

**The “Roman” Sensorium:
Enslaved Experiences in the Bowels of the Baths of Caracalla**

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Roman architecture often places emphasis on verticality, spatial positioning, and monumentality to communicate messages to, and produce feelings in, the viewers. Nowhere is this more obvious than in the euergetic projects advanced by any number of Roman emperors. Even for modern viewers, looking at the Colosseum, the Pantheon, or the imperial *thermae* produces awe at the engineering capabilities of the Romans, and the amount of material that could be mobilized. However, what lurks behind the marble and shining facades of the ‘Eternal City’? The Roman Empire was, famously, a slave empire; they relied on enslaved labor for construction, agriculture, commerce, and the running of the imperial bureaucracy.

This essay focuses on the Baths of Caracalla, analyzing the enslaved experience through a lens informed by the sensory turn. Drawing heavily on multisensory and multivocal theory, this lens enables insight into the voices silenced by history and centers an alternate view on a space to the typical elite male perspective found in literary sources. By exploring the enslaved experience in imperial *thermae*, places so laden with imperial symbolism, there is a degree of ideological reclamation and recognition. Therefore, this essay is, in a sense, politically motivated. The reconstruction is itself part of the goal: as in much postcolonial archaeology, the politics are inseparable from the work itself. Furthermore, by placing enslaved individuals into an embodied, sensorial framework, there is emphasis placed on their humanity, despite the deliberately dehumanizing conditions of enslavement. As part of this project, this essay deliberately does not place value judgements onto the spatial experiences: instead, the reader is encouraged to make sense of the points raised through their own embodied experiences.

Theoretical Framing

The sensory turn rests on three major ideas (see Hunter-Crawley 2019 for a full description). First, the idea that approaching our work in an embodied manner produces more

accurate reconstruction, and therefore more accurate conclusions. Second, that focusing on the senses enables scholars to theorize about people who otherwise might be inaccessible: through textual evidence we have clear statements of elite sensory experiences, but we need to reconstruct the sensory experiences of non-elite peoples. Finally, sensory experiences are culturally conditioned, and therefore people from different cultural backgrounds may have dramatically different sensory experiences. The sensory turn allows us to counter “the triumph of logic and rationality... [which] promote[s] ascetic withdrawal from the world” (Fabian 2000: xii). Early attempts to engage with sensory experience primarily focused on single senses, but more recent work has emphasized the multivocal nature of sensory experience and the importance of holistic descriptions. Throughout this paper, the term sensorium will be used to represent the set of the senses in use within a specified cultural context.

Classical archaeology has been relatively slow to take up the theoretical ideas raised by the sensory turn. In some ways this is not noteworthy: the traditional reliance on textual and art historical sources primes scholars to focus on visual evidence to the exclusion of other modalities. On the other hand, one might have expected that the wide variety of textual sources would enable us to integrate sensory experiences more fully within classical archaeological contexts. There has been some skepticism within Classics as to the ability of sensory work to have explanatory power—reading it as merely descriptive—but this seems to miss the broader point of the sensory turn. The point of the turn is the “acceptance of plurality in perspectives and possibilities about how the ancient world was lived” (Hunter-Crawley 2019: 444), which requires a process of descriptive work which can then be utilized in more analytical models. Furthermore, the sensory turn can be utilized within a broader post-modern project of unsettling assumed continuities and so-called universal experiences.

Within the context of enslaved people in the Roman world it is important to consider both the ‘soft power’ of cultural hegemony and the ‘hard power’ of physical violence and coercion. We need to remember that these enslaved people lived in a circumscribed, surveilled world but that they also exercised their own agency and engaged in both active and passive resistance to the hegemony of the Roman state. Integrating this perspective on enslaved people with the sensory turn produces an attention to the multiplicity of sensorial experiences, particularly when considering people from different cultural contexts. This raises two questions for this study: first, what would a Roman sensorium consist of, and second, what happens when we complicate that sensorium with the multiplicity of cultural contexts represented by Roman enslaved people?

The “Roman” Sensorium

As part of this paper’s general aim of unsettling modern assumptions of continuity with the Roman sensory experience, it is fitting to begin by examining some literary evidence regarding how the Romans may have thought about the senses. This section will begin by exploring the thoughts of Aristotle and Galen, will then consider how universally accepted these models may have been in the Roman world, and will finally ask who might be left out by these narratives of the senses.

Although he was not the first to write about the senses in the Western tradition, Aristotle may be the most influential. He discussed the senses most clearly in *De Anima* and *De Sensu et Sensibilibus* (Vinge 2009:107). Aristotle was preoccupied with two questions about the senses: first, he was interested in “the relationship between the senses and the four elements” and second, “how sensation is transmitted from the object to the sense-organ” (Vinge 2009:108). In *De Anima* Aristotle presents the case that there are five senses, arranged in the order sight, hearing, smell, taste, and touch (Vinge 2009:109). This enumeration is familiar to us as modern

readers, since it follows the standard number and order of the senses. What is unexpected about Aristotle's model is the relationship he envisioned between the senses and the brain: he denied "that all the senses have connections with the brain" (Wade 2009:58). Rather, senses were fundamentally rooted in their interaction with the surroundings. It was not until Galen, and the advent of anatomical dissection, that a strongly physiological conception of the senses entered the picture (Wade 2009:58). This is the model that is commonly accepted in the modern world: senses are thought of as innately physiological rather than phenomenological. Other classical authors, like Anaxagoras or Plato, proposed a different number of senses, suggesting that senses like touch can be subdivided. The purpose of highlighting these interpretations is to demonstrate both that the view on senses within what is considered the Western canon is not monolithic and that there were alternative interpretative schema floating around the ancient Mediterranean. While there were certainly others, for which we lack textual evidence, Aristotle and Galen demonstrate the overall point.

One important question raised by classicists working in the sensory turn is how generally we can ascribe the perspectives described by ancient philosophers. In other words, what was the reach of these philosophical conceptions? Should we assume that the views espoused by Aristotle or Galen rapidly became commonly accepted, or were even discussed among most people at all? We need to remember that "philosophers spoke to a narrow group of society and did not necessarily represent the worldview of the majority" (Hunter-Crawley 2019: 437).

Furthermore, if we take the notion of the subaltern seriously, we need to consider the impact that the multiplicity of worldviews would have on our analysis. While the Roman worldview might have been hegemonic, it is worth asking whether there truly was a coherent set of beliefs which we should call 'Roman.' This is an especially pertinent question because of how

fundamental a learned sensorium is to lived experiences (Howes and Classen 2013). By the time of the Empire, many groups of differing ethnicities and religions had been incorporated (in various ways) into the people living in the city of Rome. In particular, the enslaved populations within Rome were highly variable. It is extremely difficult to identify where these people came from, or what they might have considered part of their identities. While I will continue to use the term Roman, this multiplicity of experience and background is constantly implied. All these difficulties indicate that we must remember that the lived experience of the ‘Roman’ sensoria might be significantly different from mine.

The Enslaved Experience of the Baths of Caracalla

I now turn from the more theoretical discussion to a grounded case study. The Baths of Caracalla are a particularly salient example for examining enslaved spatial experiences in Rome. This is in part because of the strong contrast created by the significant opulence on display in the main structure, and the invisible labor required to maintain the normal operations of the baths. The Baths of Caracalla were built between AD 212 and 217 based on brickstamps and textual evidence (DeLaine 1997:15). They were public baths built in the imperial tradition of public benefaction by Septimius Severus and Caracalla and were the first baths built on this scale in over a hundred years. See Figure 1 for a schematic elevation. Janet DeLaine’s monumental work on the architecture and the building process of the baths has been invaluable in thinking about spatial experience, although her book largely glosses over the substructures.

The bath structure itself is constructed much like any other Roman bath, simply on a larger scale (Figure 2 for a floor plan). The *frigidarium*, or cold room, is at the center of a symmetrical layout. North of the *frigidarium* is an open-air swimming pool, south is the *tepidarium* and then a circular *caldarium*. These later two rooms needed to be heated: the

tepidarium only slightly, but the *caldarium* to $\sim 50^{\circ}\text{C}$ (Oetelaar et al. 2014). This heating relied on both the hypocaust system and the sun shining through large windows (see Figures 3 and 4). The hypocaust system would need to be active continuously, given the daily bathing routines: it would have been impossible to heat the water to the temperatures needed in the *caldarium* in the mornings if they cooled it down at the end of the day.

Underneath the grandeur of the Baths was a different world: rather than marble, statues, and fine decorations, there was brick, plaster, and hard labor. To keep the Baths running required huge inputs of labor, fuel, and water. Because of the scale, much of this work went on underground; invisible to the average patron, there were hundreds of enslaved people working to maintain and repair the furnaces, the drains, and the water supply. Figure 5 shows the overall map of the service tunnels. The furnaces required an immense amount of wood (as calculated by Mietz 2016). In Figure 5 the spaces labeled “S1” are theorized to be unloading and storage areas for the wood supply. These tunnels were quite large, measuring 6m wide and 6m tall (Lombardi and Corazza 1995: 52). Importantly, these were the major access tunnels: not only were they where horse drawn carts, bearing wood, likely would have entered, but they were also where most laborers would have entered the tunnel complex. These main tunnels connect to the furnace access tunnels in four places, with three connections being relatively small and the third being a major intersection. The tunnels connecting to the furnaces were slightly smaller. The next two categories of tunnel were those dealing with the water supply. Carrying water from the 10,000 m³ cistern (Lombardi and Corazza 1995: 64) was an enormous network of lead pipes, many of which needed to be accessible (see Figure 6). These tunnels were significantly smaller than those mentioned above: this may in part be due to the nature of the needed activity. Stoking the furnaces required the movement of large quantities of wood in and ash out, whereas the

maintenance of piping only required small tools and a few people. These tunnels were a level below the access and furnace tunnels (see section a-a' in Figure 5). Below that set of tunnels was one final set, which dealt with the draining apparatus of the complex.

Turning to the sensorial experience of working in the baths, the first thing to point out is the sound. There are three major sources of auditory stimulation worth highlighting. The first, and most significant, comes from the movement of wood and other supplies into the substructure on carts, and the subsequent unloading processes. The second significant source of sounds comes from the interactions between people: there would have been hundreds of enslaved people working in this space, and it is difficult to imagine these service activities as taking place in complete silence. In Seneca's *Letters* 56 1-2, we see evidence for the constant noise produced by bathers: those lifting weights, talking to others, playing various games, various shouting (Seneca Ep. 56). While this only describes those at the baths, it seems plausible to extend this sort of activity to the maintenance spaces. Because of how the piping system worked (see Figure 6), there was a near constant movement of water, being piped from cisterns to heating spaces, or directly into the baths, and then being drained out. The daily water consumption of the baths meant that this movement would have produced significant sounds: the rushing of moving water, perhaps dripping from leaky pipes. The sound of water, in particular, might have been a near omnipresent experience in these tunnels. In this context, it is important to highlight that the design of the service tunnels themselves, especially the larger access tunnels, would have amplified and carried these sounds throughout the complex: this active soundscape would have underpinned the daily experience of working in the Baths.

Olfactory experiences are notoriously difficult to convincingly reconstruct using archaeological evidence (cf. Hamilakis 2014; Rojas and Sergueenkova 2017). Most of the work

on olfaction either relies on written sources or on a degree of speculation. Within the upper levels of the Baths, it would be relatively simple to argue convincingly for the omnipresence of various scents and ointments, largely because of the elite textual evidence. However, in the lower levels, where we lack this evidence, a degree of speculation enters the picture. The constant labor, particularly in the heat of the furnaces, suggests that we can assume the smell of sweat. Around the main access areas, where horses drew carts in, it almost certainly smelled strongly of animals. As mentioned above, the Baths required a huge amount of energy input to maintain the temperatures expected for the *caldarium*. Mietz argues convincingly that the constant, relatively low, temperatures required indicate that the baths would be primarily wood-burning, rather than charcoal-burning (Mietz 2016:58-64). This constant wood-burning would both produce smoke and aerosolize volatile compounds, which are the compounds responsible for odors. While the hypocaust system did have a mechanism that channeled most of the smoke and gases out through chimneys (see Figure 7), some smoke and soot would have escaped from the furnaces. Because of the reliance on wood rather than charcoal, there would have been relatively low carbon monoxide levels surrounding the furnaces, but there would have been a constant scent of smoke in the air.

The discussion of wood burning brings us naturally to the question of the visual experience of working in these tunnels. It is unclear how most of the tunnels would have been lit. The major tunnels were lit by skylight (Piranomonte 2012: 96). This only works during the day, however: at night, other lighting must have been utilized. It seems likely that there would have been installed light sources, rather than relying on people to carry torches around. Unfortunately, those sorts of fixtures are typically made of metal, and thus commonly have been looted from the site. Either way, it is important to remember that these tunnels would not have been lit by the

bright, even lighting that we use today: it would have been a flame, flickering and sputtering. Furthermore, reconstructions of these tunnels indicate that they originally would have been plastered and whitewashed, further increasing the striking nature of this visual field. The soot from the woodburning would have quickly covered the walls and ceiling of the tunnels attached to the furnaces, differentiating the experiences near the furnaces from the experiences elsewhere in the complex.

Touch is a complicated sense to grasp. The ways in which people register touch—for instance, what counts as rough or smooth—is incredibly varied. That being said, there are some general conclusions which can be drawn. The first of these pertains to heat. Around the furnaces it would have been incredibly hot. In contrast with the experience upstairs in the *caldarium*, the people working the furnaces were more directly exposed to the heat and were incapable of leaving the space when they wanted to. Intriguingly, there was a small basin found in T4 (see Figure 3) which may have been used by workers to cool off (Lombardi and Corazza 55-56). While it seems it drained into the sewer system, it was not attached to the mechanisms that moved water around the facility. This may indicate that it was included as an afterthought, or perhaps it could be read as an addition by the enslaved laborers themselves. The second conclusion regards the building materials used. As mentioned above, the tunnels were primarily built of brick and rough stone, with the roofs covered in plaster. This stands in marked contrast to the marbles used in the aboveground complex, producing an enormously distinct sensory experience between the two spaces.

I now turn my attention to what some sensory theorists term the ‘sixth sense,’ to encompass all senses that fall outside of the standard set (Howes 2009). To be more precise, it is referred to as the ‘sixth sense’ to take advantage of the colloquialism, but there certainly are

many more than six senses. In this regard, it is difficult to speak of one enslaved experience; the enslaved workers would have been coming from different backgrounds, thereby having alternate sensoria, or engaging in different activities and therefore having different sensory inputs.

Therefore, what might be called a sixth sense could very well differ for each of them. Some of them might have been set above others, as overseers or supervisors, while others might have been assigned unpleasant labor, like unloading wood, working on the pipes, or stoking the fires.

However, the multiplicity of experience should not be overstated. In very real, material ways, there are identifiable similarities between all these groups. First and foremost, they were all being surveilled. For instance, in one of the large access tunnels there is a roundabout for carts to turn around in, with what has been theorized to be a guard-post in the center (Figure 8; Piranomonte 2012: 97). While surveillance certainly would have been most significant at the entrances and unloading zones, there were also supervisors responsible for watching the furnace workers. Enslaved people could easily be watched in the wide, better-lit, spaces like the major tunnels, but less observed in the narrow tunnels relating to water management. These might have been spaces of relative freedom; from being watched, if not physically. This means that, as many scholars have suggested, the feeling of being watched would play a role in their everyday sensorial experiences, although differentially depending on their position and tasks (Howes 2009).

Conclusions

The design of this essay may leave the impression that all these senses should be thought of univocally: by separating them into distinct paragraphs, they have been portrayed as discrete. However, as in our own experiences, many of these sensorial experiences would occur in conjunction with each other, shaped by, and shaping, one another. The choice to approach these

senses individually was driven by a desire for legibility. This is also why I chose to emphasize the senses familiar from the Western sensorium: while ideally, through some form of participant sensation, we might access other sensoria, in this case it is more reasonable to make use of familiar notions to explore an unfamiliar space.

The Baths of Caracalla represent a fascinating case study into the enslaved experience of space in the city of Rome. In many ways, the Baths can be separated into two distinct spaces: the above ground, bathing areas, and the underground, service areas. The enslaved people who worked under the baths were not able to access the upper level; conversely, the bathers were not able to access the maintenance corridors. This simultaneous denigration and exclusivity of the maintenance spaces produces an intriguing interrelationship of the distinct spatial experiences. The possibility of placing the experience in the substructures into dialogue with the experiences of enslaved people in the entourages of wealthy Romans might be a worthwhile direction for future research.

This paper has, in large part, focused on trying to apprehend the sensory experience of laborers in the substructure of the Baths of Caracalla. However, the potential implications of this more phenomenological, descriptive approach, are wide-ranging. The small water basin in the furnace space, for example, relates directly to the sensory experience of the space, but it also raises questions about the ways in which Romans thought of their enslaved workers. Considering which spaces in the substructure might be less surveilled opens consideration of the ways in which tight spaces (like maintenance tunnels) could be both physically constrictive and, to a degree, socially freeing. From a political perspective, a focus on the sensorium also begins to undermine modernist ideologies which encourage people to believe in a continuity of worldview between the modern Western nations and the Roman Empire. By showing the multiplicity of

sensory experiences within the Baths of Caracalla, that unquestioned assumption of continuity— as well as who we should regard as Roman—can be called into question.

Works Cited

- DeLaine, J. (1997). *The baths of Caracalla: A study in the design, construction, and economics of large-scale building projects in imperial Rome*. *Journal of Roman Archaeology*.
- Fabian, Johannes (2000). *Out of Our Minds: Reason and Madness in the Exploration of Central Africa*, Berkeley: University of California Press.
- Hamilakis, Yannis (2014). *Archaeology and the Senses*. Cambridge: Cambridge University Press.
- Howes, D. (Ed.). (2009). *The sixth sense reader*. Berg.
- Howes, D. & Classen, Constance (2013). *Ways of Sensing: Understanding the Senses in Society*. Routledge.
- Hunter-Crowley, Heather (2019). "Classical archaeology and the senses: a paradigmatic shift?", in *The Routledge Handbook of Sensory Archaeology*, ed. Robin Skeates and Jo Day. Abingdon: Routledge.
- Lombardi, L., & Corazza, A. (1995). *Le Terme di Caracalla*. Fratelli Palombi.
- Mietz, Michael (2016). "The Fuel Economy of Public Bathhouses in the Roman Empire" Masters Thesis at Universiteit Gent; Department of History.
- Oetelaar, T., Hughes, L. A., Humphrey, J. W., Johnston, C. R., & Wood, D. H. (2014). A computational investigation of the thermal environment of the *caldarium* in a replica Roman bath. *Journal of Roman Archaeology*, 27, 392–402.
- Piranomonte, Marina (2012). *Le Terme di Caracalla*. Ministero per I Beni e le Attivita Culturali, Soprintendenza Speciale per I Beni Archaeologici di Roma.
- Rojas, Felipe and Sergueenkova, Valeria (2017). "The Smell of Time: Olfactory Associations with the Past in Ancient Greece" in *Knowing Bodies, Passionate Souls: Sense*

Perceptions in Byzantium. Edited by Margaret Mullet and Susan Harvey, Dumbarton Oaks Publications, pp. 141-151.

Seneca. *Letters* 56 1-2

Vinge, Louise (2009). "The Five Senses in Classical Science and Ethics" in *The Sixth Sense Reader* (107-119). Howes, D. (ed.).

Wade, Nicholas (2009). "The Search for a Sixth Sense: The Cases for Vestibular, Muscle, and Temperature Senses" in *The Sixth Sense Reader* (55-87). Howes, D. (ed.).

Figures

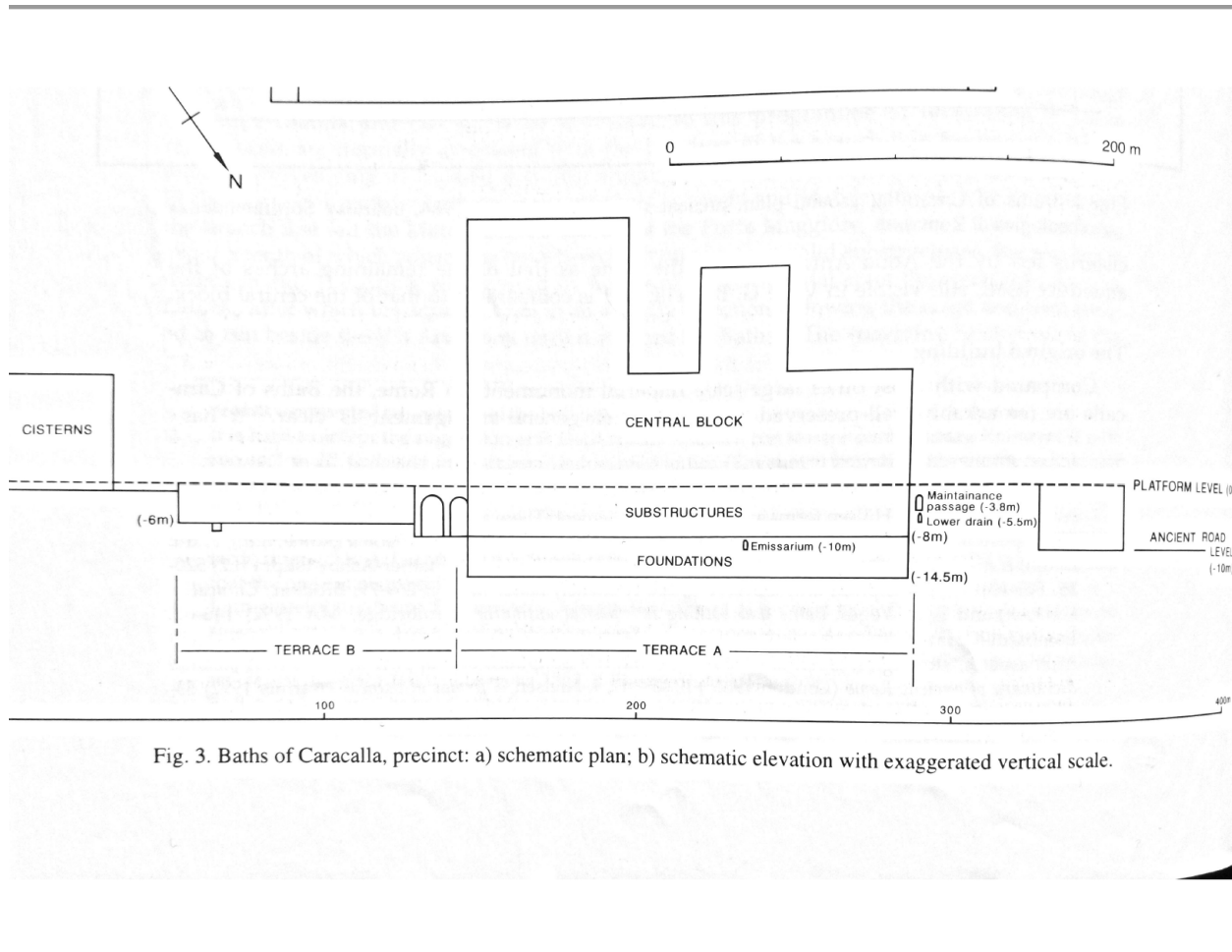


Fig. 3. Baths of Caracalla, precinct: a) schematic plan; b) schematic elevation with exaggerated vertical scale.

Figure 1: Schematic elevation of the Baths of Caracalla; Reprinted from Delaine 1997: 18.

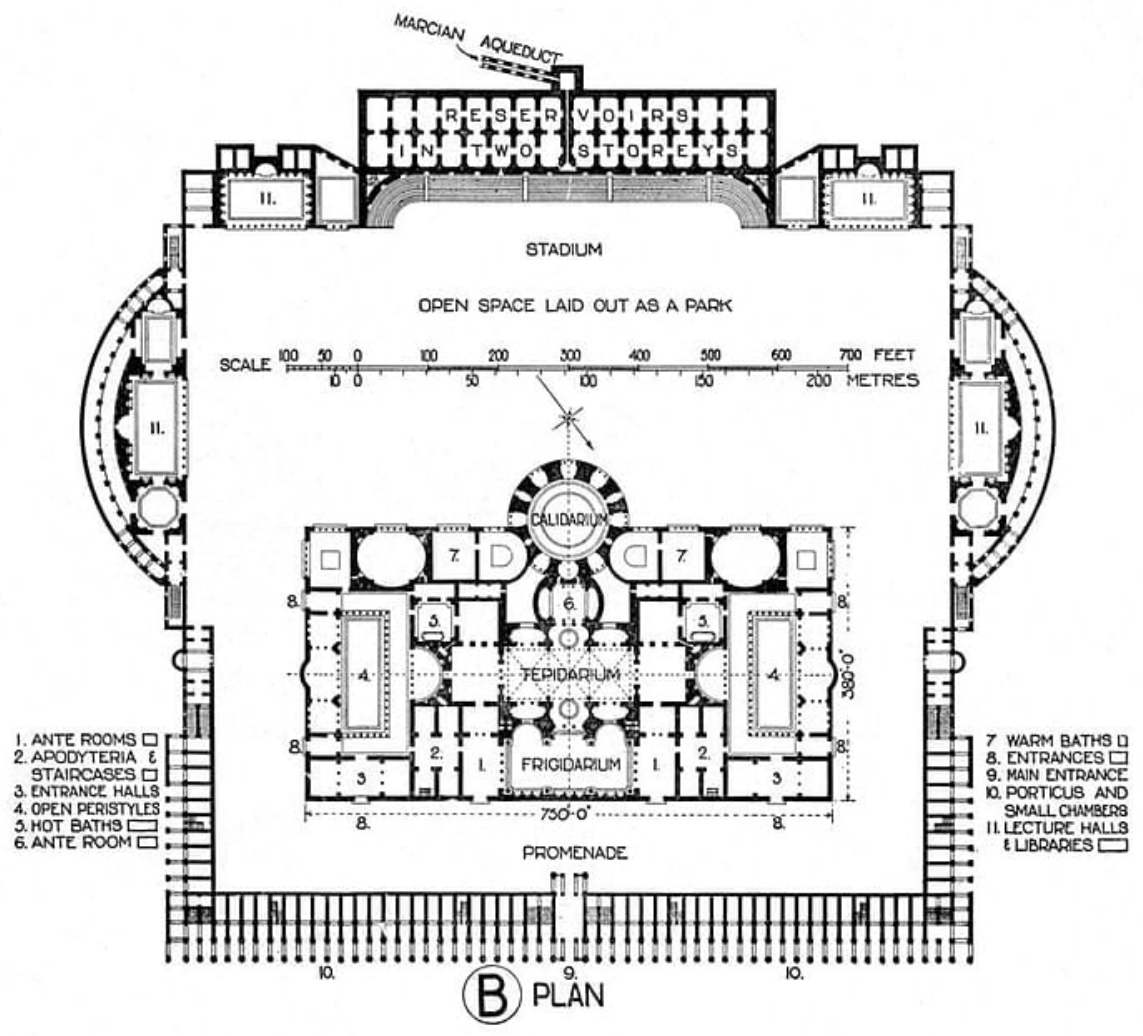


Figure 2: Plan of the Baths of Caracalla

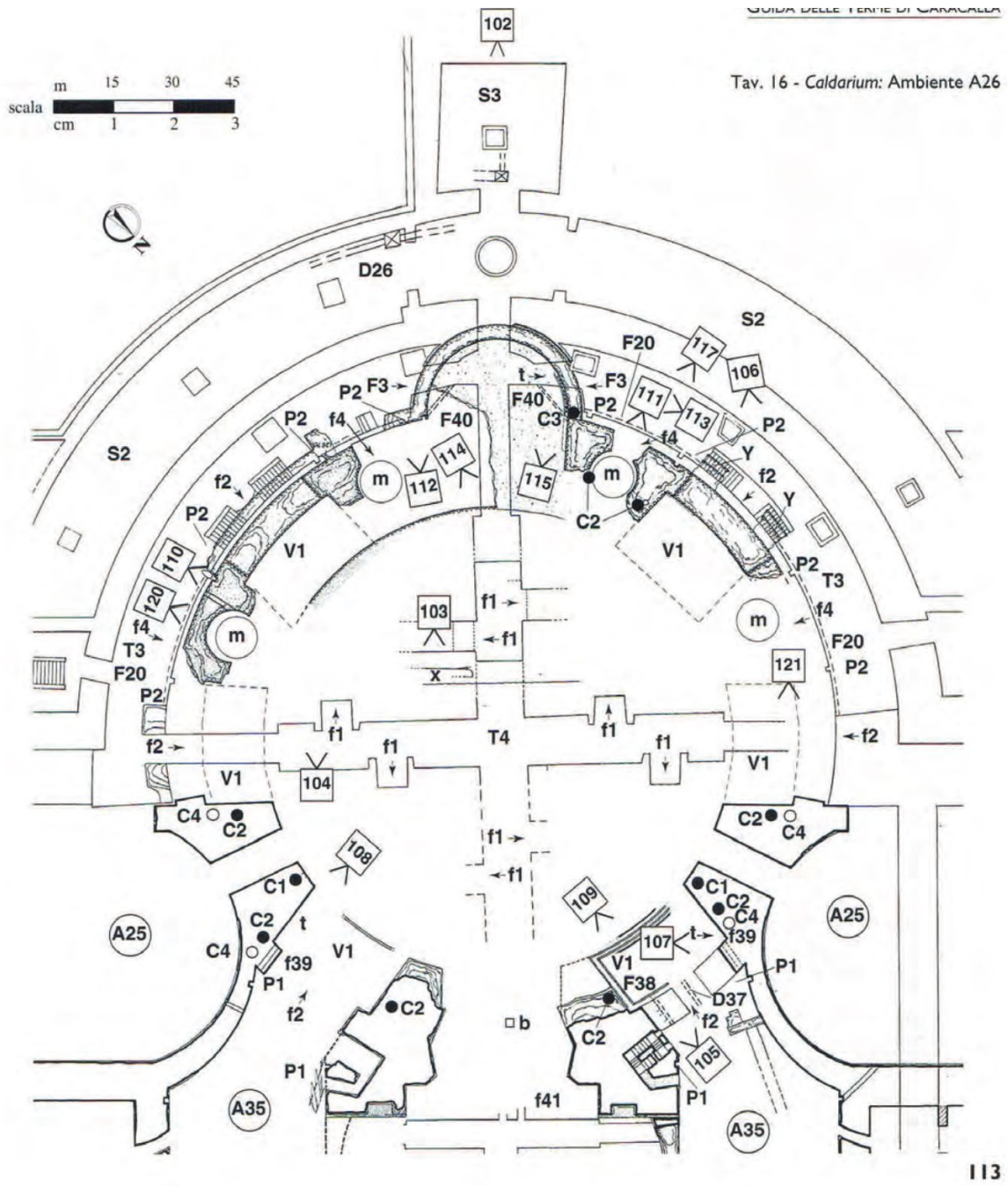
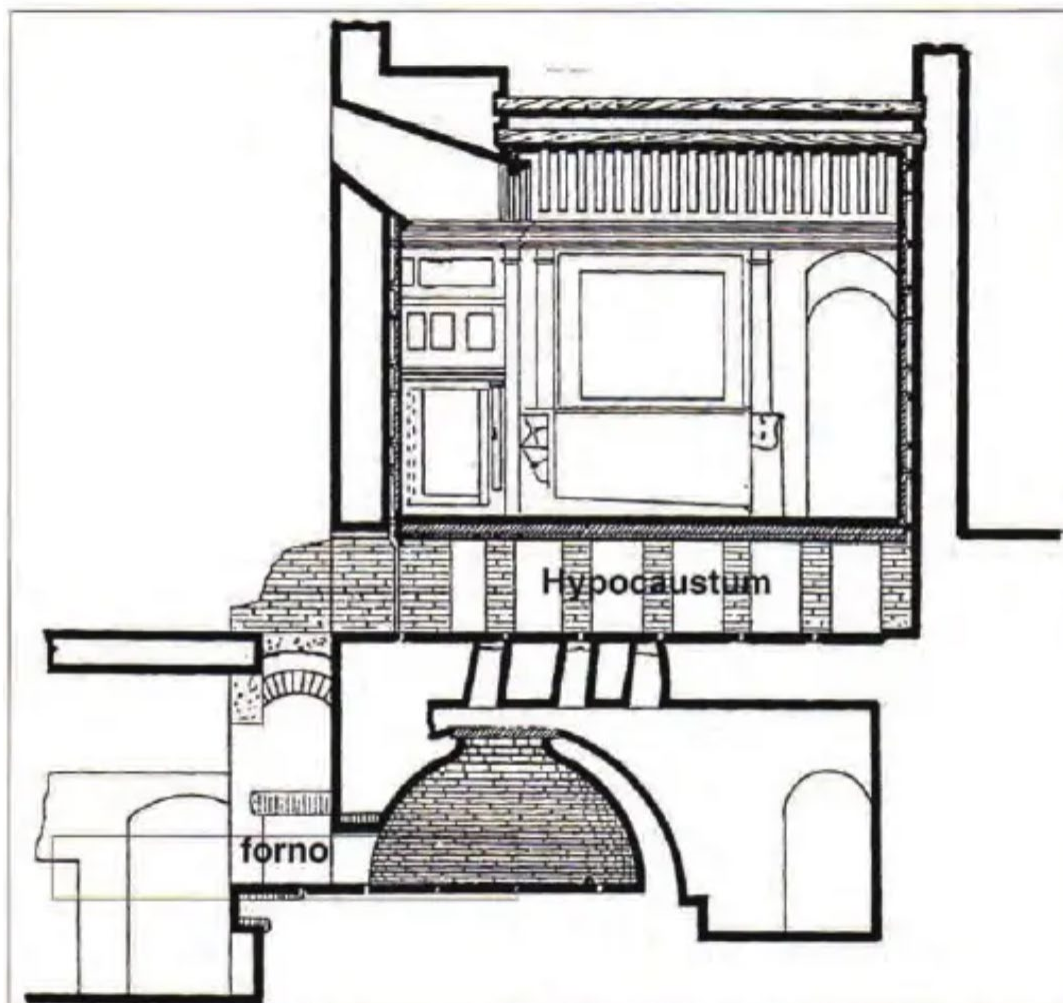


Figure 3: Plan of the *caldarium*, showing the location of furnaces.



24 - Sistema primitivo di riscaldamento degli ambienti. Dal forno l'aria calda passava in un ambiente cupoliforme dal quale risaliva nell'ipocausto.

Figure 4: Furnace and hypocaust system; Reprinted from Lombardi and Corazza 1995

sono:

■ ambienti di servizio, di transito e di deposito (S);

■ gallerie connesse all'impianto termico di riscaldamento (T);

■ gallerie, cunicoli e condotti per la posa delle tubazioni in piombo e la gestione e la manutenzione dell'impianto idraulico di adduzione e distribuzione dell'acqua (D);

■ gallerie, cunicoli e condotti connessi all'impianto idraulico di smaltimento delle acque piovane e reflue (F).

Nella tav. 3 i sotterranei sono stati suddivisi nelle quattro categorie sopra citate, assegnando ad ognuna di esse un diverso colore e identificando ogni struttura con una lettera, relativa alla categoria cui appartiene, seguita da un numero progressivo. La numerazione delle strutture riportata nella tav. 3 è la stessa che compare nelle successive tavole e nei capitoli relativi alla descrizione particolareggiata degli ambienti e degli elementi di impiantistica. Le sezioni riportate nella tavola forniscono chiarimenti sui rapporti spaziali tra i vari sistemi ipogei.

Quasi tutti i sotterranei erano destinati a svolgere le funzioni sopra riportate ed erano quindi vietati al pubblico, mentre sicuramente frequentato era il Mitreo presente nei sotterranei del lato nord.

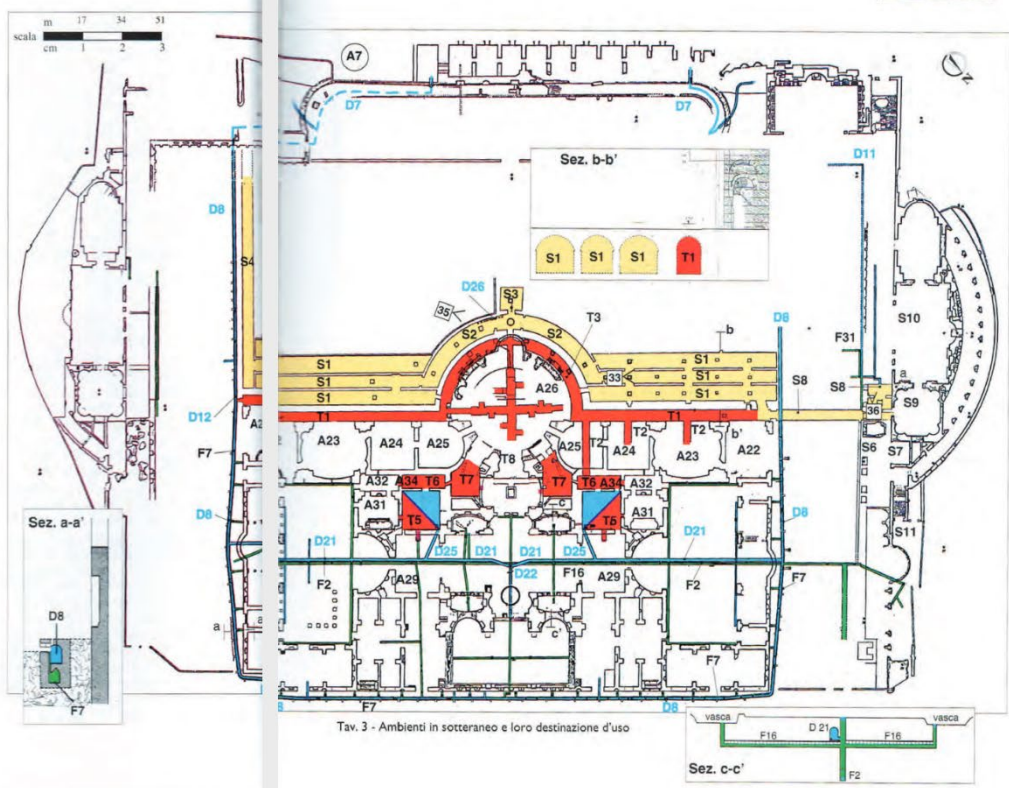


Figure 5: The service tunnels; Reprinted from Lombardi and Corazza 1995: 50-51.

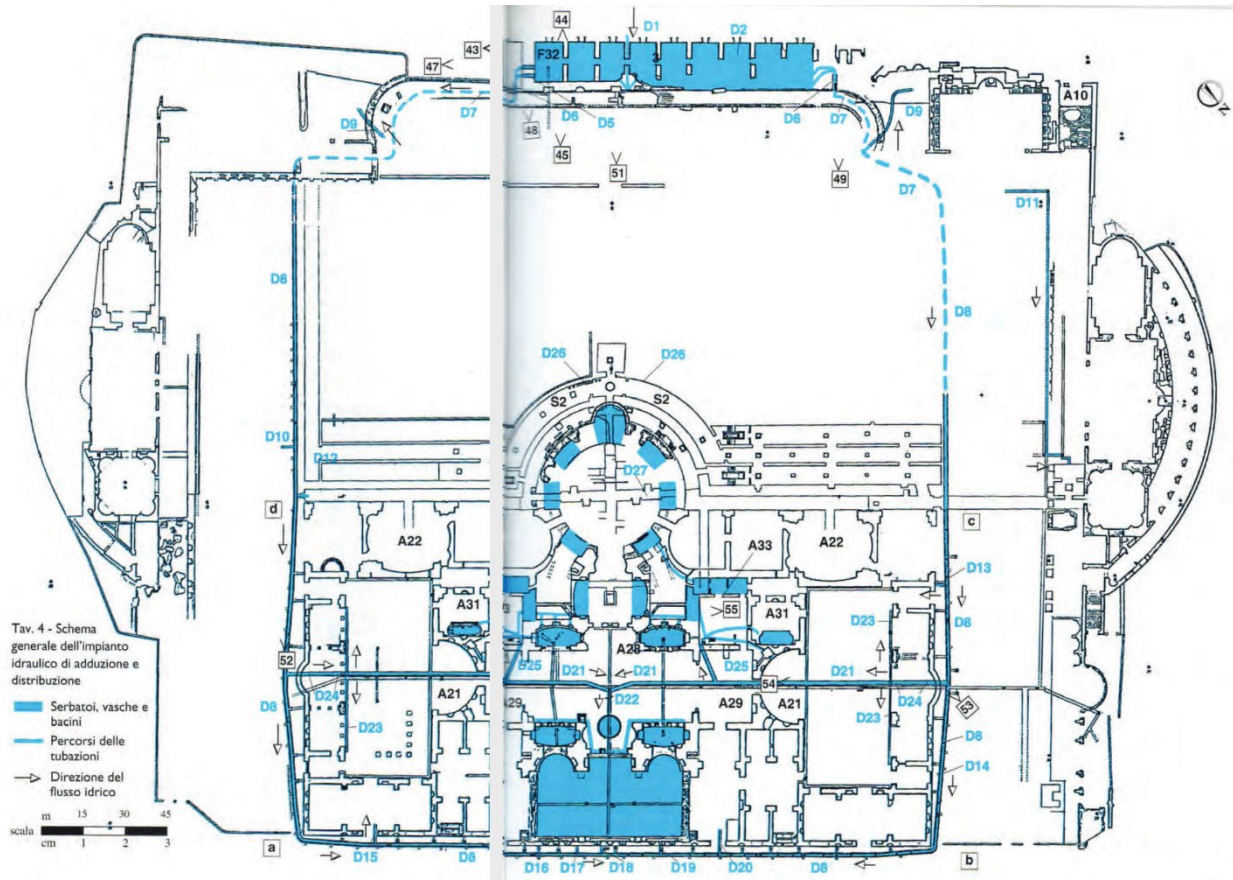
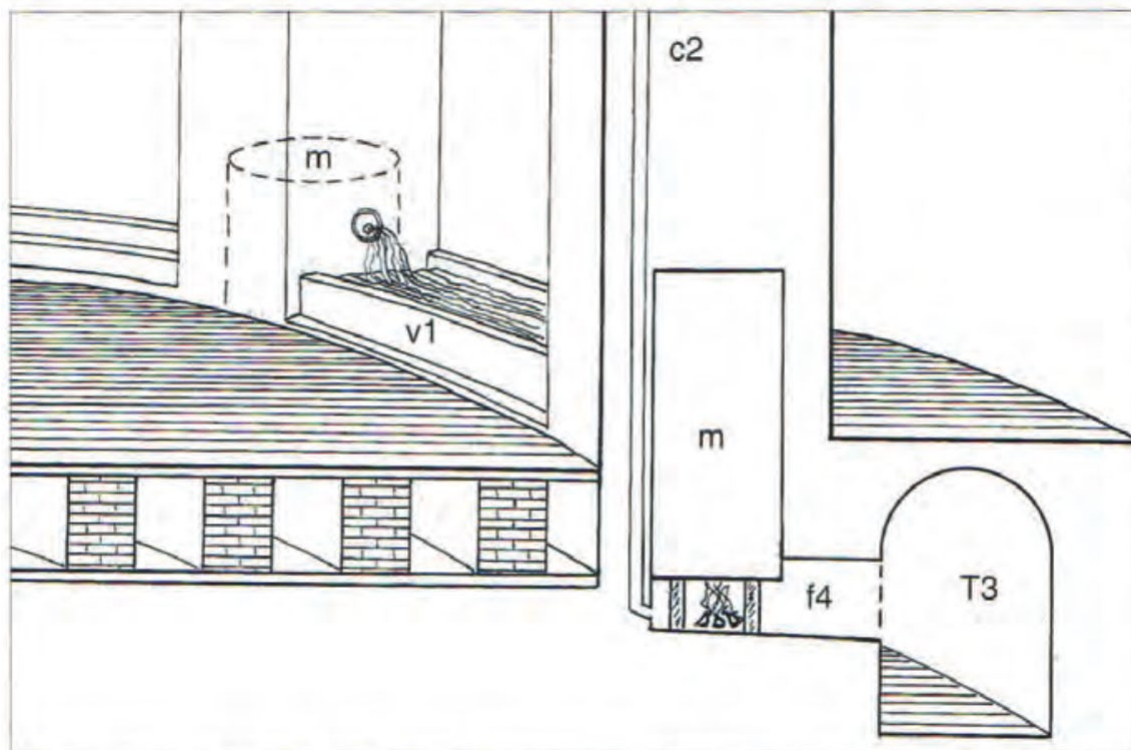


Figure 6: Water pipes. Reprinted from Lombardi and Corazza 1995



119 - *Caldarium*, sala A26: sezione ricostruttiva dell'adduzione alle vasche v1 dalle caldaie metalliche.

Figure 7: *Caldarium* and furnace; Reprinted from Lombardi and Corazza 1995



Figure 8: Roundabout and Guardpost; Reprinted from Piranomonte 2012: 96