities and the temperature of the water used in them, cannot be safely reconstructed; it seems likely, however, that the large bathtub was used for immersion in warm water, the partially closed ›hip-bathtub‹ for cleansing baths with warm water, the basin in the anteroom for brief immersions in or ablutions with cold water, and the *labrum* for washing with cold or warm water. The bath suite was situated in the *pars urbana* of the Villa, accessible from a service courtyard but located in the vicinity of a *triclinium*²³. It has much in common with slightly more sophisticated later western equivalents from the 1st c. BC, whose main bathing form was always an immersion bathtub heated by a hypocaust; the lack of an elaborate heating system and the existence of a simple ›hip-bathtub‹ for cleansing baths in the Prato bath probably go back to its early construction date in the second half of the 2nd c. BC²⁴.

– A. NÖLDEKE – G. ROEDER, *Deutsche Hermopolis-Expedition 1931–1932*, MDIK 3, 1932, 1–45 esp. 3 f.; G. ROEDER, *Hermopolis 1929–1939 Ausgrabungen der Deutschen Hermopolis-Expedition in Hermopolis, Ober-Ägypten* (Hildesheim 1959) 128–132; D. M. BAILEY, *Hermopolis Magna: Buildings of the Roman period, Excavations at El-Ashmunein 4* (London 1991) 54 f. – In the following, the only bathing facilities that are discussed in more detail are those that are hardly published or known, or whose interpretation requires further comment.

²² E. NETZER, *Die Paläste der Hasmonäer und Herodes' des Großen* (Mainz 1999) 10. 24 f. 30 f. 77. 79 figs. 11. 32. 33. 40: such bath suites were installed in the first Hasmonean palace, built by John Hyrcanus I (end of 2nd c. BC); the twin palaces built by Alexandra Salome (shortly after 80 BC); to the west of the swimming pool complex built by Alexander Jannaeus (added between c. 60 and 31 BC; the only one not included in a residential building); and in the Western palace in Masada (first Herodian building phase). The ›Roman‹-style bath suites in Herod's later palaces are not considered here.

²³ BROISE – LAFON 2001, 79–91 and BROISE 2004, 95–98 who reconstruct a bathing program that differs from the one proposed here: the anteroom as *tepidarium* (or ›bain de propreté‹) with a basin (0.70 × 0.96 m, 0.70 deep; variously described as ›baignoire en maçonnerie‹ [BROISE – LAFON 2001, 83] or ›vasque en terre cuite‹ [BROISE 2004, 95]) that would have been comparable to hip-bathtubs and would have served for cleansing baths in warm water and a *labrum* for ablutions with cold or warm water; the second room as *caldarium* (or ›bain de délassement‹) with an immersion bathtub (1.35–1.55 × 0.48–0.52 m, 0.50 m deep) for relaxing baths and a ›baignoire-botte‹ (0.65 × 0.22–0.44 m, 0.67 m deep) serving as ›pédiluve‹ (foot bath) for ablutions while standing upright. This is not convincing for several reasons: the complex and costly form of a closed hip-bathtub or ›boot bath‹ would hardly have been chosen simply for a foot bath; instead, (small or slim?) bathers must have sat down in it while taking a warm bath, either in addition to or as a substitute for an immersion bath in the adjacent bathtub. The basin in the anteroom most likely had a different function from the two bathtubs in the second room, and it might have been added to complete and modernize the bathing program by giving it a cold water facility. Its date is not discussed by Broise and Lafon, but its entrance step, built and covered with *opus signinum*, was set just on top of the continuously laid out *opus signinum* floor of the room; the ›empreintes (of its walls, note of author) laissées sur l'enduit mural‹ (BROISE – LAFON 2001, 83 figs. 128. 133) clearly disturbed the *opus signinum* pattern of the walls of the room; the *labrum* of unknown material was also set onto the *opus signinum* floor and might well have been a later addition; cf. in contrast the *labrum* in the public bath of Musarna, which was included in the design of the pavement and consequently belonged to the original plan; BROISE 2004, 80 f. figs. 111. 112.

²⁴ For the later equivalents, see below note 26; the Villa Prato was abandoned as a villa around 50–40 BC (BROISE – LAFON 2001, 164–169), and thus most likely before the need to further modernize its bath suite could have arisen. – An isolated room with a single unheated immersion bathtub, decorated in a similar way to the equivalent one in the Villa Prato, was found in Ciampino; it might have belonged to the bath suite of a rich private villa; see BROISE 2004, 100 note 117 fig. 136. – FABBRICOTTI 1976, 33–39 lists six examples of simple bath suites (allegedly ›di scopo terapeutico ed igienico‹) without hypocausts in five villas and one house of the Vesuvian area; however, only one of them gives safe evidence of an immersion bathtub: Villa rustica in località Centopiedi, FABBRICOTTI 1976, 35 fig. 2.

Since the unheated immersion bathtub was the simplest and cheapest way to have a relaxing bath, it is not surprising that it was adopted in so many different cultural contexts and was easily integrated into a specific locally determined setting. It is perhaps rather noteworthy that there are not many more examples of this bathing form²⁵.

In the Hellenistic period the second relaxing bathing form, heated individual immersion bathtubs, was exclusively established in the Western Mediterranean. The earliest examples from the 2nd c. BC can safely be identified in Peristyle house 1 of Monte Iato and the House of the arched cistern in Morgantina; in contrast, the date and exact reconstruction of the large bath suite in the peristyle building of Tolve di Moltone are insecure. The numerous examples in the Vesuvian area and other regions of Italy are commonly dated to a slightly later period, namely the 1st c. BC and 1st c. AD²⁶.

The bath suite of Peristyle house 1 in Monte Iato was added to the dwelling around 200 BC and included an anteroom (22), a bathroom (21) with a heated immersion bathtub, and a separate service room with *prae-furnium* (20) (figs. 10, 11). It is located at the intersection between the peristyle courtyard section and the service section that was added subsequently. The circulation pattern of the bath suite changed several times, but the bathing room (21) was originally accessible from the peristyle courtyard via the anteroom (22) and from room 18 via a small corridor in room 20. The very well-planned double accessibility of the bathroom is unusual and requires an explanation, the more so because it would have affected the climate of this room, making it more difficult to keep it warm. The two doors between rooms 18 and 20, the *opus signinum* pavement in the eastern half of room 20, and the elaborately made arched doorway between rooms 20 and 21 all suggest that the latter door was not just a secondary entrance through which servants brought in hot water for the bath. Instead, both doors to the bathroom must have been established for the bathers, probably to regulate the traffic in some kind of one-way system that included the use of rooms 22 and 18 before and after the bath, or to separate different groups of bathers (e.g., men and women); these groups could have undressed, waited, and relaxed separately in rooms 18 and 22, but both would have used the bathroom, perhaps at different times²⁷.

The bathtub of the House of the arched cistern in Morgantina was inserted into room 3 when the large double courtyard house was remodeled and subdivided after 211 BC (figs. 12–15)²⁸. During this process the unusually large room 3 was probably subdivided and provided with two doors opening onto the peristyle courtyard and the richly decorated corridor 2, respectively; the currently visible thin partition wall that changes orientation twice to create a kind of narrow entrance corridor for the bathroom proper probably goes back to another, later remodeling, however, because it does not correspond to the pavements in room 3²⁹. Thus the

²⁵ Handbooks on Greek or ancient bathing culture starting in the Bronze Age always refer to large, often portable immersion bathtubs in various Minoan and Mycenaean palaces; see GINOUVÈS 1962, figs. 5–7; M. WEBER, *Antike Badekultur* (Munich 1996) 18 f. 22 figs. 7–8, 14; HOFFMANN 1999, 52 f.; however, there is no evidence that these bathtubs were continuously and widely used from the Bronze Age through the Hellenistic period.

²⁶ For the Vesuvian area, see FABBRICOTTI 1976; DE HAAN 1992; DE HAAN 1993; DE HAAN 1997; DE HAAN 2001; DICKMANN 1999, 256–267. For a bath suite in the Casa del Criptoportico in Vulci, see BROISE 2004, 101–105 with earlier literature; for private baths in Rome, see PAPI 1999.

²⁷ DALCHER 1994, 35–40 discusses neither the possible significance of the double access, nor that of the continuous changes in accessibility and the circulation system. The door between rooms 20 and 21 might have served as a service door, too, because it is not entirely clear how the bathtub was filled with water in its various phases. Although the partition wall between rooms 20 and 21 gives evidence of several niches and water adductions, none of these is located directly above the bathtub; this is astonishing, because in comparison to other Hellenistic and late Republican heating installations one would have expected a boiler over the *prae-furnium* with direct connection to the bathtub; the niche in room 20 that is located above and slightly to the east of the arched opening of the *prae-furnium* includes a stone for pouring water, although this is oriented towards the east and not towards the bathtub in the west.

²⁸ TSAKIRGIS 1984, 125–151. From the beginning the southern section of the house, in which the bathroom is located, was the larger and better appointed part of the house; it remained so after the subdivision of the house.

²⁹ The southern half of room 3 (TSAKIRGIS 1984, 248 note 50: 5.20 × 3.10 m; B. TSAKIRGIS, *The Decorated Pavements of Morgantina*. 1. The Mosaics, *AJA* 93, 1989, 395–416 esp. 402 fig. 17) was paved with basalt slabs right in front of the bathtub and otherwise was paved with white *opus tessellatum* mosaic; the northern half (TSAKIRGIS 1984, 248 note 50: 3.50 × 3.10 m) was provided with *opus signinum* (mentioned in TSAKIRGIS 1984, 133, but not in TSAKIRGIS 1990, 429 f.); the boundary between the two pavement types sits directly to the north of the doorway between rooms 2 and 3 (here fig. 13). The visible partition wall most likely substituted for or complemented an earlier wall that was located between the two floor types; the easternmost part of this wall (right next to the doorway between rooms 2 and 3) is probably preserved. It must remain an open question whether the northern part of room 3 had any connection to its southern part, serving, for example, as an anteroom. The different width of the

bathroom was remotely located, but was still in the immediate vicinity of lavishly decorated reception rooms (1 and 4). It was equipped with a relatively small bathtub (1.29 × 0.67 m, depth unknown) that seems to have been inserted into the original south façade of room 3. At the same time, the south wall was enlarged, or rather doubled, to accommodate a heating installation for the bathtub. Several lava stones in the outer face of this wall frame an opening of 0.57 m in width that served to heat the bathtub and was later blocked (fig. 14); a terracotta pipe set up vertically in the southeast wall of the bathtub massif functioned most likely as a flue (fig. 15)³⁰. The room to the south, which was obviously never fully excavated, was perhaps added for the bathroom and served as a *praefurnium*. Although the bath suite in Morgantina was probably not provided with an anteroom like its equivalent in Monte Iato, the bathing room proper was larger (ca. 8.70 × 3.10 m or, subdivided, 2.80–5.20 × 3.10 m, as opposed to 3.10 × 3.10 m) and would easily have provided enough space for various activities connected with the bathing process, such as undressing, waiting, relaxing, and performing additional ablutions and washings. Both Sicilian bath suites were added subsequently in the 2nd c. BC to houses of the 3rd c. BC and were then transformed several times, and in both the elaborate hypocaust system – and this is significant – was given up in the last period of use; it was probably too expensive, too difficult to maintain, and was considered a luxury that could easily be dispensed with since the bathtubs could still be used as simpler unheated versions.

The bath suite of a rural building in Tolve di Moltone included three or four rooms arranged in a row (figs. 16, 17): from north to south, a small room (29), which was probably equipped with a pavement of terracotta slabs and a flue and therefore might have comprised a heating installation; the bathroom proper (21) with an *opus signinum* floor, a small reservoir, and a large hip-bathtub made of mortar; and another room (22, »apodyterium«) with *opus signinum* floor, connected in the south with »due vasce piatte, con funzione di raccolta delle acque, smaltite all'esterno mediante un tratto della canaletta di prima fase, rinvenuta sotto le strutture murarie del bagno« (23, 24)³¹. The bath suite was accessible either through a separate corridor (20) that led directly from the peristyle courtyard to the bathroom (21), or through the large room 15 which was served by corridor 20; both the corridor and (parts of?) room 15 were paved with *opus signinum*³². The bathing complex

two doors to room 3 (0.60 m versus 1.00 m) with the narrower one leading to the bathroom proper further speaks in favor of the idea that the room was subdivided when the bathtub was installed. The construction with four terracotta tiles on the north wall of room 3 would have been inconveniently located to heat water for the bathtub, as had been presumed by TSAKIRGIS 1984, 133; it might instead have been used to heat something (food?) for the lavishly decorated room 4, the more so because it is placed right next to the doorway between rooms 3 and 4. The new, still-visible partition wall in room 3 might have been installed for various reasons: to create some kind of vestibule for the bathroom, in order to grant more privacy and to better maintain the warmth; possibly just to subdivide the southern part into a bathing and a service section for heating water when the hypocaust heating of the bathtub was given up; or to gain a separate area for undressing, waiting and relaxing. In these scenarios, the old and the new partition walls must have coexisted and the new partition wall must have included a doorway. Alternatively, the old partition wall could have been displaced to enlarge the northern part of room 3 for an unknown purpose. In connection with this process, the mosaic floor in front of the doorway between rooms 2 and 3 was crudely covered with terracotta slabs.

³⁰ This was not recognized by TSAKIRGIS 1984, 132 f. or BROISE 1994, 27 note 27; TSAKIRGIS 1984, 383 mentions that »the late water system, made of lead pipes, fed into the basin (the immersion bathtub, *note of author*) at the south end of the room...«; these lead pipes are no longer visible. She also assumes that »the shallow basin (...) built of bricks and rubble (...) may once have supported some sort of terracotta tub or basin«. In this case the bathtub proper could have been larger than the currently visible opening which then served only for the circulation of hot air.

³¹ SOPPELSA 1991, 92 (citation). 119 f. fig. 4. – RUSSO TAGLIENTE 1992, 173–181. 269 f. with slightly different description and interpretation: room 29 as »piccolo ambiente con, al centro, una vasca, fornito di canaletta per il deflusso delle acque«; room 22 »a pianta quadrata con uno stretto e lungo ambiente interamente occupato da una vasca intonacata in rossa e collegata, attraverso un canale, con un'altra vasca ortogonale«. – See also RUSSO 1992/1993, 39–42; DALCHER 1994, 140 f. note 295; 159. – No detailed descriptions, plans, or photos of this bath suite are published with the exception of one single color photo in RUSSO 1992/1993, fig. 67, which shows only rooms 20–22 and 29 (here fig. 17). Some time after the excavation the bath was covered with a protective roof and its rooms were half-filled with sand so that the installations cannot be fully examined (state when visiting the site in 2003).

³² No entrance doors to the bath suite are indicated on any of the published plans, SOPPELSA 1991, fig. 4; RUSSO TAGLIENTE 1992, fig. 108; RUSSO 1992/1993, fig. 66. Today there is a door between corridor 20 and room 21, but the photo RUSSO 1992/1993, fig. 67 shows stucco on the walls on both sides of this »door«, such that there could not have been a doorway, at least not in the last stage of use of this building. The wall between rooms 15 and 22 is barely preserved and is not fully visible in this photo. Access through room 15 seems preferable, insofar as room 22 then could have functioned as distributive space (»apodyterium«), serving both the cleansing bathing section to the north and the relaxing bathing section to the south. The function of the large room 15 would then remain to be determined.

was added to the peristyle complex during or more likely after its second building phase, probably some time during the 3rd c. BC or even later. The interpretation of the bathing program cited above is not entirely convincing, however, because the surprisingly large and differentiated complex would have provided only one single simple bathing form, namely the hip-bathtub; furthermore, the two large pools seem disproportionate to serve only for the collection of water from simple shower-baths in a single hip-bath³³. Instead, it seems much more likely that the large eastern ›pool‹ (23), paved with *opus signinum* like the two bathing rooms (21, 22) and equipped with a small basin (foot bath?) in the south, served as an anteroom and access to the western ›pool‹ (24), which was a large immersion bathtub. The precise reconstruction (with or without hypocaust?) and date of this immersion bathtub currently cannot safely be determined³⁴. It is only certain that this rural dwelling was subsequently provided with an extended sophisticated bath suite with a relaxing bathing form some time during the 3rd c. BC (which would be astonishingly early) or, more likely, in the 2nd c. BC.

The many domestic bath suites in the Vesuvian area need not be discussed here in full detail, as they have been recently examined by several scholars³⁵. Most of the 35 bath suites in Pompeii comprised only two rooms: an anteroom and a bathroom with a heated immersion bathtub and a *labrum* that possibly contained cold water for ablutions. A few bath suites were more extended and included additional rooms such as round sweat baths (see below) and *ambulacra* in the form of small colonnaded courtyards for agreeable sojourns and walks (fig. 18)³⁶. Most of these baths, small and large ones alike, were built in a location similar to that of

³³ The plan SOPPELSA 1991, fig. 4 and the photo RUSSO 1992/1993, fig. 67 show a drain made of terracotta tubes that emerges from under the west wall of room 21; according to SOPPELSA 1991, 120 note 15, this drain belonged to the first building phase, but was reused in the third phase to evacuate the wastewater of the bath. Consequently, the source of the water that was then collected in the two ›vasche piatte‹, 23 and 24, is even more uncertain.

³⁴ The dimensions of the entire structure 24 are 1.00 m east-west × 2.80 m north-south, but its north wall is missing, and in the south a small section of 0.50–0.60 m width is partitioned off; therefore the north-south extension of the bathtub was originally probably ca. 1.80 m. Next to the east and west walls of this structure, made of rubble, are thin walls of fired brick (ca. 0.40 m wide) that flank a narrow channel (ca. 0.20 m wide), made of terracotta. The brick casing would suggest a heating system, but the channel seems more appropriate for water than for hot air and also seems to have been directly connected to the *opus signinum* floor in room 22; furthermore, this channel continues in the separate section to the south of the structure, where it meets a drain emerging from the eastern ›pool‹/ room (23) and leads to the west, out of the building. Also, there is currently no evidence of a *praefurnium* (which one would expect in the south or west of structure 24) or a flue (to be expected in the north or the northwest or southwest corner of 24). The pavement of the eastern ›pool‹/ room (23) has a gap of c. 1.50 × 1.00 m along its south wall where a small basin, drained off to the west (see above), might have been; this basin could have served as a foot bath or for simple washings before entering the immersion bathtub. A similar combination of immersion pool and small basin is found in several public bath buildings, for example the baths of Megara Hyblaea (rooms h and i) and Syracuse (without numbers); see G. CULTRERA, *Siracusa. Rovine di un antico stabilimento idraulico in contrada Zappalà*, NSc 1938, 261–301; VALLET – VILLARD – AUBERSON 1983, 49–60; J. DELAINE, *Some Observations on the Transition from Greek to Roman Baths in Hellenistic Italy*, *MedA* 2, 1989, 111–125 esp. 116 f.; BROISE 1994, 17–23. – Even if room 29 had once served for heating purposes, it hardly could have functioned as a *praefurnium* for the immersion bathtub (24). Today, this room has no west wall and no connection to room 21; it only has a kind of platform covered with terracotta slabs in its center, which includes a short, horizontally placed terracotta tube leading outwards to the west; a second terracotta tube is preserved in the northeast corner; according to the plan SOPPELSA 1991, fig. 4, a drain emerged from the northwest corner of this room. The function of this room and its relation to the bath suite remain unknown.

The date of the bath suite is debated: while SOPPELSA 1991, 92 attributes its construction to the third building phase, dated by her to the first half of the 3rd c. BC, RUSSO TAGLIENTE 1992 and RUSSO 1992/1993 vote for the second building phase which in these publications is also dated to the first half of the 3rd c. BC; according to these publications, some elements would indicate that the building was not abandoned at the end of the 3rd c. BC, as assumed by the excavators, but was still used in the 2nd c. BC. While the bathing suite, extending as a separate body beyond the western boundary of the peristyle complex, certainly does not belong to the second building phase when a simple rectangular courtyard building was transformed into a square peristyle building, it could have been added at any time after the second phase, and, depending on its bathing standard, was most likely added much later.

³⁵ See above note 26. DE HAAN 1997, 226 and DICKMANN 1999, 256 note 4 give lists of baths that differ considerably; they add up to 35 safely identified baths. – The spread of such bath suites in the Roman Imperial period cannot be discussed here; they were then also established in the Eastern Mediterranean, even in conservative areas such as Egypt; see e.g. two bathrooms with hypocaust systems under the entire room, including an immersion bathtub, which were both added subsequently (before the mid-2nd c. AD) to houses of the mid-1st to the mid-2nd c. AD in Medinet Habu (in B3 and B5); U. HÖLSCHER, *The Excavation of Medinet Habu. Post-Ramessid Remains 5* (Chicago 1954) 37 f. figs. 38–41 pl. 25a. b; TRÜMPER, 2009, 159 note 83.

³⁶ DE HAAN 1997, 226 lists only six examples in this category, but other bath suites like the ones of the Casa del Marinaio (VII 15, 1. 2. 15) and the Casa di Giuseppe II (VIII 2, 8. 39) also belong to this group because they originally included *laconica*. One might add the barely known bath suite in the Villa of Fannius Synistor at Boscoreale, not mentioned by FABBRICOTTI, DE HAAN, and DICKMANN, that comprised at least a *laconicum*, and possibly further bathing rooms on a small colonnaded courtyard;

the bath suite of Monte Iato: next to the service section, particularly the kitchen, in order to facilitate heating and water supply, but still directly accessible from the peristyle courtyard or reception area of the house.

All baths with heated immersion bathtubs belong to upscale domestic dwellings³⁷, and were often added subsequently. Although most of the bath suites had only one single bathing form, they could still be used by several persons at a time; these people waited and reposed in the anterooms or the bathroom proper or took ablutions in the *labra*.

Evidence for the third relaxing bathing form, the round sweat bath, is provided by sites in the Northeastern and the Western Mediterranean, where this bathing form was built in the 2nd and 1st c. BC; two tables (tab. 1. 2) list sweat baths identified both in previous literature and here two tables list sweat baths identified both in previous literature and here and include: 14 examples for the West (tab. 1), two of which cannot be safely identified (marked in italics in tab. 1), however, and one of which is in a clubhouse (marked in bold in tab. 1); and six examples in the East (tab. 2), one of which is also in a clubhouse-complex (marked in bold in tab. 2)³⁸. While the earliest bath suites with this innovative bathing form focused almost exclusively on the sweat bath, in later examples the sweat bath was always an addition to the standard program of anteroom and bathroom with heated immersion bathtub. The earliest safely identified examples from the 2nd and early 1st c. BC are provided by buildings in Delos, Rhodes, and Thera in the East, and by dwellings in Monte Iato, Morgantina, Solunto, and Pompeii (Villa dei Misteri) in the West (tab. 1. 2). Almost all of them were provided with an anteroom that had waterproof equipment³⁹.

The most elaborate and unusual example was installed in a peristyle house in the quarter of the theater in Delos (figs. 19–22)⁴⁰. It was at least partially heated by hot water that flowed from a cauldron in a niche through a terracotta pipe below the floor. In addition, it had a built-in basin that could be filled with water from an adjacent corridor (figs. 21. 22); this water was then led through an opening directly into the sweat room where it was most likely used for cold ablutions after the sweating process. The sweat bath was part of a larger complex with anteroom and latrine; both the anteroom and the latrine were accessible from the peristyle courtyard, but through separate entrances.

The bath suite in the Casa a vano circolare in Solunto included a large room (n) with a bench, the sweat bath (p), and an anteroom to the latter (o) (figs. 23. 24). Located on the highest terrace of this multi-level house, it was accessible via a staircase from the northern portico of the peristyle courtyard (c) that also gave access to two large and richly decorated rooms. The functions of the rooms (l and m) that are adjacent to the bath suite on the highest terrace are unknown⁴¹.

see F. BARNABEI, La Villa Pompeiana di P. Fannio Sinistore scoperta presso Boscoreale (Rome 1901) 17 f. pl. 2; M. L. ANDERSON, Pompeian Frescoes in the Metropolitan Museum of Art, Bulletin of the Metropolitan Museum of Art 45, 1987/1988, 1–56 esp. 16; M. TORELLI, The frescoes of the great hall of the Villa at Boscoreale. Iconography and Politics, in: D. BRAUND – CHR. GILL (eds.), Myth, History and Culture in Republican Rome. Studies in Honour of T. P. WISEMAN (Exeter 2003) 217–256 esp. 221; and in more detail TRÜMPER 2008, 267 note 1356.

³⁷ Peristyle houses, *atrium*-peristyle houses, and villas.

³⁸ For a more detailed discussion of sweat baths, and especially of problematic examples, see TRÜMPER 2008, 265–281. – Rectangular sweat rooms also existed in the Hellenistic period, but the round form was clearly preferable for climatic reasons; furthermore, conclusive evidence in the form of heating devices has so far been provided only for round rooms, and not for rectangular ones, with the exception of a unique bath building in Fregellae: there, the small rectangular room 15 was established in the 2nd c. BC (second phase of the bath) as a sweat room with hypocaust; see V. TSIOLIS, Las termas de Fregellae. Arquitectura, tecnología y cultura balnear en el Lacio durante los siglos III y II a. C., Cuadernos de prehistoria y arqueología 27, 2001, 85–114 esp. 91; V. TSIOLIS, Fregellae: Il complesso termale e le origini degli edifici balneari urbani nel mondo romano, in: M. OSANNA – M. TORELLI (eds.), Sicilia ellenistica, consuetudo italica. Alle origini dell'architettura ellenistica d'occidente (Pisa 2006) 243–255 esp. 248–250 fig. 8. In addition, two rectangular sweat rooms were recognized in sports facilities (Delos: Gymnasium, rooms D/E, and Palestre du lac, room E1; both vaulted) and another example was identified in a domestic context (Delos: Maison des sceaux, room π); see TRÜMPER 2005, 344 f. M. TRÜMPER, Die Maison des sceaux in Delos – Ein ›versiegelter‹ Fundkomplex? Untersuchungen zur Aussagekraft und Interpretation der Funde eines durch Brand zerstörten hellenistischen Wohnhauses, AM 120, 2005, 344 f.; TRÜMPER 2008, 251–255; TRÜMPER 2009, 144 note 16.

³⁹ With the possible exceptions of the baths in Peristyle house E2 in Monte Iato and the Maison de Fourni in Delos: both sweat baths opened off of narrow corridors that were connected to other rooms; the latter probably served as anterooms or additional bathrooms. – For more detailed information and literature on the various sweat baths, see tables 1 and 2.

⁴⁰ Quartier du théâtre, Îlot II, Maison E: TRÜMPER 1998, 262–264 cat.-no. 49; TRÜMPER 2006, 43 note 135; TRÜMPER 2008, 237 figs. 107. 135 pls. 196b–198.

⁴¹ CUTRONI TUSA et al. 1994, 53 f.; BÜRGE 2001, 60; WOLF 2003, 74. 78; TRÜMPER 2008, table 3; TRÜMPER forthcoming 1, table 7.

The sweat bath (22) of the House of the Doric capital in Morgantina was located in the service section of the dwelling (figs. 25, 26). Its anteroom (21) with a waterproof pavement was accessible from a corridor that led to the peristyle courtyard and served several rooms, a staircase, and ultimately a secondary (?) entrance to the house in the south⁴².

An example of a later bath suite with sweat bath is the bath of the Casa del Menandro (I 10, 4. 14–17) in Pompeii; this bath is dated to the second or third quarter of the 1st c. BC and is accessible directly from the peristyle courtyard (fig. 18). It consisted of a small colonnaded courtyard, a sweat bath, and a richly decorated suite of anteroom and bathroom with heated immersion bathtub and *labrum*. The large sweat bath (the largest of all examples compiled here) is not included in a sequence of interconnected rooms, and thus was not part of a clearly defined bathing program, but was situated separately – as is typical of round sweat baths in contemporary private and public baths in Italy⁴³.

The earlier and later examples of bath suites with sweat baths share several common features:

1. the – already known – location next to the service section of the house, combined with direct access from a peristyle courtyard or a richly decorated living/reception section;
2. the fact that in those cases where the construction date and the building history are sufficiently known, the majority of sweat baths were added subsequently, certainly as a much sought-after element of luxury and prestige; it is mostly sweat baths of the 1st c. BC⁴⁴ that were original to the constitutive building phase of the house;
3. and that all sweat baths were inserted in top-notch dwellings.

As mentioned before, it was not only the bath suites with sweat baths, but also the sweat baths themselves that were most likely used by more than one person at a time. The specific collective quality and use of the sweat bath is confirmed by its insertion into semi-public contexts such as clubhouses⁴⁵: this relaxing bathing form was obviously considered more appropriate for accommodating a larger number of bathers on a regular

⁴² TSAKIRGIS 1984, 65 f. 106 did not recognize the round room 22 as a sweat bath; it was first identified as such in TRÜMPER 1998, 66 note 360. Against TSAKIRGIS 1984, 46–70 the service section could possibly have belonged to the original house of the 3rd c. BC for several reasons. The original south façade as reconstructed by TSAKIRGIS 1984, pl. 5 changes orientation three times without any recognizable reason, and the otherwise well-appointed, large house would have had no service rooms in its first phase. The south wall of room 9 is not a façade wall, and its southwest corner is not an outer corner; instead, the west wall of rooms 9 and 14 runs through without a gap or change of technique. An *opus signinum* pavement was found under the floors of rooms 20, 22, and the corridor (TSAKIRGIS 1984, 65–67). Finally, it would be astonishing if this house had been enlarged after 211 BC, while, at the same time, most of the other large houses in Morgantina (with the notable exception of the House of the Tuscan capitals) were subdivided into smaller units. Therefore, the bath suite 21–22 could simply have been integrated subsequently into an existing service section, similar to the one in the House of the arched cistern; see above note 29. – TSAKIRGIS 1984, 61 f. 104 f. identifies room 12 (2.32 × 3.75 m) opening off of the southern portico of the peristyle courtyard as a bathroom (here fig. 27); while this room had a waterproof *opus signinum* floor (with inscription) and a drain in the southwest corner, it gives no clear evidence of bathing installations; the raised platform with *opus signinum* on top in the southeast corner is far too high to have served for any bathing facility (1.58 m east-west × 1.20 north-south, 0.95 m high). The pattern of the pavement (cf. TSAKIRGIS 1990, 428 fig. 4) instead suggests that this room was originally used as a banquet room with unadorned pavement sections for couches along the walls (ca. 0.75 m wide in the east and west, ca. 1.60–1.70 m wide in the south; for similar measurements of *klinai*-bands cf. room 9: 0.80–1.40 m wide) and possibly a drain to the latrine 15/16 (although the latter could easily have been added subsequently because of its unusually oriented west? and south walls); room 12 was only later remodeled (after 211 BC?) to include the platform of unknown function and a small space (0.90 × 2.18 m) of equally unknown function, partitioned off in the southwest corner. The width of the door (0.90 m) of room 12 as compared to that of the door to room 21 (0.68 m) might also speak against the use of room 12 as a bathroom; cf. TSAKIRGIS 1984, 105 note 94; 106 note 111.

⁴³ LING 1997, 61–67. – For late Republican public bath buildings with separately located *laconica*, see the Republican baths, Forum baths, and Stabian baths in Pompeii, the Forum baths in Herculaneum, and bath buildings in Cabrera del Mar, Cales, Crotona, and Norba; for private equivalents, see the baths of the Casa di Giuseppe II (VII 2, 38, 39) and the Casa del Marinaio (VII 15, 1, 2, 15) in Pompeii, the Villa of Fannius Synistor in Boscoreale, and the Casa del Criptoportico in Vulci; for literature, see table 1, and for the public examples, see TRÜMPER 2008, table 3.

⁴⁴ See tables 1 and 2: Of the 20 examples listed, including the sweat baths in club buildings and the insecure cases, the building history is unknown in three instances (15%), the sweat bath was installed subsequently in ten cases (50 %; one of which is uncertain), and the sweat bath belonged to the constitutive building phase of the house in seven instances (35%; three of which are uncertain).

⁴⁵ Maison de Fourni in Delos; and possibly also the Edificio sacro a labirinto in Solunto, against TUSA 1979; TUSA 1982/1983, 141–143; TUSA 1985, 609; CUTRONI TUSA et al. 1994, 94 f. and TUSA 1999, where the building is identified as a sanctuary, and also against BÜRGE 2001, 61 who interprets it as a private house; see in more detail TRÜMPER 2008, 269 note 1365.

basis than the single individual immersion bathtub, even when the latter was combined with an anteroom and *labrum*.

At this point, two peculiar round rooms in the palace of Vergina and in Building I,3 in Pella should be discussed briefly, since both have been identified as bathrooms and as such could provide crucial clues for the reconstruction of the development of private bathing culture in the Hellenistic Eastern Mediterranean. The round room 1969ε in Vergina with a diameter of ca. 4.90–5.20 m was built in the western part of the secondary peristyle courtyard (fig. 28). It is barely published and preserved, and its precise date and reconstruction were never discussed. The accessibility and equipment are unknown except for a possible pavement with a simple black pebble mosaic. A drain emerging from the peristyle courtyard led through room 1969δ, which lies immediately south of the round room. Fragments of a terracotta bathtub were found in room 1969β, located further to the south. The round room was variously identified as bathing facility, albeit without precise reconstruction of the possible bathing form⁴⁶. As a bathing room, it could have been equipped with hip-bathtubs or served as a sweat bath. Both alternatives present considerable difficulties, however: for a *tholos* with hip-bathtubs the room lacks necessary features such as a drain and traces of equipment from hip-bathtubs (unless the bathtub fragments from room β come from this room); furthermore, such *tholoi* have so far been found exclusively in public baths. As a potential sweat bath, the round room would be unusually large for a domestic context and probably also far too early: it was inserted at an unknown date but before 168 BC, into the secondary peristyle that was possibly added to the main peristyle in the first half of the 3rd c. BC⁴⁷; all other safely identified sweat baths in private and public contexts can be dated to the 2nd c. BC and later.

The round room (p) in Building I,3 in Pella has a diameter of 4.40 m and was most likely accessible via an anteroom (q) from the peristyle courtyard (r–t; fig. 29). Since the fragment of a bathtub was found in the anteroom (q), the round room was identified as a *tholos* with hip-bathtubs⁴⁸. Alternatively, it could have served as a sweat bath. The function of this building, which is also barely published and preserved, is much debated: commonly dated to the end of the 4th or the beginning of the 3rd c. BC, its highly unusual plan has been interpreted as a *gymnasium/palaestra* or as a private house⁴⁹. This uncertainty further complicates the identification of the round room: for a *tholos* with hip-bathtubs, it would be unusually small and completely out of place both in a private house and a public *gymnasium*; as a sweat bath, it would be unusually early, and it would be difficult to account for the fragment of a bathtub. Alternatively, the building could have been conceived as a semi-public building such as a clubhouse with peristyle courtyards (possibly with some kind of private *palaestra* among them), banquet rooms, and a bath suite (preferably with hip-bathtubs)⁵⁰.

One might argue that Macedonian palatial and upscale domestic architecture required more extended bathing facilities than ordinary private houses and therefore included bathrooms with several hip-bathtubs; or perhaps it embraced or even developed innovative bathing features such as round sweat baths much earlier than common private houses and then served as model for other domestic dwellings⁵¹. According to the above-mentioned chronology, however, these sweat baths also would have served as models for public

⁴⁶ BAKALAKIS – ANDRONIKOS 1970, 390–395; HEERMANN 1986, 271 f.; HOEPFNER 1996, 17. – Since the round room was inserted into a rectangular room, a space of ca. 2 m depth (east-west) remained between the walls of the round room and the rectangular room; this might have served as a small anteroom or vestibule to the round room.

⁴⁷ Since the round room has separate walls that are not bonded with the walls of the rectangular room and were not well founded, but were simply set on a layer of stones and pebbles, it could easily have been installed subsequently in the secondary peristyle. The scanty archaeological remains currently do not allow for a safe answer to this question.

⁴⁸ CH. I. MAKARONAS, *Ανασκαφαί Πέλλας* 1957–1960, ADelt 16, 1960 (1962), A1 72–83 esp. 82 pl. 88; HEERMANN 1986, 84 f.; see also KIDERLEN 1995, 57–61. 229 cat.-no. 27; ISLER 2001, 263 note 21.

⁴⁹ KIDERLEN 1995, 57–61. 229 cat.-no. 27: private house; HEERMANN 1986, 101–104: *gymnasium*. – No convincing parallels can be cited for either interpretation, and the building is not referred to in standard literature on Hellenistic gymnasia or houses. The absence of safely identifiable bathrooms and bathing forms in any of the five large peristyle houses in Pella, see KIDERLEN 1995, 228–234 cat.-nos. 26–32 and below note 87, makes the identification of Building I,3 as a private house even more unlikely.

⁵⁰ Similar to HEERMANN 1986, 104 who proposes private ownership for this *palaestra*-building, by an individual or an association that was maybe organized according to age. – For club buildings that had bathrooms with more than one hip-bathtub (though no *tholoi*), see above note 13; for club buildings with a sweat bath, albeit much later ones, see above note 45.

⁵¹ As proposed by ISLER 2001, 263 f.: he argues that round sweat baths were first developed in public baths that then served as models for Macedonian domestic architecture (from the end of the 4th c. BC onwards); from Macedonian dwellings this bathing form would then have spread to the domestic architecture of other regions of the Hellenistic world, including Sicily. Despite this, he does not cite a single example of a round sweat bath in a public bathing facility of the 4th c. BC or earlier.

bathing facilities; and this seems much more problematic. One should instead await a detailed examination and publication of both of these problematic round rooms before drawing far-reaching conclusions about the development of Hellenistic bathing culture in general, and domestic bathing culture in particular.

Conclusions

Regional Differences and Similarities in Domestic Bath Suites with Relaxing Bathing Forms

In summary, the distribution and context of the safely identified relaxing bathing forms in Hellenistic domestic architecture shows that the distribution pattern of relaxing bathing forms in private settings corresponds remarkably to the one of public bathing facilities⁵².

1. In the Southeastern Mediterranean, particularly in Egypt, public and private bathing facilities alike lack round sweat baths (with and without hypocausts) and heated (individual and collective) immersion bathtubs. There seems to have been a general reluctance to install expensive hypocaust systems and to embrace truly collective bathing forms.

2. Domestic baths in the Northeastern Mediterranean have yielded no immersion bathtubs at all⁵³. A few public baths of the 2nd and 1st c. BC included heated individual immersion bathtubs⁵⁴, but this relaxing bathing form was obviously far less popular than the round sweat bath. From the 2nd c. BC onwards, round sweat baths were integrated into public baths (with and without hypocausts), sports facilities, and domestic dwellings⁵⁵.

3. Only domestic baths in the Western Mediterranean give evidence of all three relaxing bathing forms from the 2nd c. BC onwards. Here public bathing facilities preceded their private equivalents in the installation of relaxing bathing forms with a sophisticated technology: collective heated immersion pools appeared in the 3rd c. BC, followed by sweat baths without hypocausts from the 2nd c. BC onwards⁵⁶. This distinctive development of both private and public baths in the Western Mediterranean has never before been recognized. The significance of the public baths is highly debated, and their idiosyncrasy has only recently been negated in favor of a model where the Hellenistic κοινή, that is the whole Mediterranean, embraced the same bathing standards in a similar way⁵⁷. Here, on the contrary, it is argued that the western tradition in the 2nd c. BC resulted in the development of what is commonly called the typical Roman bath with its sequence of differently tempered rooms, its abolishment of purely cleansing bathing forms, namely hip-bathtubs, and its refined heating system. Only from the late 1st c. BC onwards, after the new bathing standards had been well established and tested in the West were they also exported to the East⁵⁸.

The significant regional differences in the choice of bathing forms were obviously mainly determined by local cultural traditions and customs and by the social context, because no other factors, such as chronology,

⁵² For public baths in more detail, see TRÜMPER 2006; TRÜMPER 2008, 268–274; and esp. TRÜMPER 2009.

⁵³ Only a few hybrid examples, such as closed hip-bathtubs (›boot baths‹) and heated hip-bathtubs; see above notes 16 f.

⁵⁴ TRÜMPER 2008, table 7; TRÜMPER 2009, table 4: heated immersion bathtubs were safely identified in bath buildings of Gortys and Olympia and might also have been provided in bath buildings of Dilesi, Eretria, and Thessaloniki.

⁵⁵ TRÜMPER 2008, table 3; TRÜMPER 2009, table 8.

⁵⁶ TRÜMPER 2008, table 6; TRÜMPER 2009, table 6: collective heated immersion pools were safely identified in bath buildings of Fregellae, Marseille, Megara Hyblaea Morgantina, Syracuse, and Velia, and might also have been provided in bath building of Gela; for sweat baths in public baths, see TRÜMPER 2008, table 3; TRÜMPER 2009, table 7.

⁵⁷ See e.g., BROISE 1994, 26; Y. THÉBÈRT, Thermes romains d’Afrique du Nord, BEFAR 315 (Rome 2003) 51–57. esp. 51 note 21; 56; see in more detail TRÜMPER 2009, note 2.

⁵⁸ The best Eastern site for studying the development of ›Greek‹-style bathing, which is characterized by an inclusion of purely cleansing bathing forms such as shower-baths in hip-bathtubs, and the transition to ›Roman‹-style bathing, which dispensed with simple cleansing bathing forms, is Olympia, with its sequence of at least three different ›Greek‹-style baths (Older and Younger sitz-bath, Late Hellenistic bath to the north of the Altis) and one of the earliest, if not the earliest, ›Roman‹-style baths in Greece (so-called Hypocaust-bath; ca. 40 BC); see E. KUNZE – H. SCHLEIF, 4. OIBer (Berlin 1944) 33–39. 46–51; J.-Y. MARC – J.-CHR. MORETTI (eds.), Constructions publiques et programmes éditaires en Grèce entre le II^{ème} siècle av. J.-C. et le I^{er} siècle ap. J.-C., Actes du colloque organisé par l’École française d’Athènes et le CNRS, Athènes 1995 (Athens 2001) VIII note 4; U. SINN – C. LEYPOLD – CHR. SCHAUER, Olympia – eine Spitzenstellung nicht nur im Sport. Eine neuentdeckte Badeanlage der hellenistischen Zeit, AW 34, 2003, 617–623. – For a differentiation of ›Greek‹-style versus ›Roman‹-style bathing in more detail see TRÜMPER 2009.

technology, climate, or availability of resources for the operation of a bath, can fully account for them⁵⁹. Despite these differences, however, the Hellenistic domestic baths with relaxing bathing forms also share many common features:

1. With the exception of the Egyptian examples, for which no precise dates are available, relaxing bathing seems to have become popular in domestic architecture only in the 2nd c. BC, at a later time than in public establishments, at least in the Western Mediterranean. In the latter region, and probably also in the Eastern Mediterranean, it is likely that homeowners adopted and imitated new standards of public bathing facilities, rather than those of royal residences, which so far have yielded no safely identified evidence of innovative relaxing bathing forms before the second half of the 2nd c. BC⁶⁰. This development conforms well to the increasingly luxurious lifestyle and the new emphasis on pleasure and well-being, both of which have often been recognized as typical traits of the Hellenistic, and particularly the late Hellenistic period.

2. All examples for which the context is sufficiently known belong to top-quality houses⁶¹. This result is hardly astonishing or unexpected since the construction and operation of a relaxing bathing form was certainly costly. The new bathing standards were far from common or obligatory, however, even in houses of highest rank. In extensively excavated sites such as Delos, Solunto, Morgantina, and Pompeii, only a minority of these upscale houses is provided with bathrooms, let alone with an innovative relaxing bathing form⁶².

3. This picture is confirmed by the following observation: In 11 of the 20 (55%) domestic dwellings that have a history which is sufficiently known, and that have one safely identified relaxing bathing form, the innovative bathing feature was added subsequently, clearly as a highly desirable major improvement and also most likely as a status symbol⁶³.

⁵⁹ For this in more detail, see TRÜMPER 2009.

⁶⁰ See the palaces of Vergina, Jericho, and Masada, above notes 22, 46; see also NIELSEN 1994, *passim* and esp. table 115. The different bath suites in the palace of Pella are not yet sufficiently known to fully assess their bathing program and standard; the larger of the two bath suites included a small covered cold immersion pool and was integrated into a section that is now identified as the *palaestra* of the palace; see P. CHRYSOSTOMOU, Λουτρό στο ανάκτορο της Πέλλας, *AErgoMak* 2, 1988, 113–121; P. CHRYSOSTOMOU, Ανάκτορο Πέλλας και Πελλαία Χώρα κατά το 1999, *AErgoMak* 13, 1999, 491–505 esp. 492–495; P. CHRYSOSTOMOU, Ανάκτορο Πέλλας 2001–Βασιλείος Καράβος, *AErgoMak* 15, 2001, 441–450 esp. 444.

⁶¹ Peristyle houses, *atrium*-peristyle houses, villas etc. The size of these houses is not taken into account here, because it often cannot be calculated due to incomplete excavation or insufficient preservation and because it varies enormously across regions in light of the highly different urban-architectural and social contexts. It would only make sense to assess the size of houses with luxury bathing facilities within their immediate urban context, that is, the respective site. See following note.

⁶² See also in more detail below: Delos, see below note 74: only four of 89 (4.5%) houses had bathing facilities with relaxing bathing forms (rectangular or round sweat baths): Maison des tritons (rank according to house size: 8 of 89); Maison II/I, Îlot des bronzes (12 of 89); Maison E, Îlot II, Quartier du théâtre (13 of 89); Maison des sceaux (25 of 89). – Morgantina, see above notes 28–29, 42, below note 71, TSAKIRGIS 1984, 2, 27 note 6: 13 houses were more or less fully excavated, 12 of which were still used or built after 211 BC; of these 12 houses three were subdivided into two units so that 15 living units are known for the period after 211 BC; two of these 15 (13.3%) had bathing facilities with relaxing bathing forms (heated immersion bathtub; round sweat bath): House of the Doric capital (rank according to house size after 211 BC: 3); House of the arched cistern, south part (rank according to house size after 211 BC: 4). Note, however, that the two largest houses after 211 BC, the House of the Tuscan capitals and the Southwest House (?), are not fully excavated or known and might very well have included bathing facilities. – Solunto, see CUTRONI TUSA et al. 1994, 40 pl. 5 (»Quadro di unità abitative«): if only the larger units are counted as houses (though shops and shop-complexes could also be inhabited), ca. 31–33 houses were excavated, only one of which (3%) had bathing facilities with a relaxing bathing form (round sweat bath): Casa a vano circolare which clearly ranks among the ca. eight to nine largest houses of the city. – A notable exception seems to be Monte Iato with its unusual concentration of large peristyle houses, see DALCHER 1994; BÜRGE 2001: two of the five (40%) known houses had bathing facilities with relaxing bathing forms (heated immersion bathtub; round sweat bath).

⁶³ See also above note 44: here, semi-private buildings such as clubhouses as well as the houses of Pompeii and Herculaneum are not taken into account; for these, see above note 26. Houses whose building history is sufficiently known (in alphabetical order of sites; * = relaxing bathing facility built subsequently): Boscoreale, Villa of P. Fannius Synistor; Delos, Maison II/I, Îlot des bronzes*, Maison des sceaux*, Maison des tritons*, Maison E, Îlot II, Quartier du théâtre*; Jericho, first Hasmonean palace built by John Hyrcanus I, twin palaces built by Alexandra Salome, bath to the west of the swimming pool complex built by Alexander Jannaeus*; Masada, Western palace; Monte Iato, Peristyle house 1*, Peristyle house E2*; Monte Sannace, Peristyle house on the Acropolis?; Morgantina, House of the arched cistern*, House of the Doric capital*; Rhodos, Palace-like dwelling; Solunto, Casa a vano circolare*?; Sperlonga, Villa Prato; Thera, House of Pothitos?; Tolve di Moltone, Peristyle house*; Vulci, Casa del Criptoportico.

4. Most bathing suites with relaxing bathing forms are located between service sections and the most important part of the house, usually a peristyle courtyard with lavishly decorated living and reception rooms. Because of this specific location and the generally high costs for the construction, operation, and maintenance of private bath suites, J.-A. Dickmann concluded convincingly that all of the examples in Pompeii were predominantly used within the context of the reception of guests; this is confirmed by the often lavish decoration of these bath suites⁶⁴. Since Pompeii was provided with several public baths in the 1st c. BC that were frequented by bathers of all different social classes, the contemporary private domestic bath suites were not a necessity to grant the pleasure of regular bathing, but were a complement to the public premises and thus were clearly an extravagant luxury feature.

In theory, the intriguing interpretation of Pompeian bath suites as an important asset for the reception of guests can easily be transferred to all Hellenistic bath suites with relaxing bathing forms, largely using the same arguments; unfortunately, this can only be done on a less substantial basis. While the location within the house is the strongest argument for all of the bathing suites, the decoration does not generally help to support the idea of bathing suites as part of the reception area because often, and particularly in the case of baths in the Eastern Mediterranean, it is not preserved or known; furthermore, a lavish decoration was simply neither appropriate nor required for the small dark sweat baths that were predominant in the Northeastern Mediterranean⁶⁵. As will be discussed shortly, the relationship between private and public baths, which is crucial for determining the main function and use of private bathing suites with relaxing bathing forms, cannot be assessed on a comprehensive basis.

Hellenistic Domestic Bathing Culture: A Preliminary Assessment

When moving from the differences and similarities between Hellenistic private bathing suites with relaxing bathing forms to a final comprehensive evaluation of private Hellenistic bathing culture, two central questions arise: first, the general popularity of bathing facilities in domestic architecture, both from a diachronic perspective (that is, in comparison to earlier and later periods), and in terms of the overall quantitative relationship between private bathrooms or suites with cleansing bathing forms and those with relaxing bathing forms; second, the qualitative and quantitative relationship between public and private bathing facilities.

A comprehensive quantitative assessment of private bathing facilities in the Archaic through Hellenistic periods is currently impossible, due to the large number of sites around the Mediterranean; also, it would probably not be reasonable or truly revealing because of the very different states of excavation, preservation, and publication of the various sites. Only sufficiently known individual sites can be explored in terms of their number and quality of private bathing facilities. An overview of a few representative sites, roughly organized chronologically, provides a highly diverse picture:

- In Olynthos (432–348 BC) 22–27 of the 86 (25–31%) sufficiently known houses have clearly identifiable separate small bathrooms that were usually located in the service-section (kitchen-complex) and were equipped with one single hip-bathtub (fig. 4)⁶⁶.

⁶⁴ DICKMANN 1999, 256–267. esp. 266 f., contra DE HAAN 1997, esp. 220.

⁶⁵ See above and in more detail TRÜMPER 2008, 263–268; TRÜMPER 2009.

⁶⁶ See ROBINSON – GRAHAM 1938, 198–204: According to ROBINSON – GRAHAM 1938, 199 »facilities for bathing, either bathtubs or special bathrooms, have been found on the ground floor in fully one-third of the houses excavated at Olynthus«. According to the table p. 204, of the 57 houses that were fully excavated and well preserved 15 (26%) had small bathrooms (three of which were provided with only earth floors); seven (12%) had bathtubs in large multifunctional rooms with earth floors (and cement near the bathtub in one instance; two of these houses, A vi 7 and E.S.H. 4, also had a small bathroom); and one (1.8%) had a bathtub in the flue. Of the 29 houses published in D. M. ROBINSON, *Domestic and public architecture, Olynthus 12* (Baltimore 1946) that were fully excavated and well preserved, seven (24%) were provided with a safely identified small bathroom (A viii 2, room k; A viii 4, d; A viii 5, h; B vi 4, k; B vi 5, i; House of twin erotes, a; Villa of the bronzes, k), and five (17%) were provided with a potential small bathroom (A viii 1, room m; A viii 3, k; A iv 3, k; A iv 5, f; House of the many colors, g); in two further houses (7%) fragments of bathtubs were found (B vi 3, room j; B vi 7) and in two others (7%) rooms were identified as bathrooms without conclusive evidence (A iv 7, room j; South villa, m). Thus, of the 86 houses, at least 22 (25.5%) and probably 27 (31%) had separate small bathrooms, and ten (11.5%) or only eight (9%, if A vi 7 and E.S.H. 4 are not counted twice) were provided with bathtubs set up in multifunctional rooms. CAHILL 2002 does not discuss bathrooms separately, but of the 35 houses in his cluster five (regular houses with more specialized rooms and a tendency to be better appointed and decorated than houses in the

- In Kerkouane (4th c. to probably ca. 250 BC) nearly all houses (44 of 46 = 96%) were provided with small bathrooms that opened off of the courtyard or the vestibule and usually included a single hip-bathtub⁶⁷.
- In the approximately 70 houses of Priene (mid-4th–1st c. BC; houses the in west quarter largely abandoned after a catastrophic fire in the second half of the 2nd c. BC) only one (1.4 %) single small bathroom with a terracotta hip-bathtub was found in house 21a; this bathroom was a later addition to the courtyard, and was a makeshift solution in an uncommon position⁶⁸.
- Eretria: In almost all of the four to six known houses (four to five houses 4th–3rd c. BC; one of them subdivided into two houses after 198 BC), small bathrooms were identified in the service sections next to the kitchen; these identifications were based on waterproof equipment, drains, and – in two cases – single terracotta hip-bathtubs. Although the two latest bathrooms, built after 198 BC, had relatively sophisticated heating systems (in one case even a simple hypocaust), both were still provided with only a single hip-bathtub⁶⁹.
- Pergamon: Not one single bathroom from the Hellenistic period could be identified in the 39 known dwellings (18 courtyard houses; 21 peristyle houses, including the palaces), most of which seem to have been built in the Hellenistic period (3rd–1st c. BC). A few of the larger houses were subsequently equipped with bathing facilities from the late 1st c. BC onwards; these included relaxing bathing forms (heated immersion bathtubs) and sophisticated hypocaust systems, and thus were clearly influenced by new Roman standards⁷⁰.
- In Morgantina (3rd c. BC–1st c. AD, with significant changes after 211 BC) a considerable number of terracotta hip-bathtubs were found, but not one of them was obviously *in situ* (fig. 1). Bathing facilities can be safely identified in two of the 15 (13.3%) fully excavated living units used after 211 BC; these facilities were installed after 211 BC and include a heated individual immersion bathtub and a round sweat bath (figs. 12–14. 25. 26). In a third house (6.6%) a bathroom with an unknown bathing form (hip-bathtub or unheated immersion bathtub?) was probably also built after 211 BC⁷¹.
- Monte Iato (3rd c. BC – 1st c. AD) has yielded evidence of at least five peristyle houses, only one of which has been fully excavated. Two of these houses (40%) were subsequently equipped with relaxing bathing facilities in the 2nd c. BC (one heated immersion bathtub; one round sweat bath; figs. 10. 11)⁷².

other clusters), bathing facilities were identified more or less safely in 20 (57%); CAHILL 2002, 209. 291 f.; for a comparison: at most seven (23%) of the 30 houses in his cluster one (regular plan with fewer specialized rooms and less lavish decoration) had bathing facilities; CAHILL 2002, 209. 289.

⁶⁷ See FANTAR 1985, 305–358 esp. 338 f. 348 f.: one house (Rue de l'Apotropaïon 6) had two bathrooms, and another house (Rue du Temple 4) even had three. While the majority of bathrooms were provided with single hip-bathtubs (mostly with a seat), the house at Rue du sphinx 1 had a double hip-bathtub (see FANTAR 1985, 331 f. pl. 35) and the house at Rue de l'Apotropaïon 12 had an immersion bathtub (1.50 × 0.65 m, 0.80 m deep; see FANTAR 1985, 316 pl. 13).

⁶⁸ See WIEGAND – SCHRADER 1904, 292 f.; HOEPFNER – SCHWANDNER 1986, 179.

⁶⁹ See above note 16. – House of Mosaics, room 16 (first third of 4th c. BC); see P. DUCREY – I. R. METZGER – K. REBER, *Le quartier de la Maison aux mosaïques, Eretria 8* (Lausanne 1993) 48. – House I (4th/3rd c. BC): no bathroom; House IA, room m (phase 3; after 198 BC); House IB, room A (phase 3; after 198 BC); House II/IIA, room a1 (phase 1; beginning of 4th c. BC – phase 2; c. 300 BC); House IIB, room r (phase 2; c. 300 BC); House IV, room 5 b (phase 2A; c. 300 BC); see REBER 1998, 47 f. 56 f. 75. 102. 107. 109. 137–139.

⁷⁰ See WULF 1999, 100–102. 149–190.

⁷¹ Several well-preserved terracotta hip-bathtubs are on exhibit today in the local museum of Aidone; cf. TSAKIRGIS 1984, 384. 406 note 53. Houses with bathing facilities: House of the Doric capital (sweat bath); House of the arched cistern (heated immersion bathtub); House of the official: room 10 with a platform (1.30 × 3.10 m) on the south wall (for a terracotta hip-bathtub?) that was originally paved with *opus signinum* and had a drain in the southwest corner; see above notes 28–29. 42. 62; TSAKIRGIS 1984, 65 f. 219. 132 f. 383–385 pls. 66a. 67a. 81a. For the problematic identification of room 12 in the House of the Doric capital as a bathroom, see above note 42. – D. P. CROUCH, *Water Management in Ancient Greek Cities* (New York 1993) 357 claims to have identified two bathrooms on the ground floor of the House of the Ganymede, but without precise reference to rooms; a third bathroom would have been on the upper floor, although there is no safe evidence of an upper floor for this house. Her statement on p. 357 that »large and medium-sized houses at Morgantina were usually provided with bathrooms« (or better bathing facilities such as hip-bathtubs) might be true according to the evidence of hip-bathtubs, but cannot be substantiated from the archaeological record.

⁷² See above notes 27. 39. 62.

- In Solunto (3rd or 2nd c. BC – 1st c. AD) about 31–33 houses were excavated; the largest and best-appointed were all centered around a peristyle courtyard and located along or in the vicinity of the main street, the Via dell' Agora. Bathing facilities were recognized in four (12–13%) of these upscale houses, but only one of these (3%) can be safely identified and determined to be a round sweat bath (figs. 23. 24), while the other three have not yielded conclusive evidence to reconstruct the bathing form performed in them or even to safely identify them as bathing facilities at all⁷³.
- In late Hellenistic Delos (after 167/166 BC – ca. 69 BC) six of 89 (7%) houses had safely identifiable small bathrooms with one single hip-bathtub, three to five (3.5–5.5%) houses possibly had small bathrooms, two (2.25 %) houses had single hip-bathtubs in multifunctional rooms, and four (4.5%) houses had round or rectangular sweat baths (one of them also had a separate bathroom with a hip-bathtub; figs. 19–22)⁷⁴.
- In Pompeii (2nd c. BC – 1st c. AD, but mostly 1st c. BC to 1st c. AD) ca. 35 of c. 400 (8.75%) houses and suburban villas were provided with a bathing suite that usually comprised at least two rooms and a relaxing bathing form, mostly a heated immersion bathtub; more than two rooms and additional bathing forms, such as *laconica* and later cold water bathing facilities, were rare (fig. 18)⁷⁵.

This overview shows that the existence of separate bathrooms was obviously determined primarily by local customs and habits, and also by individual preferences – exactly like the choice of relaxing bathing forms in private bath suites – and that other factors, such as the size, type, and decoration of houses, the local water supply and availability of wastewater disposal, as well as the chronology, cannot sufficiently and satisfactorily account for the significant differences seen both between and within the cities cited here. Otherwise it would be impossible to explain why in a city like Kerkouane, almost all of the relatively small courtyard houses were provided with bathrooms in the 4th and 3rd c. BC, while a city like Priene, with its mainly simple small courtyard houses, has yielded only one single bathroom in a much longer period from the 4th through 1st c. BC, and the Hellenistic royal city of Pergamon, with its well-appointed large peristyle houses and palaces, gives no evidence of bathrooms at all before the pronounced influence of Roman culture towards the end of the 1st c. BC⁷⁶. In cities such as Classical Olynthos and late Hellenistic Delos, where 25–31% and 7–10% of all houses, respectively, have clearly identifiable separate bathrooms, the choice to establish a bathroom might have been motivated by factors such as social aspirations and individual preferences. In both cities houses with bathrooms belong to the category of better appointed and decorated dwellings with more specialized rooms and prestigious features such as peristyle courtyards and lavishly decorated reception rooms. It must be emphasized, however, that bathrooms were not standard in these cities, even at a certain socio-economic level, because an astonishing number of the largest and richest houses lack such a convenience⁷⁷. In contrast, in other cities such as Eretria and Monte Iato, bathing facilities were

⁷³ WOLF 2003, 56. 62. 66. 74 f. 78 identifies all four as bathrooms: 1) Casa del deposito a volta, room ZG1 (pro: platform at rear west wall, 1.30–1.70 × 1.85 m, 0.57 m high; waterproof equipment of room and platform; drain from platform?; platform for terracotta bathtub? – contra: platform too high for bathtub; platform subsequently subdivided, which is incompatible with bathtub; no safely identified drain); 2) Casa di Arpocrate, room ZG1 (pro: location and design comparable to room ZG1 of Casa del deposito a volta; platform at rear west wall, 0.72–0.80 × 1.05 m, 0.44 m high – contra: no clear waterproof equipment; no drain; platform too high for bathtub, also too small if access step is taken into account; two doors to courtyard and the adjacent room that is without waterproof equipment or any other visible connection to a >bathroom<); 3) Casa di Leda, room ZG4 (pro: *opus signinum*; proximity to kitchen; opening to cistern – contra: no drain; room unusually large for bathroom; at best a multifunctional room for use of water). – 4) Casa a vano circolare, rooms n-p with round sweat bath p; see above note 41. – A large number of Hellenistic houses were also excavated in Agrigento but are hardly published so that their bathing standard cannot be assessed; despite their long use well into the Roman Imperial period and their numerous remodeling processes, the original Hellenistic houses of Agrigento could be reconstructed fairly well in several instances; see WOLF 2003, 83 note 418 (literature) attachment 86, 11. 12.

⁷⁴ See TRÜMPER 1998, 64–67 notes 345. 346 fig. 85.

⁷⁵ See above note 26. – Here comparisons cannot be extended to later sites of the Imperial period.

⁷⁶ Compare the average house sizes and house types of these three cities: Kerkouane: courtyard houses with ca. 96–176 m²; FANTAR 1985 does not systematically provide measurements or detailed plans of all houses, but gives only measurements of individual houses, see pp. 649. 653. 657. 664. 669. – Priene: original house lots for simple courtyard houses, 207 sq. m; changes in the Hellenistic period with lot sizes from 50 to ca. 500 sq. m and the construction of a few peristyle houses; see HOEPFNER – SCHWANDNER 1986, 169–172. 184. – Pergamon: peristyle houses with sizes from 280 to 1500 sq. m and even over 2000 sq. m in case of the palaces; see WULF 1999, 174 f.

⁷⁷ Which also applies to the situation in Pompeii.

probably more common or even obligatory in upscale houses, albeit at different periods: while belonging to the original house plans from the 4th c. BC onwards in Eretria, bathing facilities seem to have been added to the preexisting houses in Monte Iato, only later, in the 2nd c. BC⁷⁸.

The remarkable regional and social differentiation in the distribution of private bathrooms has parallels in modern times: in the 19th and 20th c. the popularity, design, and significance of private bathrooms differed significantly in various countries of the western world such as England, France, Germany, and the USA. While a separate bathroom was a prerogative of wealthier people for a long time, the upper class or aristocracy often did not play a leading role in the development of sanitary installations for various reasons: they maintained conservative attitudes towards personal hygiene and the body and were reluctant to embrace new ideas, habits, and technologies; they possessed enough servants to perform the time-consuming and onerous tasks of preparing old-fashioned baths (or, for example, of emptying chamber pots); and they had old dwellings that often were much more difficult to provide with modern technologies than newly built houses. Instead, the middle class or ›bourgeoisie‹ figured as a proponent of modern sanitary standards and endorsed and advanced the idea of a separate, secluded and intimate room for personal hygiene⁷⁹.

From a chronological perspective it is remarkable, however, that there is no obvious, ubiquitous trend in the ancient Mediterranean toward establishing more and more bathrooms and equipping the majority, or even all of the houses with such a convenience as time progressed – as can be observed in dwellings of the western world in the second half of the 20th c. For example, in Classical Olynthos and late Classical Eretria, many more houses were provided with bathrooms than in Hellenistic Pergamon, late Hellenistic Delos, or late Republican Pompeii. Thus the only noticeable and really universal development in Classical and Hellenistic bathing culture remains the introduction and spread of a new bathing standard in the Hellenistic period that, once again, was largely optional. Adoption of this standard was not required either at a local level, that is, in specific cities, or at a social level, that is, in specific social strata. This can best be observed in cities such as Eretria, Morgantina, and Monte Iato, where bathing standards changed significantly in the 2nd c. BC, and in cities such as Delos where both old-fashioned and modern bathrooms were established contemporaneously from 167/166 BC until about 69 BC. While many reasons could account for this specific development of ancient bathing culture and for the relative scarcity of private bathrooms well into the Roman Imperial period, one of the most prominent factors was most likely the availability, equipment, and function of public bathing facilities.

Relationship between Private Domestic and Public Bathing Facilities in the Hellenistic Period

Since no other site with private bath suites (including those with simple cleansing bathing forms as well as those with relaxing bathing forms) is as well known as Pompeii, and very few sites have yielded evidence of both private and public baths at all, the crucial question of the relationship between public and private baths cannot be systematically assessed⁸⁰. Instead, a few case studies presented in a roughly chronological order can illustrate the complexity and variety of private versus public bathing culture in different cities; for this

⁷⁸ In Monte Iato three of the four incompletely excavated peristyle houses have yielded no evidence of baths so far, but given the astonishing density of peristyle houses and sophisticated bathing facilities, they might easily be expected to do so in the future. – One might add Morgantina as another example, assuming hypothetically that most of the larger houses from the 3rd c. BC really had bathrooms or at least bathing facilities in the form of terracotta hip-bathtubs; see above note 71.

⁷⁹ For literature, see above note 1. In this period the majority of people, particularly the lower classes, either never bathed, or bathed very infrequently in makeshift facilities at home, or in one of the public baths that were built for cleansing purposes in some of the larger cities. – It is usually assumed that the largest and best appointed houses of an ancient city were owned by the social elite; whether this elite was always defined by socio-political status (that is criteria such as family, profession, ethnicity, and political power), however, and not by financial means (which could naturally result, e.g., in political influence) is questionable. In late Hellenistic Delos, for example, wealthy foreign upstarts such as ship-owners and merchants could easily have outmatched the local political elite in the decoration and amenities of their houses.

⁸⁰ This holds true for the whole Mediterranean in the Archaic through Roman Imperial periods; although numerous public bath buildings are known from the Roman Imperial period, few sites except for Pompeii provide substantial evidence of domestic architecture with bathing facilities; good case studies would be provided by sites such as Dougga, Ephesos, Ostia, and Timgad, which are not discussed here, however, because this would greatly exceed the chronological focus of this paper (and conference).

purpose, the focus is on the Hellenistic period again, and on cities where a substantial part has been excavated⁸¹. In the following, private bathing facilities are only listed in more detail if this was not done above.

- Kerkouane: bathing facilities of the 4th c. BC to mid-3rd c. BC were identified in: a) almost all domestic buildings (see above); and b) two public bath buildings (Quartier du Boulevard 2; Rue des Artisans 6) that both give no conclusive evidence of bathing forms and standards and ultimately cannot be safely identified as public baths⁸². If there really were two public bath complexes in Kerkouane, this small city would have been extraordinarily well appointed with both private and public bathing facilities, and one would particularly like to know who used the public baths and for what reason. The public premises could have served specific purposes such as socializing (e.g., collective baths for specific groups or associations) or ritual ablutions in connection with visits to a sanctuary⁸³.
- Eretria: bathing facilities were identified in: a) domestic buildings (see above, 4th – 1st c. BC); b) one sports facility (Northern gymnasium: *loutron* with basins for cold water ablutions, 4th c. BC; round sweat bath, 2nd c. BC); and c) a public bath building (Bath at the harbor: two *tholoi* with hip-bathtubs, and probably a heated round sweat bath and heated individual immersion bathtubs; after 198 BC?) that provided at least cleansing bathing forms for both women and men⁸⁴. Probably the public bath, and certainly the gymnasium, offered more advanced bathing standards than the two known domestic bathrooms that date to after 198 BC. Little is known about domestic architecture after 198 BC, however, and particularly about more modest dwellings (both before and after 198 BC), which might not have had their own bathroom and whose owners might therefore have relied on public baths for regular cleansing baths.
- Priene: bathing facilities were identified in: a) one domestic building (see above, before the second half of the 2nd c. BC?); b) one sports facility (Lower gymnasium: *loutron* with basins for cold water ablutions; second half of 2nd c. BC); and c) one public or semi-public bath (Building on Quellenthorstrasse / corner west-*porticus* of the agora, without denomination: round sweat bath; probably late Hellenistic); in addition, epigraphic evidence testifies to the existence of a βαλανεῖον after 84 BC, most likely a public bath with warm bathing forms, which cannot be safely identified in the archaeological record⁸⁵. Hellenistic Priene seems not to have boasted a particularly developed bathing culture on either the private or the

⁸¹ Evidence from later periods in these cities, e.g., ›Roman‹-style bath buildings from the Imperial period, is not taken into account. Also, it is not always known whether the various bathing facilities of a city coexisted and were all used contemporaneously, at least for a certain period of time. – These case studies offer nothing but a preliminary list of bathing facilities in each city and a brief evaluation; the topographic and socio-historic context of the selected sites cannot be discussed at length, although it was certainly crucial for the development of the local bathing culture.

⁸² Quartier du Boulevard 2, see FANTAR 1985, 336 f. pl. 40: complex of three small rectangular rooms with waterproof equipment, two of which »donnent directement sur la cour de l'édifice auquel elles appartiennent non loin du puits«; no evidence of bathing forms or drains is mentioned, but Fantar assumes that there may have been portable bathtubs. Since no plan of this complex is published (or at least clearly labeled), its layout and accessibility cannot be assessed. – Rue des Artisans 6, see FANTAR 1985, 307 fig. 1; 326–329 pls. 29–31: complex of four rooms with waterproof equipment and drains, but whose relationship and interconnection is not quite clear; two rooms (a and b) seem to have had entrances from the street; while two rooms (a and b) were equipped with large benches, none provided evidence of a clearly identifiable bathing form or a source of water supply; FANTAR 1998, 53 proposes that this bath building was probably a private establishment belonging to the owner of the adjacent house (Rue du Sphinx 1), which had a well; water could have been heated in the kitchen of this house and then passed through a communal wall between the kitchen and the bath building.

⁸³ As proposed by FANTAR 1998, 53: this is not entirely convincing, however, because the ›public bath‹ at Rue des Artisans 6 is located only in the vicinity of the main temple of the city, but not right next to it; furthermore, it is questionable whether a potentially private establishment (see previous note) could and would have provided the necessary facilities for the performance of essential rituals that were part of a public cult and sanctuary.

⁸⁴ See above notes 16, 69; GINOUVÉS 1962, 42, 185 notes 6–7; 207 f.; P. AUBERSON – K. SCHEFOLD, Führer durch Eretria (Bern 1972) 126–129; E. MANGO, Das Gymnasion, Eretria 13 (Gollion 2003) *passim*; P. DUCREY, Eretria. A Guide to the Ancient City (Gollion 2004) 248 f.; TRÜMPER 2008, table 7; TRÜMPER 2009, table 4.

⁸⁵ See above note 68; WIEGAND – SCHRADER 1904, 265–275. pl. 21; J. DELORME, Gymnasion. Étude sur les monuments consacrés à l'éducation en Grèce (des origines à l'Empire romain), BEFAR 196 (Paris 1960) 191–195; GINOUVÉS 1962, 204 note 1; M. SCHEDE, Die Ruinen von Priene (Berlin 1964) 81–89; ST. L. GLASS, Palaistra and Gymnasium in Greek Architecture (Ph.D. thesis University of Pennsylvania, Philadelphia 1967) 188–200; W. HOEPFNER – E.-L. SCHWANDNER, Haus und Stadt in klassischen Griechenland. Wohnen in der klassischen Polis I² (Berlin 1994) fig. 186; F. RUMSCHEID, Priene. Führer durch das ›Pompeji Kleinasien‹ (Istanbul 1998) 202–210; N. A. DONTAS (ed.), Priene. Foundation of the Hellenic World (Cambridge, Mass. 2000) 160–167; TRÜMPER 2008, table 3; TRÜMPER 2009, table 8; TRÜMPER forthcoming 1, notes 117–119; I. Priene 112, 113. If the βαλανεῖον was really built in

public level. The only known possible public bath offered an innovative bathing form for a relatively large number of bathers, but no abundant cleansing bathing facilities⁸⁶.

- Pella: bathing facilities were identified in: a) the palace (large bath in the *palaestra* with small covered cold water immersion pool; small bath with unknown bathing form in building VI; end of 4th/beginning of 3rd c. BC); b) one domestic building (House of Dionysus: two rooms in the southwest corner of the north peristyle, with unknown bathing form; shortly after 315 BC); c) a semi-public club (?) building (Building I, 3: round room p with unknown bathing form; end of 4th/beginning of 3rd c. BC – 90 BC); and d) a public bath building (Baths in artisans' quarter with three phases from the last quarter of the 4th c. BC to the last quarter of the 2nd c. BC; only in the last phase was the building provided with two relaxing bathing forms).⁸⁷. During the heyday of Pella and its domestic architecture (end of 4th c. BC to about the mid-3rd c. BC) bathing obviously became important, because facilities were provided in the palace and in a semi-public club (?) building, in a public bath, and probably also in one or more houses. In the late 2nd c. BC when construction and remodeling had largely ceased in the category of large peristyle houses, the public bath that probably served the needs of a relatively modest neighborhood was still provided with new relaxing bathing forms such as would never be installed (subsequently) in any of the upscale dwellings, even though they were inhabited until about 90 BC.
- Pergamon: bathing facilities were identified in: a) one sports facility (Gymnasium: at least one *loutron* with basins for cold water ablutions, 2nd c. BC; rectangular sweat bath?, late Hellenistic); and b) one public bath building (Bath to the southwest of the Upper Agora, beneath a bath building of the Imperial period: *tholos* with hip-bathtubs?; 3rd c. BC)⁸⁸. As in Pella, bathing culture was obviously not one of the primary interests in Hellenistic Pergamon; this might partially be due to the difficulties of supplying water on the steep ›Burgberg‹⁸⁹. In addition to the bath building to the southwest of the Upper Agora, there might have been other public baths on the Hellenistic ›Burgberg‹ to provide cleansing (and relaxing?) bathing facilities for the population, but there seems to have been no dramatic change in bathing culture, at least on the private level, before the end of the 1st c. BC, when Roman influence became more manifest; only then were several ›Roman‹-style bath buildings built in some private houses, in the Gymnasium, and as small independent establishments⁹⁰.
- Morgantina: bathing facilities were identified in: a) domestic buildings (after 211 BC); and b) one or two public bath buildings (North bath, northern *tholos* in the west quarter: *tholos* with hip-bathtubs, communal heated immersion pool; South bath, southern *tholos* in the west quarter: *tholos* of unknown function; both 3rd c. BC and abandoned after 211 BC)⁹¹. In the 3rd c. BC, the better known public bath (North bath) had a higher bathing standard than the houses that were provided, at best, with simple hip-bathtubs. If the west quarter really included two adjacent public baths, there might have been a comparatively dense network of public bathing facilities that might have substituted for the lack of equivalents in private homes. After 211 BC the situation seems to have changed, however, and affluent homeowners might have preferred to install their own modern bathing facilities to compensate for the lack of adequate public

connection with one of the gymnasia, as is usually assumed in literature (see TRÜMPER forthcoming 1, note 118), its use might have been restricted to select males.

⁸⁶ With a diameter of 5.80 m, this would be the largest round sweat bath in a public bath building of the Eastern Mediterranean world; cf. dimensions of sweat baths in TRÜMPER 2008, table 3 and TRÜMPER 2009, tables 7. 8. – Ablutions might have been performed in one of its anterooms in connection with the sweating process, but there were no installations for extensive cleansing procedures.

⁸⁷ See above notes 48–50 for Building I, 3. CHRYSOSTOMOU 1988, 120 note 20; M. LILIMBAKI-AKAMATI, Συγκροτήματα εργαστηρίων και λουτρών στην Πέλλα, AERgoMak 11, 1997 (1999), 193–203; M. LILIMBAKI-AKAMATI – N. AKAMATIS, Το δημόσιο λουτρό της Πέλλας. Ανασκαφική περίοδος 2007, AERgoMak forthcoming. – KIDERLEN 1995, 177–184. 228–234 cat.-nos. 26–32 does not discuss bathing facilities as a distinct feature of the large peristyle houses of this city.

⁸⁸ W. RADT, Pergamon. Vorbericht über die Kampagne 1981, AA 1982, 521–561 esp. 544–547; RADT 1999, 113 f. 139 f. 344; TRÜMPER 2008, table 5; TRÜMPER 2009, table 2; TRÜMPER forthcoming 1.

⁸⁹ Although the ›Burgberg‹ was provided with a highly sophisticated water pipe system that supplied, for example, the bathing facilities of the Gymnasium, and although almost all houses had cisterns; see RADT 1999, 147–158.

⁹⁰ See RADT 1999, 131–145.

⁹¹ See above notes 28–29. 42. 62. 71; H. L. ALLEN, Excavations at Morgantina (Serra Orlando). Area VI, the Hellenistic Bath and Sanctuary, AJA 78, 1974, 370–382; BROISE 1994, 23 f.

ones: while the heated individual immersion bathtub in the House of the arched cistern could have been inspired by and modeled after the collective public predecessor, the round sweat bath in the House of the Doric capital was a local novelty, but popular elsewhere in contemporary Sicily.

- Solunto: bathing facilities were identified in: a) domestic buildings (see above, 3rd c. BC? or 2nd/1st c. BC?); b) one sports facility (Gymnasium: round sweat bath; 2nd c. BC); and c) one possibly semi-public club building (Edificio sacro a labirinto: small round sweat bath; late Hellenistic?)⁹². Bathing culture in Solunto obviously started to flourish in the 2nd c. BC with a remarkably homogenous standard in various private, semi-public, and public buildings, even though it had hardly existed before (some modest domestic facilities?), if at all. This suggests a close interaction between the patrons of the respective facilities, but the chronological sequence of the three round sweat baths, together with the possible models and influences, currently cannot be determined. The absence of a truly public bath building⁹³ and clearly identifiable bathing forms that required water (hip-bathtubs, immersion bathtubs, basins, pools etc.) is remarkable, especially since the city was well equipped with a dense network of cisterns.
- Delos: bathing facilities that all date to the period of 167/166 to 88 BC were identified in: a) domestic buildings (see above); b) two sports facilities (Gymnasium: vaulted rectangular sweat bath?; Palestre du lac: vaulted rectangular sweat bath?); c) three semi-public club buildings or hotels (›Hotellerie‹: bathroom with unknown bathing form; Palestre de granit: bathroom or suite with unknown bathing form; Maison de Fourni: round sweat bath); d) a garden-*porticus* complex (Agora des Italiens: two round sweat baths) in which access both to the building and to the bath suite could be fully and separately controlled and thus restricted⁹⁴; and e) a public bath building or semi-public club building (Quartier du théâtre, Îlot III, Maison N: three hip-bathtubs, three cold water immersion basins)⁹⁵. Whereas the cosmopolitan trade port seems to have been well provided with semi-public bathing facilities, there are relatively few domestic examples and not one single large and safely identifiable public bath. The bathing culture is noticeable for its highly idiosyncratic experimental heating systems in various sweat baths that have no parallels elsewhere in the Mediterranean world. Public or semi-public buildings with innovative bathing forms, particularly the Agora des Italiens, might have served as models and incentives for homeowners to embellish and modernize their dwellings; this is evinced by the widespread distribution of round (and rectangular) sweat baths.

No recognizable, let alone homogenous pattern emerges from this overview. Instead, it becomes clear that the development of bathing culture was foremost a local phenomenon. Furthermore, several important questions must remain open:

1. whether private bath suites were, in general, just a luxurious option to a dense network of public facilities, or were instead a substitute for a lacking or unattractive public alternative. It is clear, however, that, in contrast to the modern concept of complementary functions for private versus public bathing facilities⁹⁶, no strict differentiation in equipment and function between private domestic and public baths can be observed in the Classical and Hellenistic periods. The only difference was that public bath establishments could generally offer a larger variety of bathing forms in one single setting, more truly collective bathing forms (which were used by more than one bather at a time), and a more advanced heating technology; yet they did not provide an essentially different bathing standard. Thus, in theory, public baths could easily have compensated for the lack of private bathrooms, and domestic baths could have functioned as an extravagant luxury in addition to public facilities, and not as a necessity or a substitute⁹⁷. This is particularly true for relaxing bathing forms that increased the social and pleasurable component of bathing both on a public and private level.

⁹² See above notes 41. 45. 73; for the Gymnasium, see CUTRONI TUSA et al. 1994, 77–79; A. WIEGAND, *Das Theater von Solunt. Ein besonderer Skenentyp des Späthellenismus auf Sizilien* (Mainz 1997) 18. 25–29.

⁹³ Although a relatively large area of the city was excavated, see CUTRONI TUSA et al. 1994, pl. 2; later, at an unknown date, a ›Roman-style bath building was built at the south border of the city; see CUTRONI TUSA et al. 1994, 43–47.

⁹⁴ The user groups of both the building and the bath suite cannot be determined; see in detail TRÜMPER 2008, 340–350.

⁹⁵ See above note 74; TRÜMPER 2008, 225–258 esp. 250–258 with older literature.

⁹⁶ With private facilities serving mainly for the daily personal hygiene of the family and public baths providing recreational, pleasurable leisure facilities for exercise, health, and socializing, see above.

⁹⁷ As assumed by DICKMANN 1999, 256–267 esp. 266 f. for Pompeii, see above note 64. – The situation might have been different for individual sites, however, depending simply on the availability of public baths and their standards.

2. whether public bathing facilities in a city always provided higher standards than their private equivalents and led the development of the local bathing culture, so that, for example, they were still attractive to people who had only simple cleansing bathing facilities at home.

3. whether the user spectrum differed significantly in public, semi-public, and private bathing facilities, for example according to social status, age, gender, and ethnicity, or whether private versus public facilities were even expressly installed with a view to such differentiations. Some general assumptions are possible, however: the use of sports facilities was usually restricted to select males in each city. Access to semi-public club buildings was normally limited to the members of the respective association (ordinarily also male) and select invited guests. Public baths were, in theory, open to everybody; while it is obvious that attempts were made in some ›Greek‹-style public bath buildings to separate the genders, little is known about the impact of the other above-mentioned distinguishing criteria on potential users. The use of relaxing bathing forms in these facilities might have been a prerogative of men, however, and given the required time and leisure and probably the increased entrance fee for using them, their use may even have been restricted primarily to upper class males⁹⁸. Finally, the use of private domestic bathing facilities was certainly controlled by the homeowners and usually would have been restricted to their families and guests; it can only be assumed, by comparison with Roman equivalents, that luxurious private bathing suites with relaxing bathing forms in upscale houses of the Hellenistic Eastern Mediterranean were primarily used by males of higher social standing within the context of the reception of guests; in contrast to this, simple bathrooms with cleansing bathing facilities might have been conceived mainly for use by the family, without excluding their occasional use by guests (after all, possession of one's own bathroom seems almost always to have been a major asset in ancient domestic architecture). Thus, in all the different contexts that were provided with bathing facilities in the Hellenistic world, the innovative relaxing bathing forms might have been conceived primarily for the pleasure, benefit, and socializing of upper class males.

Despite the heterogeneity in the development of local bathing culture, some general trends are still identifiable. While public bathing culture changed and flourished in the western Mediterranean as early as the 3rd c. BC, particularly in Sicily⁹⁹, private bathing culture followed, both in quantity and quality, only a century later. In contrast to this, the revolution in bathing culture in the Eastern Mediterranean, both on the public and private levels, occurred only in the 2nd c. BC, and especially in its second half. Cities such as Pella, Pergamon and Priene participated less in this development than other sites such as Eretria and particularly Delos, especially on a private level, probably because the three afore-mentioned cities experienced a politically motivated decline or crisis and suffered from a natural catastrophe, respectively, in this crucial period.

Regional and local differences notwithstanding, relaxing bathing facilities remained an extravagant luxury feature in domestic architecture throughout the whole Hellenistic period in the entire Mediterranean, even if they were obviously more popular in the West than in the East: whereas 61% of all ›Greek‹-style public baths were equipped with a relaxing bathing form, very few houses in various individual cities could boast such a standard¹⁰⁰. Whether this changed significantly in the Imperial period – for example, with considerable and more widespread progress in heating technology and water supply as well as increased political stability and prosperity – remains to be demonstrated by further research.

⁹⁸ That the archaeological remains provide some evidence to substantiate this theory cannot be discussed here.

⁹⁹ Other sites such as Fregellae, Gela, Megara Hyblaea, Syracuse, and Velia can be added to the example of Morgantina; see TRÜMPER 2008, table 6; TRÜMPER 2009, table 6, M. TRÜMPER, Gender Differentiation in Greek Public Baths, in: Internationales Frontinus Symposium zur Technik und Kulturgeschichte der antiken Themen, Aachen März 2009 (forthcoming).

¹⁰⁰ Cf. the percentages of houses per site, although these are necessarily ›flawed‹ due to the different states of excavation, preservation, and publication: Monte Iato: 40%; Morgantina: 13.3%; Pompeii: 8.75%; Delos: 4.5%; Solunto: 3%. – For the number of ›Greek‹-style public baths with relaxing bathing facilities, see TRÜMPER 2009; ›Roman‹-style baths are excluded from this calculation because they are defined by the existence of relaxing bathing forms, see above note 58.

Table 1
Round Sweat Baths in Domestic Architecture of the Western Mediterranean

Site	Bathing forms	Context of bath	Diameter of sweat bath in m	Pavement	Stucco	Heating source	House type	History	Date (century BC)	Identification in literature	Authenticity	Literature
Boscotera, Villa of P. Fannius Synistor	1 sweat bath; other forms unknown/debated	complex with 3 suites with each 2 rooms?; anteroom 20 and sweat bath 21, accessible from peristyle courtyard; 2 suites with unknown bathing forms (16-17, 18-19), accessible from peristyle courtyard and secondary colonnaded courtyard 15, respectively	c. 3.00	unknown	unknown	unknown	villa	original?	1 st c. BC?	yes	no	BARNABEI 1901, 17–18 pl. 2; ANDERSON 1987–1988, 16; TORELLI 2003, 221; TRÜMPER 2008, 267 note 1356
Megara Hyblaea, House in square 40/49?	1 sweat bath	suite with 2 rooms: anteroom, sweat bath	1.55	unknown	unknown	unknown	unknown	unknown	after 214?	no	yes	unpublished, cf. VALLET – VILLARD – AUBERSON 1976, square 49
Monte Iato, Peristyle house E2	1 sweat bath, 1 hip-bath tub	sweat bath, accessible through corridor from peristyle courtyard; next to lavishly decorated rooms; possibly suite with several rooms (in one of them: hip-bath tub)?	3.10	white cement	white coarse stucco	rectangular structure made of fired bricks; in center small lime stones with traces of fire	peristyle house	subsequently	House: 3 rd , sweat bath: 2 nd	yes	yes	BÜRGE 2001, esp. 57 f.
Monte Sannace, Peristyle house on the Acropolis?	1 sweat bath?	suite with 2 rooms: anteroom, round room h; accessible from peristyle courtyard	1.70–1.80	earth?	unknown	unknown	peristyle house	original?	end of 4 th /beginning of 3 rd	yes; Datcher; unlikely: Trümper; silo: Ciancio et al.	no	CIANCIO et al. 1989, 24 pl. 27; DALCHER 1994, 140 note 259; TRÜMPER 2008, 260 note 1354
Morgantina, House of the Doric capital	1 sweat bath	suite with 2 rooms: anteroom 21, sweat bath 22; accessible from corridor in service section; separate bathroom 12 in different part of the house?	3.30	opus signinum?	stucco remains of unknown quality	unknown	peristyle house	subsequently	after 211	no	yes	TSAKIRGIS 1984, 65 f. 106; TRÜMPER 1998, 66
Pantelleria, House on the Acropolis (Sag- gio III)	1 sweat bath	not yet fully known; separate bathroom with hip-bath tub in a different part of the house	2.00	opus signinum	stucco of unknown quality	unknown	peristyle house	not yet known	not yet known, but before 1 st c. AD	yes	no	SCHÄFER – OSANNA – RIETHMÜLLER 2001, 237–238; OSANNA et al. 2003, 72–80; DE VICENZO – OSANNA – SCHÄFER 2005; OSANNA 2006, 42–45
Pompeii, Villa dei Misteri	1 sweat bath	suite with 3 rooms: anteroom/sapodyterium 42, bathroom/tepidarium 43, and sweat bath 44; accessible from secondary atrium	1.65	opus signinum	stucco over tiles	unknown	villa	subsequently	c. 60 BC?	yes	yes	MAIURI 1931, 63–66, ESPOSITO 2007.
Pompeii, Casa del Giuseppe II (VIII 2, 38–39)	1 sweat bath, 1 heated individual immersion bath tub	suite with 3 rooms: bathroom 7 (scaldarium) with heated individual immersion bath tub; room 6; sweat bath 8; on lowest terrace of the house, next to kitchen (prae-furnium)	c. 3.10	unknown	white stucco	unknown	>Hanghaus< with three terraces	original	80–30	yes	yes	NOACK – LEHMANN-HART-LEBEN 1936, 18–30 esp. 22–25, 30; FABBRICOTTI 1976, 76–78; PPM VII 308–310; DICKMANN 1999, esp. 262–264 note 42

Table 1 (cont.)
 Round Sweat Baths in Domestic Architecture of the Western Mediterranean

Site	Bathing forms	Context of bath	Diameter of sweat bath in m	Pavement	Stucco	Heating source	House type	History	Date (century BC)	Identification in literature	Autopsy	Literature
Pompeii, Casa del Menandro (I 10, 4.14–17)	1 sweat bath, 1 heated individual immersion bath tub	suite with 4 rooms: small colonnaded courtyard 46; room 47 (<i>stipidarium</i>); bathroom 48 (<i>scaldarium</i>) with heated individual immersion bath tub and <i>labrum</i> ; sweat bath 49 (<i>laconicum</i>); accessible from peristyle courtyard	4.25	pavement of lava stones (with stucco?)	waterproof stucco	gap in floor (0.62 m diameter) = fireplace?	atrium-peristyle house	original	1 st (2 nd Pompeian style)	yes	yes	LING 1997, 61–67
Pompeii, Casa del Marinaio (VII 15, 1. 2. 15)	1 sweat bath, 1 heated individual immersion bath tub	suite with 3–4 rooms: room d'; bathroom (<i>scaldarium</i>) e' with heated individual immersion bath tub; sweat bath n', distributive space between d' and n'	c. 2.10	unknown	unknown	unknown	atrium-peristyle house	subsequently	end of 1 st	no	yes	PPM VII, 704–709
Solunto, Edificio sacro a labirinto (club building?)	1 sweat bath	sweat bath g; accessible from room f in center of building (whose function is unknown)	2.70	earth?	waterproof stucco	unknown	club building (or public bath?) with peristyle and cryptoporticus	subsequently	probably 2 nd	yes	yes	TUSA 1979; TUSA 1982/1983, 141–143; CUTRONI TUSA et al. 1994, 94 f.; TUSA 1985, 609; TUSA 1999, 375; BÜRGE 2001, 61
Soluto, Casa a vano circolare	1 sweat bath	suite with 3 rooms: room n with bench; anteroom o; sweat bath p; accessible via corridor/ staircase from peristyle courtyard	2.20–2.30	earth?	stucco remains of unknown quality	unknown	peristyle house	subsequently?	probably 2 nd	yes	yes	CUTRONI TUSA et al. 1994, 53 f.; BÜRGE 2001, 60; WOLF 2003, 74, 78
Stabiae, Villa rustica sul colle di Varano	1 sweat bath, 1 heated individual immersion bath tub, cold-water pool?	suite with 6 rooms: 2 rooms without installations; sweat bath; room with cold-water pool?; bathroom (<i>scaldarium</i>) with heated individual immersion bath tub; <i>prae-furnum</i> ; accessible from peristyle courtyard	3.30	unknown	unknown	unknown	villa	unknown	unknown	yes	no	FABBRICOTTI 1976, 63 f.
Vulci, Casa del Criptoportico	1 sweat bath, 1 heated individual immersion bath tub	suite with 4 rooms: 2 rooms (<i>apodyterium</i> , <i>stipidarium</i>); sweat bath; bathroom (<i>scaldarium</i>) with heated individual immersion bath tub and <i>labrum</i> ; accessible from peristyle courtyard via a corridor and a large room, and from garden portico via a large room	1.90	<i>opus tessellatum</i>	unknown	unknown	villa	original	end of 2 nd /beginning of 1 st	yes	no	BROISE 1991, 85–88; PESANDO 1997, 287–290; BROISE 2004, 101–105

Table 2
Round Sweat Baths in Domestic Architecture of the Eastern Mediterranean

Site	Bathing forms	Context of bath	Diameter in m	Pavement	Stucco	Heating source	House type	History	Date (century BC)	Identification in literature	Autopsy	Literature
Delos, Îlot des bronzes, Maison I	1 sweat bath	suite with 2 rooms: anteroom EQ, sweat bath EP; accessible through door from peristyle courtyard	2.30–2.50	terracotta slabs	waterproof stucco	central built fireplace	two houses merged, one with one with peristyle	subsequently	end of 2 nd / beginning of 1 st	no	yes	SIEBERT 2001, 56 f.; TRÜMPER 1998, 180–186 cat.-nos. 4–5
Delos, Maison de Fourni (club building)	1 sweat bath	suite with 2 rooms?: large anteroom/vestibule, corridor to sweat bath; accessible from street	ca. 1.80–2.00	white cement	stucco remains of unknown quality	traces of fire on pavement?	club building (with peristyle); additional living units	subsequently	after 167	no	yes	DAUX 1961, 914; BRUNEAU – DECAT 1983, no. 124, esp. p. 314; TRÜMPER 1998, 317 f. cat.-no. 91
Delos, Maison des Tritons	1 sweat bath, 1 hip-bath tub	suite with 2 rooms: anteroom AL with hip-bath tub, sweat bath in AM; accessible through corridor (with kitchen?, latrine) from peristyle courtyard and possibly via separate corridor from street	1.90	earth?	waterproof stucco	channel with hot water	peristyle house	subsequently	end of 2 nd / beginning of 1 st	no	yes	BRUNEAU et al. 1970, 99 f.; TRÜMPER 1998, 205–207 cat.-no. 19
Delos, Quartier du théâtre, Îlot II, Maison E	1 sweat bath with integrated supply for cold ablutions	suite with 2 rooms: anteroom i and sweat bath; accessible from peristyle courtyard	1.56–1.65	white stucco	waterproof stucco	channel with hot water	peristyle house	subsequently	after 167	disputed	yes	CHAMONARD 1922–1924, 190 f.; GINOUVES 1962, 204 note 1; TRÜMPER 1998, 262–264 cat.-no. 49
Rhodos, Palace-like dwelling	1 sweat bath	not fully known: suite of several rooms?: anteroom and sweat bath, accessible from peristyle courtyard B (later enlarged: most likely with heated immersion tub)	2.40	unknown	unknown	unknown	large complex with several peristyle courtyards	original to major building phase Ic	2 nd /1 st	yes	no	DRELIOSI-HERAKLEIDOU 1996, 189
Thera, House of Pothitos	1 sweat bath	suite with 2 rooms: small anteroom V; sweat bath W; accessible from corridor S on lowest terrace	2.20	unknown	unknown	unknown	*Hanghaus with several terraces	original?	Hellenistic?	no	no	HILLER VON GÄRRINGEN – WILSKI 1904, 151

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Fig. 1: Hellenistic terracotta hip-bathtub with stepped bottom, from Morgantina; Aidone (Morgantina), Museum



Fig. 2: Hellenistic terracotta hip-bathtub, partially closed on top, from Agrigento; Palermo, Archaeological Museum



Fig. 3: Delos, Quartier de l'Aphrodision, Maison I: plan

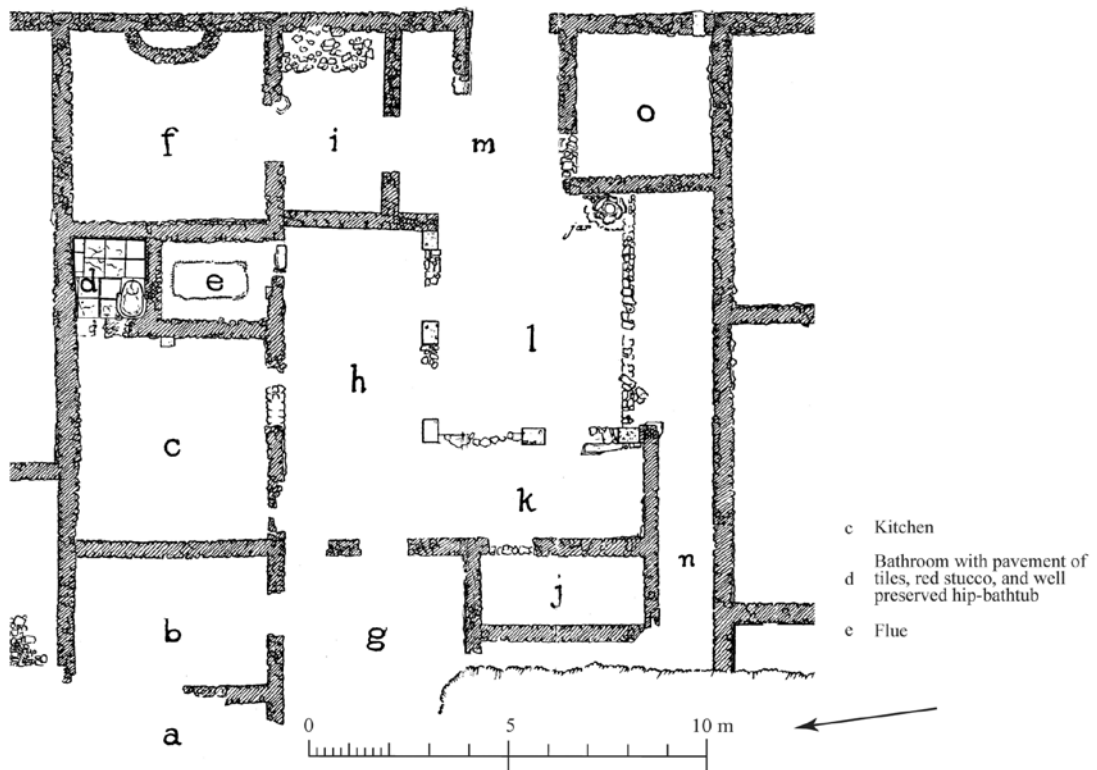


Fig. 4: Olynthos, House A2: plan

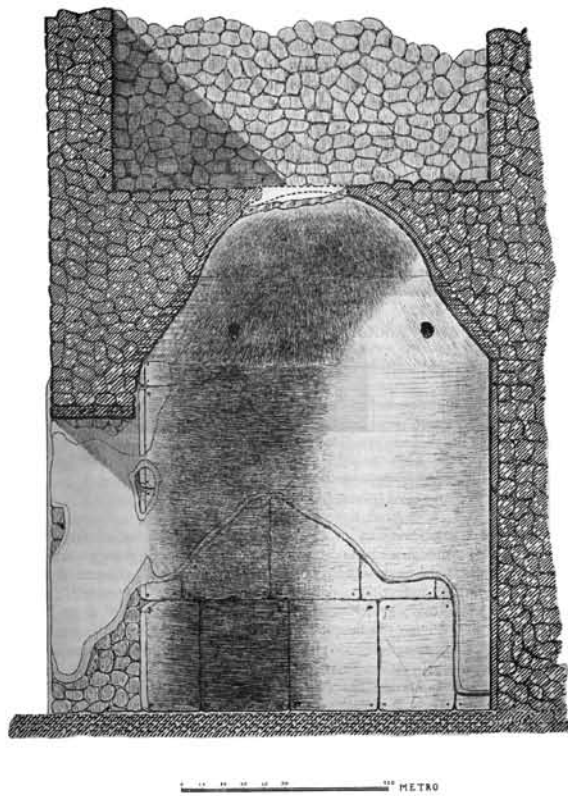


Fig. 5: Pompeii: Villa dei Misteri: round sweat bath (*laconicum*), section; 2nd/1st c. BC

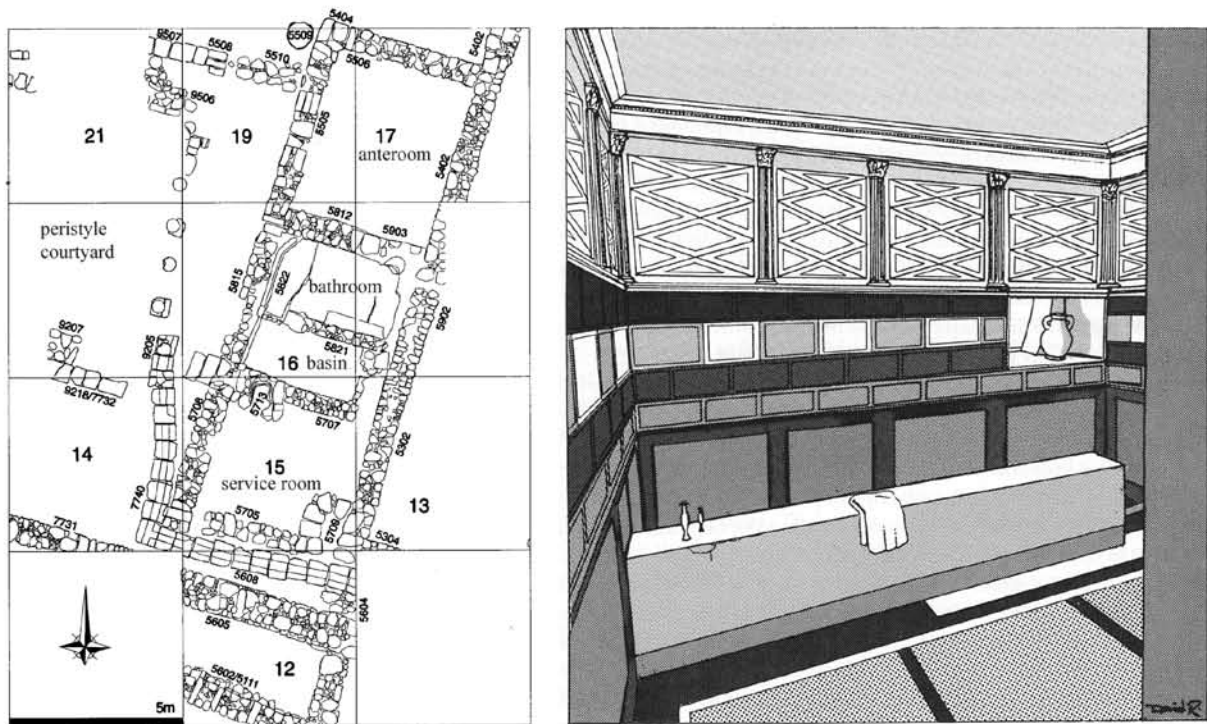


Fig. 6: Tel Anafa, Peristyle house (LHSB): plan of bath suite in the east wing and perspective reconstruction of central room of bath (16) with basin; last quarter of 2nd c. BC – second quarter of 1st c. BC



Fig. 7: Kom Troughah: private bath with hip-bathtub, reservoir(s), and immersion bathtub; Ptolemaic period

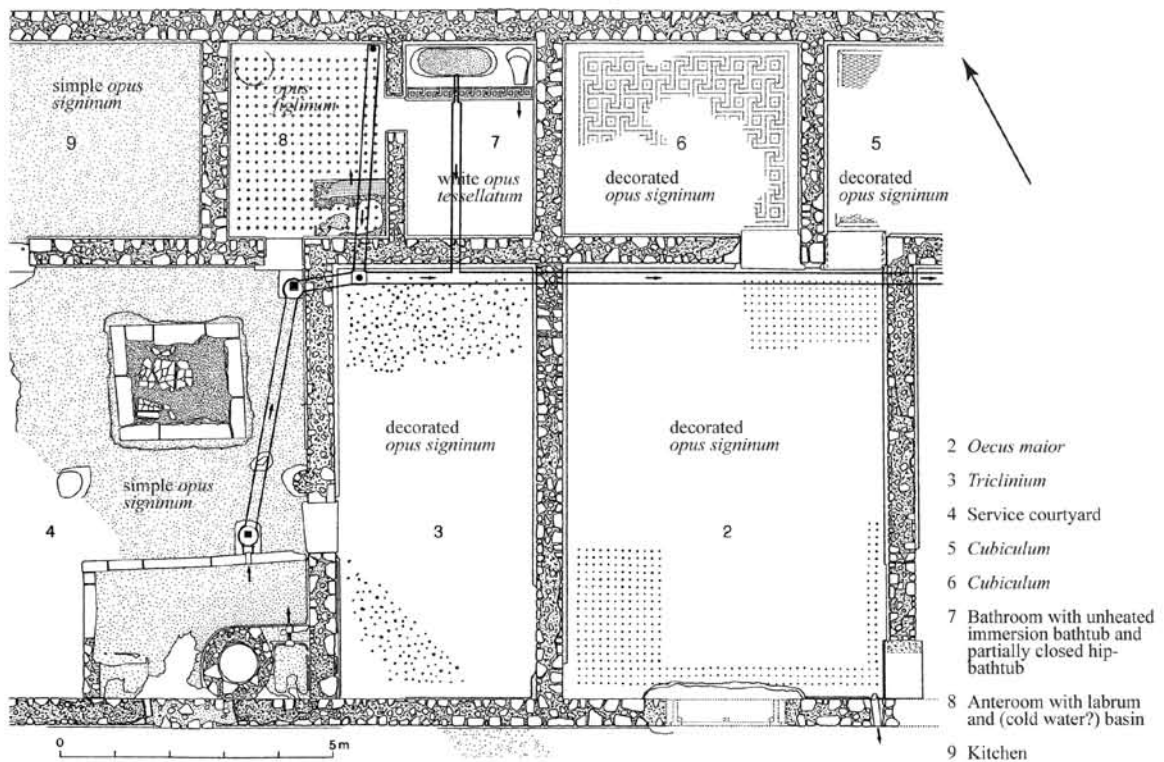


Fig. 8: Sperlonga, Villa Prato: plan of a part of the *pars urbana* with conjectural reconstruction of drains; second half of 2nd c. BC

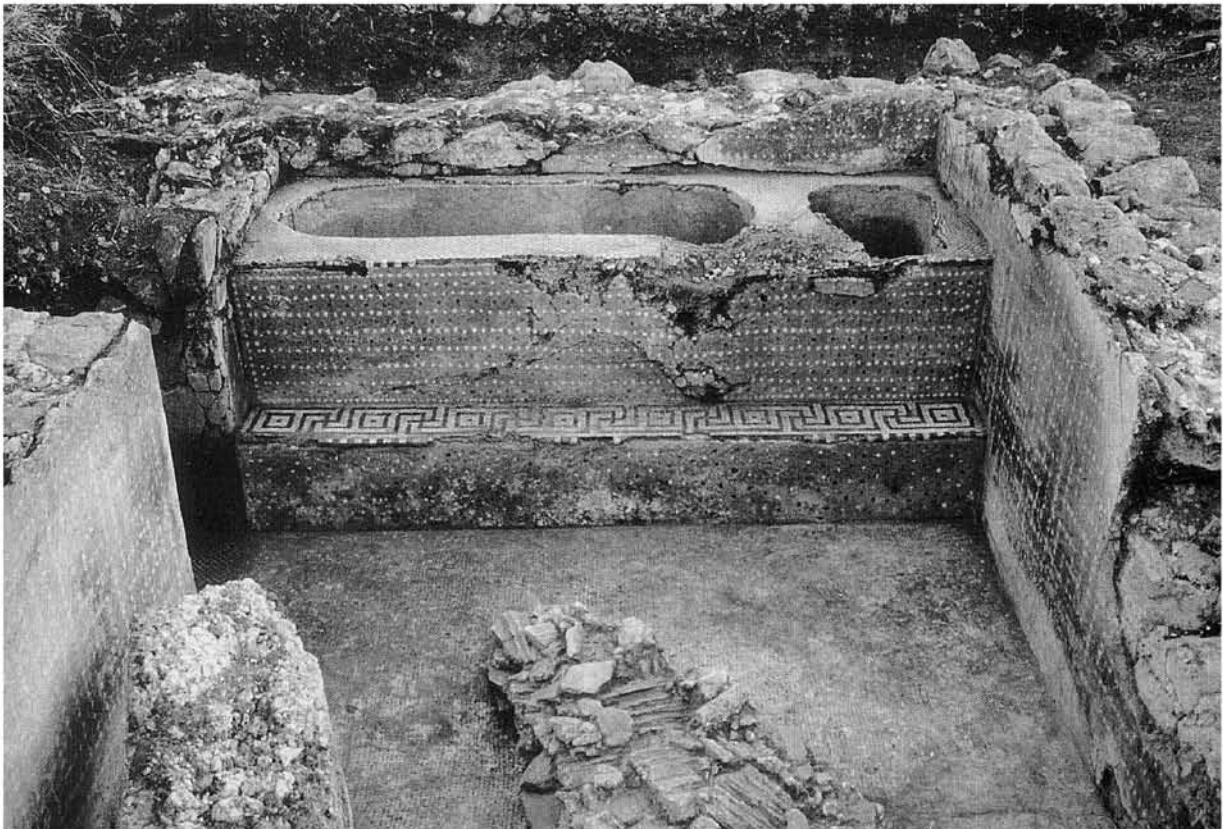


Fig. 9: Sperlonga, Villa Prato: bathroom with unheated immersion bathtub and partially closed hip-bathtub; from south

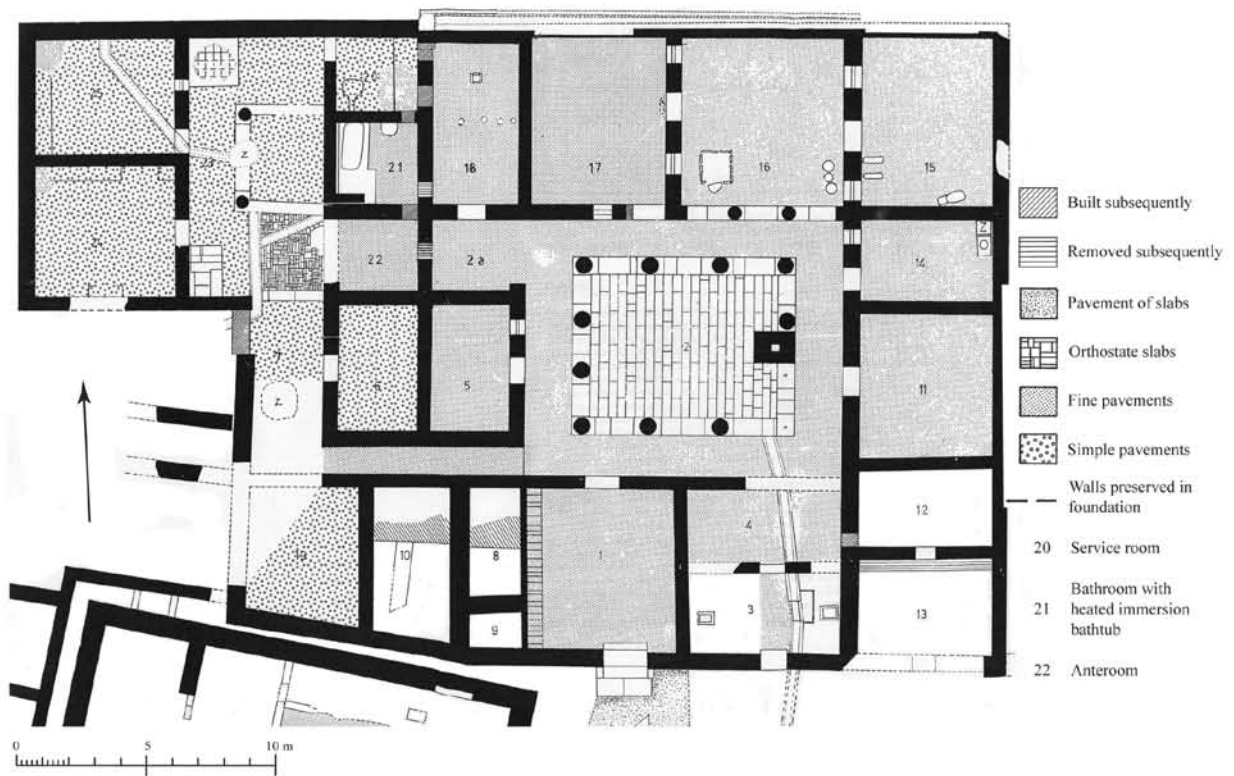


Fig. 10: Monte Iato, Peristyle house 1: plan of the building after the enlargement around c. 200 BC



Fig. 11: Monte Iato, Peristyle house 1: bathroom 21 with heated immersion bathtub; from south

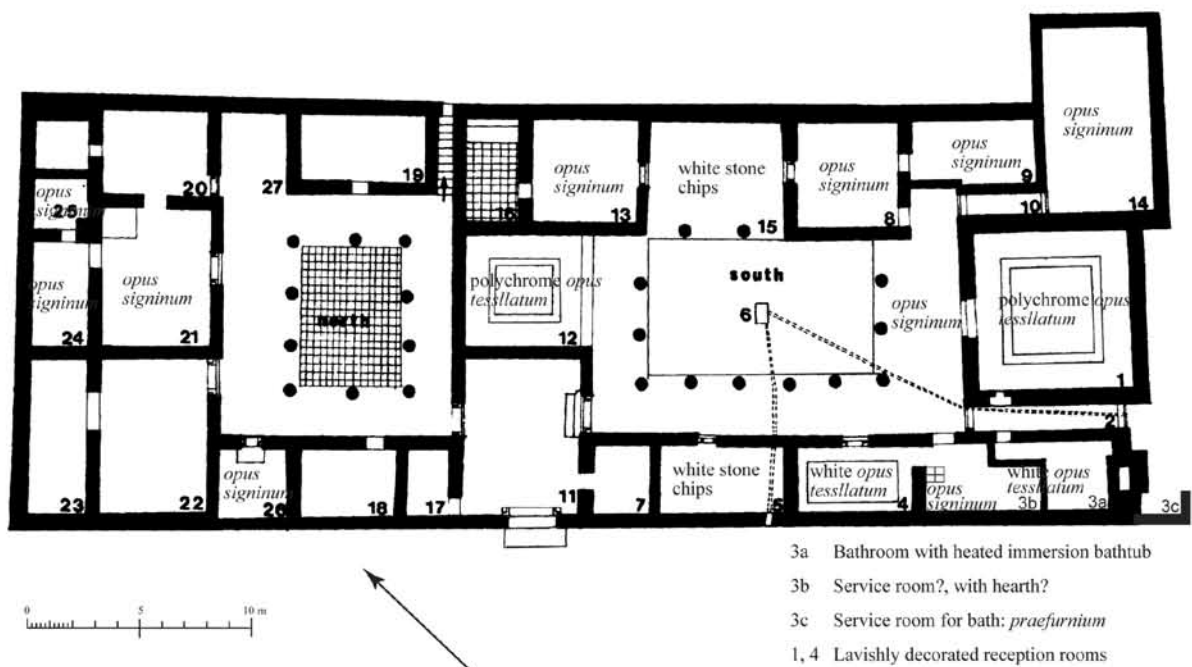


Fig. 12: Morgantina, House of the arched cistern: plan of the building after 211 BC



Fig. 13: Morgantina, House of the arched cistern, room 3: overview; from north



Fig. 14: Morgantina, House of the arched cistern, room 3: south wall of the heated immersion bathtub, blocked opening for heating the bathtub; from south



Fig. 15: Morgantina, House of the arched cistern, room 3: terracotta pipe (flue) in the southeast corner of the heated immersion bathtub; from southeast

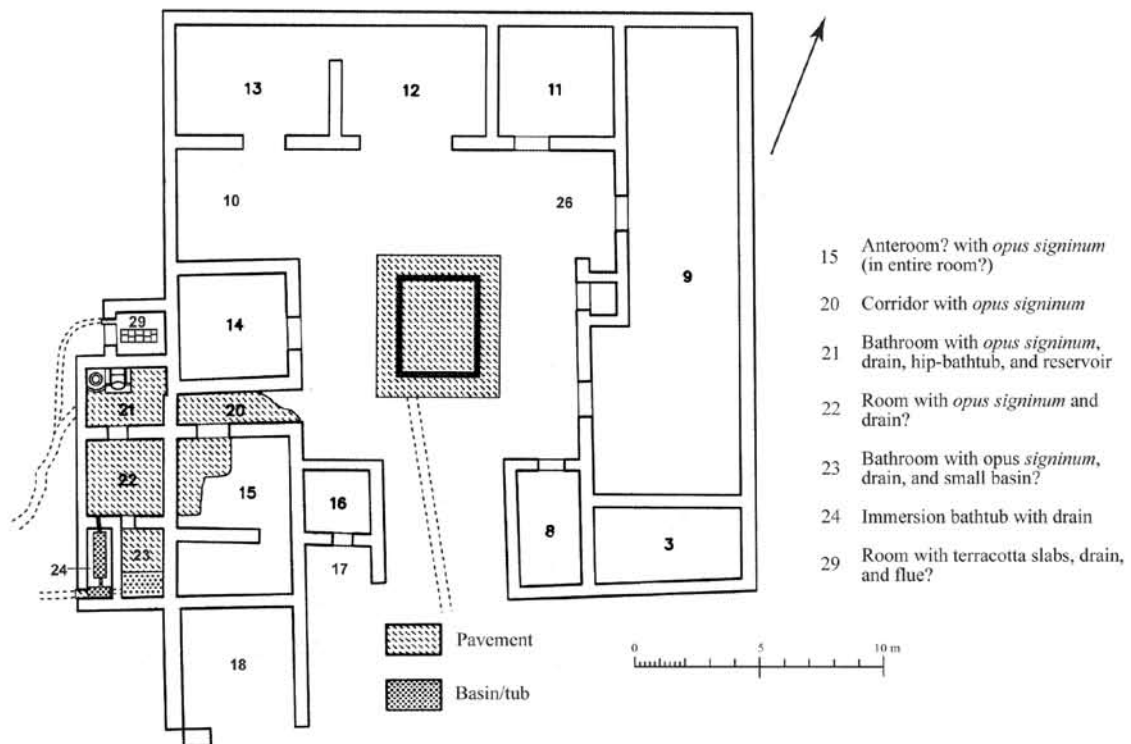


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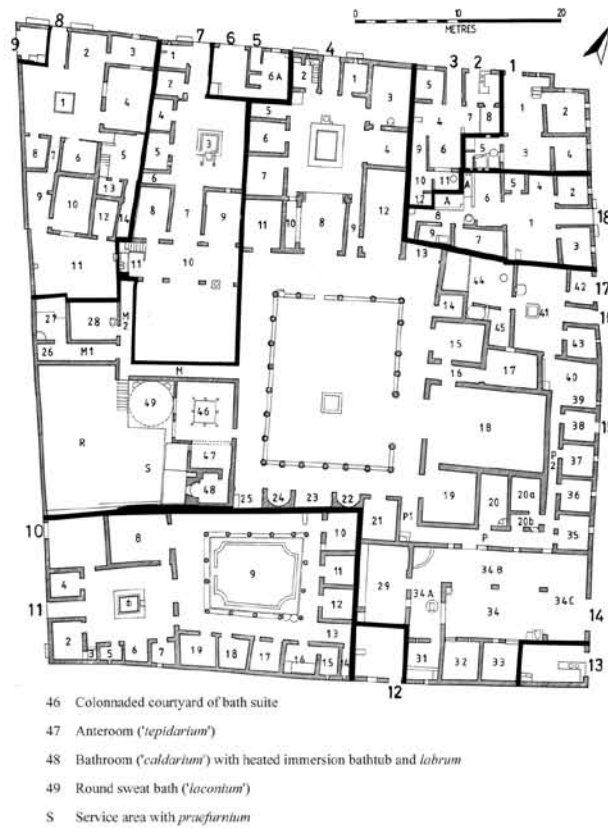


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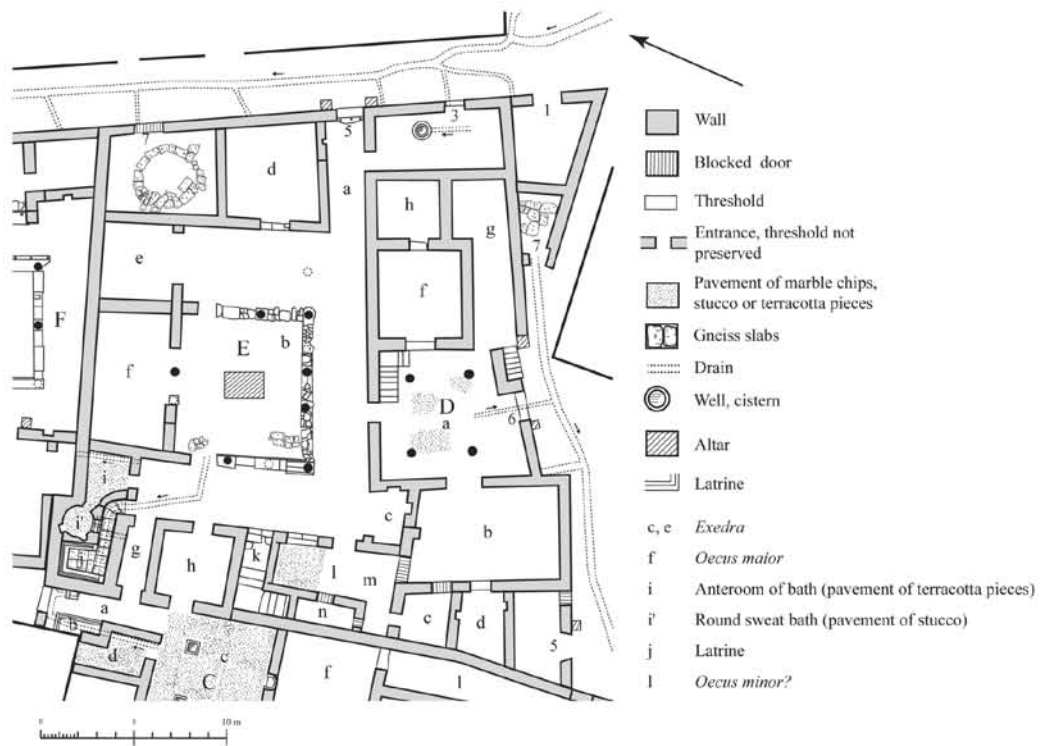


Fig. 19: Delos, Quartier du théâtre, Îlot II, Maison E: plan; after 167/166 BC, before 88 BC



Fig. 20: Delos, Quartier du théâtre, Îlot II, Maison E: round sweat bath i'; from east



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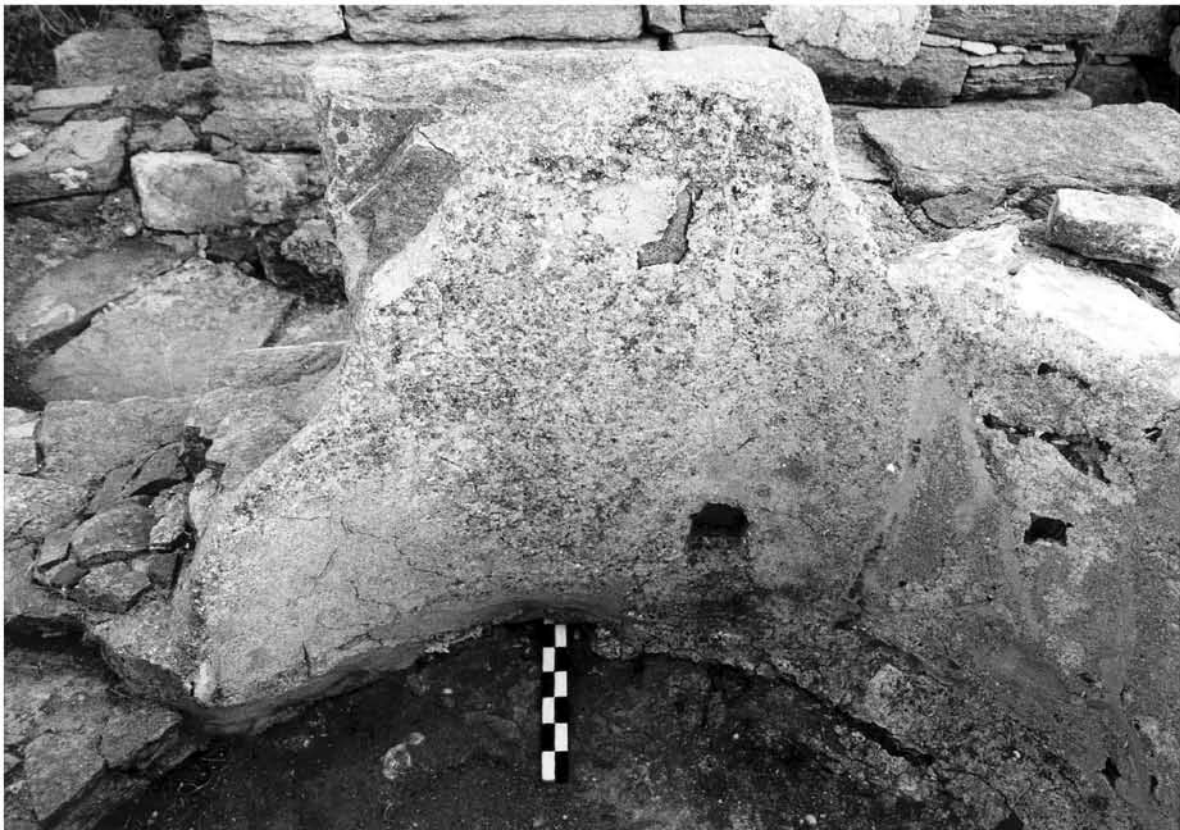


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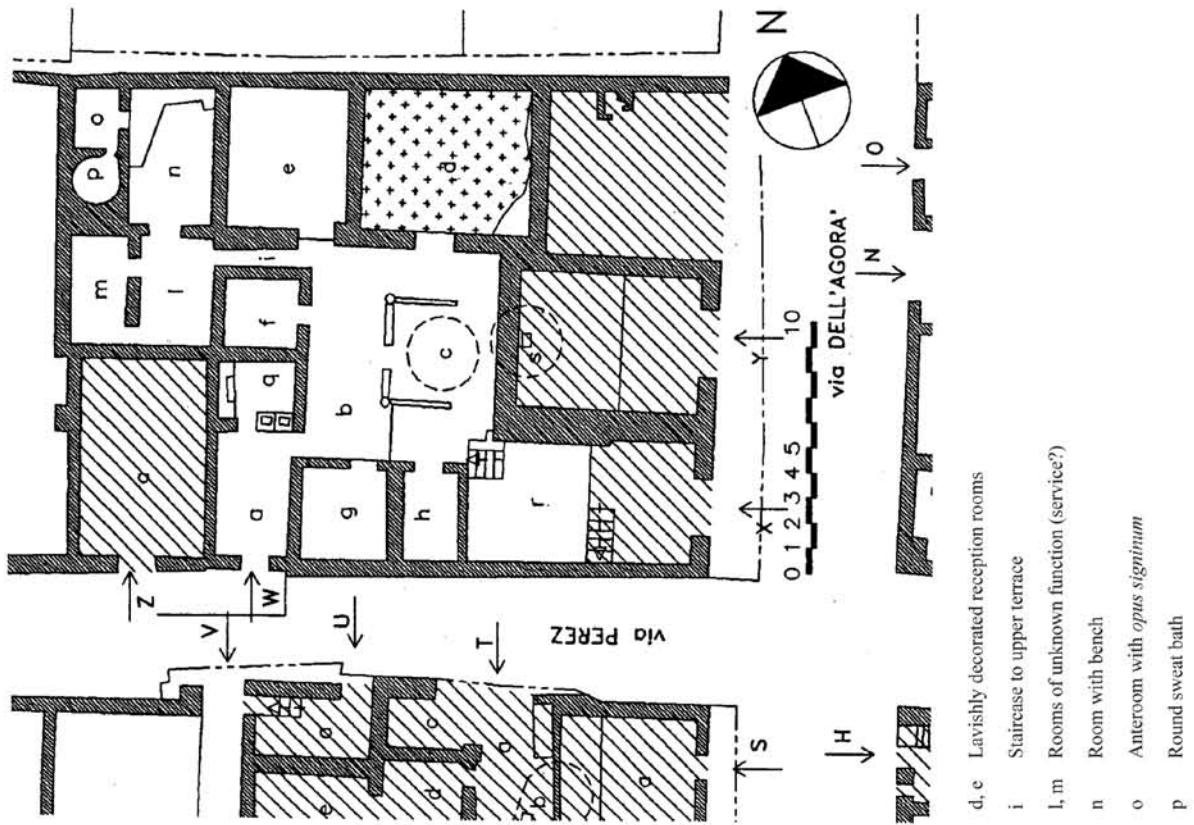


Fig. 23: Solunto, Casa a vano circolare: plan; Hellenistic



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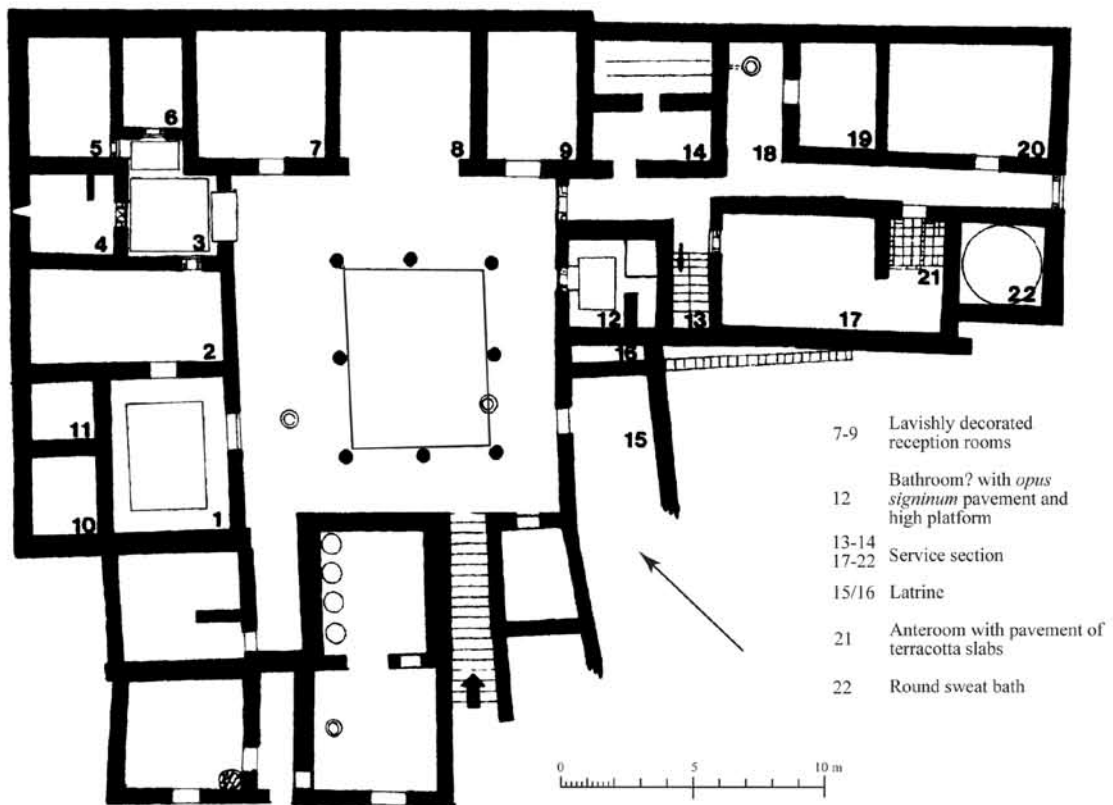


Fig. 25: Morgantina, House of the Doric capital: plan of the building after 211 BC



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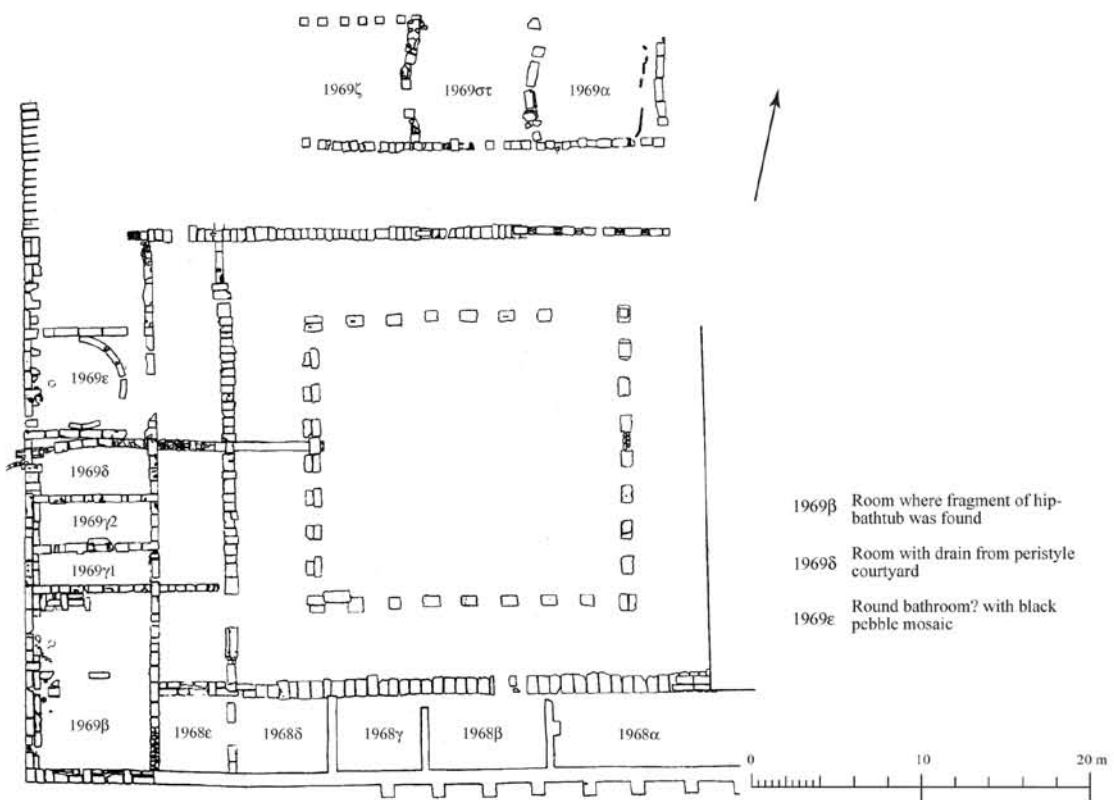


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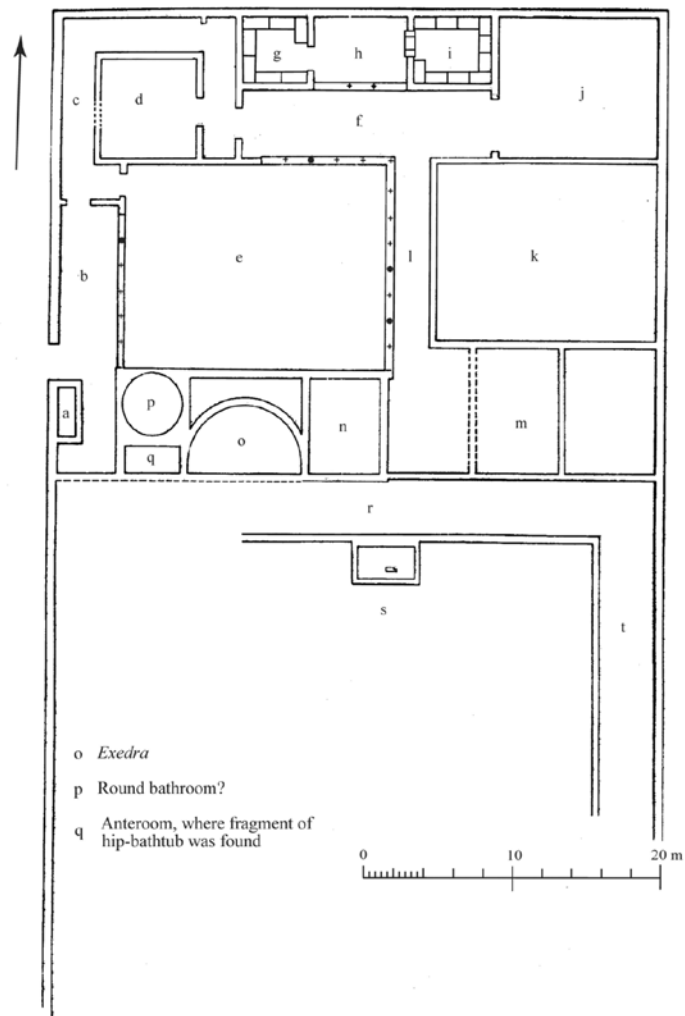


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