3. FORMATION PROCESSES AND EXCAVATION OF SPECIFIC CONTEXTS

3.1. FLOORS

The term **floor** is reserved for a purposefully constructed, smoothed level in an interior or exterior space (Fig. 4). Floors are sometimes constructed using special materials such as plaster, mosaic, or stone slabs, and in these cases are immediately recognizable. More frequently, however, and particularly in domestic structures, floors are constructed with earth or clay that has been beaten to a flat and smooth surface. These floors are recognizable on the ground as a crust of hard-packed earth or clay, often with sherds or other artifacts lying flat on top of them. Some floors are necessarily smooth and level constructions, as they are the use surfaces of interior spaces. For this reason, it is typical to find a deposit of soil used as leveling fill immediately below a floor, deposited to create the level surface for the floor itself. It is unlikely that a floor would have stones, tiles, bones, or other objects sticking up and through it. In such a situation, either the context is not a floor, or the floor surface was abraded with use over time. The presence of a later floor resurfacing would be evidence for the latter situation.

Any floor built with special materials should be recorded as a structure (see §3.2 regarding surfaces treated as structures), as the fields on the Structure Sheet will most accurately record such features. A floor that is not built of these or other materials and is simply a crust of packed earth should be recorded as a deposit, as the fields on the Deposit Sheet will most accurately describe this feature. This crust should be cleaned well before being excavated as its own context. The underlying fill should also be assigned its own context number. The process of cleaning and removing the top crust before the underlying fill must be repeated as often as is necessary until all phases of the floor and localized floor repairs are removed. In the case of repairs, the repaired part must be recorded and removed separately from the original floor—each human action must be assigned its own context number.

Figure 4. Photo of a clay floor bounded by two walls, cut by a later pit in the background. Photo A. Carter

If objects are found resting on the floor (i.e. they have not been disturbed since their deposition), this assemblage must be assigned its own context number, as these objects were deposited at a different moment in time from both the construction of the floor and the deposition of the fill that covered the floor (see §8.7).

3.2. SURFACES

The term **surface** refers to a purposefully constructed exterior space that would have been exposed to the elements (Fig. 5). A surface might be, for example, an open-air interior courtyard or the surface of an animal pen or a yard used as a work area. Surfaces can be made of packed earth and/or supplemented with pebbles or crushed ceramics. If a substantial number of pebbles and cobbles are used in the surface, the decision may be made to record it using a STRUCTURE SHEET.

Figure 5. Surface of a central courtyard in a Byzantine house. Photo A. Carter

Exterior surfaces that are exposed to the elements—as well as human and animal foot traffic—most certainly will undergo a series of resurfacings and repairs. Once the surface is damaged, foot traffic and erosion gradually remove the hard trodden surface in this spot. Further erosion can create a depression in the damaged area that, in turn, will collect rainwash, silt, and windborne debris. Together these actions create a surface with a series of small depressions filled with silt, pebbles, and other debris that can be distinguished from the rest of the surface in the field. These silted-in depressions may be patched by a dump of earth and other materials that are packed down, recreating a relatively level surface. After years of use, an exterior surface will comprise a patchwork of depressions and repairs and possibly a series of partial or total resurfacings.

For each excavated surface, any damaged portion of the surface and surface repair(s) must be identified, isolated, and excavated individually using a Deposit Sheet. Surfaces are generally recorded as deposits (see above for exception). They should be 100 percent dry sieved and possibly sampled for water floatation.

3.3. ROADS

Roads are distinguishable in the field by their very compact surfaces, their linear nature, their relationship to other roads and structures, and the fact that they are usually "metaled" unless they are built of stone slabs. The term **road metal** refers to a road surface constructed with crushed stone, gravel, or pebbles. Potholes and wheel ruts may also be preserved on the surface of roads.

A road that is built of stone paving should be recorded with a Structure Sheet, and a metaled road with a Deposit Sheet. As with other surfaces (§3.2), repairs and repavings/resurfacings are each assigned individual context numbers. They are usually recorded as deposits, but sometimes they are recorded as cuts instead (e.g. wheel ruts or other disturbed areas on the road). Roads must be 100 percent dry sieved and sampled for water sieving. However, since traffic on a road may have damaged or destroyed any organics that would be recovered by water flotation, it may be useful to float a test sample of road material in the field before sampling more widely.

3.4. FOUNDATION TRENCHES

Wall construction techniques vary from period to period at Corinth. In some periods, the builders first dug a trench that was to be the same dimensions as the wall, then built the foundations of the wall inside this trench. When the foundations were laid, the gaps in the foundation trench were backfilled on one or both sides of the foundations, and the wall superstructure was built upon these foundations (Fig. 6). Backfilled gaps will typically be less compact than the soil into which the trench was dug, and they will typically extend 10–40 cm out from each wall face. Like pit fills, lenses of fill inside a foundation trench may not have been deposited in regular horizontal layers. If backfill from the original excavation of the wall was dumped into the foundation trench in a series of dumping actions, the fills might settle against the cut of the foundation trench, rather than lie horizontally. It is also likely that foundation trench fills will not be uniform along the entire length of a wall. This is particularly true for long walls, as the backfill may simply be composed of whatever soils into which the trench was dug, and these soils will have varied along the length of the wall. In the case of a site with multiple terraces, the foundation trenches of some walls dug may be dug to different depths on either side of the wall.

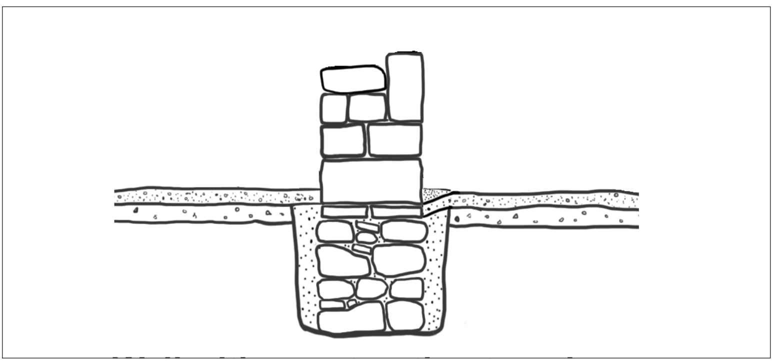

Figure 6. Wall with foundation trench with multiple fills, in section. Drawing J. Herbst

Not every wall, however, will have a foundation trench. Some foundations are constructed by placing stones or a mix of rubble and mortar into the foundation trench, completely filling the cut (Fig. 7). In this case, there would be no later backfilling of gaps in the foundation trench, since no gaps were left during construction. Such a construction technique does not usually leave a perceptible cut, but there will likely be a noticeable change in construction technique between the wall foundation and superstructure. This change allows the excavator to reconstruct the surface into which the foundations were laid, and thereby determine relative dating and establish stratigraphic relationships. Walls built directly on top of earlier walls also may lack foundation trenches, as they were never founded in the ground; still, it is likely that there will be a perceptible difference in the construction of the two phases of the wall.

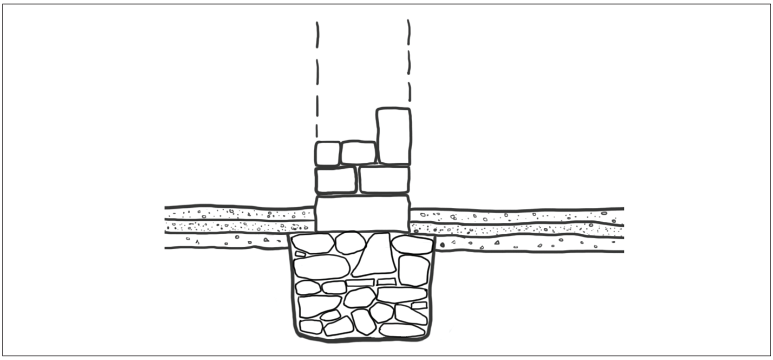

Figure 7. Wall without foundation trench, in section. Drawing J. Herbst

There are some site formation processes that make identifying a foundation trench more complicated. For example, floors tend to be very compact surfaces; however, they are compact because they are walked upon. Areas in the center of the room and at thresholds may be more compacted than areas that experienced less foot traffic, such as corners and the bases of walls. This change in compaction will be diffuse, and it may not be possible to find the true and continuous cut of the foundation trench in this scenario. Natural factors may also complicate matters. Roots tend to take the path of least resistance in their growth: they regularly are found at interfaces between cuts and fills, and they are also common along the interface between soil and a built structure (i.e. a wall and the soil abutting it). A very narrow strip of less compact soil running along a wall is more likely to be the result of root action than the top of a foundation trench. Water running down the exterior face of a wall also may erode or disturb the soil there and give the impression of a foundation trench. In both cases, careful excavation will show that what was initially interpreted as a cut does not continue into the underlying soil contexts. Finally, as with any less compact soils that fill cuts, loose fill in a foundation trench may settle over time and lead to settling in the layers of the fill or floor above. This will cause a change in elevation across the surface of the fill or floor, dipping down next to the wall. But as with the previous two examples, it will not be possible to find the true cut of the foundation trench in the slumped fill or floor.

Foundation trench fills must be carefully excavated (Figs. 8 and 9) and 100 percent dry sieved. Each lens of fill must be assigned its own context number, as foundation trenches can provide a secure date for the construction of walls. If a trench is too narrow to dig all the way to the base, the excavation of the fill(s) within it must be stopped arbitrarily until the surrounding soil can be excavated to a depth that allows digging to continue inside the trench. If there is no foundation trench and instead the wall foundation completely fills the cut, there is a risk of contamination as excavation of the surrounding floors and fills proceeds. A skin balk (see §2.4.1) should be left against the face of the wall foundation to prevent any material from the later foundation from contaminating the earlier surrounding deposits.

Figure 8. Foundation trench prior to excavation. Photo A. Carter

Figure 9. Foundation trench with top lens of fill removed. Photo A. Carter

3.5. ROBBING TRENCHES

A robbing trench may be created after a wall has gone out of use. The stones of the wall and sometimes even the foundations may be robbed (i.e. removed) to build a new structure. Robbing trenches are common features, as it is easier to rob out a preexisting wall than to quarry new building material. Robbing trenches are recognizable during an excavation as roughly linear features that are often related to still-existing walls. The fill inside the robbing trench is usually less compact that the fill it cuts; however, this is not always the case, as the compaction of the fill is dependent upon the composition of the soil being used as backfill (e.g. clayey soil will be more compact than sandy or silty soil once it fills the trench). Sometimes the robbing trench was backfilled immediately after the robbing took place, particularly in an area of continuous building activity and use of space, where large open trenches would be a hazard. In other cases, the trench may have been left open for a period of time before it was backfilled. **Silting**, or the slumping of the sides of the cut and erosional deposition at the bottom of the trench under the backfill, would be evidence of the latter situation. Robbing trenches that were left open for a period of time might suggest a period of abandonment for that part of the site.

Fig. 10 illustrates the phases of abandonment and robbing of a wall in section: (a) the wall in use; (b) the wall after the structure has gone out of use: part of the upper wall has collapsed and debris has fallen from the structure to lie against the wall on both sides; (c) further degradation of the wall, with layers of fill accumulating above it and leaving a noticeable hump in section; and (d) the removal of the wall and its foundation, and therefore the creation of a robbing trench. Note that in Fig. 10d, the robbing trench is narrower than the original foundation trench, and so it did not completely remove the foundation trench fill (see Fig. 11). A careful excavator, therefore, would still be able to identify and excavate the original foundation trench fill despite the robbing activity. A robbing trench should be

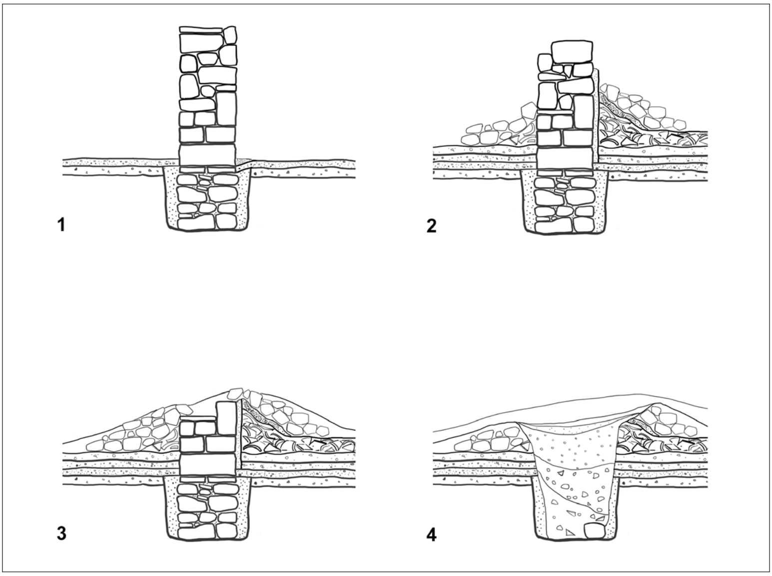

Figure 10. Four stages of the creation of a robbing trench, in section. Drawing J. Herbst


Figure 11. Robbing trench post-excavation, showing preserved foundation trench. Photo A. Carter

recorded with a Cut Sheet, foundation and robbing trench fills with multiple Deposit Sheets, and the wall with a Structure Sheet. Together, these sheets will record all of these activities and their relationships (see §6.2–6.4).

3.6. PITS

Pits are of particular importance because they are discrete units that usually contain dumped material, which may be useful for dating purposes. They are also sources of valuable microfaunal data that may be collected through water flotation (see §2.6). Pits are typically circular or oval in shape, and they can be recognized easily because the fill within the cut is different from the soil into which the pit is cut. Usually the pit fill is less compact than the surrounding deposits, and it may contain different inclusions (although this is not always the case). As with foundation and robbing trench fills, loose pit fills can settle over time, creating a slumping of the deposits that cover them (see §3.4 and 3.5). This makes finding the cut of the pit more complicated, as the depression caused by the settling of the deposits overlying the pit can be mistaken for the pit itself.

The full extent of the pit cut must be revealed before the fills inside are excavated. If the pit cut is irregular in shape, it may have been truncated by later action; if this is the case, the later deposits must be removed before the pit fills are excavated. Unless it is logistically impossible or unsafe to do so, it is good practice to section the fills of a pit (see §2.4.3 and 4.3). This will help ensure that even very subtle changes between fill contexts are observed both in plan and in section, and that the stratification of the pit fills are fully understood. Sectioning can also allow for more complex environmental sampling. Pits should be 100 percent dry sieved and sampled for water floatation.

3.7. WELLS

At Corinth, wells are cut into bedrock or soil and often have a wellhead built of stones. The cuts of wells have straight sides, and they are generally circular in plan, very deep, and usually with rough-hewn handholds. They are dug in order to reach the natural water table. Wells are distinguishable from another common feature at Corinth: the manhole that connects down to a water channel, which is a part of the water supply system.

Usually if a well went out of use but later activity continued to take place in the same area, the well was used as a rubbish dump and then backfilled (often quickly) to create a level surface with the ground soon after its abandonment. When the fills of a well are removed, it is useful to establish an elevation point at the mouth of the well. This point can be used to measure the depths of the fills within the shaft using a tape measure if and when it becomes impossible to use the total station as the depth inside increases. All attempts should be made to identify the stratigraphy of different fills within the well shaft and to excavate them in stratigraphic sequence. However, this may not be possible if the well is very deep, has been subjected to substantial sorting by the action of the water inside, or contains a single massive backfill dumped inside. In these cases, the fill inside the shaft should be removed in 10-cm units, assigning a unique context number to each fill within the well. The fills should be 100 percent dry sieved, and samples must be taken for flotation.

3.8. LEVELING AND DUMPED FILLS

At a site with multiple occupation phases, each new phase may be built on the remains of the previous phase. Elements of the earlier phases might be reused (e.g. walls may be robbed, new phases of walls may be built on top of earlier walls, roads may be resurfaced, or thresholds may be raised). In some areas, however, the new occupants may have created a level and uninterrupted surface on which to lay floors and surfaces and construct new buildings. Oftentimes in these instances, episodes of leveling and terracing to create the new higher surface (i.e. **leveling fill**) are preserved. These episodes can be minor, as when a floor is abraded and goes out of use: in this situation, leveling fill may be spread over the floor and a new floor established above this. Leveling also can be a more massive operation, such as at sites built on a slope, where the slope is terraced to maximize the potential for flat spaces (e.g. in the later Forum area). In the case of terracing, it is common in Greece to encounter terrace walls that support the leveled soil from the side. These are typical features of both ancient and modern agriculture, as well as urban areas. Leveling fills are distinguishable in the field by their association with later floors or structures and the heterogeneous and poorly sorted nature of their inclusions (see §6.2.9). Dumped fills may be found in association with surfaces or leveling operations, and they are distinguishable by the fact that they are composed of random materials and fill uneven depressions. A **dumped fill** may be a **midden** (or rubbish heap), but it is distinguished by the fact that it was not dumped in order to create a level surface.