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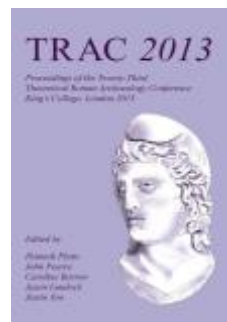
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Paper Information:

Title: Resurrecting Refuse at Pompeii: The Use-Value of Urban Refuse and its Implications for Interpreting Archaeological Assemblages

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Pages: 65–78



DOI: http://doi.org/10.16995/TRAC2013_65_78

Publication Date: 04 April 2014

Volume Information:

Platts, H., Pearce, J., Barron, C., Lundock, J., and Yoo, J. (eds) 2014. *TRAC 2013: Proceedings of the Twenty-Third Annual Theoretical Roman Archaeology Conference, King's College, London 2013*. Oxford: Oxbow Books.

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Resurrecting Refuse at Pompeii: The Use-Value of Urban Refuse and its Implications for Interpreting Archaeological Assemblages

Kevin Dicus

Introduction

In the contemporary, first-world, perspective, the term ‘refuse’ conveys a sense of permanence and finality. In this context, refuse can be defined as ‘the by-products of any human activity that are deemed useless and, therefore, disposed of or abandoned’ (Staski and Sutro 1991: 3). Discard processes separate material culture that has lost all value – use-value and value as a commodity – from the behavioural system in which it had once participated.

Scholars who trace the biographies of material culture in the archaeological record tend to see refuse in the same way. The conscious removal of an object from the behavioural system consigns it to a state tantamount to death, indefinitely disconnected from the behavioural system and the consciousness of people active within it. Michael Schiffer’s (1972) influential model for an object’s life cycle tracks its participation in the systemic context up to its relegation to the archaeological context. In the systemic context, an object is manufactured and used and, when possible, repaired, recycled, or reused to extend its use-life. When such strategies are exhausted, the object reaches the end of its use-life and enters the archaeological context as refuse. In this state, there is no strategy that provides a way for a discarded object to re-enter the systemic context.

Ted Peña (2007) refines Schiffer’s model in his study of Roman pottery in the archaeological record. Pottery, he argues, did re-enter the systemic context from the archaeological context through a process of ‘reclamation’ (Peña 2007: 12–13). Reclamation took place through either a casual discovery or the systematic collection of vessels or sherds whose potential for reuse or recycling was perceived (Peña 2007: 317–318). It can be assumed that only certain vessels met the established minimum qualifications (size, completeness, thickness) to be re-introduced into the systemic context, while the majority of discarded pottery, either not meeting the qualifications or just never noticed, presumably remained in the archaeological context.

This paper follows closely the model designed by Schiffer and refined by Peña. It also expands the criteria by which refuse was valued and reclaimed in the ancient Roman world. Peña is undoubtedly correct that particular vessels and sherds were reclaimed from the archaeological context; the same processes, furthermore, surely motivated the reclamation of other object types in metal, stone, glass, plaster and so on. It is argued here, however, that the chance discovery or systematic collection of discrete objects was only one way refuse returned to the systemic context. More often, these objects were reclaimed without ever being recognised or evaluated

individually; rather, the objects acquired value collectively. It was the rubbish heaps themselves, of which the discarded objects were constituent parts, which were perceived as useful. Refuse, removed from the city and separated from the behavioural system, returned into the city on a regular basis. In an ancient urban setting like Pompeii, the re-introduction of refuse was vast. These large mounds were used as convenient sources of infill for various types of construction projects, for example, to fill pits and disused vats, tanks, and cisterns; it would also be used as a levelling fill to raise the elevations of spaces.

The large-scale use of refuse affects the interpretation of the archaeological record in meaningful ways. The second part of the paper argues that while refuse constitutes a large part of the assemblages at Pompeii, it is not adequately understood as such and often there is overreach in trying to elicit meaning from the artefactual evidence. This stems in part from an anaemic distinction between primary and secondary deposits. A refuse assemblage imported into a space clearly represents secondary deposit and bears no relation to the function or meaning of the space in which it was found. Treating it as an ideal assemblage, that is, as one that reflects the activity, function, or meaning of the space, is a mere relic of ‘the Pompeii Premise’. While ‘the Pompeii Premise’ has been refuted for house-floor assemblages, it still seems to influence the reading of subsurface assemblages.

The remedy, finally, is to seek out the formation processes that saw to the deposition of each assemblage (Schiffer 1972; 1976; 1985). If it is not known *how* an assemblage ended up where it did, the assemblage cannot reliably inform the narrative of a site. To illustrate this point, this paper examines two assemblages excavated by the Pompeii Archaeological Research Project: Porta Stabia which, since 2005, has explored the residential blocks VIII.7.1–15 and I.1.1–10. They have been chosen because of their ostensible similarities: they fill rather simple pits dug within domestic spaces; they contain similar classes of artefacts, and they are chronologically close. By asking a certain set of questions of the pits – Why were they dug? How were they filled? What was the source of the infill? – a final crucial query can be addressed: What is the relationship between the assemblage and past activities in the space? The answers lead to the conclusion that the ostensible similarities between the assemblages are a red-herring: their formation processes are different and, consequently, so too is the class of information that can be derived from them.



Figure 1: Plan of VIII.7 showing pit (hatched) in property 14–15. Image: PARP:PS.



Figure 2: Overhead view of trench in property VIII.7.14-15. Image: K. Dicus.

The artefact assemblages of two pits

The first assemblage was recovered during the 2009 excavations at the rear of property VIII.7.14-15 (Ellis and Devore 2010) (Fig. 1). This space, lacking architectural development, functioned probably as an open garden area rather than a part of the property's indoor living quarters. An early water channel, predating the north and west walls that currently delineate the property, suggests that it changed little over a series of occupational phases. South and east of this channel, a large pit had been dug down to the natural lava bedrock. Its full extent is unknown because it continued past the eastern and southern extents of the trench. Furthermore, a modern (19th century) base of a water tower displaced much of the assemblage at the pit's centre (Fig. 2).

The assemblage that filled the pit exhibits a wide variety of pottery classes and other object types, representing the highly variegated elements of a Roman urban setting – trade and commercial, domestic, and sacred. The pottery spans a wide chronological arc. *Bucchero* fragments from the sixth century B.C. are the earliest diagnostic materials, and the *terminus post quem* comes from a *terra sigillata* bowl from the workshop of Marcus Perennius Bargathes, made between 10 to 25 A.D. Most of the pottery fragments are amphorae, commonwares, and cookwares; other domestic wares (finewares, thinwall, black gloss) are strongly represented (Table 1). Faunal remains were recovered, and small finds include a large quantity of building materials (brick and tile, plaster, mortar and *cocciopesto*) and other random objects (Table 2). Interestingly, votive objects were present, including several third century B.C. anatomical terracottas and statuette fragments.

The second assemblage comes from the 2011 excavations in property I.1.1 which exposed a pit spanning the eastern half of Room Three (Ellis, Emmerson, *et al.* 2012) (Fig. 3). The pit's dimensions were 3 x 2.3 metres, and it descended nearly one metre where it reached the upper stratum of the natural paleosol. Stratigraphic relationships showed that the pit was dug late in the occupational history of the structure: it cut through the penultimate surface and, after the pit was filled, the final-phase *opus signinum* floor was laid down on top.

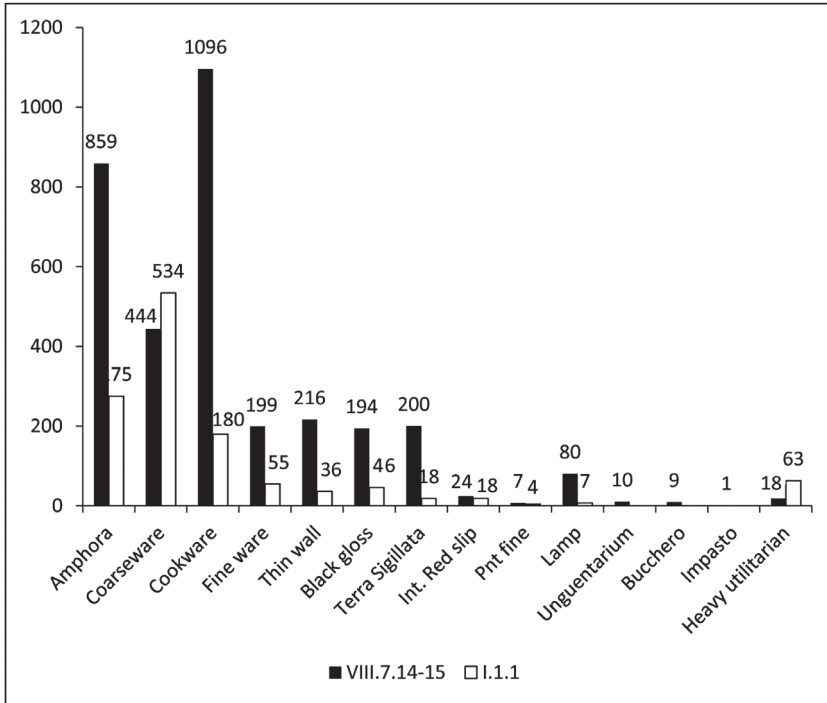


Table 1: *Quantification of pottery fragments from properties VIII.7.14–15 and I.1.1.*

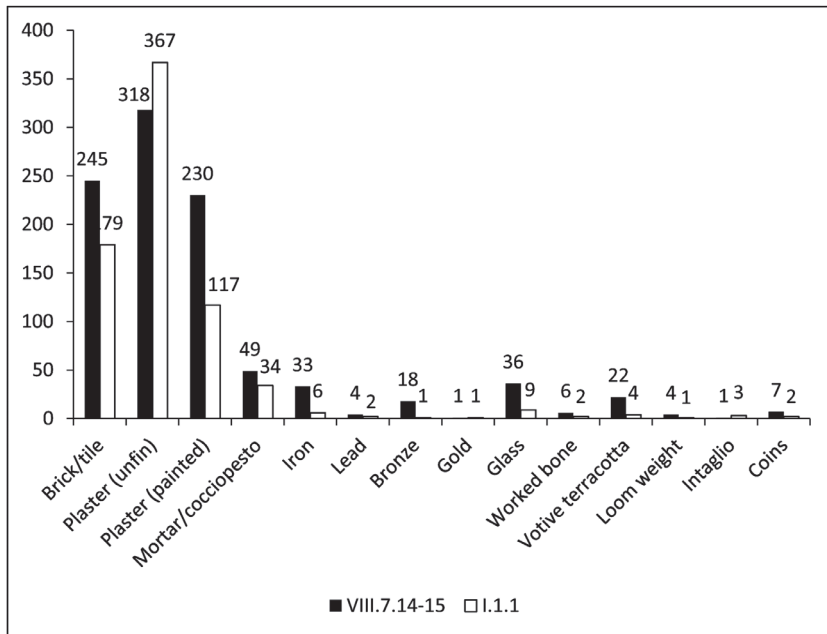


Table 2: *Quantification of small finds from properties VIII.7.14–15 and I.1.1.*

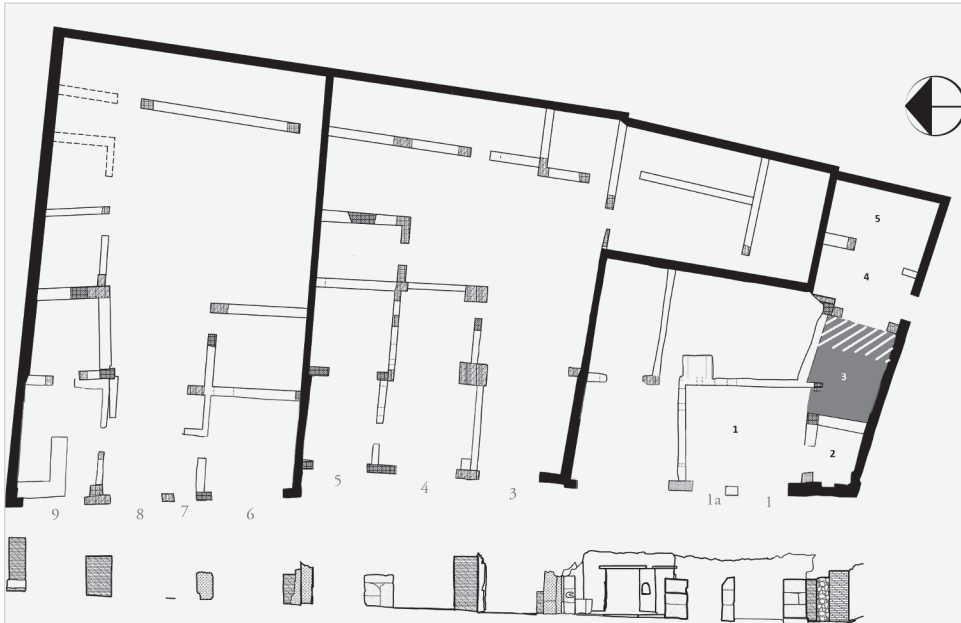


Figure 3: Plan of I.1 showing pit (hatched) in property 1. Image: PARP:PS.

The artefact assemblage of the pit's infill encompasses many spheres of activity and spans a wide chronological arc, from the fourth century B.C. to the first century A.D. The pottery came primarily from domestic (commonwares, cookwares and finewares), economic and trade contexts (amphorae fragments) (Table 1), while building materials, various small finds, and faunal remains were also present (Table 2). Miniature votive cups indicate ritual contexts. Most interesting were the objects that came from industrial contexts: numerous vessel separators, or kiln supports, were found, which were used in a potter's workshops to stack and separate vessels during firing.

The two assemblages share numerous similarities of character and content. Both are associated with simple pits and contain high concentrations of material remains. Both, furthermore, are notable for their lack of functional and chronological consistency, representing different spheres of activity and spanning many centuries of occupation. The similarities end, however, when both the motivations behind each pit and the formation processes of the assemblages are examined.

Refuse and the formation processes of infills

The assemblage in property VIII.7.14–15 filled a pit that was created as a result of quarrying activity. As stated above, very little development took place in the area, with the result that the ancient soils remained undisturbed. The soils are accumulations from millennia of Vesuvian eruptions, strata of ash-rich earth called *pozzolano*. The pit had cut into these strata of natural deposits. Geophysical studies have shown that *pozzolano* was a highly effective aggregate in mortars and plaster (Vogel and Märker 2011) which had been exploited for Pompeian building projects from at least the second century B.C. (Miriello, Barca, *et al.* 2010). Its importance is attested also by the numerous examples of quarrying pits uncovered elsewhere at Pompeii

(e.g. Robinson 2002: 94; 2005: 110–113). To answer, then, why the pit was dug, quarrying the *pozzolano* motivated the digging; the pit itself was merely the by-product of the project.

This understanding allows for a solid interpretation about the formation process of the infill: how and with what the pit was filled. The *pozzolano* was valued as an important component in construction projects throughout the city. After extraction, it was removed and an outside source of infill was required to fill the remaining void. What the source of the infill material was has not been recognised adequately, much less how it came to be used as infill. To begin to trace the process, it is important to recall the characteristics of the assemblage. It included elements from disparate sacred, domestic, commercial and industrial contexts. Somehow the objects travelled from many different primary contexts to here, but it was not often by means of multiple independent events where materials arrived from point A (various primary contexts), to point B (the pit). There must have been another step as well, an intermediary point where refuse from throughout the city was discarded and eventually reclaimed for purposes such as filling voids.

This intermediary location was the extramural refuse heaps. Normal urban routines, such as ongoing construction and demolition events, as well as domestic, commercial, and industrial activities, generated significant amounts of waste. Its proper management and disposal was a quotidian chore: refuse had to be removed so that it would not take up valuable intramural space and impede the day-to-day operations of a densely populated city. How Pompeii managed this is explained by excavations outside of the city wall, where refuse heaps are regularly found resting against the wall itself. They occur along the stretch between the Herculanean and Vesuvian Gates (Maiuri 1930: 230–273; 1942: 174–175; 1943: 279–281), outside of the so-called Capuan Gate (Etani, *et al.* 1994; 1998; 2003), near the Nolan Gate (Chiaramonte-Treré 1986), and near the Amphitheatre Gate (Maiuri 1942: 175). From what has been catalogued and published, their assemblages are notably similar to the assemblage from the quarrying pit: the variegated objects represent disparate contexts and activities in the city; they span from the sixth century B.C. up to the final years of Pompeii.

Previous explanations attribute the refuse heaps to post earthquake cleanup in 63 A.D. (Maiuri 1943: 279; Romanazzi and Volonté 1986: 57). This interpretation is unnecessarily restricted in scope, exclusively relying on a single causation while ignoring the fuller active history of the city. As Peña (2007: 282) writes, ‘it is not clear why they cannot just as easily be interpreted as the product of an ongoing, routine disposal of small domestic and construction refuse by those who generated it.’ Indeed, there is strong evidence that at least some of the discard activity was not compelled by earthquake destruction: Flavian artefacts are present. If the refuse heaps were motivated by earthquake cleanup alone, then objects that postdate the earthquake by at least seven years should not be present. Extramural refuse disposal took place after the earthquake and there is no reason to believe that it did not take place before as well.

How the refuse, after being discarded, was then viewed and used is where this paper both deviates from the one model that sees refuse discard as the final and enduring transition out of the systemic context (Schiffer 1972: 159) and expands on the other model that includes reclamation as an added step in an object’s life cycle (Peña 2007). The new model presented here allows all refuse, not just specific objects, to re-enter the systemic context *en masse* because it was a valued source of fill material. Different activities of Pompeii’s inhabitants generated discrete assemblages of waste that were deposited on top of, and beside, one another in a growing accumulation outside the city wall. This locus functioned less like a permanent dump and more like temporary storage. Refuse was reclaimed from this accessible and convenient source to be used as infill for construction and demolition events. The assemblages that constituted the

accumulation, however, were no longer discrete, and many could be collected together in a single reclamation event. For this reason infill assemblages contain objects that originally had no functional, spatial, or chronological relationships during their primary-use phase. As infill the objects assumed a new shared function, albeit invisible and inactive, as construction material.

Finally, this pattern of reclamation would also ease an important concern about refuse collection. Since the extramural discard was a regular and managed system of waste disposal, rather than an *ad hoc* response to a natural catastrophe, part of its management must have taken into account the ever-growing accumulation. Without a strategy of removing the refuse, the volume would soon become too great. A steady reclamation of its parts for later use controlled the volume. The impact of incoming detritus from within the city was negated or at least lessened by the removal of refuse going back into the city.

The assemblage in property I.1.1, by contrast, filled a pit that was created as a result of a late renovation to the room. Once excavations cleared the infill, a concrete-poured framework was found propped against the walls of the room's southeast corner. It was the substructure of a toilet for a small bathroom introduced during the final phase of occupation (Fig. 4).



Figure 4: View of property I.1.1, Room Three, with the toilet (bottom left) and early structure (top). Image: K. Dicus.

Using the hard paleosol stratum as a foundation, it rose nearly one metre where it terminated as a rectangular opening surrounded by the *opus signinum* surface. The pit, then, facilitated construction by exposing the paleosol foundation and giving space for the construction of the framework. These necessities motivated the digging of the pit and, in direct contrast to the first example, it was the extracted materials that were the by-products of the activity.

How, then, was the pit filled and what was the source? The principles of least effort would have it that the answer, and the source, is close at hand. There would have been two options when dealing with the pit's by-product, this mound of extracted materials, but only one seems logical. The first option would be to discard the mound in the extramural refuse heaps, but this would require later reclamation when the pit was needed to be refilled at the end of the project. The second, and more efficient choice, would be to reserve the mound and use it again as infill. Most of the extracted remains – minus that displaced by the toilet's framework – was dumped back into the void up to floor level and the *opus signinum* flooring was laid down. The importation of an infill source, so necessary in the first example, plays no part in the formation process here.

The above analysis is meant to emphasise a crucial distinction between two assemblages sharing similar appearance and artefact assemblage. In spite of the similarities, their formation processes are considerably different. The following summarises the different processes of the two. The motivation for the former quarry pit was to extract *pozzolano* for use as aggregate in mortar and plaster. The pit itself was a by-product of the quarrying and needed to be refilled by a source imported for this purpose. The source was Pompeii's refuse, stored (not disposed of permanently) along the city wall's exterior. The motivation for the latter construction pit was the pit itself, giving space to construct a toilet. The extracted material was the by-product of the activity, and it remained nearby to be used again as infill. Given the different processes, logical progression would have it that the information coming from each would be different as well. The distinction, however, is not often discerned, with the consequence that most assemblages tend to be read as if they are ideal, whether or not they are primary or secondary. In many ways a residual 'Pompeii Premise' still guides the interpretations of the archaeological record.

Interpreting subsurface assemblages – a survival of 'the Pompeii Premise'?

Pompeii in the 1970s and '80s unwittingly became the cynosure in the debate concerning formation processes in the archaeological record. At issue were house-floor assemblages – artefactual traces of human occupation and activities that were left behind before and after the abandonment of a structure – and the degree to which they, now part of the archaeological context, reflected the past activities (the systemic context) of the location in which the objects were found. Michael Schiffer (1972; 1976 and 1985), rejecting the claim that artefacts presented a 'fossil record' (Binford 1964: 425) of past activities, identified a series of cultural and noncultural formation processes that transformed the archaeological record, as he wrote, 'spatially, quantitatively, formally, and relationally' (Schiffer 1976: 11). The processes, in turn, affected the record's interpretive potential.

With its purportedly ideal and unparalleled assemblages, Pompeii was the great exception. Vesuvius had compelled a sudden evacuation of the city; material remains became *de facto* refuse, not discarded intentionally, but abandoned at their places of use – a systemic inventory entering into the archaeological context (Schiffer 1972: 160). Pompeii's subsequent entombment ensured that the abandoned material remains were unaffected and unmodified by formation processes. The upshot was the survival of, in the words of Schiffer (1985: 18–19), 'a systemic inventory of

household artefacts, thus faithfully mirroring the activities that took place in those architectural spaces.’ Everywhere else, archaeologists had to concern themselves with formation processes; not to contend with them subjected interpretations to ‘the implicit assumptions that formation processes had benign effects and that archaeological assemblages can be treated analytically as if they are equivalent to systemic inventories’ (Schiffer 1985: 20). To perceive assemblages in this manner was to commit a logical fallacy popularly known as ‘the Pompeii Premise’, where one casts the characteristics of ideal Pompeian assemblages onto assemblages of other sites (cf. Binford 1981; Schiffer 1985).

Pompeian scholars rightly took umbrage at ‘the Pompeii Premise’ and disabused others of the notion that house-floor assemblages at Pompeii were ideal and somehow immune to the forces of formation processes. Penelope Allison (1992) in particular showed that the archaeological record was disturbed also here and that the assemblages were incomplete or distorted representations of the systemic inventory. Soon after Vesuvius erupted, for example, recovery and looting removed many objects. Early campaigns of excavation, the methodologies of which left much to be desired, collected prejudicially and left to posterity patchy written records. Objects were misplaced, either when a house collapsed during the eruption or when early archaeologists rearranged them so that they conformed to notions of the ‘proper’ Roman house. These activities (both cultural and noncultural), Allison argued, met the criteria of formation processes. In short, there is no ‘Pompeii Premise’, not even at Pompeii.

Pompeian inventories are problematic: formation processes created and distorted the archaeological record; house-floor assemblages do not necessarily reflect the systemic inventory of a specific space. Few would deny this now, but many still proceed *as if* the assemblages are ideal. A problem is that the scholarship has progressed significantly on proper methods for interpreting house-floor assemblages, but, in practice, house-floor assemblages are rarely, if ever, encountered in the field at Pompeii. What is needed is an investigation of how formation processes create, modify, and disturb archaeological assemblages that Pompeian excavations actually encounter.

From house-floor to subsurface assemblages

Theories of formation processes that centre on house-floor assemblages, although informative, are limited by their synchronic perspective of the archaeological record because they deal mainly with abandonment and post-abandonment phases of a site or structure. Schiffer (1985: 24–30), for example, has identified eight processes that are responsible for house-floor assemblages. One of them – primary refuse (discard or loss of materials at the place of use) – concerns activities just prior to abandonment; two – including *de facto* refuse (unintentional discard) – occur during the period of abandonment; the remaining five – including secondary refuse (intentional discard away from place of use) – occur after the abandonment of the site or structure. The processes do not allow for any preceding phases of activity (cf. Bon 1997: 10).

This omission is quite relevant at Pompeii where numerous phases in the organisation of the urban space brought dramatic changes over centuries of occupation. If, as Allison (1992: 49) states, ‘the Pompeian inventories [of house-floor assemblages] are more of a nightmare’, the complex stratigraphy resting just below the final-phase surfaces must be more problematic. This subsurface stratigraphy constitutes the majority of the archaeological record and, consequently, excavators must prioritize it over house-floor assemblages for constructing diachronic narratives.

This brings up another problem of the inexorable link between formation processes and house-floor assemblages: house-floor assemblages are a moot point in Pompeian excavations.

It is ironic that the paradigm of the ideal house-floor assemblage comes from a site where house-floor assemblages are no longer encountered. Where excavations occur today, these assemblages have long since been removed, leaving behind a few decontextualised objects and scatters. Allison (2004; 2006) has skilfully shown how archaeologists can recreate, to an extent, house-floor assemblages through archival research; however, *in situ* inventories of the site's abandonment phase are a thing of the past and will remain so as long as the buried zones of the city remain off-limits to excavations (as they rightly are for reasons of preservation).

Formation-process theories and Pompeian archaeology are compatible, but the theories should be applied to contexts that are encountered regularly. These contexts, of which the two infills discussed here are a part, are the subsurface assemblages, which include all collections of material culture that fill, separate or stabilise various features (floors, tanks, wells, pits) that are beneath and pre-date the final-phase (abandonment) level on which house-floor assemblages would be found.

Subsurface assemblages encompass the vast occupational history of a site or structure. Therefore, to create an accurate diachronic narrative one must understand each assemblage on its own merits. This includes, most importantly, how a deposition occurred – its formation process. Many excavations, however, proceed as if all assemblages convey the same taxonomy of information; 'the Pompeii Premise' infiltrates site narratives despite its broad rejection. Assemblages are seen, specifically, as compositions of primary refuse. Consequently, because the place of an object's discard is the same as the place of its use, that object reflects directly the location's systemic context. The promise of the ideal assemblage, considered to be erroneous in house-floor assemblages, still drives interpretations that derive from subsurface assemblages. For example, subsurface assemblages are used to explain a space's changing activities (e.g. Fulford and Wallace-Hadrill 1999: 99–102), the chronological range of occupation of the space (e.g. Carafa 1997: 21), construction and demolition events (e.g. Robinson 2002: 94), diet and status (e.g. Ciaraldi 2007), and ritual behaviours within a space (e.g. Bon, Jones, *et al.* 1997: 44; Carafa 1997: 21), among others.

It is important to state that the interpretations are not necessarily incorrect; they very well could be correct. However, if the processes that led to the deposition of an assemblage remain ambiguous, then it is not possible to judge either way. Does an assemblage represent a systemic inventory of the space – composed of primary refuse – or does it bear little relationship to the systemic inventory – composed of secondary refuse? Is the assemblage itself cohesive? That is, do all of the artefacts within a single context belong to a single systemic inventory, or did they originally belong to separate inventories which were brought together into a single context by subsequent processes? They are difficult questions to answer, but in doing so one can more-readily construct an accurate and transparent history of the site.

Drawing meaning from the artefact assemblages

Returning to the two assemblages presented here, with their formation processes clarified, what can each assemblage reveal about the systemic context of the architectural space? Because each was formed in markedly different ways, the information will be different, but not categorically so. It is facile to rely on a dichotomy that interprets one assemblage as ideal, faithfully mirroring past activities of a space, and the other not. The reality is much more complicated.

The assemblage of the quarrying pit offers little of value in terms of the information about past systemic contexts in property VIII.7.14–15. With the exception of the *terminus post quem* of the quarrying itself, the assemblage provides little else. The infill is entirely a secondary deposition – imported from outside of the property, sourced from refuse heaps that received materials from all quarters and all contexts of the city. This is not to say that the artefacts are without value. They can answer many other types of questions about Pompeian activities in general. The anatomical votives, for example, show that this mode of ritual behaviour was practiced here. It is also interesting that the votives were part of a refuse heap and no longer in a sanctuary space as offerings. Could it be that they were disturbed during a renovation of the sanctuary space? Does it suggest a prevailing attitude after the Roman conquest of Pompeii that condoned the deconsecration of pre-Roman votive objects and sacred spaces? The objects retain tangible meaning, but the right questions must be asked of them.

The assemblage is not meaningful in relation to the architectural space in which it was recovered. The votive objects, for example, do not mean that the pit or property held sacred significance; the *bucchero* fragments do not point directly to 6th century B.C. activity here; building materials do not indicate a reconstruction of the property; the inhabitants' diet cannot be understood through the faunal remains; and so on. There is no significance to the types of artefacts that constitute the assemblage: reclamation collected the assemblage by chance; it is accidental and requires no explanation above and beyond this. Indeed, this is true for all assemblages sharing the same formation process: all will exhibit unique artefact assemblages but none will be meaningful as an ideal assemblage.

The assemblage of the construction trench in I.1.1 is more problematic. It has been shown that the materials found within the pit's infill occupied the space to begin with, but does this mean that they represent an ideal primary deposit? Evidence exists that many of the objects, in fact, do mirror past systemic contexts of the space. Associated with the earliest phase of activity of Room Three are the remains of a small structure (Fig. 4). The interior of the structure was filled with pottery fragments and, most telling, miniature votive cups and vessel separators, both of which were typologically identical to the examples recovered from the pit's infill. The structure, it was hypothesised, functioned as part of a potter's workshop in use before construction of the domestic architecture. Excavations in 2012 verified the hypothesis: in the southeast corner of Room Five the kiln itself, in a remarkably well-preserved state, was uncovered (Fig. 5).

The vessel supports come from the early kiln in Room Five; the miniature votive cups are identical to those found within an early structure in Room Three. It is strong physical confirmation of an ideal assemblage, but this is deceptive. Certainly some objects in this case can be construed to be ideal, but not all of them. The problem is that the stratigraphic information was stripped from the objects when they re-entered the pit as infill. The pit cut through five phases of occupation. The phases are demarcated by their own material-rich strata that were acted on by certain sets of formation processes. One common stratum, for example, is the levelling fill. Levelling fills were large deposits spread evenly over the space in order to separate a later surface from a previous one. Over multiple phases they caused the elevation of the room to rise. Like the pit's infill, dense artefact assemblages comprised most of the levelling fill. Where, however, did the assemblage come from? It is conceivable that objects from the room itself could be reused as fill (primary refuse), but in most cases, certainly, this is not very likely simply because levelling fills required so much material. They should instead be viewed as fills of any other void, an open space needed to be filled in or filled over, and without a readily available source the infill was imported from elsewhere – again the extramural refuse heaps are a viable candidate.



Figure 5: The kiln in property I.I.1, Room 5. Image: K. Dicus.

Undisturbed, the multiple phases of activity remain stratified and their formation processes are distinctive. When, however, the stratigraphic layers were cut through by the pit and the extracted material was reused as infill, both the primary and secondary refuse from the stratified layers were returned to the same general location from which they came, although this time with the stratigraphic sequence erased and the material remains strewn chaotically in the mix. In this state it is nearly impossible to determine *prima facie* what formation process was responsible for the deposition of what object and, consequently, what the material culture can say about the systemic context. The only way, for example, we know for certain that the votives and vessel supports functioned in the space in previous phases is because those contexts, in which the artefacts functioned, were located and identified. The cacophony drowns out the distinct sounds of the once-differentiated strata that is now re-contextualised as a single assemblage.

Conclusion

It has long been settled that house-floor assemblages undergo changes and disturbances that directly affect the scope of information one can draw from them. Michael Schiffer's formation processes are an invaluable template for recognizing these events and they demonstrate that primary and *de facto* refuse that reveal something about a space's systemic context are rarely encountered. This is true also, as Penelope Allison showed, at Pompeii, where formation processes, natural and cultural, ancient and modern, have modified the remains.

The same conversation should be had for other types of assemblages, those that are grouped together here as subsurface assemblages. Like house-floor assemblages, subsurface assemblages arise from numerous different formation processes, each of which must be taken into account before constructing a site narrative. To assume that the artefact assemblages represent systemic contexts is to promote the survival of 'the Pompeii Premise'.

The two infills discussed here demonstrate the differentials in the types of information from which a site narrative can draw. Both of them are problematic: one includes nothing from the systemic context; the other does, however it can be hard to distinguish in the chaos of disturbed stratigraphy. This is the complex reality of the situation. I have brought up only two out of a wide range of possibilities. There certainly are identifiable infills that consist of primary depositions

and offer a clear reading about the activities of a certain space; others, however, will consist of purely secondary depositions, offering no such information, and many others will fall somewhere in between. Each simply must be taken on a case-by-case basis and the formation processes made explicit in order for us to discern the difference.

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Acknowledgments

I would like to thank Professor Steven Ellis (University of Cincinnati), director of the ‘Pompeii Archaeological Research Project: Porta Stabia’. His professional camaraderie has been instrumental to my development in the field and his friendship a real pleasure. It is rewarding beyond words to be a part of such an influential and challenging project; a project which would not have been possible without the generous support from the Semple Fund of the Department of Classics at the University of Cincinnati, the National Geographic Society, and the Loeb Classical Library. Special thanks go out to John Wallrodt for a remarkably intuitive and accessible database, the staff of PARP:PS, the many excavators whom I supervised for so many seasons, the *Soprintendenza archeologica di Napoli e Pompei* and, finally, the anonymous readers who provided insightful suggestions on how to improve this work. Any errors in this article are solely mine and do not reflect the professionalism and talents of these great people.

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