Department of Archaeology

The commercialisation of urban elite dwellings in Pompeii: an assessment of the Bakeries of Region VI.

By

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I certify that:

a) The following dissertation is my own original work.

b) The source of all non-original material is clearly indicated.

c) All material presented by me for other modules is clearly Indicated.

d) All assistance received has been acknowledged.

Abstract:

This thesis assesses the often complex commercialisation of elite properties in Pompeii with reference to the bakeries of region VI. Pompeian research has over the years been over theorised with individual approaches failing to transcend multidepartmental boundaries. This paper selects five elite domestic/ previously domestic properties in region VI from Pompeii, for their association with the baking industry. It assesses the architectural changes of the properties and material culture to highlight the potential motivational factors behind the addition of bakeries within such residences.

The results from this analysis highlight the significant involvement of the social elite within the baking industry. While the evidence suggests that the industry was largely overseen by a workforce that transcended the social spectrum of the city. However, the elites gained more through the addition of bakeries within their properties than the potential loss of social status, from which the literary sources may lead us to believe. This paper also reassesses the early work of Mauri (1942) with his now largely discredited argument that the social elite had abandoned the city following the earthquake of A.D 62. Instead this paper suggests that the earthquake did not serve as a coup de grace of the social elite, but an opportunity to revitalise their urban property portfolio, manage assets and consolidate the growth of their personal finance in a select number of properties.

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List of abbreviations:

CIL – *Corpus Inscriptionum latinium*



Chapter one: Introduction.

I: Introduction

This thesis will assess the complex commercialisation of elite properties, highlighting the significant factors behind the addition of bakeries and its impact on the household and their relationship with the wider urban landscape. As the producers of the staple foodstuff of the ancient diet, bakers (*pistores*) played an indispensable role in the social, economic and political life of the Roman city and indeed the Empire. The social history of the production and commercialisation of bread in the Roman Empire begins following the third Macedonian war (172 to 168 BC) Pliny the Elder (HN XVIII 107) describes how before this, no professional bakers existed in the city of Rome with the production of bread left to private citizens for private consumption. It is from this, the practice of crushing and grinding wheat, that we see the development of the word '*Pinsere'*, (to beat, pound or crush) to the word '*Pistor'* (Baker). The establishment of its commercialisation began in Rome around 171 B.C, (Mayeske, 1972, 10) to accommodate the growing demands of the city's urban population, with the development of the rotary mill. By the early first century A.D this commercialisation had spread across the empire. In Pompeii a significant aspect of the commercialisation, was embedded in the commercialisation of elite domestic dwellings. It is here that this thesis seeks to integrate its analysis, the commercialisation of the '*pistrinum (Bakery),* within the elite domestic households of Pompeii.

While academic writings (See Wallace Hadrill, 1994) on the spatial distributions between the public and private spheres within the Roman household have persistently emphasises the social, cultural and political processes taking place within domestic properties, it should not be forgotten that one of the key aspects of the relationship between the public and private was the way in which it incorporated commercial activities. Although numerous publications on the extent to which domestic properties played a key role in urban economics exist and a considerable proportion of urban retail and manufacturing took place within the direct environment of these properties, there is unfortunately a significant lack of understanding for the extent and ways in which the physical presence of retail and manufacturing in these domestic contexts impacted the social dynamics of both the property and the individual.

Historically Pompeian research has been seen as subjective, under-theorised and biased leading to many isolated studies including the role of private houses in society, the organisation of space, domestic architecture, rental property and artefact assemblages. While they individually give us insight into aspects of ancient life, they have collectively failed to understand these aspects within the larger frameworks of both the city and the empire. Over the last two decades, archaeologists and historians have come to realise that the usual methods and approaches of their disciplines have failed to transcend the boundaries of their individual approaches and therefore excluded certain evidence, issues and people from the historical record leading to the collaborative approaches now taken by a number of research teams working on the site (See particularly PARP: PS, University of Cincinnati). Despite these changes, one area that continues to receive a significant absence of scholarly attention is that of urban production, particularly those incorporated within elite domestic dwellings.

While a couple of production processes have been studied more thoroughly, urban production and its impact on urban economies have failed to be integrated into the current debates on the social and spatial functioning of the city. In the post-war era, several specialist studies were conducted: perhaps most notably, Walter Moeller with his investigation of the wool trade (1976), Bettine Gralfs with her discussion of metalworking (1988) and Betty-Jo Mayeske with her intensive survey of the Pompeian Bakeries in *'Bakeries, Bakers and Bread at Pompeii: a study in the social and economic history'* (1972). Similarly individual workshops have been analysed in detail, perhaps more coincidentally being within wider research areas or within insula and houses chosen for systematic study, such as the '*Casa Del Labrinto'* (Strocka, 1991) which will be further discussed later in this work.

Despite these, there have been few attempts to use this material to answer questions regarding the social functioning of the city and the development of such commercialisation with domestic settings. One of the first steps has fortunately been taken by Andrew Wallace-Hadrill (1994). He analysed the distribution of shops and workshops over various categories of buildings, concluding that due to the spatial requirements they were predominantly found in medium to large houses. He also emphasised the fundamental mixture of economic and residential functions in atrium houses in relation to the varying sizes throughout the city. (Wallace-Hadrill, 1994, 123). However as the focus of his work was the shops' location rather than their

function, he did not fully analyse urban production. Using his approach, he thoroughly dismantled the work of 'Amedeo Maiuri', who had previously suggested that the presence of workshops inside the 'noble' houses was a sign of the deteriorating living conditions in the last years before the eruption, suggesting a city in decline left to the vulgarity of freedmen and their workshops (Maiuri, 1942, 161).

Ray Laurence briefly investigated the spread of workshops in the city. Using data from specialist studies he showed that at Pompeii, while there were concentrations of certain commercial activities in certain areas there were no areas particularly devoted to retail or production. Instead the household and the workshop, agriculture and retail existed in close proximity in an integrated society (1994, 17). While his argument stands, there still remained some separation of the population, with elites inhabiting larger urban residences particularly around region VI. The domination of urban elites is described by Jones and Bon, who have argued that the distribution of urban elites across the urban landscape, surrounded by their dependants and political supporters, produced a mosaic of neighbourhoods and was, deliberately or not, an exercise in social control (Bon &Jones, 1997, 143).

Moving from these general works to more focussed discussions on bakeries, we may first turn to the works of Betty Jo Mayeske (1972). Her work has remained a principle text for the study of not just Pompeian bakeries but studies across the empire. However, unfortunately her analysis and identification is often misleading with the added issues of significant over-reliance on her work by subsequent authors without critical reassessment of her work. She posits that any space with an oven must have been a bakery, with the result that a number of smaller spaces have been included, with no appreciation for the potential activities that may pertain to the use of an oven, some serving as merely domestic kitchens. Mayeske also attempts to infer the social status of bakers through their relationship to large houses. From this she incorrectly came to the conclusion that baking in Pompeii was undertaken, in part, by members of the social elite. This in itself presents a number of issues, she first assumes that the spatial relationship between bakeries and elite domestic dwellings is a reflection of the socio-economic status of bakers, and also that the people involved in a bakery were from the same social background. Through the assessment of our five case studies, we will be critically engaging with these issues through the assessment of the social-economic positions of the bakeries inhabitants.

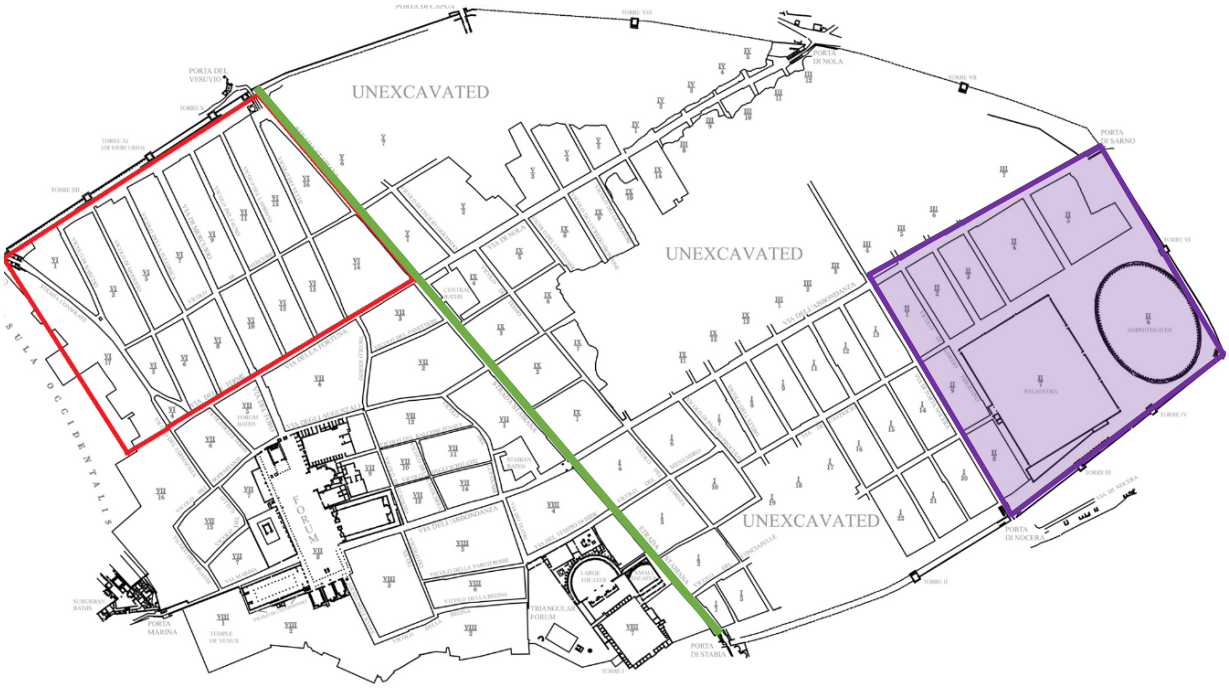
Following the work of Mayeske, D. P. S. Peacock has produced a series of articles (1980, 1989) on the millstone trade and baking mills in Pompeii. Unfortunately, his work focussed on the typological and petrological study of the mills and failed to integrate these within the wider context of the buildings. Similarly individual studies have made passing reference to Pompeii's baking industry, but fail to fully engage with the material, as they are only included within larger works. See Jashemski (1979), Jongman (1991) and Curtis (1997).

The most recent work and publications of Pompeian bakeries have been undertaken by the French school in Rome, in partnership with the Centre Jean-Bérard and the University of Rouen in France (Monteix, 2009). Their project aims to understand the techniques used in ancient bread production, particularly during the transformation in the second century BC, when its production became a larger commercial entity across the Italian peninsula and areas of Roman control. Unfortunately their work is not yet published, only as individual campaigns online. However, the project did not aim to integrate the research into the wider economic debates surrounding elite involvement, social transition or economic importance making its inclusion in this work of limited value. Instead it sought to clean, catalogue and record the features of a select number of bakeries in Pompeii alone. In doing so, they developed clear stratigraphic phases for the investigated bakeries thereby aiding our understanding of the development of the industry in Pompeii, drawing inferences for the industry in the wider empire. Unfortunately, only the bakery within the House of the Labyrinth was accessed in their catalogue. Similarly, despite acknowledgment of the work of Mayeske, they failed to critically engage with her work. In failing to integrate their results into the wider research questions, a large body of research into the development of the industry and their association with their direct environs, was unfortunately missed.

It is here that this thesis will begin to engage, looking at the material in a collective context within the region (for this study region VI was chosen) and with the wider urban landscape of the city. It will assess the architecture of the elite properties within which bakeries are constructed and attempt to infer the motivational factors behind their location close to and inclusion within what are considered to be elite domestic properties and the implications of this location. We will first understand the

regional selection into which all our case studies are contained, before understanding them in their wider context.

I.II: Cohesive neighbourhoods - The case for region VI.



Map 1: Plan of Pompeii with the area of Region VI outlined in red. (Dobbins & Foss, 2009, Map 3)

To present a coherent discussion, the selection of a single region is made to ensure a tighter focus and engagement with the material. During the early excavations the city was divided, under Giuseppe Fiorelli, into nine regions. Fiorelli assumed that future excavations would uncover a street connecting the Porta Capua with the Porta Nuceria (Mau, 1899, 34), a second *Cardo Maximus* to balance the first, no doubt swayed by the modern predilection for symmetry. However, his assumptions were proved incorrect, and the city was divided into only six. Despite this, archaeologists continued to use Fiorelli's numbering scheme. But this means that the boundaries of some of the regions are arbitrary.

As can be seen from Map 1 (above) those regions to the east of the *Cardo Maximus* (Highlighted in green), with the exception of Region II, all contain areas yet to be excavated. Despite being fully excavated, Region II (Outlined in purple) contains no examples of bakeries or bakeshops, thereby making this thesis, extremely difficult

to contextualise within a selected regional framework. It was therefore decided, in the interest of a wider cohesive and engaging argument, that those regions to the east would be excluded, leaving only regions VI, VII and VIII. Contained within these three areas are 18 properties associated with the baking industry, 13 bakeries and 5 bakeshops (Laurence, 1994, figure X). Region VIII, contains only two examples of bakeries (VIII.4.26/ VIII.6.1) and, while both are contained within large domestic dwellings, it was decided that a larger number of properties should be evaluated. As this was leaving only VI and VII, both containing an equal number of domestic bakeries, it was decided that the inclusion of the forum and the surrounding public amenities within region VII, may cause a reversal of traditional polarity as argued by Hilliar and Hanson (1984, 183). In this they suggested that the relationship between the inhabitants of Pompeii and strangers is reversed so that strangers control the public spaces. While this may not be the case with Pompeii, it is yet another factor which may obscure our study. Similarly the interaction between the bakeries and the urban landscape may have been affected by restrictions of space and access particularly around the forum.

We are therefore left with region VI, bound in the northwest corner of the city by the *Cardo Maximus* to the east and one of the *Decumanus Maximus* to the south. Whilst we will be using Region VI as a control for our study, we should be aware that the modern regions represent no cohesive neighbourhood in antiquity. However, Laurence (1994, 42) has suggested that in antiquity, what is now region VI, was a visible neighbourhood with select identity. Using a number of altars found at crossroads across the site, he suggested that these may form the boundaries of neighbourhoods. Distribution patterns of these street shrines appear to discredit his theory with a significant number along the *Via dell'Abbondanza* which would suggest neighbourhoods of only a few households. Laurence therefore suggested that instead of being located in the heart of the neighbourhood they instead represented linear parameters (1994, 42). Similarly he argues that the use of public fountains and the analysis of their location can also help define the civic identity around region VI in antiquity. It would be perhaps unsurprising to acknowledge the area maintained a cohesive neighbourhood even in antiquity. However the analysis of street shrines and fountains is unlikely to lead us to any definitive conclusion in relation to its cohesive neighbourhood in antiquity.

Contained within the region are 7 Bakeries and 1 bakeshop, of which four are confined within elite domestic dwellings with the bakeshop at VI.6.4-5 architectonically and socially connected with the House of the Pansa at VI.6.1. It was, however, decided that for this study only five properties would be chosen, five domestic bakeries and the single bakeshop, to ensure that a closer analysis and interpretation of the remains within a cohesive context would be undertaken. We must also try to understand some of the key formation processes that have affected the region. Unfortunately preservation in the region is uneven, with its excavation intermittent throughout the late nineteenth and early twentieth centuries. It has across the years built a reputation as the towns 'smart' quarter, a characteristic based on the obliteration of urban dwellings and retail in the shadow of all but show homes (Wallace-Hadrill, 1995, 154), a direct contrast to the work of James Packer (1975, 133) who has suggested that the region was in fact a plebeian stronghold. In which he sought to highlight the overlooked middle and lower class houses of Pompeii. However his argument also highlights the interconnectivity and reliance between the social stratigraphy across the city and into the elite domestic properties.

As such the region, and the whole of Pompeii, has undergone extensive artefact assemblage manipulation noted resoundingly by the work of P. M Allison (1992, 49-56). She identified correctly, that there was a number of intervening events between the moment of abandonment and destruction and the arrival of modern archaeologists who have complicated the artefact assemblages by removing and repositioning artefacts (See also Binford, 1981; Schiffer, 1972; 1985).

Early excavations simply followed the course of the ancient streets, with no careful record of their work and only the best artefacts occurring in the National Archaeological Museum in Naples with no associated context or provenance information. Many material goods also quickly disappeared into private collections and properties across Europe, losing all historic and archaeological value. With Pompeii quickly becoming a stop on the European grand tour, many artefacts were repositioned to fit with preconceived ideas of how the record should have looked in Pompeii (Allison, 1992, 52). We should therefore be aware that in many of the properties discussed below, no artefact assemblages remain and where material does exist we should be hesitant with its interpretation of room and property use.

Despite this Region VI still, thanks to the spatial distribution of bakeries connected with domestic properties and the total excavation of the region, allows us to understand the case studies in their direct environment. From this we can try to understand the wider picture of elite commercialisation and its role in the economic, social and political development of the city and perhaps the empire. We will therefore begin with our case studies, five distinct properties each containing or having direct architectonical association with the baking industry.



CHAPTER II: Case studies and their Contextualisation.

Chapter II: Case studies and their Contextualisation.

Before we assess the five properties that will form the basis of our study, we must first understand the variant forms of domestic workshops, their application within the baking industry and the physical operation of the bakery. From the analysis of the domestic workshops in Pompeii, including bakeries, Miko Flohr (2014) has suggested three variant forms of domestic workshops

1) Incorporated Workshops
2) Associated Workshops
3) Independent Workshops

Using these three domestic workshops as a basis, we may be able to understand the complex spatial forms of Pompeian bakeries. The first as perhaps the name suggests had the greatest impact on the domestic function of the property. As we will see the domestic and commercial spheres were often heavily intertwined. The incorporation of a bakery within its domestic setting thereby impacted (the penetration of) on the private realm of the house as these bakeries have no secondary entrance. This form of bakery is best exemplified at the Mill/Bakery at V.4.1-2. Here the import of raw material and the exportation of the finished product had to pass directly through the small atrium at the front of the property. Similarly, the animals that operated the mills and anyone affiliated with the production process must have passed through the one atrium. As we will see, the House of the Labyrinth at VI.11.9-10, is also a property of this form.

The private domestic sphere was less impacted when the bakery was accessible from a secondary entrance in addition to the domestic entrance. This is perhaps the most common form of bakery in Pompeii, as highlighted in table 1 (See appendix). Despite the secondary entrance, there is still a certain degree of direct interaction between the domestic sphere and the production areas. In many cases the bakery was constructed in the area previously reserved for the Peristyle garden and therefore connected via the *tablinum.* Unlike the incorporated bakeries, the importation and exportation of raw goods was visually disconnected from the main household. The

House of the Baker at VI.3.3 exemplifies this form with its access to the rear at VI.2.27.

The final form and perhaps the least impactful on the domestic sphere are those bakeries seemingly visually and architecturally disconnected from atrium houses. Across Pompeii, sixteen bakeries and bakeshops are disconnected from domestic contexts. Instead they are found within *tabernae* or entirely separate visually undomesticated properties. Many are architectonically linked with larger properties but with no direct connection between them, such as the House of the Sallust at VI.3.6. Despite the clear architectural disconnection it has been suggested that these bakeries are still involved with elite social, political and economic development. In many cases they are incorporated within single unbroken facades, suggesting that they may have still remained in the patronage or ownership of the social elite, living close by or elsewhere in the city.

Before analysing the physical and material remains in the following case studies, we must first understand the terminology and physical operation of the bakery. The analysis of terminology and analysis of the baking industries operating sequences will allow us to distinguish production areas from other areas dedicated to storage. Perhaps one of the greatest tools for the identification of the operation of the bakery comes from the frieze found on the Tomb of Eurysaces the baker at the *Porta Maggoire* in Rome, which will be discussed again in this work for its reference to the growing social class associated with the industry. From the frieze the following sequence of production can be identified below;

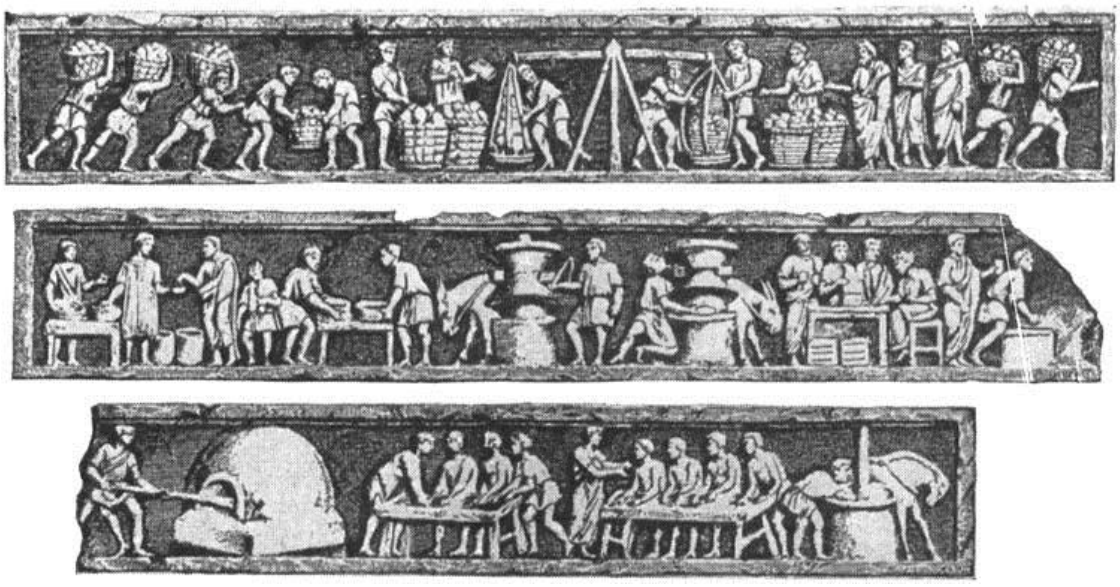


Figure 1: Frieze from the tomb of Eurysaces, highlighting the production processes in a bakery (Curtis, 2001, fig 28))

1) The grain is milled into flour.
2) The flour is sifted to remove any potential impurities.
3) The ingredients are mixed and kneaded into dough.
4) The dough in formed into loaves.
5) The loaves are left to rise.
6) The loaves are baked into bread in the ovens.

Unfortunately many of the vestiges associated with such production have not survived in the archaeological record, requiring no permanent fixtures such as tales and sieves, which would have been made of organic materials not surviving in the archaeological record at Pompeii.

The definitive feature of the bakery, alongside the oven, is perhaps the remains of the mills, rotated by mules and depicted in the centre of figure 1. The depictions of the rotary mills were also discovered on a relief sculpture by Overbeck and Mau (1884, fig 186) on a bakery shop sign. In the stables of the House of the chaste lovers, the skeletons of five equids were uncovered. New examination aimed to study the skeletons and reflect on the link between the equine and bakery in which they were discovered. The analysis of the remains highlights the short femurs and extended tibia's which reflect the animal's consistent use within the bakery (Nuviala, 2014). A single bronze bell once harnessed around the neck of an equid in the bakery of the House of the Labyrinth also confirms the presence of mules within a domestic context.

The mills themselves consisted of two parts, the lower *Meta* and the upper *catillus (See figure 2).* In Pompeii, the *Meta* is usually fixed into the floor of the bakery or raised on a masonry base, fixed throughout the entire process. The average *Meta* is approximately 60cm in height and 76 cm in diameter with the *catillus* measuring approximately 70cm in height and 73 cm in diameter (Mayeske, 1972, 8). The *Catillus* sits on top of the *Meta* and is rotated during the milling process, holding grain in the top. As the *Catillus* is turned, by mules harnessed to the wooden cross beam, the grain was channelled through the opening into the space between the *Meta* and *Catillus*, where it was crushed by the rotation. A wooden or metal container, often a lead sheet,

was sometimes fixed to the base of the *Meta* to collect the crushed grain (Mayeske, 1972, 11).

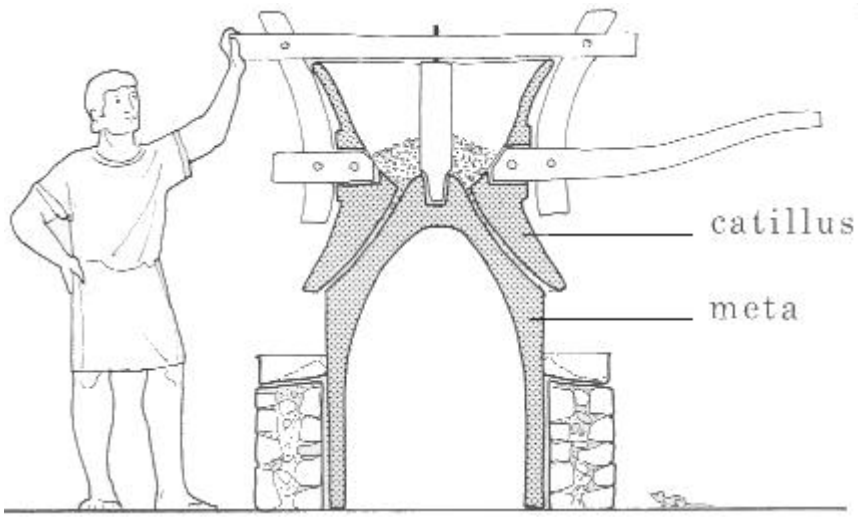


Figure 2: Cross section of mill highlighting the Meta and Catillus (Adam 1984, fig. 735)

The production of bread also helps to highlight the hierarchies in place within the workshop. Bakeries were dependant on the hierarchies of people, who varied both in their socio-economic background and in the level of their compensation for their participation.

Many of these forms are more fluid than distinct but as we will see they form the major backbone of Pompeian bakeries from which all can be categorised. We will now assess the following five properties:

1) The house of the Baker/Casa del Forno. (VI.3.3/27-28)
2) The house of the Labyrinth. (VI.11.9-10)
3) The house of the Sallust. (VI.2.6)
4) The Bakery of the Christians (VI.6.17-21)
5) Unnamed bakeshop (VI.6.4)

Each of the five properties highlights in variant forms the commercialisation of domestic properties and the involvement of the baking trade within the economic, social and political growth of the city.



Map 2: Region VI with all Bakeries highlighted (After Dobbins & Foss, 2007, Map 3)



Map 3: Region VI with the five case studies highlighted. (After Dobbins & Foss, 2007, Map 3)

II.I: The House of the Baker (VI.3.3/27-28)

Our first case study focuses on the bakery within the House of the Baker located at VI.2.3/27-28, on the *Via Consolare,* a major thoroughfare running from the *Porta Ercolano* to the forum. As we will see in the following case study of the House of the Sallust (VI.2.6) the *Via Consolare* plays a significant role in urban retail, clearly proving a route way capitalised for personal financial gain.

A cursory glance at the property's ground plan may suggest that the bakery and property is an exemplary form of associated bakery as outlined by Flohr (2014), with the domestic quarters accessed at VI.2.3. However, as we discuss the property, it appears to have been totally surrendered to the industry and we may therefore be required to re-interpret Flohr's variant forms.



Figure 3: Ground plan of the House of the Baker (VI.3.3/27-28) (After Dobbins & Foss, 2007, Map 3)

Originally the *fauces* led into an *atrium* with a modest peristyle garden to the rear, typical of Roman urban domestic properties. In many ways the property conforms to the idealistic ground plan outlined by Roman architect and engineer, Vitruvius

(Hales, 2003, 4). However by A.D. 79, the peristyle garden had been converted into the bakery with the additional access at VI.2.27/28 from the *Vicolo di Modesto*. The date of the property is uncertain; the *fauces* of the property is flanked by two retail units (VI.3.4/VI.3.1), each with additional rooms to the rear and access to upper floors. The lack of connecting doorways between the *atrium* and these retail shops, potentially disconnecting them socially and economically from the domestic property, suggests it is unlikely that the bread produced on the property was sold here. If it was, then the owners or workers would have passed through the *fauces*. This would have caused the continual penetration of labour into the domestic heart of the property. We may wish to consider again the works of Mauri, as this property appears to confirm his argument of elite abandonment. However as we will see, the absence of the elite from the property does not reflect the wider changing social dynamics of the city.

Flanking the *atrium* are four small rooms (C, D, E and F) over which the balcony was constructed during the transformation of the property in which the bakery was added. Flohr (2007, 138) has suggested that the reduction of living quarters, as a consequence of the addition of the bakery, instigated the creation of further living quarters, which the previous architectural ground plan could not provide. The forefront of the house was therefore rebuilt; the walls around the *atrium* were strengthened, and four pillars of *opus latericium* were built on the corners of the *impluvium*, which were able to sustain the first floor, accessed by the new staircase installed in the south-west corner of the *atrium.* The creation of these pillars visually obliterated the axial view from the street. We may therefore suggest that the *atrium* had entirely lost its domestic function.

The *tablinum* (G) opened into the bakery, also accessible through rooms H to the west of the *tablinum.* In the former peristyle four mills were installed, an average number in comparison with other bakeries in the city, See table 1 in the appendix. To the north, the door into the stable (M) contained a long manager and watering trough (b/c). The interpretation that this is a stable must be questioned. There is a 34cm drop between the street level and the floor of room 28, which unlike room L, was not fitted with masonry steps. While it is possible that a wooden ramp existed, lack of organic material preservation makes this assumption difficult to confirm. On the street outside, modern drain covers have obliterated the remains of the curb stones, however Poehler (2011, 200) has identified this as a side ramp. In his survey of the economics of

Pompeian transport, he identified that side ramps are found at 80% of the bakeries, suggesting that the cost of installation was offset by their size, allowing multiple deliveries to occur. Assuming this was a stable, we are still left with a distinct lack of evidence to support this idea.

To the west the kitchen, which by A.D. 79 was accessible only via the bakery, contained a cook top, small oven, basin and latrine. Stairs also led to the rooms above the kitchen and potentially the stable Amphorae containing grain and flour were found in here alongside several carbonized loaves (Joshel & Hackworth Petersen, 2015, 128). Unfortunately no further record attesting to these remains in this context have been found.

The main door of the oven (J) faced the peristyle before which there was a cistern curb and arched recess for wood storage. On both sides of the oven were earthenware vessels to hold water. Above this was a *lararium* painting, unfortunately now lost, containing the depictions of three individuals, the central figure potentially depicting the Goddess of bread production, Fornax surrounded by two *lares*, guardian deities.

The only connection between this house and the Bakery was through two doors in the *tablinum* that could be closed off, suggested by the significantly reduced doorway width at the rear of the *tablinum*. Similarly door hinges also give testament to the ability to close off either the entirety of the bakery or the owner's office (Mayeske, 1972, 95). A number of domestic remains found in the *atrium*, including bronze ornaments, tufa hand mirrors and cups of fine pottery indicate potential domestic context, but do not suggest elite extravagance as seen in the houses of the Menander (I.10.4) or House of the gilded cupids (VI.16.7) (Carrocci & De Albentiis, 1990, 22). Despite these potential signs of domestic material remains, the building was painted in plain white plaster with only one *cubiculum* (F) painted in a simple style associated with middle-class housing.

We should also be aware that the inclusion of domestic items may still have been available within commercial settings. A number of tools found in the corner of the *atrium*, combined with the plain plaster, may suggest that the building was simply undergoing extensive redecoration. However, if we look at the cohesive structural and material remains, when compared with the idealistic vestiges of elite lifestyle, we can

see that perhaps the structure has been entirely overcome by the commercial enterprise. As we have seen the axial view from the street was all but destroyed despite this being a pivotal way in which the owners negotiated their social status within the community (Hales, 2003). Similarly the internal spatial organisation was entirely transformed with the addition of the bakery. Flanking the rear of the *atrium* (rooms D and E on the plan) the *alae* have been closed off thereby transforming the rooms function. The lack of *triclinium*, usually located of the peristyle garden (Room H) may also suggest a transition away from an elite domestic function. The reuse of thresholds in the property, that do not fit in their new location, also suggests a haphazard construction unlikely seen within elite architecture.

We cannot assess the role of this property however, without due consideration of the bakeries wider spatial distribution in both the wider region and the larger urban landscape. Flohr (2007, 138) incorrectly ignores the secondary entrances at the rear of the property (VI.3.27-28), which must have served the needs of the bakery directly, without interfering with the front quarters of the property. Instead he suggests that the traffic passed directly through the property.

According to the work of Eric Poehler (2006, 61), the town enforced measures to ensure the continual circulation of wheeled transport, using wheel ruts and kerbstone ware on the streets across Pompeii. Poehler outlined a strict system of traffic flow, using region VI as a control for his work. Using the rounded kerbstone at the confluence of the *Via della Terme, Via della Fortuna* and the *Vicolo di Modesto*, which suggest a tight right turn, Poehler concluded that drivers chose to continue northbound on the *Vicolo di Modesto* rather than compete with the single lane section of the *Via Consolare* from the Herculaneum gate. Assuming the work of Poehler is correct and a strict one way system was enforced, any exportation from the property would have had to turn left as they exited the property. From there they were bound to turn west along the *Vicolo di Mercurio.* At the junction with the *Via Consolare*, traffic was able to head both north out of the city or follow the system south for the movement of goods around the town. Even if products were exported from the front of the property it is unlikely to have affected the traffic movement constrained to follow the apparent 'one way system' of the region. The lack of associated retail shops at the property, assuming the shops along the *Via Consolare* were now disassociated from the property, suggests an inescapable need to export goods and waste, out of the city or

around the town, whether this was in the form of baked bread or milled flour. Similarly the need to import raw materials, such as fuel, must also be considered in the properties' wider spatial interaction.

The production within the bakery also requires close analysis. While large variants would have occurred each year, Jongman (1991, 135) has suggested that the Pompeian cereal industry produced approximately 7,500 metric tons of grain. He therefore estimated that the average person consumed 200kg of grain a year and that the industry could feed 37,500 people. This figure is, however, larger than traditional population estimates which are usually between 10,000 and 20,000 (Bakker, 1999, 13/Finley, 1999,139).

This may highlight a certain degree of product exportation. However, Bakker has suggested that those Romans entitled to the grain dole received five *Modii* per month, or approximately 33.5kg of grain (Bakker, 1999, 13), an annual consumption of around 400kg. Using this figure as the estimated consumption amount across the population it decreases to 18,750, a figure more consistent with current estimates. We should be aware that these figures should be treated with some hesitation. Aldrete (2004, 197) argues that 400kg of free grain was enough to feed two people for the year. If so the estimates may remain, that it was possible to supply bread for up to 37,500 including the population and any available for exportation and sale. We should be aware however that these figures are not accurate estimates. Definitive numbers are impossible to calculate.

Back in the Bakery, Bakker (1999,14) has suggested that, with his population estimate of 10,000, the 110 mills, inclusive of estimations of those bakeries yet to be discovered. Each bakery would therefore have potentially served around ninety individuals. The House of the Baker, which has four mills, would therefore have served three hundred and sixty individuals. Using the population estimate suggested above of 18,750, this figure increases to 680 people per bakery or 170 per mill. The average animal powered mill, which in this case is likely given the presence of the stable (Room M), can grind between 10KG and 25 KG of grain per hour. If the average Pompeian required five *modii* a month, each millstone would have been required to grind 90 KG of grain a day, requiring continual rotation for between 3.5 and 9 hours. The population estimates outlined by Bakker fail, however, to transcend

our understanding of Roman society. It is perhaps easy to conceive in a modern middle class western world that everybody has access to bread. However as we are discussing in this paper, Roman society was bound by rigid social frameworks. We cannot therefore suggest that we can estimate 'average' consumption, which would have fluctuated enormously from the elite to the poor. Similarly Bakker's hypothesis does not reflect the wastage that would have occurred in both elite domestic contexts and also from the bakeries themselves. The fluctuations in both population estimates and production value, unfortunately leads to a dramatic variation, which may be too large



Figure 4: The House of the Baker, looking west through the bakery into the atrium (S,A. Jashemski, 2007)

to gain any real valuable data analysis. No estimates are given for the production of bread, taking into consideration both the size and temperature of the ovens. Similarly their work fails to understand production rates for the sale of products to those visiting the town, which may have increased the production.

Bringing this discussion back to the House of the Baker, we may begin to understand the complex role it played in the distribution of both baked bread and potentially of flour. If this bakery had no direct area for the sale of products, we must then assume that it was connected with a largely commercial network operating in Pompeii, perhaps exporting to one of the bakeshops along the *Via degli Augustali*, who were unable to produce their own flour.

However it appears that this building was, at least by the eruption, no longer the residence of the member of the urban elite and maintained either on their behalf, or in favour of the social climbing middle classes with a growing wealth indicated by the major redevelopment of the property. How then do we identify this property against the three forms championed by Miko Flohr. At the beginning of this case study, we highlighted that the property appears to conform to Flohr's associated bakery. However, we may now understand this as an independent bakery. If so, it becomes increasingly apparent that a further distinction must be made between independent bakeries within previous domestic properties and independent bakeries outside domestic properties in what we may understand as *tabernae* and other similarly solely retail units.

II.II: House of the Labyrinth (VI.11.9-10)

Our second case study comes from the House of the Labyrinth at VI.11.8-10. The building occupies the entirety of the southern end of the *insula* VI.11 which was by 79 A.D, only accessible from the *Vicolo di Mercurio*. During the 1st Century AD, the property underwent drastic alteration leading to the addition of the bakery following the earthquake. Unlike our other case studies, the property is not located in an area of the city which was largely impacted by passing footfall, perhaps reflected in the lack of façade retail units typical of urban properties. Instead these rooms have been incorporated into the atrium. The building was first excavated in 1834 and included in the compendium by Mayeske (1972), which provided a brief description of the bakery's features, without any engagement with the material. Volker Michael Strocka (1991) was first to publish a detailed analysis of the establishment including a suggested chronological development of the property.

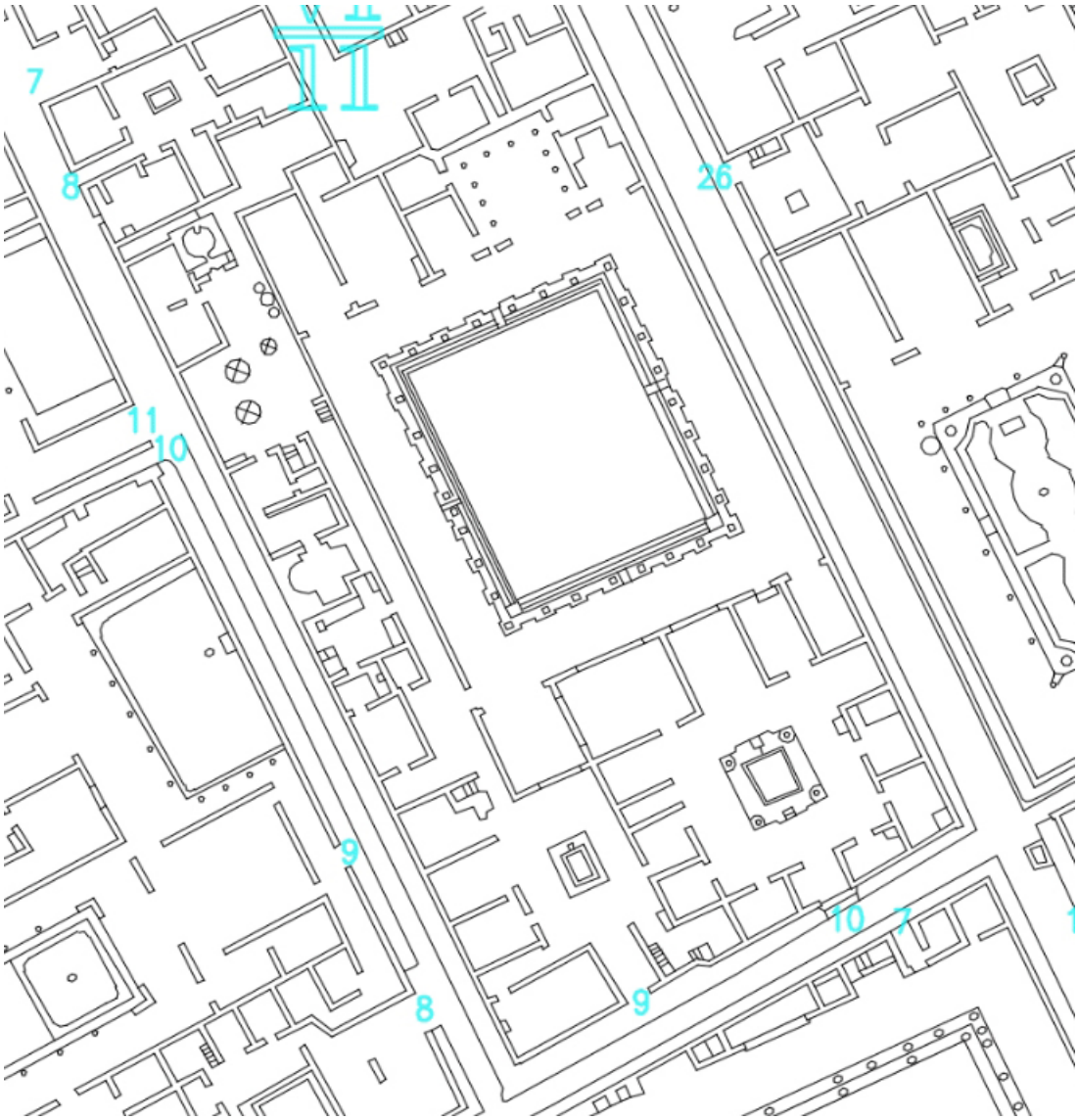


Figure 5: Plan of the House of the Labyrinth (Dobbins & Foss, 2007, Map 3)

This *atrium* house was constructed through the connection of two separate houses. As figure 5 highlights the remains of the individual properties are still roughly visible around the separate atriums, with the larger of the two now occupied by the main domestic quarters of the unified property. To the south it faces the rear of the House of the Faun (VI.12.2). Despite the east façade being longer than the west, the insula shape is not irregular. The difference in length is accounted for by the jump forward of the unit that occupied the south-east corner of the block (VI.11.10). Of the original arrangement of house 9, in which the bakery is located (VI.11.9), only the *atrium* is preserved. If the property originally possessed a *tablinum* it was destroyed when the large *peristyle* of the double atrium house was installed (Schoonhoven, 2006, 91). Despite these drastic alterations to the property the original side wall of the house was preserved.

The bakery is located at the end of a long *passage*, entirely concealed visually within the boundaries of the property. As we will discuss in the following discussion, while the bakery was not visually available to the general public, the heat, sounds and smells from the courtyard would have alerted to its existence within the property. Using Flohrs (2014) three variant forms against the remains of this bakery we may further understand the complexity of outlining only three forms. Potentially a hindrance of Miko Flohr's three workshop forms is the lack of flexibility for individual architectural styles, reflected in the patchwork construction and availability of space within the fabric of urban architecture. The building appears to straddle the boundaries of both an incorporated bakery and associated bakery, with its construction in the secondary peristyle directly beside the property's private baths and with the inclusion of the second atrium for the exportation of finished goods. While a secondary entrance does exist into the property at VI.11.8, the reduced doorway, between this property, into the area behind the oven appears too small for finished products to have been manoeuvred through. However in many ways the bakery may also be categorised as an associated bakery with the presence of the bakery completely isolated from the main domestic quarters around the large peristyle and *atrium* through VI.11.10.

The bakery itself contains three mills, four basins, a hearth and oven. During the excavations a small room was found to the left of the oven, in which there was a kneading machine (Strocka, 1991, 61). The presence of the machine and the location of the basins may give us an indication of the bakery's internal operation, which saw milled flour passing into the small room to the east of the oven (See figure 6 below) to be kneaded into dough. During the cleaning of this room, a small bronze bell was uncovered, which Strocka (1991, 62) has suggested was hung around the neck of one of the mules that operated either the mill or potentially, given its context, the kneading machine. From here the formed dough, would have been easily passed through the small window into the oven. Behind the oven a small corridor

gives access into a small rectangular room, which Mayeske (1972) suggests operated as a stable for mules. During the construction of the bakery a doorway that once led between the large peristyle and the bath complex, was sealed (See figure 6, below) suggesting that the bath complex and visibility into this area was no longer considered as vital to the economic advantages that the bakery added to the property.

The property at VI.11.8 could also be accessed from the rear of the oven through a significantly reduced doorway. Strocka (1991, 63) has interpreted the property as the home of the bakery's foreman, or perhaps wider staff. The property is relatively modest in size with a *fauces* leading to an *atrium* with small *impluvium.* We may potentially assume that this property (VI.11.8) remained under the ownership of the occupant of the House of the Labyrinth. The foreman of the bakery, undoubtedly of considerably lower social status, was given a satisfactory property in which to live comfortably alongside his workplace. This gives us some indication of the social networks at play within Pompeian bakeries.



Figure 6: The bakery within the House of the Labyrinth, note the sealed doorway which previously connected the large peristyle to the private baths. (S. A. Jashemski, 2006)

The houses of the middle and lower class have been examined by James Packer (1975, 133-145). Who highlighted that the members of the lower classes lived in surprising comfort, lacking the vestiges of elite residences but with adequate space alongside those facilities (i.e. bathing, Palaestrae) within the city. The property at VI.11.8, conforms with the outlines suggested by Packer (1975, 136) in plan and facility inclusion, which highlights the existence of some form of personal life behind the confines of elite ownership. As we have mentioned,

the forefront of such research is led by Emanuel Mayer (2012), who has highlighted, using aspects from Pompeii, the existence in the archaeological record, of an ancient middle class. It may be argued that the commercial diversification of the cities in Campania was a result of the Roman patronage system (Wallace-Hadrill, 1994, 34). What emerges from the work of Mayer (2012) and Packer (1975) is a closer understanding of the world, domestic and commercial of the middle class. Urban life is multifaceted

Perhaps surprising, given the size of the property, the largest of our case studies examines the bakery which contains only three mills. Using Bakker (1999, 14) and Jongman's (1991, 135) population and production estimates the output of the bakery had the potential to serve the needs of 270 people per annum, based on the population estimate of 10,000. Using the larger population estimate of 18,750, this figure, however, increases to 511 per annum. This figure, with due acknowledgment of the undeniable inaccuracy that these estimates have, still highlights that the production output of the bakery sought to produce beyond the needs of the household. These exports, either as milled grain or finished loaves would have been circulated around the city, potentially to the surrounding *tabernae* and bakeshops along the *Via Degli Augustali.* Unlike the vast majority of elite domestic households in both Pompeii and the wider Roman urban landscapes, the House of the Labyrinth, either accessed from VI.11.9 or VI.11.10 has no directly or architectonically related retail units adorning the façade of the house. The production, similar to the bakery in the House of the Sallust (VI.2.6) must therefore have operated within a wider production network of supply. The lack of retail units attached to the property is also reflected in the property's immediate surroundings, with the closest, and only *tabernae* in the vicinity of the property located at VI.13.17.In comparison to the properties in the east of the region, with their close proximity to the increased footfall also the *Via Consolare*, the *Vicolo di Mercurio, Vicolo del Fauno and Vicolo del Labrinto,* the property is situated away from areas of the city populated by both increased footfall around the city gates and those areas of the city habited by increased plebeian domestic housing, whose inhabitants were accustomed to buying food day by day (See Tacitus, *Hist*. 4.38).

Unlike the House of the Baker (VI.2.3) (Poehler, 2011, 2000) the property made no deliberate alterations to the city streets through the addition of paved or side ramps to aid with the delivery and exportation of goods, fuel and waste. This does not however, suggest that the property did not export any goods but that the owners potentially did not wish to make architectural alterations to the city streets in front of their property which would have alerted to the presence of the bakery. As we briefly mentioned the bakery is invisible from the street, a potentially deliberate act of concealment, given the construction of a wall in the doorway

which previously gave access to the secondary peristyle (VI.11.8a, See figure 8 above). The continuation of the doorway in this location would have aided the necessary exportation of goods out of the property. The act of blocking the doorway may signify that, while the bakery financially offset the cost of disruption to the private baths, the owner did not wish to highlight with direct visibility from the street a direct involvement (their involvement) with the industry.

To visit again the work of Eric Peohler (2006, 69) and his identification of Pompeii's traffic flow system, we can also begin to understand the spatial position(s) of the bakery and its place within the distribution of goods around the urban cityscape. Peohler suggests that the *Vico di Mercurio* was strictly one way, forcing any traffic from the property westbound towards the *Via Consolare*. Despite the area's residential character, heavy rutting along this relatively modest road further attests to its use by carts continually carrying goods (Poehler, 2006, 69).

The property exemplifies both the internal dynamics of both production and the chain of hierarchy. The property also may indicate the deliberate concealment of the bakery, if so this was undertaken by the owners for their own satisfaction and retention of perceived elite values away from urban industries. Unlike the House of the Baker the property has entirely retained its residential character, potentially at the expense of the private bath complex. However, this may have been offset by the financial prosperity that the commercialisation of the property brought.

II.III: House of the Sallust (VI.2.6)

Our next case study, the House of the Sallust, further develops the ideas of elite dependence on the lower social classes who were either employed or owned by the owners of the property, or their clients. The property also highlights the complexity of rental property identification and the potential continued patronage of properties all but architectonically attached to the main household. The house is thought to have been first constructed around 140 B.C (Laidlaw & Burge, 2014, 255), based on the analysis of pottery fragments found around the atrium during its excavation by A. Martin. The architectural phases of the development of the property are vital to our understanding of the bakery which was added to the property in the early first century at the expense of the garden that encircled the property.

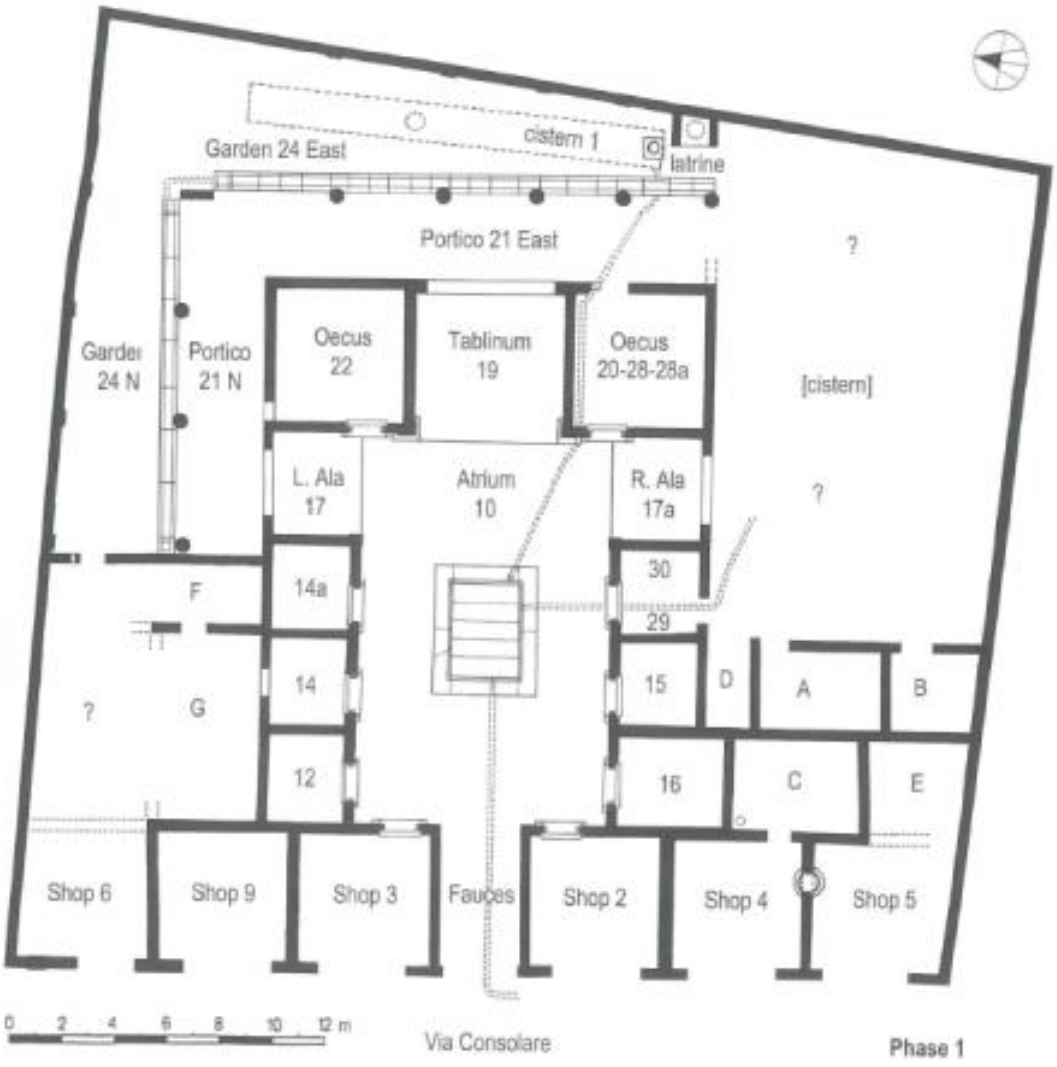


Figure 7: Plan of the Samnite property (VI. 2.6) (Stella and Laidlaw, 2014, Fig 6.1)

The Samnite property (See figure 7) was constructed within the entire boundaries of the lower portion of the insula and therefore, despite significant internal reconstruction, the property was never expanded. Despite the irregularity of the plot it was constructed with almost exact symmetry, with six identical *tabernae* lining the tufa façade on the *Via Consolare.* The tufa façade undoubtedly signified the growing wealth of the house's owner, which is further expressed by the sculptured capitals that crowned the ionic pilasters either side of the main entrance. From the street the axial view into the property was carefully orchestrated to display the atrium with its grey impluvium. To the rear, through the tablinum and the portico was the garden carefully decorated in the first style, which gave the illusion of a larger space beyond the tablinum despite the constraints of the properties boundaries (Laidlaw & Stella, 2014, 132). Even in its earliest phase, the *tabernae* at VI.2.3 and VI.2.5 were connected with the property, typical of urban domestic architecture.

The remaining four units (shops 5, 4, 9 and 6 on figure 7 remained visually unconnected to the property, with no direct relationship other than their inclusion architecturally within the tufa façade. However, underneath the cross wall, between shops 4 and the *thermopolium* in shop 5 is a small opening. During the modern excavations of the property between 1969 and 2010 the remains of a well was uncovered. It was assumed that the well formed part of the earlier water system before the main house block was built, left open under a protective rectangle of limestone ashlar blocks and fitted into the rubble crosswall. The well was filled with lapilli from the eruption, suggesting that it remained in use. A box drain from the counter of the *thermopolium* also suggests that it was still functional at the time of the eruption, (Laidlaw and stella, 2014,125). Clearly these properties remained spatially and architecturally intertwined with a potential degree of social control (See Viitanen and Ynnilä, 2012, 151).

It is unclear who operated these retail units or indeed what was sold from them, as there is no archaeological record for their excavation. However, architecturally they appear to remain the property of the main household, with their architectural changes coinciding with the remodelling of the house. By the mid-1st century B.C, access to the back room of shop 4 was blocked with rubble of Sarno limestone and the room incorporated into the larger building, which by the early 1st century formed part of a secondary triclinium (Number 35 on figure 8). Similarly during the construction of the

bakery, shop 9 was blocked up suggesting that it too was still under the ownership of the occupant. The construction of the bakery out of shop 6 and its subsequent extension into the property, highlights the profitability of the industry, which must have exceeded the income generated from either ground rent of shops 6 and 9 or the profit from any sales within these retail units. Alongside the addition of the bakery (See figure 8) in the early first century the property underwent dramatic alterations, which Laidlaw and Burge (2014, 259) suggests signified a new owner, a wealthy one with lower social status converting the property into a commercial property, visible enough in the archaeological record that it was included in Klebergs' (1957,34) list of Pompeian *Hospitia.*

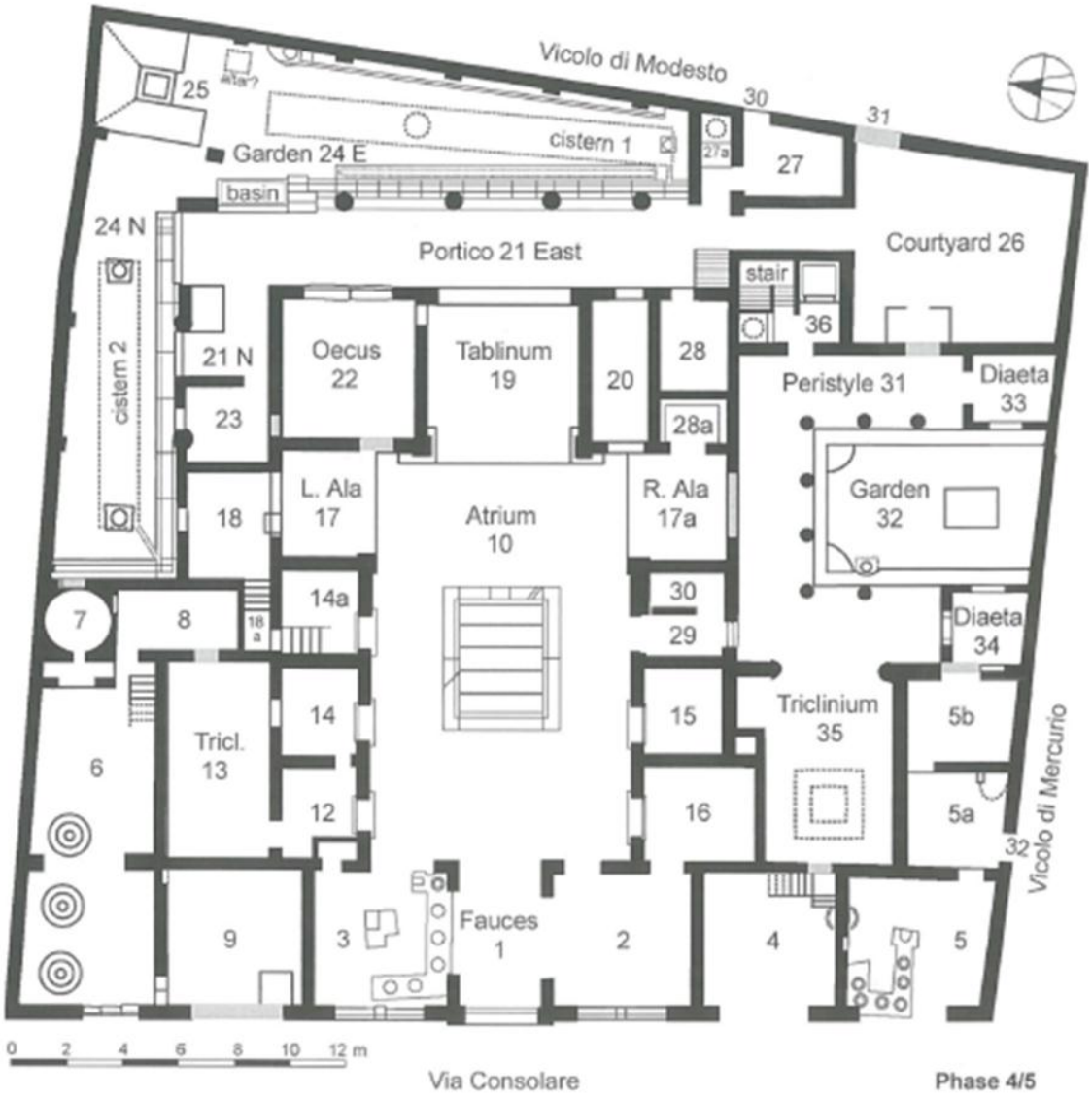


Figure 8: Plan of the final form of the House of the Sallust at the time of the eruption.

(Stella & A. Laidlaw, 2014, fig 6.9)

Despite the drastic changes in architectural design, Laidlaw and burge (2014, 260) have suggested that the continuation of the Samnite decoration in the atrium suggests the deliberate continuation in the appearance of old wealth. However, we could also argue that the continuation of the Samnite decoration indicates a lack of expendable wealth in which to redecorate. However, the greatest transformation occurred along the property's façade. The single find of a denarius of Mark Anthony under the *thermopolium* gives us a *terminus post quem* of 32/31B.C for its construction. Increased visibility into the atrium and redecoration in the third style, alongside the construction of a second story above the atrium, suggests that its core functional value had changed with economic growth now a main motivational factor.

Looking back at the variant workshop forms as outlined by Flohr (2014) the bakery at the House of the Sallust appears to conform to the idea of the independent bakery. Economically this bakery does not appear to hold the same level of economic success produced by the House of the Baker, perhaps visible in its drastically reduced size. While no visual connection exists between the bakery and the house, it remains architectonically associated within the confines of the property and therefore potentially operated with support from a patron.

As perhaps the title of this thesis initiates, Roman society was bound by strict social hierarchy often reflected in patron and client relations. While this is perhaps difficult to assess in the archaeological record, Viitanen and Ynnilä (2012, 141-155) have attempted to implement this social control onto the archaeology at Pompeii through their analysis of where large dwellings were located in comparison to surrounding activities. This is difficult in the case of the House of the Sallust, if we agree with Laidlaw and Stella (2014), and Kleberg (1957) that the property was converted into a larger commercial unit. The owners of elite houses were probably able to control, at least partially, the movements of the persons who had relations with them. The patron- client relationship was always unequal (White, 2008, 251). While absent from the House of the Sallust, many larger properties are adorned with street side benches, intended for waiting clients during *salutatio* with their patron.

If the pattern of large elite residences surrounded by shops resulted not only from economic terms, then it is possible that they were also maintained by common ownership. If so, elite members of society would have benefited from public visibility

of their property within the towns urban infrastructure, not just in social terms but also economically. The greater the number of buying customers and associates they could attract, the greater the potential for personal profit. As we have mentioned, many properties including the House of the Sallust, were bound at their entrances by connected retail units. However, there are other structures that cross the perimeter walls, clear property boundaries and imply common ownership. Leander Touati (2008, 117) and Pirson (1997, 173) have also suggested that common ownership may be detectable through the mapping of parallel alignments of properties, similar construction techniques and materials, continuous pavements and curb stones and shared structures or façade treatment. However, shared utilities do not necessarily imply ownership. Roman law enabled adjacent properties to share the use of some of their structures (*Dig*. 8. 2-3). We may then not just be dealing with ownership but legal binding co-operation among neighbouring units belonging to different owners. However, as we have seen the façade of the House of the Sallust including the Bakery, are architecturally integrated into the tufa façade suggesting that, although perhaps the property has been turned over to a large commercial unit, the unit itself, including all properties included within the tufa façade, remain the property of the owner.

The integration of the bakery and its prominent location on the *Via Consolare* was clearly stimulated by personal economic growth. However, we perhaps see a certain degree of juxtaposition within the architecture and its spatial integration. In its final form the entrance of the Bakery (VI.2.6) was restricted by the construction of a wall of mixed rubble terminated with a jamb of *opus mixtum vittatum* formed of Sarno limestone and Nocera tufa, both locally sourced from Pozzuoli. The use of *Opus Mixtum Vittatum*, is heavily connected with the post-earthquake (64 A.D) restoration of the city (Adam, 2007, 108). Similarly, following the earthquake there would have been an abundance of rubble for its construction, suggesting the narrowing of the entrance way was undertaken sometime after this date. The motivation behind the reduction of the doorway is unclear, but was possibly stimulated only by the desire to reduce the doorway, characteristic of urban retailing. Its reduction also gave some cover to the first mill.

The change from the characteristic doorway of urban retail, also suggests that the property didn't serve its products on site. Fiorelli (1875, 50) suggested that the room immediately to the right of the entrance functioned as a bread shop with a hearth

and a latrine. However, he unfortunately provides little evidence for his interpretation. We may wish to question why, if this room sold the produce in the bakery, access was blocked directly from the street.

To the left of the entrance, were the three mills constructed of volcanic stone. In his original description of the bakery, Le Vega (*PAH*, I.ii 83-84) records that the floor of the bakery was just earth, with the exception of the volcanic paving surrounding the mills, suggesting that the mills were operated by mules, with the paving providing additional grip. Unfortunately there has been no identified associated stable in which these animals may have been kept. While potentially rooms 8 or 9 may have served as stabling facility;

"Non vi si e' fatto alcun ritrovamento"

"*Not a single find was recorded*" (PAH,I.ii, 83)

which may have helped with identification. Co-incidentally, a stable at VI.1.22, almost directly opposite the entrance to the bakery on the *Vicolo di Narciso*, may have housed the animals. However, no connection between these properties exists to support this claim.

The bakery's proximity to the extensive *thermopolium* at VI.2.5, may suggest that some of the produce was sold here. The joining of the *Via Consolare* with *Vicolo di Narciso*, created a small 'piazza', containing a public fountain, a well and a street shrine. As we have already discussed, public fountains would have created a meeting place. It is therefore not difficult to imagine that the bakery and the *thermopolium* attracted custom from passing footfall into the city along the *Via Consolare.*

To return to the work of Jongman (1991, 135) and Bakker (1999,14), this Bakery, as we saw with the House of the Labyrinth (VI.11.9/10) served the needs of 270 people based on a population estimate of 10,000. Using the larger population estimate of 18,750, this figure increases to 511. However again we should be aware that these figures fail to acknowledge production for wider export, or sale to visitors to the town which may have drastically increased the required production. Given the bakeries proximity to the Herculaneum gate and the lack of directly associated retail unit, we may argue that a certain degree of its production was for exportation out of Pompeii or certainly exportation to properties around the town. Integrating the bakery

into the traffic flow system outlined by Poehler (2006), the only movement from the bakery was north out of the city or to follow the system south along the *Via Consolare* from which all areas of the town could be reached. Unlike the House of the Baker (VI.3.28) no side ramps or paved ramps assisting the delivery of produce has been found.

The House of the Sallust (VI.2.4) is a complex property with a difficult architectural sequence. The addition of the bakery in the early 1st century, undoubtedly added significant economic growth to the value of the property. Despite claims that the house was converted into a commercial unit, which may suggest a change of ownership, it is still possible that the bakery remained the property of the owner supported by their role as a business patron. The architectonical connection between visually separated bakeries will now be further developed in our final two case studies, the Bakery of the Christians VI.6.17-21 and the un-named Pastry shop at VI.6.4. Both of which are associated with the House of the Pansa (VI.6.1) architectonically and uniquely referenced in a surviving rental notice.

II.IV/V: Bakery of the Christians/bake shop. (VI.6.17-21 & VI.6.4)

Our final study combines two properties both architecturally associated with the larger House of the Pansa at VI.6.1. The first a relatively small bakery at VI.6.17-21, the second a bake shop on the eastern corner of the insula at VI.6.4. Both properties can be highlighted as 'independent' workshop forms as suggested by Flohr (2014), which although independent, these properties have perhaps been immortalised through their connection with one of Pompeii's eminent citizens; Gnaeus Alleius Nigidius Maius in a rental notice for the insula.



Figure 9: Plan of the Bakery of the Christians (VI.6.17-21) and the Bakeshop (VI.6.4) along the facade of the House of the Pansa with which both properties are architectonically attached (Dobbins & Foss, 2007, Map 3)

Unfortunately little scholarly work exists on these properties, perhaps over shadowed by the House of the Pansa and the rental notice. Both properties were recorded by Mayeske (1972, 98-103), however, her recording was nothing more than a visual description. At VI.6.17-21, Mayeske recorded it as a large bakery with no living areas, which as we will see may be incorrect. The bakery is located in the southern

corner of the insula, opening on the *Via delle Terme and* the junction between the *Via Consolare* and the *Vicolo di Modesto*, similar to the House of the Sallust (VI.2.6) suggesting its deliberate construction to maximise profit. However, unlike the House of the Sallust, this is the first bakery with a directly associated retail unit in which we must assume the produce was sold. However, very little remains of the retail archaeology with the exception of the characteristic doorways at VI.6.20 and VI.6.21. Mayeske (1972,99) records the remains of shelf brackets on the eastern wall, which have long been lost in the 44 years since her compilation. The workshop is entered from a doorway in the rear wall of the room accessed from VI.6.17, the threshold of which is absent, which Mayeske argues eased the movement of mules. The bakery, which was visually separated from the retail unit, contains three mills, all of which were paved with lava stones. The oven is constructed with rubble masonry faced with brick in a large relieving arch over the lintal slab entrance with a repeated arch façade at the top. Above the opening to the oven, a red travertine phallus was held in a recess, below which was written;

"*HIC HABITAT FELICITAS*"

Happiness lives here" [CIL IV 1454]

Excavated on the 12th February 1815 (See PAH I, 3, 170) amidst a strict conservative society, the image was quickly removed to the Naples Museum. Three terracotta jars were found against the eastern wall bearing the stamps of *C. Cluentius Ampliatus* [CIL, X, 8047] and *C. Naevius Vitalius (See PAH, I, 170).*

On the opposite corner of the insula the bakeshop (VI.6.4), its inclusion in this study seeks to highlight its role in the larger supply network that must have functioned across the city alongside those bakeries with mills. The bakeshop can be accessed from both the *Via delle Terme* (VI.6.4) and the *Via della Fullonica* (VI.6.5). Both entrances are characteristic of commercial retail units opening into a room almost $3M^{2,}$ against the northern wall, the base of three stone steps. A doorway leads into the rear of the property which potentially signified the boundary between the public and private spatial distribution of the shop. A corridor opens into a small room which once contained an oven. Unfortunately the allied bombing of Pompeii in 1943 destroyed all evidence of the oven which is no longer visible in the archaeological record. To the left of the main workroom is a small room, which contained traces of fine wall-decoration

(Flohr, 2007, 141). Flohr therefore suggests that the room functioned as an office suggesting that as it was decided not to surrender the room to the building of the oven, which would make the functioning of the bakeshop practical, indicating that the room was not related to the production process. However, it may also have been easier for the installation of ventilation, to construct the oven on the outer wall rather than within the property.

The bakeshop has no recorded mills, suggesting that the production of goods on the property was reliant on continual delivery of milled flour.

On the external pilaster between VI.6.4 and VI.6.5, the remains of political graffiti for Julius Polybius, may suggest the political patronage of the bakeshop or certain political association to the industry. Now irrevocably lost, it read:

"*Caium Iulium Polybium IIvirum iure dicundo Papanio rogat*"

"Papanio asks you to vote Julius Polybius for Duumvir in charge of Justice" [CIL IV 146]

While this graffiti is unrelated to the bakeshop and any mention of specific products, three further pieces of electoral graffiti from the *Via Nola* and *Via Stabiana highlight* the potential use of bakeries within the political campaign of Julius Polybius for Duumvi. This important feature will be discussed later in the work.

Six bakeshops are recorded across Pompeii with four out of the 6 occurring along the *Via degli Augustali* (See map 4 below). Unlike bakeries containing mills, all the recorded bakeshops are located in areas specifically designed to enhance their public visibility. *The Via degli Augustali* was a major thoroughfare into the forum. In a similar way the bakeshop at I.3.1, is located directly opposite the entrance to both the large theatre and the Odeon.

Our Bakeshop at VI.6.4, is located directly opposite the entrance to the woman's baths, at the rear of the forum baths. Unlike those bakeries with mills, bakeshops were not restricted to spaces with amble room for mills and turning circles for mules, instead they were able to integrate with ease into pre-existing urban architecture in visually and economically strategic locations around the city.

Both bakeries are clearly integrated into the urban landscape with financial prosperity at the forefront of consideration in their construction, the bakeshop capitalising on passing footfall outside the woman's entrance to forum baths, and the bakery attracting passing traffic along the *Via Consolare* and the 'Piazza' created by its confluence with the *Vicolo di Modesto*.



Map 4: Location of the 6 bakeshops in Pompeii (Dobbins & Foss, 2007, fig Map 3)

To again turn to the works of Poehler (2006, 61) we can begin to understand the location of the bakery and bakeshop and their place in the wider regional and city urban landscape. As we have previously suggested with the workshop entrance to the rear of the House of the Baker (VI.3.27) the *Vicolo di Modesto* was strictly a single track road northbound, thereby avoiding the oncoming traffic flow from the Herculaneum gate. As Mayeske noted, the threshold at VI.6.17 is absent. However, she failed to also record that the curb stones onto the street were also deliberately reduced, which Poehler (2011, 200) highlighted as a side ramp, characteristic of 80% of all Pompeian Bakeries. Perhaps surprising, given the lack of mills and therefore the shortage of a constant supply of milled flour, no evidence of rut ramps, paved ramps or side ramps, exist around the bakeshop. Poehler (2006, 62) indicates that the *Via della Fullonica* operated a one way southbound traffic flow. Undoubtedly the bakeshop was

reliant on the mills of other bakeries in the city. However it may also be possible that milled flour was imported from the villas in the surrounding landscape.

The investment of the social elites in urban commercialism extended beyond the ownership or operation of workshops within the city and included the management of villa estates in the surrounding Campanian landscape. Of the 43 excavated villas in the environs of Pompeii almost all possess their own small bread oven if not their own threshing floors, granaries and mills. The villa at Boscoreale for example has a single mill and bread oven. Whilst much of the Villas production, particularly given the single mill, would have been used to satisfy the needs of the villa's owner and staff, surplus from these villas could certainly have been sold for profit. This investment of urban commerce strengthens our understanding of elite interest in urban workshops and casts further doubt on the total elite abandonment of the city following the earthquake of AD.62.

With its clear economic advantages we will now assess their inclusion within the insula and the wider commercial network including their potential rental through the association with one of Pompeii's leading social elites. The *Insula Arriana Polliana*, with which both of properties are included, is perhaps most famed for the rental notice that once adorned the pillar between VI.6.19 and VI.6.20 (Della Corte, 1965, 113). As with the House of the Sallust and the potential patronage of the bakery by the owner, the bakery and bakeshop were let for rent by the owner. Excavated in 1815 the rental notice reads;

"Insula Arriana / Polliana C Allei Nigidi Mai / locantur ex Kalendis Iulis primis tabernae / cum pergulis suis et cenacula / equestria et domus conductor / convenito Primum Cnn Allei / Nigidi Mai servum"

"In the Insula Arriana Polliana of *Cn Alleius Nigidius Maius*, *tabernae* with *pergulae* and *Cenacula Equestria* and *Domus* will be let out from July 1st onward. For letting consult Primus, slave of *Cn Alleius Nigidius Maius" [CIL IV 138]*

Pirson (1997, 166) conclusively linked the rental notice to the insula. Tabernae is perhaps the most common property definition, with the term used to define, shops, workshops and taverns. The term is also used in relationship to living quarters as attested in its definition by Ulpian (Dig.50.16.183). The habitation of *tabernae* is also attested by the remains of cooking facilities, latrines, down drains and bed niches built

into the back rooms. The term *pergulae* refers to mezzanine floors often associated with *tabernae*. Pirson argues that the tabernae at VI.6.2/3/4/23 which are not connected to the main household are therefore rental units. The remains of staircases, beam holes which supported the ceilings and downpipes visible in the partition walls between the *tabernae* all suggest *pergulae.*

Cenaculum refers to an upstairs flat, for which the rental notice includes *equestria*, suggesting a request for a certain class of citizen. The identification of such establishments is more difficult to ascertain. Pirson (1997, 171) suggests that external staircases leading directly from the street are perhaps evidence for these properties. Using this analysis we may be able to suggest that the doorways at VI.6.18/19 both contained staircases, potentially extending above the bakery and probably over the *tabernae* 22. Unfortunately all evidence of any staircases are now visibly lost, recorded only by Fiorelli (1875, 103).

The inclusion of the *domus* has been linked to the House of the Pansa itself. However, a number of arguments against such a theory appear to prevail. The rental of the property would have required extensive furnishing and decoration as well as substantial household staff, which given the objectification of slaves may, however, have been included within the rental notice. It is therefore unlikely that a household capable of such investment would have been looking for a rental notice painted onto the street corner and then negotiating the contract through the slave primus. Similarly epigraphic evidence suggests that *Cn Alleius Nigidius Maius* was still involved in political life after the earthquake in A.D 62 (Mouritsen, 1988, 36) and was therefore still present in the city.

The bakery and *tabernae* in the south west corner of the insula seem to have been constructed in the latest phase of construction, when the tuff façade of the 2nd century BC on the south front of the insula had been replaced by brick pillars, perhaps as a result of damage from the earthquake itself. The external staircase at VI.6.19 is surrounded by a brick pillar and the corner of the adjacent wall in *opus reticulatum*. The entrance to the adjoining staircase at VI.6.18, is a secondary opening in a wall of *opus reticulatum*, suggesting it was constructed sometime following the earthquake. With the addition of the bakery and the potential continued occupation of the House of

the Pansa by Cn Alleius Nigidius Maius, we may begin to attempt to understand the lack of social stigmatisms attached to residences within close proximity to bakeries.

Of the people immortalised in Pompeian graffiti, none achieved a higher social position or was more frequently represented than he, appearing in 17 separate documents across the city. We know from electoral *programmata* than Maius ran for *aedileship* (See CILV IV 512) and the *duumvirate* (CIL, IV, 499) both offices he filled. Maius also served as *quinquennial duovir*, the highest elected magistrate, by the eruption he had also served as *flamen* to Vespasian, hosted extravagant gladiatorial games in his honour (See CIL, IV 1180) all of which earned him the title of *Princeps Coloniae* (Moeller, 1973, 520). Nigidius Maius clearly belonged to the milieu of leading men, both economically and politically who fathered first-generation senators. Ironically, it was the offspring of such *homines novi* who espoused a reactionary agrarian ideology (Mayer, 2012, 47) while local dignitaries like Nigidius Maius saw no juxtaposition in displaying personal involvement with the urban economy.

Indeed, the economic strategies of Maius were virtually identical to those citizens who lived in considerably smaller properties with considerably less wealth, and also to the owner of the House of the Sallust. The addition of bakery and bakeshop in close proximity to his property must have been financially advantageous against the continual noise, heat and smells from two properties.



CHAPTER THREE: Contextualisation and Discussion.

Chapter III: Contextualisation and Discussion.

Having assessed our five case studies we will now contextualise these within the frameworks of the wider urban landscape including the factors behind their construction and their manipulation of the domestic architecture. From our analysis of the case studies, two potential key factors behind the addition of bakeries emerge, political and economic motivation.

III.I: Motivational construction for the Bakeries of region VI.

Financial advantages.

Each property we have discussed undoubtedly benefitted financially from its construction. The addition of a bakery, for either wholesale or retail created a chain of supply that was distributed amongst citizens either in associated retail units or with connected retail establishments. The financial advantages of association with urban production, is perhaps difficult to assess in the archaeology record. However, fragmentary remains clearly attest to the advantages of economic success. In the *fauces* of the House of Siricus at VII.1.47, visitors to the property were greeted with a mosaic floor reading:

'SALVE LUCRUM'

'Hail profit' (CIL X 874)

The property appears to have been undergoing extensive remodelling at the time of the eruption with the bakery entirely dysfunctional. Interestingly, this is not the only bakery in the city, which was by A.D 79 in a state of abandonment. During the extensive cleaning of the bakery at I.3.27, by the French school, it was highlighted that the lack of paved stones around the mills suggest that it was not functional at the time of the eruption (Monteix, 2015, 6), However, this may indicate a state of repair rather than a state of abandonment. It is unlikely that the profit margins generated from its addition of the bakery was the sole income of the occupant. However the addition of the mosaic clearly highlights the prominence of domestic commerce in Pompeii and at the very least the prominence of this individual. A similar mosaic was excavated in a small domestic property within region VI (VI.14.39) reading:

' Lucrum gaudium'

‘Profit, Joy!’ (CIL X 875)

Whilst the property is not associated with any form of Bakery, the presence of the mosaic highlights the pride of the occupant’s extensive profit margins, built into the *impluvium*, it was also prominently visible to those entering the house ensuring the self-represented commercial connection.

One may argue however that such a blatant expression of accumulative wealth was uncommon for those born into luxury instead the social standing of the associated individuals had been born from their involvement with commerce. The advertisement of commercial profit in a domestic context was not however a matter of social class and can be found across the city, even within the palatial House of Aulus Umbricius Scaurus (VII.16.15/16). The shameless advertisement of his services are built into the impluvium. Self- representation in connection with urban retail does not seem to be discouraged, but highlights the profitability of domestic commerce.

The digest of Justinian, provides further evidence for the profitability of the addition of a bakery and retail unit within a domestic context as a useful expense, ‘*Utiles impensae’* (*Dig*. 25.1.6). While this was written in the later 6th century, its contents were established by jurists making comments on texts from about A.D130, which themselves were brought together from earlier legal texts in circulation before the eruption. It is clear that the economic benefits were not the only factor behind their construction.

Political Motivation

As we have suggested, bakeries and bakeshops were by their nature at the centre of the plebeian world. It was the ‘*Cibus Vulgaris’* (Suet. *Aug*.76.) the peoples food, the ‘*quo uiutur’* (Plin.*HN* 22.138), the thing that sustains us. We must then understand the vital role this played within the wider political world. To control the bread supply was in effect to control the people. Politically bread played an indispensable role. Even Juvenal’s satirical claim that the Roman people were sustained by ‘*panem et circenses’* (Juv.*Sat*.10.81) carries a significant political implication. Speaking literally bread and circuses outlines the formula in which social control was embedded.

In Pompeii, on three electoral *programmata*, Gaius Julius Polybius, a candidate of *aedile* and *duovir* during the flavian period (Mayeske, 1988, 155) highlights the connection between bakers and their products with electoral propaganda. Found on the*Via di Nola*:

'*Caium Iulium Polybium Aedilem Oro Vos Faciatis Panem Bonum Fert'*

I ask you to vote Gaius Julius Polybius for aedile, he brings (gives) good bread

(CIL IV 429)

While some discrepancy surrounds the reading of the graffiti whether he brings or gives, it is clear that as candidate for office he is acknowledged in connection with the baking trade. Outside the House and Bakery of T. Terentius (VII.2.3/6) on the *Via Stabiana* two further electoral graffiti were uncovered in connection with Polybius:

'Caium Iulium Polybium Iivirum Oro Vos Faciatis Multum pistores Rogant'

'Many Bakers ask you to vote Gaius Julius Polybium as duumvir'

(CIL IV 886)

Similarly,

'Caium Iulium Polybium Iivirum Studiosus Et Pistor'

'The students and the bakers as you to vote Gaius Julius Polybius for Duumvir'

(CIL IV 875)

Including the graffiti from the Bakeshop at VI.6.4, four individual pieces of graffiti in locations across the city with direct connection between Julius Polybius and the baking trade, is enough to suggest that this may not be the single expression of an individual but that it formed a key aspect of his political campaign.

Mayeske (1988, 155) suggests that Polybius was a citizen who managed or owned large commercial bakeries in the city. Therefore an association of bakers might give support to his candidacy. Whatever the connection was between Julius Polybius and the bakers it leaves us with little doubt that its production was clearly utilised as a political tool. During the cleaning and cataloguing of Pompeian bakeries by the French school in Rome, graffiti preserved on the *catillus* from the House of the chaste lovers

(IX.12.6.8) also potentially indicates the direct association with Julius Polybius, with graffiti reading;

C.I.P

Caio Iulio Polybio

(CIL IV 8057 13a)

(Monteix, 2013) Which may give a location and direct association with the political manipulation of bakeries under Julius Polybius

Further evidence of the potential political manipulation of bread and bakeries can be seen in a fresco from which the house is named, the House of Baker at VII.3.30. Adorning the left wall of the *tablinum*, now removed to the Archaeological museum in Naples, was an image depicting the distribution of bread (See figure 10, below). Recent scholars have suggested that the image is in fact intended to represent the private benefaction of bread. The painting's composition is set to accentuate the



Figure 10: Fresco from the tablinum of the house at VII.3.30. (Clarke, 2003, 261)

variant social classes in the image. It is not clear if the seated man is wearing a toga but there is a clear contrast between his white garment and the dark coloured clothes worn by the two men and young boy. Despite this we should not instantly suggest, based on his seated position and white robes that this man belonged to the social elite.

Architecturally and decoratively the property appears too modest to be the residence of a member of the social elite. The property also does not have any of the vestiges commonly associated with an elite lifestyle. Instead Clarke (2003, 261) has suggested that this was the home of a baker, who during a time of prosperity, was able to distribute free bread amongst the people. This may have been a step towards running for minor office in the city. However, nothing in the property indicates that he reached such an achievement.

In many ways these motivational factors highlight the reality against the idealistic comparisons suggested by Wallace-Hadrill; Public versus vulgarity, pleasure verses utility and luxury versus profit (1994, 118). However, they highlight these worlds are not polar opposites, as he suggests, but a complex intertwined mechanism in which political power, production and profit formed a cohesive cohabitance in the Roman city.

We will now assess the social responses to the baking trade with an assessment of the ancient sources, many of which seek to condemn elite involvement with urban commercialism. It should be understood that those members of Roman society which sought to condemn urban commercialism were however, citizens whom did not need to be concerned with urban economies and the potential financial, political or social advancement that could be gained from such involvement.

III.II: Social responses to the Baking trade.

The satirist Juvenal (Juv.*Sat*.10.81) described the Romans as a people sustained by '*Panem et cirenses'* (Bread and circuses). The phrase has in recent years taken on a largely metonymic meaning in our modern concept. However, his words had a very real importance at the time they were written. Bread was the staple food of the Roman diet, inexpensive and somewhat nutritious. It was as Pliny (Plin.*HN* 22.138) describes '*Quo uiuitur' (*the thing that keeps us alive). Juvenal was not alone in his identification

of bread as a distinctly plebeian obsession, for Suetonius (Suet. *Aug*.76.) bread was the '*cibus vulgaris',* the people's food. No Roman meal would have been complete without some form of bread. A grocery list scratched into the walls of the atrium at IX.7.25 (CIL IV 5380) records 14 different forms of bread.

The elite may have identified *panis* as the foodstuff of the plebs, but all Romans, it seems, shared the opinion that bread was something more than just a form of sustenance. In effect, those who control the production and flow of bread, controlled the standard of living of ordinary Romans, thereby making the role a significant social and economic entity.

The widespread consumption of bread would have ensured that urban residents had frequent recourse to the *pistrinum* for their basic dietary needs. Only the richest in society could afford to employ a baker in their homes, signified in the archaeological record by the remains of hand turned cylindrical mills such as that found in the House of the *Ceii* at I.6.15 (Carrington, 1936, 107). The existence of these hand mills suggests that grain was able to be bought for personal production of flour. However, while the evidence for hand mills suggests a large proportion of personal bread production. The presence of private ovens are scarce. The ground grain must therefore have been taken to a professional baker for cooking. The distribution of bread stamps in properties across the city may serve as further evidence of such activity. A carbonised loaf of bread from the House of the Stags (Ins IV, 21) in Herculaneum contains a stamp reading:

"CELERIS Q. GRANI VERI SERVUS"

"Celer, slave of Quintus Granius Verus"

The House in which this was found has no private oven suggesting that this stamp may have been used by the Household to signify its owner during its production. The production of bread in such a domestic context does not necessarily imply the presence of a 'baker'. Although raw grain can be stored for a number of months, once milled and baked it quickly goes stale. Bakers were therefore required to produce a constant and consistent supply of fresh bread, working through the night to meet the demands of the morning (See Martial. *Ep. 12.57.5*). Tacitus (Hist. 4.38) describes how the plebs were accustomed to buying food day by day, linking this consumption

pattern directly with their sole concern for the grain supply. While the works of Tacitus are linked to the operations in Rome, the distribution of *tabernae* in Pompeii and the lack of cooking facilities inside residential properties may suggest that a similar pattern of consumption. Frequently visited *Pistrina* then, were recognisable landmarks in the urban landscape, a visibility that endures today thanks to their preservation in the archaeological record.

In Ostia, the remains of seven *Pistrina* have been analysed by Jan Theo Bakker, who focused on the technological processes of bread production in the city. Bakker argued that the population of Ostia had reached 40,000 (Bakker, 1999, 111) by the second century C.E against sixty mills or twenty bakeries. This however, leads to the estimates of 2,000 people per bakery a figure which appears drastically high in comparison with Pompeii. While this drastic figure may seem excessive the size of the mills at Ostia suggests that it operated on a more industrial scale, producing far more flour than their Pompeian counterpart. The average diameter and Height of Ostian *catilli* are 0,80m and 0.80m, against a diameter and height of only 0.70m by 0.70m. Similarly the average diameter and height of the *meta* are 0.95 and 1.15m against Pompeii's 0.75m by 0.60m (Bakker, 1999, 110) The drastically increased figures must therefore reflect Ostia's position as the port of Rome and its increased footfall caused by sailors and other merchants.

Despite the increased production of Ostia, graffiti found on the façade of an unnamed House at III.5.4 seems to suggest the infamy of Pompeian bread reading:

"Viator Pompeii's panem gustas Nuceriae bibes"

"Traveller, you eat bread in Pompeii but you go to Nuceria to drink. At Nuceria, the drinking is better" [CIL IV 8903]

While the graffiti represents the opinion of a single individual it may also be a criticism of Pompeian wine rather than the infamy of Pompeian bread, in which case bread may be used as a metaphor for life's basics but that the vices of life were better sought in Nuceria.

We cannot, however, assume that the requirement for the sale of bread products in and around the forum markets, required fixed establishment. Found on the rear wall of the peristyle in the House of Anicetus at I.3.23 the painting of the 'Riot at the

Amphitheatre' records the clash between Pompeian's and local Nucerians. Whilst the focus of the image is the riot itself, the ephemeral structures seen outside the arena may have contributed to the sale of baked products, clearly targeting increased footfall around those areas of public gathering. Further depictions of ephemeral retailing can be seen in the fresco found in the House of the Baker at VII.3.30 as discussed above (See page 54). With the exception of the Bakery of the Christians (VI.6.17-21) and the Bakeshop (VI.6.4-5), the remaining properties discussed in our case studies are not attached directly to retail properties. As we have suggested in each of these three cases the property must have existed in conjunction with a wider retail unit of exportation and sale. While their exports may have been to local tabernae and the markets of the forum, it may also be suggested that in the interest of increased sale some of the products were sold from ephemeral structures around the city, including the amphitheatre and theatres. Potentially related to the minimum spatial requirements associated with the installation of mills, bakeshops were able to be installed with greater ease into pre-existing urban fabric.

As we have seen, the location of bakeshops (See figure 8) is vital to the retail sale with the bakeshops of region VII all located along the *Via degli Augustali.* Laurence (1994, 55) also highlights this phenomenon in his study of the distribution of retail units, emphasising the concentration of bakeries along the city's major thoroughfares particularly *the Via di Stabia* and the *Via degli Augustali*. Their proliferation in places particularly associated with production and retail distribution support the literary sources: bakeries served the needs of the local population and were woven in the very fabric of urban town planning.

In region VI, as figures 2 and 3 highlight, there appears to be a distinct pattern in the construction of bakeries and bakeshops which focus on the *Via Consolare.* As we have previously discussed, this road was a major thourghfare into the city from the Herculaneum gate and would have provided increased public visibility for the bakeries and thereby potentially aiding the sale of products. Similarly their proximity to the city gates may also have eased the transportation of grain into the city and the exportation of products out of the city.

This brings us back to Juvanal's claim of a society bolstered by 'bread and circuses' (Juv.Sat.10.81); to control bread production and supply was to control and

satisfy the people. The commercialisation of bakers, bakeries and bread could therefore be harnessed for the political, economic and social advantages with which it had unintentially developed. It is here we see the juxtaposition between ancient literature and the archaeology. The upper classes looked down on the baking industry as an intently plebeian industry. However the archaeological record clearly highlights the close connection between elite domestic architecture and the baking industry.

III.III: Eurysaces the baker, a case for the middle class.

As we discussed with the House of the Labyrinth (VI.11.9-10), the internal dynamics of the bakery relied to a certain extent on social hierarchies. The internal and social growth of the baker is best exemplified in the tomb of Eurysaces. Located outside the Porta Maggiore in Rome, in the shadow of the Aqua Claudia, it has become an iconic symbol of the rising urban middle class. The subtle interplay in the tomb's construction, through visual and textual references, highlights the importance of Eurysaces within society, whose role in public food supply ensured his eternal prestige. The tomb therefore plays an integral role in our understanding of the baking trade within Rome and the wider Empire. While it is not linked directly with Pompeii, we can assume that the social growth of Eurysaces, and the financial growth he experienced, reflects the role of individuals within the baking trade, particularly freedmen, who saw no social degradation as a result of their involvement and advertisement within the baking industry

Lauren Hackworth Peterson (2006, 246) has argued that the role of the tomb, contrary to common assumption, emphasises Eurysaces self-identification as a *Pistor redemptor,* concluding that work, citizenship and wealth are the dominant visual and verbal themes of the tomb. The tombs clear relationship with the baking industry cannot be underestimated. Does this then represent the middle class professional pride as suggested by Mayer (2012,112). However, we should understand that the inclusion of title '*Redemptor*' distinguishes himself from simple bakers in the city. In no other context contained within the *Corpus Inscriptionum Latinarum* (CIL) is the title and occupation *'redemptor'* associated with *pistor*. We may then argue that the inclusion in this context highlights his success beyond a simple baker but as a contractor, a role intended to convey higher social status. Clearly he saw no social degradation of his

memory following the construction of the tomb having identified himself as both a *pistor* and a *contractor,* emphasising this as part of his social identity.

Whatever the intended visual display expressed to the public we should be aware that the tombs prevalence at the Porta Maggoire highlights his work as a baker. Again we see that the profession of *pistor* in the archaeological record juxtaposes the classical texts which would appear to suggest a profession criticised for its association with the lower social classes.



CHAPTER IV: Manipulation, concealment and the Architecture of Power.

Chapter IV: Manipulation, Concealment and the Architecture of power.

As we saw with almost all our case studies, the combination of domestic and commercial enterprise under one roof was not without its consequences, many of which must surely have required a certain degree of compromise within the household. Unlike the retail properties connected with atrium houses, bakeries within domestic contexts would have generated noise, excessive heat, and unpleasant smells from both the animals and the continual production of bread. The continual delivering of grain, flour, fuel for the ovens and the transport required for the exportation of finished products and waste cannot have been convenient for the visual appeal of the property.

Similarly the risk of destruction by fire must surely have prayed on the minds of those surrounding such establishments, particularly those in proximity of bakeries. An explicit text in the work of Aulus Gellius (15.1.2) highlights the vulnerability of urban property, in which he records a member of his entourage watching an entire insula overcome with flames from the Esquiline hill in Rome, acknowledging that although there were returns from urban property investment, as we have seen in all of



Map 5: Plan of the city with the six domestic properties contianing bakerieswith associated retail unit, highlighted in red, with major roadways through the city highlighted in green showing the increased potential fro direct retail sale to increased traffic and foorfall. (After Dobbins&Foss,2007, map 3)

our case studies, the risks were far greater, a fear which must have transcended urban centres across the empire. We should therefore try to understand the potential ways in which these nuisances affected both the domestic property and the wider urban environment.

The spatial interaction between the workshop and the street is perhaps the most obvious link between the bakery and outside world. In this way it is perhaps most notable to understand whether those bakeries had attached shops. From our five case studies, only the Bakery of the Christians at VI.6.21 and the bakeshop (VI.6.4/5) has a directly associated retail unit. Across the 12 bakeries within domestic contexts only 6 have associated retail units (See table 2). Plotted on a plan of the city (See map 5, above) we can see that those with bakeries in domestic settings with associated retail units are all located in direct proximity with the major thoroughfares. We may suggest then that these directly associated retail units further emphasised the economic potential of domestic bakeries and that their owners were fully capitalising on the commercialisation of their properties.

Shops were places of direct social interaction between the workshop and the public. The facades of retail units were there to express the intended portrayal of self-representation. Potts (2009, 65) has suggested that facades were used to further develop 'anticipatory socialisation'. In this she argued that the continual imitation of values, aimed to invoke assimilation into higher social standing through the continued perceived moral and social 'values' of the elite. The wide openings, characteristic of retail establishments across the empire, however, also increased the sensory experience for the attraction of passing trade.

The visibility of the bakery from the axial view from the street into the workshop, would have alerted people to the existence of a bakery. As we have already mentioned the characteristic doorways associated with retail units and workshops would have the multi-functional purpose of providing additional light and ventilation into the property. The most obvious example of this can be seen at the rear of our first case study; House of the Bakery at (VI.2.3) which opens onto the *Vicolo di Modesto (VI.3.27-28).* Of our five case studies, only the House of the Baker and the House of the Labyrinth (If we include the access via the 'foremans' house at VI.11) have secondary access into the bakery. In comparison, however, of the twelve domestic

bakeries across Pompeii, only four have additional direct access into the bakery (see table 2). For the purpose of clarity, the primary entrance into these bakeries is defined by entrance into the domestic property, usually through the *fauces.* All secondary entrances are those which give direct access into the bakery with total avoidance of the *atrium* and or potential areas of domestic habitability.

Flohr (2007, 135) also suggests that these secondary entrances into the workshops were all but restricted to the remote areas of the city, found both in quiet alleyways and bust ling roads serving the city traffic. While most secondary entrances to workshop areas are located on a different road than the main entrance to the property. This is perhaps a reflection on the rigid internal organisation of urban architecture rather than the relationship between the workshop and the street. Robinson (2005, 88) first suggested that the relegation of commercial production to the narrow back spaces in large homes was an effort to conceal participation in culturally unacceptable activities, using this evidence to nuance Finley's position that the social elite avoided economic interaction with the lower class. It is perhaps clear from this paper that he failed to fully assess the physical remains basing his ideas, regarding social status and human behaviour never tested by detailed analysis.

Despite this Flohr (2007) suggests that some properties highlight the potential concealment of the domestic workshops. At the bakery located within VI.14.28-32, he suggests that the rear access is hidden on the narrow *Vicolo di Mercurio*. However, the large shop associated with the property would appear to suggest otherwise.

This concealment of bakeries as suggested by Flohr does appear elsewhere in the city. In the Bakery of Modestus at VII.1.30, a wall was deliberately constructed across the front of the tablinum, thereby obscuring the axial view from the street to the bakery at the rear of the property. Similarly a large decorative basin was constructed out of the impluvium with terracotta tubes maintaining an overflow suggesting it was filled. Despite the potential concealment of the bakery, analysis of the building plan suggests that the construction of the wall north of the tablinum was intended more for the spatial arrangement of the property. The entrance opened into what was once the *tablinum;* the construction of the wall ensured nothing more than internal spatial arrangements. However, on the façade of the building a number of masonry motifs including phallic imagery, most likely served as an apotropaic symbol of good fortune

(Moser, 2006, 53) and geometric designs representing baked bread comparable to the carbonised loaves were found inside the locked oven. It therefore seems unlikely that this property had maintained its domestic character with such an overt expression of association with the baking industry integrated into the architectural design of the façade. Does this confirm the 'brutal invasion' of the commercial world, as Maiuri (1960, 188) would have us believe?

The House of the Labyrinth has also been used to suggest the deliberate concealment within the household. However, as we have discussed, the architectural sequencing of the property, suggests that the addition of the bakery in the area that was previously the secondary peristyle, was nothing more than a marriage of convenience in an area of the property away from the domestic show rooms. In many properties, the atrium remains intact, we may therefore seek to make a clear distinction between those properties in which the bakery was installed alongside the atrium, and those in which the atrium was surrendered to the industry. Currently only three examples of this type are recorded in the city, (V.3.8/ VIII.4. 26-27/ VIII.6.1, 9-11) (See figure 7),a figure not extensively high in comparison to the extent of atrium houses across the entirety of the excavated areas. We must therefore try to understand the motivational factors in these circumstances. Analysis of figure seven, does not appear to suggest that their construction is related to their location within the city and therefore we may then suggest that the addition of a bakery into the Peristyle was more a matter of spatial convenience within the property, than a deliberate spatial planning. However, we may also reverse this potential argument and suggest that those installed within the atrium were constructed within a restricted urban environment, in which the domestic function was completely abandoned.

We should not, however, suggest that the presence of a bakery in close proximity to the atrium indicates the potential abandonment of the domestic character. The bakery at VI.14.33-34 is directly next to its small atrium suggesting that the nuisances from the bakery did not impact the residence. Similarly in the House of the Baker (VI.3.3), during the excavation of the atrium, a number of luxury domestic items were found including a silver handled mirror, several glass beads from a necklace, scissors, drinking cups of fine glass and pottery and a bronze vase with decorated handle (Fiorelli, 1875, 221). Such vestiges indicative of an elite lifestyle highlight that

the close proximity of workshop and residential areas did not always affect the continued habitation of the property.



Map 6: Plan of Pompeii highlighting the three properties in which the bakery mills have been constructed in the atrium. The green lines represent the roads onto which the entrance way faces. (Dobbin & Foss, 2007, Map 3)

It therefore appears that Pompeian elites in Regio VI and beyond, or those integral to the baking trade, neither emphasised the existence of workshops nor consciously hide them, while variants exist(s) in the city, the concealment of the bakery within the domestic setting appears to be a matter of personal preference or coincidence. Either through the direct manipulation of architectural design or through unavoidable spatial organisation, the practicality of the bakery's operation appears to have outweighed any moral condemnation which may affect architectural design.

The acceptance of bakeries or domestic workshops also raises again the work of Maiuri (1942, 216) who, as we have mentioned, argued that the earthquake of A.D 62 served as a final coup de grace of the Pompeian elite who retreated from the city and who's residences were occupied by a growing band of nouveaux riche. While limitations regarding the accurate dating of the construction of bakeries within domestic properties are prevalent, all the properties studied in this work are estimated to a period of 10 years spanning the earthquake. Construction techniques in southern wall of the Bakery of the Christians may confirm its addition. Richardson Jr (1988,

309) has suggested that the elite residences, did not fare well following the earthquake. The destruction of almost three-quarters of the city including the cities major public buildings caused a shortage of workforce even with supplementary recruits from the surrounding areas. The great fire in Rome in A.D 64 would have further stretched available resources with private houses forced to wait behind the restoration and erection of important public works. However, Richardson Jr wrongly suggests that the installation of workshops, such as bakeries and fulleries inside large houses is illustration of the makeshift expedients to which they resorted. However, despite a potential stretch in resources this research suggests that the earthquake of A.D 62 did not serve as a coup de grace of the social elite, but an opportunity to revitalise their urban property portfolio, manage assets and consolidate the growth of their personal finance.

Bringing this discussion back to Flohr's original three variant workshop forms, we can see that this does not accurately engage with the material remains of Pompeian bakeries and their integral role within the domestic household. Following this research it is perhaps clear that a fourth form of Pompeian bakery should be included;

4) Domestic conversion bakeries.

Those included in this form are the bakeries which have been established from domestic properties that now do not seem to have any of the remaining domestic function prior to the bakeries' installation. Flohr (2007) may have included these within his 'Independent' bakeries. However, there appears to be a clear distinction between bakeries such as the perhaps 'independent' bakery included in the House of the Sallust (VI.2.6) and the independent bakery at the House of the Baker (VI.3.3,27/28) which appears to have taken over the entirety of the domestic sphere. The total conversion of the domestic spheres does not suggest that the property did not contain within it rooms assigned for residence in the property. However, the encroachment of the bakery into those areas traditionally associated with the domestic quarters suggests a change of focus for the property.



Conclusion

Conclusion

This paper has sought to understand the complex role social elites had within the baking industry at Pompeii. Our five case studies have highlighted that the baking industry, certainly those within region VI, are characterised by the variety of their construction. Their construction appears almost haphazard, located in properties of variant size and status. The location of the bakery may serve to highlight this point if we think comparatively between the House of the labyrinth (VI.11.8-10) with the bakery added into the secondary peristyle and the atrium bakery at VIII6.1/9-11. This flexibility allowed Bakeries to be installed into the urban fabric with very little trouble. While the concealment of bakeries may be suggested, there does not appear to be any active policy condemning the industry and the associations with it. Instead we can suggest that the concealment of the bakery was left to the discretion of the owner. However, a distinction must be made between deliberate concealment, of which the evidence is scare and those properties which installed the bakery within the confines of the property as a mere matter of spatial convenience. The open relation between the bakeries and the street suggests that despite their nuisance (Smell, heat, sound and increased traffic flow) they were not governed by active policy. Their inclusion within domestic properties of variant size also suggests a significant lack of condemnation, contrary to the writings of the Roman political elite. In essence the elite of Pompeii were not the elite of Rome.

Challenging the work of Miko Flohr (2014) has also highlighted the need for a revaluation for the categorisation of urban domestic workshops. As I have suggested in this work, the total conversion of domestic properties, away from the previous elite residence, should not be overlooked, however, a wider domestic comparison must first be made with all domestic workshops to draw any new firm conclusions. Certainly these properties were still occupied by the social elite; however, we may argue that these were new elite, an elite ready to develop with the current financial and social developments. Those bakeries, as I have suggested in which the elite domestic character has been entirely lost, or lost to the extent of the previous elite inhabitants suggests that they may be owned and governed by elite families living elsewhere in the city. While this would fit perfectly with the Weberian and finleyen model that the ruling elite made their money from the land they owned, I also wish to look back at the early works of Maiuri (1942). While his argument has been largely discredited, the

construction of the bakeries within domestic architecture appears to suggest that the earthquake of A.D 62 did impact the urban elite. Instead this paper has highlighted that that the earthquake did not serve as a coup de grace of the social elite, but an opportunity to revitalise their urban property portfolio, manage assets and consolidate the growth of their personal finance in a select number of properties.

Pompeian bakers appear to live where they worked, or certainly close too, reflected in the strong social hierarchy that existed within Pompeian Bakeries. Where available the material culture from our five case studies highlights that a certain degree of financial prosperity amongst the workers. Fine jewellery attesting to the presence of both males and females. The residential life of bakeries not totally converted by the addition of the bakery remained similar to those properties of similar wealth; again compare the House of the Pansa, with its rental notice to the House of the Lararium of Achilles (I.6.4).

The social position of the workmen of establishments without living areas, such as the bakery and bakeshop associated with the House of the Pansa, is currently unclear and will require further research. Some may have been subordinate to the household, but it should not be excluded that others had their own household and worked for wages. Similarly those, as perhaps working within the Bakery of the Christians (VI.6.170-21), must have had a comparative degree of personal freedom, even though they remained in the lowest social class. Contrary to the work of Mouritsen, the evidence from our case studies suggests one of relative independence. We do not know the legal status of the inhabitants of the five bakeries from our case study. As I have suggested, they may have been freedmen, slaves or free born citizens. Academics have debated continually where the Roman world stood between the polarities of hierarchy and individualism. From these five case studies, their material culture and architectural changes, one may suggest that the Roman world was less hierarchic and more individualistic than scholars have tended to assume.

In economic terms, Pompeian bakers were in part memebers of a growing band of neuvaux riche or ‘Middle Class’ citizens who belonged to the elite, only through patronage and ownership, but who nevertheless grew financially prosperous from their affiliation with the industry. Unfortunately these were a class of Roman citizens who

left very little, if any textual footprint and whose existence is only now being appreciated in both the academic and archaeological record.

Appendix

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Type	Location	Group	Capacity	Shop	Location	Direct access
Bakeshop	I.3.I	Taberna	1 oven	Yes	Shop	Y
Bakery	I.3.27	Other	5 mills	Yes	Central area	Y
Bakery	I.4.12-17	Other	4 mills	Yes	Central area	Y
Bakery	I.12.1-2	Other	4 mills	Yes	Other	N
Bakery	V.3.8	Domus	3 mills	No	Atrium	N
Bakery	V.4.1-2	Domus	3 mills	Yes	Back area	N
Bakery *	VI.2.6	Taberna	3 mills	No	Other	Y
Bakery *	VI.3.3	Domus	4 mills	No	Back area	Y
Bakery	VI.5.15	Other	2 mills	Yes	Shop/back	Y/N
Bakeshop *	VI.6.4-5	Taberna	1 oven	Yes	Other	N
Bakery *	VI.6.17-21	Other	4 mills	Yes	Other	N
Bakery *	VI.11.9/10	Domus	4 mills	No	Other	Y/N
Bakery	VI.14.28-32	Domus	4 mills	Yes	Back	Y
Bakery	VI.14.33-34	Domus	4 mills	No	Other	N
Bakery	VII.1.36/37	Domus	4 mills	Yes	Back area	N
Bakery	VII.2.3-7	Domus	4 mills	No	Other	No
Bakery	VII.2.20.22	Domus	5 mills	No	Other	Y
Bakeshop	VII.12.1-2.36	Taberna	1 oven	Yes	Shop	Y
Bakeshop	VII.12.7	Taberna	1 oven	Yes	Back area	N
Bakeshop	VII.12.11	Taberna	1 oven	Yes	Shop/Back	N
Bakeshop	VII.12.13	Taberna	1 oven	Yes	Back area	N
Bakery	VII.16.6.9.11	Domus	2 mills	Yes	Other	Y
Bakery	VIII.4.27-27.29	Domus	3 mills	Yes	Atrium	N
Bakery	VIII.6.1.9-11	Domus	4 mills	No	Atrium	N
Bakery	IX.1.3.33	Other	3 mills	Yes	Central area	N
Bakery	IX.3.10-12	Other	4 mills	Yes	Central area	Y
Bakery	IX.3.19-20	Other	4 mills	Yes	Central area	Y
Bakery	IX.5.4	Other	4 mills	Yes	Central area	N
Bakery	IX.12.6	Other	4 mills	Yes	Central area	Y

Table 1: All Pompeian bakeries highlighted by individual region.

Property	Estimated date of addition	Source
House of the Baker	A.D 62- A.D 79	(Joshel & Hackworth Petersen, 2015, 128)
House of the Labyrinth	A.D 62- A.D 79	(Strocka, 1992,95)
House of the Sallust	A.D 30- A.D 79	(Laidlaw & Burge, 2014, 262)
Bakery of the Christians	A.D 50- A.D 79 (Hesitant)	(Adam, 2007, 108)
Un-named Bakeshop	A.D 50- A.D 79 (Hesitant)	(Adam, 2007, 108)

Table 2: Estimated dates of addition for the five case study bakeries.

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