

**Foodways and Cultural Identity in Roman Republican Italy**

By

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“Increased self-esteem amongst pottery specialists might bring to the surface thoughtful economic and cultural discussions that are currently rather difficult to locate in excavation reports and specialist periodicals; this might encourage them to contribute broader papers to JRA. Their specialty would simultaneously become more satisfying in itself, and make a higher-profile contribution to the overall interpretation of a project.”

-Greene, K. 2005. “Roman pottery: models, proxies and economic interpretation.”  
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## **Abstract**

Foodways – the methods of production, preparation, and consumption of food and drink – are credited with reflecting and constituting expressions of identity throughout history. One of the benefits of foodways studies is their potential to reach into the domestic realm: how do the daily behaviors of individuals express their personal identity, and how does this relate to changes and expressions of cultural identity in the public realm? This dissertation uses the examination of food and dining in Republican Italy to illuminate the nature of cultural change in central Italy. Methods of studying the cultural effects of Roman contact and conquest have focused primarily on the observations of changes in the public realm: that is, city planning, architecture, and monumentality through inscriptions and art. While such evidence informs our understanding of the cultural associations desired by both individuals and entire cities, these outward displays of cultural affiliation often differ from people's more private practices. Using two sites in central Italy as case studies, I undertake a systematic morphological examination and use-alteration analysis of ceramics from domestic contexts used for cooking, preparing, and serving food and I compare trends in the use of ceramics to trends in the faunal record from the same locations. I use statistical analyses to compare changing vessel sizes, proportions of vessel types, and associations between different patterns of wear in order to determine how ceramics were being employed by ancient users. I examine changing proportions of animal species, cuts of meat, and processing methods. Through detailed study, it becomes possible to deduce cooking methods and the types of foods being prepared and consumed. I also consider how contemporary Latin authors, all of whom originated from outside of Rome, articulate cultural identity through foodways. I conclude that food behaviors in this period suggest a complexification of Roman Italy over time and I highlight the importance of regional variation and the continuity of local environments. Ultimately, this project nuances how we understand the expansion of Rome in Italy by adding an important dimension to the methods employed in studying inter-cultural contact.

## Chapter 1 - Introduction

In middle of the first millennium BCE the city of Rome was emerging as an important peninsular power. It began dominating its surrounding peoples and their landscapes, politically unifying the central portion of Italy for the first time by the middle of the third century BCE. The strengthened connections between the diverse towns of the Italian peninsula and the wider Mediterranean had significant implications for the subsequent evolution and expression of identities in ancient Italy.

### 1.1. Foodways and Identity

Jumping forward in time to present-day Italy, the modern political party known as the Lega Nord promotes instead the separation of northern Italy from the economically-disenfranchised South and decries the encroachment of foreigners on the ideals of Italy. One colorful Lega Nord slogan: *“Yes, to polenta, no to cous cous! Proud of our traditions”* exemplifies how food and cultural identity can be intertwined (Figure 1). Traditional Northern Italian food is valued, and foreign food, especially coming from Africa and the East, is seen as a threat.

Meanwhile, grassroots food movements in the United States are challenging established modes of food production and consumption. In an article on the development of major food movements food commentator Michael Pollan observes that modern concerns about food origins and food types are really about “community, identity, pleasure, and...carving out a new social and economic space.” The “Slow-food” and “Locavore” movements are a reaction to “the homogenization of taste and



Figure 1. Poster for the Lega Nord political party (Grasso 2010 (April 9))



experience represented by fast food.”<sup>1</sup> Fears regarding the health implications of chemical preservatives, the loss of consumer agency in the factory production of food, and the near extinction of traditional local agricultural practices all drive these movements. These contemporary examples of food as both an instrument of identity and a cultural metaphor echo the experiences of many global cultures and populations.

Anthropologists often refer to the body of food related activities, e.g. methods of food production, diet, preparation, and modes of consumption, as “foodways.”<sup>2</sup> Foodways were recognized as reflective of personal and cultural identity and social relationships at least as early as Lévi-Strauss’ 1964 discussion of the significance of raw and cooked cuisine among the Bororo people of Brazil.<sup>3</sup> Pierre Bourdieu wrote that taste for a particular food is a social construct reflecting and producing historical and political arrangements.<sup>4</sup> Food allows for self-definition and hence distinction from others. For example, historically the Chinese did not drink milk; the consumption of milk served as a cultural marker that formed a distinction between culturally Chinese and people from bordering regions.<sup>5</sup> While much food consumption behavior is treated as “natural” or unquestioned (the realm of *‘habitus’*), in some circumstances, people may make conscious choices to eat in a specific way in order to express their loyalties to a group or to affiliate, even temporarily, for political purposes. In the 16<sup>th</sup> century, ceramic evidence suggests that Spanish colonists in the Americas ate according to local indigenous customs, rather than excluding the native population by maintaining Spanish customs. This is despite contemporary Spanish textual evidence which disparages native foods as disgusting.<sup>6</sup> Foodways can also reveal the complexities of cultural identity in a ritual context: for example, in post-colonial Algeria, the Muslim population widely regarded French bread as better than native Arab bread. Native Algerians described French bread as tasty, white, and pure and Arab bread as dark and old; nevertheless, Arab bread was still strictly used in ritual contexts.<sup>7</sup> In the ancient Roman

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<sup>1</sup> Pollan 2010 (June 10).

<sup>2</sup> An early example is the journal *Food & Foodways*, whose first volume was published in 1985.

<sup>3</sup> Lévi-Strauss 1969.

<sup>4</sup> Bourdieu 1979.

<sup>5</sup> Goody 1982, 107.

<sup>6</sup> Rodríguez-Alegría 2005.

<sup>7</sup> Jansen 2001.

world, foodways can play a similar role in creating, determining, and understanding the complications of identity.

During the Republic, food played a vital role within the developing discourse concerning what it meant to be a Roman as distinct from one of the populations Rome encountered as its territory grew and its ties in Italy and the Mediterranean strengthened. The archaeological evidence of foodways in central Italy – in particular the great quantities of pottery and animal bones – is a fundamental source for the study of domestic life and daily behavior since it constitutes the remains of seemingly ephemeral actions like cooking and eating. This dissertation presents a detailed study of this body of archaeological material as a means to explore foodways and better understand developing Roman and Italian identities in the Republican period.

The remainder of this chapter provides historical and historiographical context for this work by outlining some recent approaches to studying Roman cultural interaction. This is followed by a description of how Roman foodways in the Republic have been studied in the past from both a literary and a material culture perspective. Finally, the new research presented here is placed within the context of Roman ceramic and faunal studies of foodways in the Roman world.

## **1.2. Roman Italy in the Republican Period**

The city of Rome expanded its political control across Italy from the 6<sup>th</sup> to the 1<sup>st</sup> centuries BCE through warfare, intermarriage, and colonization. A complex series of political statuses was awarded to surrounding Italian city-state allies through treaties and informal agreements. By the middle of the 3<sup>rd</sup> century about 20% of Italy, mostly central Italy, was legally Roman territory.<sup>8</sup> The link between the city of Rome and its Latin and Italian neighbours was maintained by Rome's use of their residents in its military campaigns elsewhere.<sup>9</sup> Rome's relations with its allies were turbulent and faced challenges at several points in Rome's early history. At the end of the 3<sup>rd</sup> century BCE, when Hannibal's Carthaginian army invaded Italy during the Second Punic War, the Italian cities in Etruria

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<sup>8</sup> Cornell 1995, 380–383.

<sup>9</sup> Pfeilschifter 2007, 30; Lomas 2011, 341, 346.

and Campania were not uniformly loyal to Rome. Although the textual sources which report these events are contradictory and heavily biased, they suggest that Hannibal's invasion of Italy was an attempt to liberate the Italians from Roman control and that a number of cities were receptive to this effort. It is also apparent from the sources that Rome countered the rebellious inclinations of several nominal Italian allies by posting additional garrisons and administrators in these cities to ensure their continued cooperation during the war.<sup>10</sup> Following Rome's victory over Carthage around 201 BCE, there was increased political instability in Italy as Rome proceeded to investigate and punish the cities in Italy whose loyalty was in question. In Southern Italy, such as in Capua, local leaders were executed, and in central Italy, cities were assessed extra taxes and required to provide more men for military service.<sup>11</sup> These soldiers would be essential to Rome's numerous military campaigns abroad in the 2<sup>nd</sup> century BCE, in Spain, Greece, and Macedon. The damage Hannibal inflicted on the Italian countryside, the strain of the 2<sup>nd</sup> century wars on populations across Italy, and the agrarian re-organization enacted by the Roman administration cumulatively had a substantial effect on the Italian cities' relationship with Rome, and influenced their acceptance and adoption of Roman cultural practices. The unrest of this period is thought to have contributed substantially to the outbreak of the Social War.

The Social War, in the early 1<sup>st</sup> century BCE, was motivated by numerous areas of dissatisfaction amongst the allies. While some scholars argue that the Social War began as an attempt to break free of Roman control in Italy, most scholars agree that it was, in fact, an attempt by the Italian cities to gain full political recognition, predominantly motivated by the elites seeking social mobility. Even though the Italian allies eventually achieved their desired status, it is unclear whether the elite class actually benefitted from being awarded Roman citizenship. Social mobility, specifically the ability to move from the aristocratic ranks of a particular town into the aristocracy of Rome, does not seem to have been well-established until after the Augustan period.<sup>12</sup>

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<sup>10</sup> See Livy book 22 and 23, and Polybius book 3. Lomas 2011, 343–345.

<sup>11</sup> Lomas 2011, 352.

<sup>12</sup> Keller 2007, 43.

### 1.3. Conceptions of “culture”

In this history of the political dominance of Rome and the subsequent conflict and integration with its closest territories, formal political status is the most clearly definable aspect of the relationship. The cultural integration of Rome and Italy is not so clearly visible.<sup>13</sup> I use the term “culture” to refer to a self-conceptualized identification “with a broader group or in opposition to others.”<sup>14</sup> The generation and maintenance of cultural identity is accomplished through behavior:

Social practice involving material culture is how the idea of the group (whether that be social, familial, ethnic, or other) becomes articulated: it is not something that can be ‘read off’ from the artefactual evidence, without regard for its contexts of use and production.<sup>15</sup>

Modern anthropologists have increasingly acknowledged the fluidity of cultural identity and how it is tied to “everyday practices and habitual behaviour.”<sup>16</sup>

The definition of what it meant to be “Roman” – as distinct from Italian or Greek – in the Republican period was in a constant state of flux; the political turbulence of the period meant that the multiple groups in the Italian peninsula interacted with Rome and with each other in continually changing ways. In fact, the very idea of defining differences among these groups has been called into question.<sup>17</sup> Tim Cornell and Mario Torelli have emphasized the cultural *koine* of the Italian peninsula even in the centuries preceding Rome’s dominance. The populations of central Italy, whether from Rome or another town, were familiar with aspects of culture from the Greek colonies and mainland before and during the period of Roman expansion.

Even if one acknowledges a *koine* of some behaviors, it is reasonable to imagine that bringing the Italian peninsula under one political umbrella over the course of the 4<sup>th</sup> to the 1<sup>st</sup> centuries BCE had wide-ranging effects on its people. Recent studies of Roman cultural

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<sup>13</sup> I refer to “culture” and not “ethnicity” in order to avoid any implication that I am interested in capturing a group association tied by bloodline or race. Lucy 2005, 87–91.

<sup>14</sup> Borrowed from Sian Jones’ definition of “ethnic identity” (Jones 1997, xiii).

<sup>15</sup> Lucy 2005, 102.

<sup>16</sup> Jones 1997, 75; Lucy 2005, 97.

<sup>17</sup> Cornell 1995, 163; Torelli 1995, 4; Torelli 2000; Terrenato 2008, 4; Wallace-Hadrill 2008, 98–99 for the problems of assigning cultural origin to changes in material culture in Italy.

interactions in Italy and the Roman provinces have noted the heterogeneity with which cultural traits were chosen, adopted, and combined. Scholars have explained Roman contact with “others” in terms of cultural hybridity, *bricolage*, creolization, and bilingualism.<sup>18</sup> The results of this contact depend on myriad factors including the region and the status of the participants and even the evidence examined. Despite efforts to emphasize the local scale and multifaceted nature of Roman interactions with other populations, studies of “Romanization” have often had to focus on large-scale public expressions of identity. Urbanism and city planning, shifting architectural styles, and monumentalization comprise the bulk of the evidence for the impact of Roman presence in a new region.<sup>19</sup> A recent monograph, Louise Revell’s *Roman Imperialism and Local Identities* (2009), focuses on public architecture in the western Roman provinces. Rather than simply noting imported architectural styles as evidence of “Romanization,” Revell explores the lived experiences or “social practices” of people in these spaces. This focus on behavior, user agency, and practice is unusual and her conclusions highlight the heterogeneity of Roman-ness in the provinces; yet, the evidence she employs is still from a public context.<sup>20</sup> “Romanization” studies are often “confined to public aspects of elite behaviour;”<sup>21</sup> yet people’s public manifestations of cultural expression can differ significantly from their more private practices.<sup>22</sup>

Scholars of early Rome have often turned to an analysis of language as evidence for cultural dominance or integration.<sup>23</sup> The increased appearance of bilingual inscriptions, and translation and transliteration of Etruscan and Oscan names into Latin names are cited as examples of increased Italian participation in the Roman cultural sphere.<sup>24</sup> In Wallace-Hadrill’s recent look at Roman cultural transmission, he highlights language and linguistic expression as a way of identifying traits which reflect individual identity, rather than being

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<sup>18</sup> Woolf 1994; Terrenato 1998a; Roth 2007; Van Dommelen and Terrenato 2007; Wallace-Hadrill 2008.

<sup>19</sup> Millett 1990; Millett 2007; Woolf 1994; Woolf 1997; Woolf 2000; Dyson 2003.

<sup>20</sup> Revell 2009, 191–193.

<sup>21</sup> Terrenato 1998b, 105.

<sup>22</sup> Terrenato 1998b, 102

<sup>23</sup> For an exploration of the theoretical basis and assumptions inherent in this method, see Langslow 2012.

<sup>24</sup> Cornell 1991; Cornell 1995, 41–44; Pfeilschifter 2007, 29; Wallace-Hadrill 2008, 82–96; Adams 2003a, 112–159.

overt public displays of cultural loyalty.<sup>25</sup> While epigraphic study of language is important, inscriptions as “an index of Romanization” still concentrate on publicly-displayed, long-lasting monuments.<sup>26</sup> These pieces of evidence reflect an impressive presence and visibility of Rome; yet they do not represent broad and subtle changes in the way people actually lived.

In contrast to public monuments, food is often self-selected and its preparation and consumption less subject to display and public critique.<sup>27</sup> Cultural change and exchange happens at a person-to-person level and the sharing of food and drink is the ultimate context for intercultural exchange.<sup>28</sup> With the possibilities for the study of foodways and the polyvalence of “Romanization” in mind, this dissertation examines foodways as symbols of group association, as evidence of technological sharing and contact, and as changing venues for interaction. I also consider how foodways relate to expressions of identity in the public realm in a way that may nuance our understanding of the effects of the expansion of the early Roman empire. I examine deposits of ceramics and faunal remains from two Republican towns in central Italy: the coastal city of Populonia about 300 kilometers north of Rome, and Musarna, an inland settlement less than 100 kilometers north of Rome. Both were Etruscan towns that came under Roman political control in the early 3<sup>rd</sup> century BCE. Both have recent systematic excavation of Republican layers, relatively undisturbed by later building, in areas other than sanctuaries. This allows for the study of foodways with evidence not strictly affiliated with religious rites.<sup>29</sup> The study of these two sites together allows for the consideration of regional differences, namely, coastal versus inland.

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<sup>25</sup> Wallace-Hadrill 2008, 75–86.

<sup>26</sup> Woolf 2000, 77–82.

<sup>27</sup> While Roman dining (whether in a public or a domestic context) can have definite display and competitive feasting elements, they are on a much smaller scale, and observed by fewer people, than public monuments.

<sup>28</sup> Jones 2007, 216.

<sup>29</sup> Foodways affiliated with religious rites may bring a host of complications (and perhaps aspects of conservatism) which would be very difficult to disentangle from cultural identity (see for example, the example of bread in Algeria above). Furthermore, religious rites performed at a sanctuary are inherently public in their location, thus limiting their value in the context of studying the domestic realm. Finally and most importantly, it is vital that the deposits from Musarna and Populonia be both from the similar areas of town (residential/commercial) to make valid comparisons between them. See chapter 4 for a further explanation of the nature of the deposits studied.

#### 1.4. Traditional approaches to Roman foodways in the Republic

With the exception of a few landmark critical studies, such as Emily Gowers' *The Loaded Table*, there has been a tendency in many discussions of Roman food to cite anecdotal textual sources with little accounting for authorial bias or chronological or geographical context. Scholars have often discussed "how Romans eat" without acknowledging Rome's millennial time span and Mediterranean-wide reach. This problem pervades studies of Roman everyday life in general. Matthew Roller, in his recent book on Roman dining posture, expresses his frustration with the indiscriminate use and re-use of what he calls handbooks, specifically work by Jérôme Carcopino from the 1940s and J.P.V.D. Balsdon from the 1960s.<sup>30</sup> Such handbooks are impressive repositories of textual references and paint a lively picture of Roman daily life, but are not very nuanced in their description of the way the Romans behaved, and typically do not engage with the art historical or archaeological record in any detail.

When we turn to archaeology and examine the spatial and architectural evidence for Roman cooking, discussions of Roman food are largely drawn from Campanian evidence – often the same recycled and re-worked Pompeian evidence. In Pompeii, the movement of ceramic and decorative implements by modern travellers and scholars has meant that what might look "normal" and "obvious" as Roman cooking and dining methods is not actually "Roman," but was staged in the last few centuries.<sup>31</sup> The kitchen in the house of the Vettii supplies the canonical example of supposedly Roman cooking. We can compare an archival photo of the stove at the time of its excavation to two recent photographs (Figure 2). In the archival photograph (a) the stove is covered in charcoal and perhaps volcanic debris; two corroded metal cooking stands sit on the stove-top, one of which holds a large metal pot. On the floor in the corner of the room, at least four pots are piled up and covered in debris. In the two recent photographs (b, c), the pots previously found on the floor are arranged in two different ways on the stove. This is not to say that these last two photographs are inaccurate depictions of how Romans cooked, but nor are they obviously or necessarily correct.

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<sup>30</sup> Roller 2006, 5.

<sup>31</sup> Allison 1992.

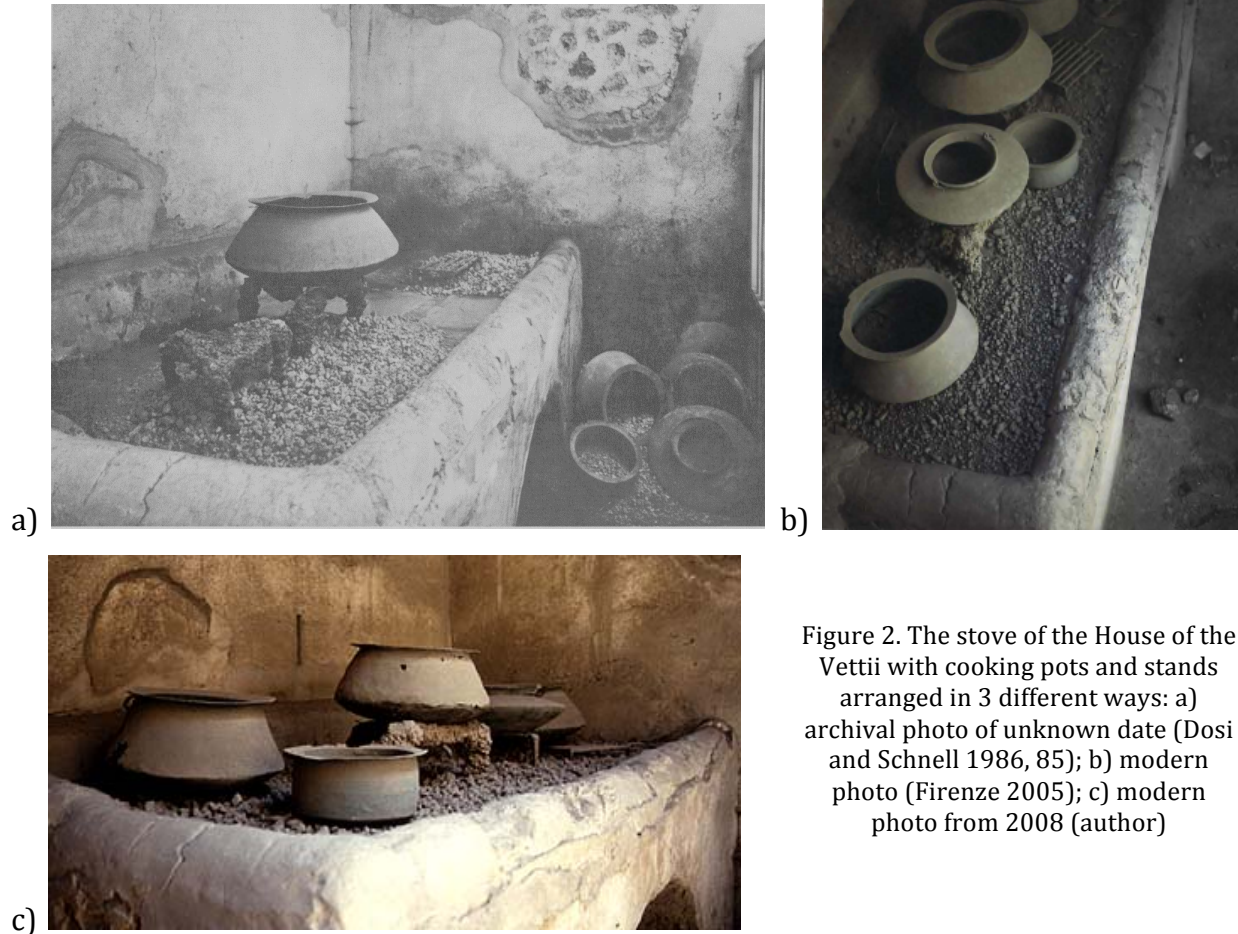


Figure 2. The stove of the House of the Vettii with cooking pots and stands arranged in 3 different ways: a) archival photo of unknown date (Dosi and Schnell 1986, 85); b) modern photo (Firenze 2005); c) modern photo from 2008 (author)

With regard to cooking spaces (using mostly Campanian evidence and its application to other contexts) it seems that by the 1<sup>st</sup> century CE people were cooking on stoves or hearths which were masonry platforms of several different designs.<sup>32</sup> On the surface of these platforms, cooking fuel, probably charcoal or very hot embers, was spread around and pots were positioned in some way in, on, or next to it. This masonry platform was located in a room Latin sources refer to as a *culina*, a kitchen, which often also had a latrine associated with it. The *culina* is generally identified based on the presence of this stove, the latrine, water access, ventilation, and especially in grander houses, its location in what looks like the servile area of the building.

Specifically in the Republican period, perhaps pre-2<sup>nd</sup> century BCE, textual evidence suggests that the cooking area was less fixed. The two main textual sources are both connected to questionable folk etymologies: in the *Fasti*, Ovid explains that the word for the

<sup>32</sup> Foss 1994, 78–81; Salza Prina Ricotti 1978, 239–242.



front space of the house, the *vestibulum*, derives from the fact that the hearth, and therefore Vesta, used to be located at the entrance to the home. This is where the cooking was done. Alternatively, Servius writes that Cato said that dining and cooking used to take place in the atrium of the home and that the space is called the atrium because it was black (*atrum*) with the smoke of the fire.<sup>33</sup>

From an archaeological standpoint both of these explanations are plausible. A

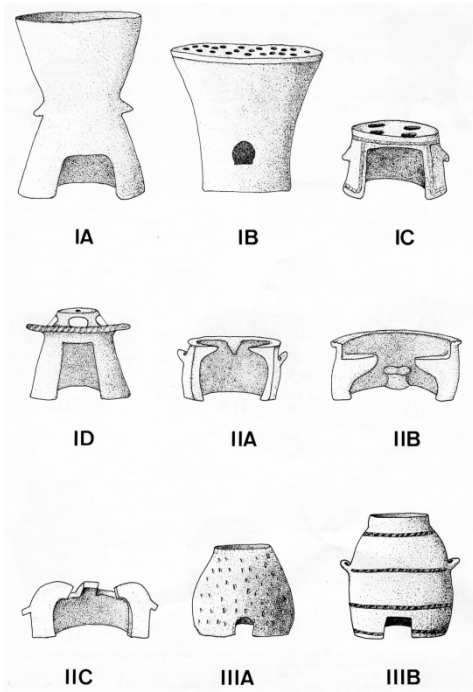


Figure 3. Basic ceramic cooking stand typology for Italy, 14<sup>th</sup> to 2<sup>nd</sup> century BCE (Scheffer 1981, fig. 2)

mobile cooking arrangement in a relatively open area at the entrance or front of a home, or alternatively in a courtyard, makes sense for ventilation reasons, and seems to have precedents in both the architectural design of residences in pre-Roman Italy and in Greece, as well as in material finds. Mobile ceramic cooking stands and cooking braziers seem to have been important household implements which are found in residential areas, dump sites, sanctuaries, and tombs throughout the peninsula from the 14<sup>th</sup> century BCE into the 2<sup>nd</sup> century BCE (Figure 3).<sup>34</sup>

These portable cooking implements and our two textual sources, however, do not necessarily indicate that cooking happened exclusively in an open area before the 2<sup>nd</sup> century BCE. Masonry platforms

exist in rooms adjoining latrine areas in several sites of early to middle Republican occupation. The construction of these fixtures, however, is often not datable to a particular phase of habitation, and they could therefore have been added before or after the middle of the 2<sup>nd</sup> century BCE.<sup>35</sup> There are also examples of 2<sup>nd</sup> century houses where archaeologists

<sup>33</sup> Ovid *Fasti* 6.302-306; Servius A. 1.726. both cited in Foss 1994, 69-70.

<sup>34</sup> Scheffer 1981; Banducci Forthcoming.

<sup>35</sup> The House of Diana from Cosa excavated by Fentress et al. has a "*culina*" in room L. The house itself seems to have been built in about 150 BCE. Based on the online stratigraphic description and the finds, there is nothing to indicate that room L was a *culina* except the fact that it is towards the back of the house and had a water basin added during a phase of Republican modification around 70 BCE. Or, "there may have been significant excavation error on our part in this room." Rabinowitz 2002; Fentress 2003, 17 does not mention

have identified a *culina* based on the presence of water features and the room's location, but which do not have a fixed surface on which to cook (Figure 4). This may present an example, therefore, of an appropriate location for cooking, which would have required the use of a moveable cooking apparatus.

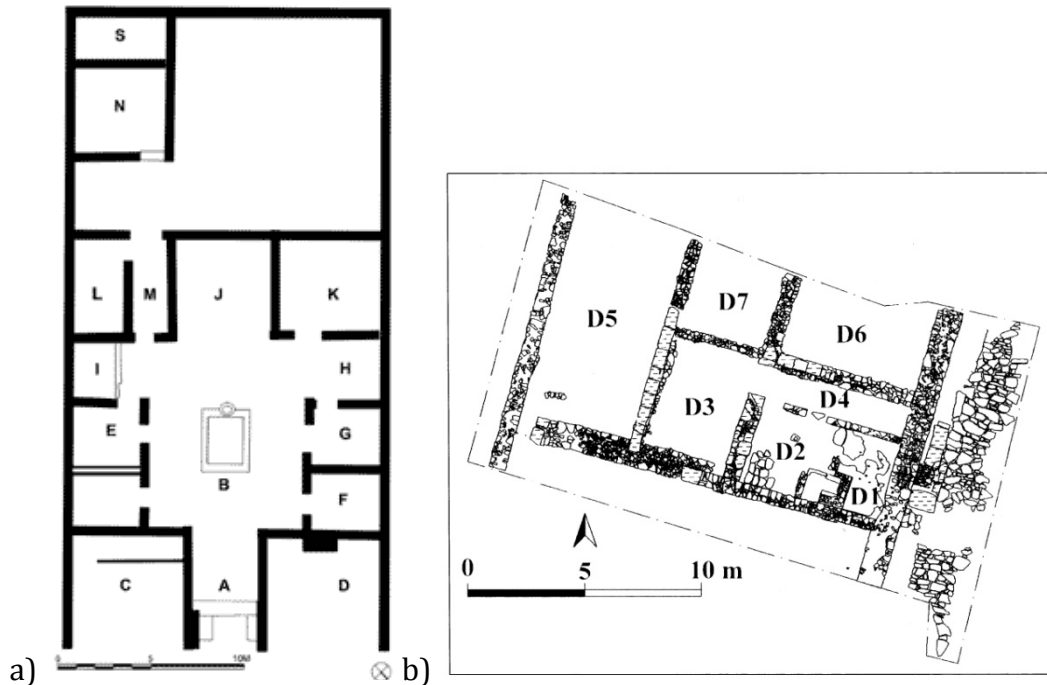


Figure 4. a) Room L: *culina*, Cosa, House of Diana, 2<sup>nd</sup> c. BCE (Fentress et al. 2003 online); b) Room D2: *culina*, Populonia, domus, Saggio IX, 2<sup>nd</sup> century BCE (Acconcia and Rizzitelli 2008, 198)

Dining in the Roman world has been widely investigated especially in reference to its social and political dynamics. The differences in the arrangement of dining spaces between the Greek and the Roman worlds suggests a difference in the social purposes of dining.<sup>36</sup> We have *triclinia*, the traditional Roman dining room, where textual, artistic, and architectural evidence all indicate that group dinners were held for household residents and their invited guests. It is not clear how early reclining on couches in a dining room began. Etruscan and Archaic Latin iconography depict reclining banqueters.<sup>37</sup> In the 2<sup>nd</sup>

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this potential chronological problem. See also the further physical description of the space which just mentions the wall which divides it from the corridor and the fact that it has an *opus signinum* floor (one probably from the first phase the construction and the other from the second Republican phase) slanting toward the drain.

<sup>36</sup> Dunbabin 1991; Dunbabin 1998; Nielsen 1998.

<sup>37</sup> Rathje 1994.

century BCE, the diners in the plays of Plautus recline.<sup>38</sup> Most scholars assume that this was a consistent habit through the Republican period.<sup>39</sup> This, however, was the experience of the elite. Our knowledge of the dining habits of the lower classes is much less clear because of their infrequent depiction in iconography and in texts. According to Matthew Roller, sub-elite houses in Pompeii (that is, houses of relatively well-off working people) all have rooms we would traditionally call *triclinia*. In the Imperial period, funerary monuments of freedmen often feature the deceased reclining on an ornate couch while waited upon by slaves; from these, we might conclude that the sub-elite recognized an importance to depicting themselves on the dining couch.<sup>40</sup>

### 1.5. Artifact studies and foodways

The small number of artifact studies of foodways in the Roman world have made important strides in discovering the problems and the promise of the field for exploring questions of ancient behavior and cultural contact.

In 1988, Michel Bats produced the first explicit discussion of Roman alimentary habits by examining ceramics from the Gaulish settlement at Olbia in what is now France. Bats was interested in how a “celto-ligurian” area’s foodways changed under Greek and then Roman influence. He cites textual sources to make some general observations about Greek and Roman eating habits, then he explicitly connects the shape of pots to the method of cooking (for example, round-bottomed *chytra* in the Greek world would be best for a brazier or on a tripod stand above live fuel; while the olla with a flat bottom could be placed directly on a cooking surface) and he alludes to the practicalities of serving (which vessels can conveniently be served from at the table, and which require serving dishes).<sup>41</sup> His exhaustive study of Greek and Roman cooking and serving vessels in the region, and of vessels of local Massaliote production, reveals the inter-play between local forms and imported forms over five centuries of Olbian rule and connects changes in vessel form to changes in diet and food preference. Ultimately, Bats suggests that Roman cuisine was

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<sup>38</sup> See for example, Plautus’ *Stichus*.

<sup>39</sup> Dunbabin 2003a, 12.

<sup>40</sup> Roller 2006, 53–55.

<sup>41</sup> Bats 1988, 75.

more focused on fatty stewed foods than was Greek cuisine, which may have favored drier meats with accompanying side dishes. His use of the textual sources is somewhat problematic, in that he applies various ancient authors' remarks with little critical commentary and little historical specificity. Bats' engagement with the ceramic record and his practical suggestions were the first of their kind.

In a similar vein, in 2006 Jordi Principal undertook a study of foodways in the Northern Iberian coast.<sup>42</sup> He acknowledges the "Hellenic" and "a-Hellenic" traditions of the black gloss form first identified by Jean-Paul Morel, and later by Bats, but explains that the design and attempts at metal imitation should be of secondary concern when examining the changing black gloss forms. Like Bats, Principal notes the change in Iberia away from bowls in the 3<sup>rd</sup> century to wide shallow bowls and plates in the 2<sup>nd</sup> century. For Principal, this suggests that the inhabitants of Roman Iberia began eating semi-solid foods out of bowls (porridge, stew) in the Hellenic tradition and then started eating solids (meat, fish) which were served on open flat forms in line with an Italic tradition. He also includes a brief examination of local Iberian cooking vessels. He notes that local forms, in particular an "S-shaped" pot which existed before Roman contact, continue to dominate. He also briefly explains that Italic "common ware" in the form of low pans only start to appear in the mid to late 2<sup>nd</sup> century BCE. Principal understands there to be a time lag between the black gloss change and the cooking ware change. For future work, he calls for further attention to be given to the find contexts of ceramics for food, and for regional variations to be acknowledged in order to nuance the general trend he observes.

In 2006 Hilary Cool published an extensive compilation of everything known about food and drink in Roman Britain. She examines all manner of evidence: texts, artifacts, and subsistence remains. Her detailed discussion of the ceramics notes the introduction of several new forms to sites in Britain, including imitations of African cooking pot forms produced in local clay, and tripod cooking bowls from Gaul; both possibly suggest the change in cooking methods of the people who were using them, or the introduction of a new population to the area, namely, the Roman army. Her conclusions are limited by the fact that she relies on previously-published materials. She therefore calls for the further

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<sup>42</sup> Principal 2006.

clarification of questions of food and contact through an increased use of residue analysis and the systematic analysis of wear patterns.<sup>43</sup>

Focusing less on cultural identity and more on status identity, Hudson's 2004 thesis examined the changing foodways of late Rome especially in Egypt and Asia Minor, but using discrete ceramic and silver assemblages as well as domestic spaces and iconography from all over the empire. He observes two forms of dining: status dining and convivial dining. The first was meant to emphasize the prestige and superior status of the host. Hudson demonstrates that the second dining style, convivial dining, in which the diners share from the same dish, only became the norm in the 4<sup>th</sup> century CE. He attributes this to a new-found sub-elite attempting to assert its internal cohesion and egalitarianism.<sup>44</sup>

On the Italian peninsula, Andrea Zifferero has been the most prolific researcher of foodways, though his interest is in Iron Age rather than Roman Italy. He creates a conceptual model that emphasizes how ritual, rank, ethnicity, and food systems all collectively had an influence on ceramic morphology in pre-Roman Italy (Figure 5).

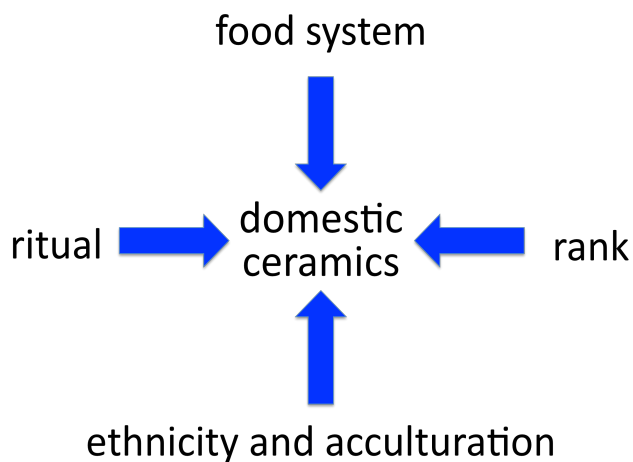


Figure 5. Model explaining how various societal factors affect ceramic form (after Zifferero 2004)

Zifferero examines the changing forms of Iron Age cooking stands from central Italy and the ritual use of the lug-handled *clibanus*, or *testum*, a cooking bell which was probably

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<sup>43</sup> Cool 2006, 37–43.

<sup>44</sup> Hudson 2010.

used to cook bread.<sup>45</sup> According to Zifferero, by the mid 5<sup>th</sup> century there was a significant decline in the frequency of the *clibanus*' appearance. He links this decline to the grain distribution first established by the Twelve Tables in 440 BCE, which greatly improved available grain quality and led to widespread baking of leavened bread. Zifferero does not, however, reconcile this idea with the fact that one of our major explanations of bread making in a vessel under a covering is from Cato in the 2<sup>nd</sup> century.<sup>46</sup> In Zifferero's case studies, he attributes morphological change and the disappearance of shapes to both food changes and cultural contact between the Etruscans, Latins, and Greeks.<sup>47</sup>

Until now, scholars have mainly focused on examining single classes of pottery (either fine ware or coarse ware). These have been largely morphological studies that give little attention to other physical qualities of the ceramics, and do not typically consider other types of archaeological evidence.

In contrast, this dissertation includes the study of whole deposits from two sites including the examination of all ceramics of various fabrics and forms that pertain to food preparation and serving. I examine different types of cooking vessels – vessels for storing and preparing foodstuffs, and vessels for serving foods to the consumers or diners. This allows us to see changes or variations in vessels used for different stages of food preparation and serving and to consider what simultaneous changes may imply. The study of multiple fabrics and forms allows us to consider the potential transfer of functions from one vessel type to another as well as the mixing of vessel types for similar purposes. For example, was a diner in ancient Italy concerned that all the dishes in his dinner set match in color (red, rather than black)? Assumptions of uniformity like this may mean that we are missing opportunities to capture realistic instances of daily use. It is only with the study of entire contexts and assemblages of material that we can think about ceramic use holistically in the Roman world.

## **1.6. New methods for ceramic analysis**

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<sup>45</sup> Zifferero 2004. This was an idea originally explored by Cubberley et al. 1988 and will be discussed further in chapter 5.

<sup>46</sup> Cato *de Agricultura* 74-75.

<sup>47</sup> Zifferero 2000; Zifferero 2004.

My ceramic study focuses on both morphology and on alteration, or the traces of wear on the vessels which result from their use. The study of Roman vessel morphology has been extensive, and has been driven by the need to create typologies for archaeological dating purposes. As summarized above, only a few studies have engaged with Roman vessel morphology from the perspective of function. An important limitation in this type of study is that the direct attribution of vessel form to function assumes that ancient users chose to use vessels which were most appropriate for their needs, in quality of material and size and shape.<sup>48</sup> In the case of Rome, a complex stratified society with a complex ceramic corpus, this is not an unreasonable assumption; however, the study of ceramic forms and food should be combined with other innovative examinations of vessel remains.<sup>49</sup> For example, the use of alteration analysis of ceramics – that is the systematic recording of traces of wear related to use-life of the vessel – can be combined with observations made about form to determine function.<sup>50</sup> The principle behind alteration analysis is similar to the idea of *chaîne opératoire*, a term which refers to the sequences or patterns inherent in the production and use of an artifact. Through the identification of patterns in the traces of wear on a vessel, the choices which the user made as well as the unintended consequences of a user's interaction with the vessel, can both be reconstructed.<sup>51</sup> The two main types of use-alteration documented on *ceramica* are fire damage (discoloration of the ceramic vessel from the cooking fire and charred food) and abrasion (caused from cooking and eating utensils as well as storage). In Roman ceramic reports, discoloration from fire has occasionally been noted; however, anecdotally and non-specifically. The recording of different types of abrasion on Roman vessels is even more limited.

The research presented in this dissertation is the first large-scale systematic dataset of this type of information on Roman pottery.<sup>52</sup> This use-alteration dataset contributes substantially to our understanding of the cooking, preparing, and serving food in Roman

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<sup>48</sup> Ericson et al. 1971; Braun 1983; Rice 1990.

<sup>49</sup> See the chapter on my ceramic methodology for a broader discussion of form and function.

<sup>50</sup> Hally 1986; Rice 1990.

<sup>51</sup> Grace 1996, 218–219.

<sup>52</sup> J. T. Peña's Pompeii Artifact Life History Project begun in July 2012 involves the collection of similar data on a smaller scale from several properties in Pompeii.

Italy. My analysis reveals that vessels made from fabrics and forms which we might classify as inappropriate for heating were in fact used for heating water in particular contexts; we can determine the location and type of the heat source with which different cooking vessels have contact; we can see that “fine” wares for serving liquid or semi-liquids had more contact with utensils than we may have originally hypothesized (Figure 6).

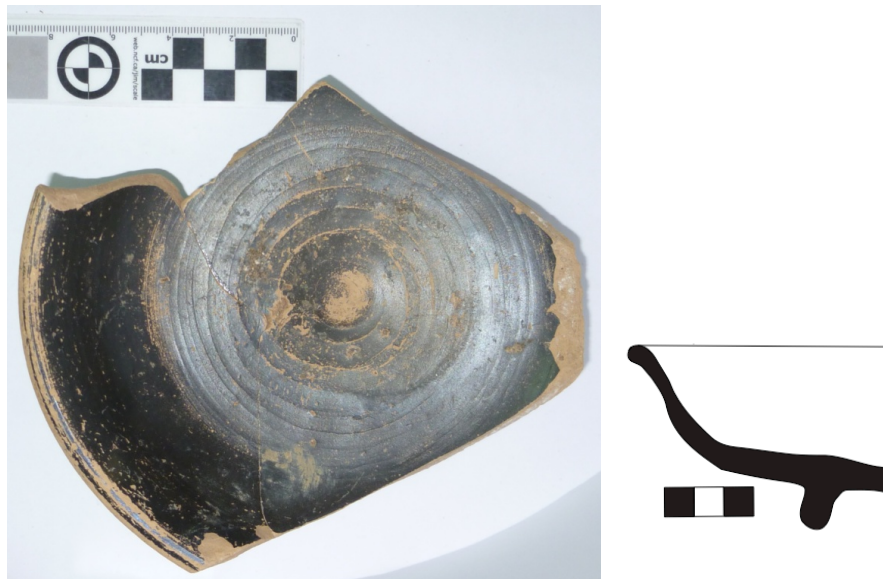


Figure 6. Fragment of black gloss bowl with abrasion from stirring (MUS 3790)<sup>53</sup>

### 1.7. The role of environmental archaeology

The study of ceramic identification and form as well as alteration, parallels similar methodological developments in environmental archaeology, especially zooarchaeology.<sup>54</sup> As a complement to my ceramic study, I incorporate the published and unpublished faunal material from both of my study sites. The study of faunal remains requires the same two-part analysis as ceramic study. The first step is the basic identification of bone elements and the species, typically the three common domesticates: cattle, pig, and sheep/goat (these bones are largely indistinguishable).<sup>55</sup> The recovered elements reveal which cuts of meat people ate. Primary cuts are the most tender pieces from the central section of the

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<sup>53</sup> All figures are produced by the author unless otherwise credited.

<sup>54</sup> Unfortunately, botanical analyses are not available for the deposits under study, see Chapter 8 below.

<sup>55</sup> MacKinnon 2004, 215.



animal, and secondary cuts come from the lower limbs; these two types of cut are likely to be the most sought-after and valuable parts of the animal. The animal's extremities for example, feet, provide essentially no meat but may have been used for making broth. Finally, the skull and its associated meat had its own set of attractions and delicacies, depending on the animal.<sup>56</sup> The second step in the analysis is the study of the modification of bones – butchery marks, fragment size, and surface discoloration – all of which can reveal details of meat processing. We can posit the skill of the butcher to consider how and by whom people's meat was prepared, the portions which were being cooked and consumed, and in some cases, we can tell how the meat was being cooked – through roasting or boiling.<sup>57</sup>

Several general observations about faunal studies in Italy deserve mention here. Studies of faunal evidence from Italy have tended to support the impression gleaned from textual sources that Romans preferred pork above all other meats.<sup>58</sup> However, a growing number of scholars have questioned the methods used to arrive at this conclusion, and have emphasized regional variations across Italy.<sup>59</sup> Faunal studies use bones to calculate the minimum number of animals present on a site and therefore the number of animals consumed; however, different species of animals produce different amounts of meat. The calculation of “meat weight” of different species can be a key contributor to faunal study. For example, in meat weight, one cow is equivalent to four pigs. Michael MacKinnon's 2004 study of meat production and consumption in Roman Italy demonstrates that when we consider meat weight along with the study of bone fragments, the amount of cow meat increases substantially compared to pig and sheep/goat.<sup>60</sup> Depending on the region and period, pig is not as dominant as it was once seemed. In Northern, Central, and Southern Italy, pig reached the peak of its consumption in the Imperial period in central Italy in particular: “Pork accounts for, on average, about half the domestic mammalian meat

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<sup>56</sup> MacKinnon 2004, 26, 196; Barker 1982, 86.

<sup>57</sup> Alhaique 1997; Roberts et al. 2002; MacKinnon 2004.

<sup>58</sup> Purcell 2003, 340.

<sup>59</sup> Michael MacKinnon's 2001 study was the first to really challenge the idea of the predominance of pork in the Roman diet. Though he concludes that it was important, his effort to complicate the issue through the identification of different species sizes was welcome. MacKinnon 2004, 194.

<sup>60</sup> De Grossi Mazzorin 1985, 156 already experimented with this on a smaller scale.

consumed in Imperial times.”<sup>61</sup> In contrast, in the Republican period (for MacKinnon, 500 to 50 BCE), there were various other meat preferences in the Northern, Central, and Southern Italy. It has not yet been established, however, when this shift in meat consumption occurred. The clarification of such shifts and the potential reasons behind them is explored in the following study.

Furthermore, large scale synthetic studies of zooarchaeological trends in Italy completed by MacKinnon, Anthony King, and Jacopo De Grossi Mazzorin have either tended to treat the whole pre-Imperial period of Italian history as one, or to cover only the centuries before the 3<sup>rd</sup> century BCE. Therefore, we lack a focused concentration on the middle or late Republic, the period of Roman expansion in Italy.<sup>62</sup> The faunal remains discussed in this dissertation can begin to fill this gap and provide a closer look at the Republican period, divided into centuries.

### **1.8. Food in Latin literature and the development of *romanitas***<sup>63</sup>

The rich textual sources of the Roman world are of great benefit to our understanding of cultural mores. In Chapter 2, I appraise the various ways in which food and dining are explicitly described and implicitly referenced in literature. Because of the chronological scope of this study, I concentrate on the works of authors active in the Republican period in order to avoid the common fallacy of applying Augustan and later authors’ memories or fabrications to much earlier periods and events. My examination is informed primarily by agricultural manuals by Cato and Varro, satire by Ennius and Lucilius, and comedic plays by Plautus, as well as more fragmentarily preserved works by their contemporaries.

References to food in ancient literature are rarely only about sustenance: they concern culture and ethnicity, status, and the definition of community. Through a series of

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<sup>61</sup> MacKinnon 2004, 215.

<sup>62</sup> MacKinnon’s time periods are 500 to 50 BCE and then Imperial is 50 BCE to 300 CE. King’s “Greek, Etruscan, Pre-Roman” data all comes from sites up to the third century BCE with the exception of Tarquinia, whose data goes from the 9<sup>th</sup> to the 2<sup>nd</sup> century BCE. His “Roman period” is 3<sup>rd</sup> century BCE to 6<sup>th</sup> century CE (King 1999, 192). De Grossi Mazzorin’s syntheses move all over time (see especially De Grossi Mazzorin 2004).

<sup>63</sup> I use “*romanitas*” as a way to denote the abstract idea of Roman-ness, fully aware of its anachronism. Adams 2003.

interwoven dichotomies, foodways become explicitly connected to identity in both comedic genres and didactic treatises. In Republican literature, we encounter the articulation of a complicated relationship between food enjoyment, correctness, and quality. The representation of food even in the most fragmentary texts can be tied to specific ideas of sensory perception and properness, which unite to form an ideal of Roman behavior.

### **1.9. Chapter outline**

In the following chapters, I will distil the methods and materials for examining foodways in Republican Italy. Chapter 2 is an exegesis of food references in Republican literature. Beginning with a brief history of the development of Republican literature generally and its connection to the development of Rome itself, I demonstrate how foodways have had a close connection to the rhetoric surrounding *romanitas* in Roman literature. Food plays an intrinsic role in the articulation of antithetical categories: *luxuria* versus modesty, excess versus tasteful moderation, town versus country, generosity versus miserliness. I consider the connections between Greek literary precedents and emerging Latin genres and how foodways and knowledge about food adumbrate emerging social norms.

Chapter 3 explains the methodological choices made in the collection and analysis of the ceramic data from the study sites. I explain the theoretical justification for the functional study of archaeological ceramics, and I address some of the difficulties and limitations of my approach. Since there have been few large-scale studies of ceramic alteration, and none in the Roman context, I also describe the database I used to record the findings from the ceramic analysis. The database style and some of the terminology I have developed were inspired by the vocabulary used by conservators in reporting the condition of artifacts in museum collections.

Chapter 4 introduces the two case study sites, the Etrusco-Roman towns of Musarna and Populonia. After presenting their historical backgrounds, I consider the history of excavation and publication of each site. I describe the archaeological contexts chosen for analysis and explain their chronological phasing. I also consider the formation processes governing the materials recovered from these deposits and how this affects an understanding of the pottery assemblages.

Chapter 5 presents results of the statistical analysis of fragments of vessels used for cooking from Musarna and Populonia. For each site, I proceed through each form explaining the trends in the morphological characteristics for each phase of habitation. I then describe the use-alteration of the vessels, specifically the evidence for blackening and abrasion. I explain how a combined morphological and alteration study contribute to the interpretation of vessel function. It is evident that certain forms of cooking vessels were used in relation to the cooking fire in a limited number of ways. At both sites the results demonstrate relatively standardized methods of cooking with different vessel forms which remain consistent over time. At Musarna, there are changes in vessel size of two forms which suggests a changing context for food preparation and consumption. At Populonia, most of the vessel forms remain consistent in morphology and size suggesting relative uniformity in cooking practices.

Chapter 6 addresses the use of vessels for preparing, storing, and serving food at the study sites by examining black gloss, red gloss, and common wares. The chapter is organized by site with each vessel form and its associated morphological trends over time described. I also examine the traces of abrasion on these vessels in order to consider what kinds of foodstuffs they contained. Results demonstrate, for example, a decrease in the use of black gloss bowls in favor of plates at Musarna, while at Populonia bowls are consistently prevalent. This has implications for our understanding of the way in which food was served and the types of food being consumed at these two sites.

In Chapter 7, I describe the faunal evidence from Musarna and Populonia. I combine the published bones from the Hellenistic bath house at Musarna with unpublished remains recently studied at my direction by the staff at the Museo Nazionale Preistorico Etnografico "Luigi Pigorini" in Rome and by Dr. Michael MacKinnon. The faunal assemblage demonstrates a great deal of variability over time, particularly with regards to the presence of pig and chicken bones. I also re-examine the published faunal material from Populonia, the study of which was completed Dr. Jacopo De Grossi Mazzorin. This evidence suggests a decrease in pork consumption towards the end of the Republic and several other

regionally-specific trends.<sup>64</sup> These findings are complicated by a broader discussion of the differences in cuts of meat and animal age over time.

Chapter 8 presents a final synthesis and interpretation of the trends observed in the previous three chapters. I highlight the variations present between Musarna and Populonia and consider how the examination of their respective foodways can contribute to our understanding of their local histories. I then return to the idea of Roman cultural contact and explore how the analysis of foodways adds nuance and raises questions concerning how we understand the experience of Romans and Italians in our study sites, and Italy in the Republic in general.

The appendices include the results of an experiment to demonstrate vessel volume, explanations and formulae of the statistical tests I use throughout this dissertation, the description of several pottery sooting experiments I have undertaken, a discussion of an un-used study site, and data recording diagrams for easy reference.

By examining food practices within the culturally multifaceted and developing region of Italy during the Republic, it is hoped that this work can both stimulate an interest in the increased application of systematic foodways analyses, while also furthering our understanding of the complex cultural interactions within the region itself.

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<sup>64</sup> De Grossi Mazzorin and Minniti 2008.

## Chapter 2 - *Food in Republican Literature*

This chapter explores the representation of food and foodways in the literature of the Republican period. In doing so it provides context for this dissertation's archaeological examination of foodways and cultural expression. The literature of the Latin language started to develop in the late 3<sup>rd</sup> century BCE. Livius Andronicus and Quintus Ennius wrote works based on Greek models and also created new stories and new genres for the Roman people.<sup>65</sup> Authors in the late 3<sup>rd</sup> century were using art and literature to express "national qualities"<sup>66</sup> despite the challenges of an ever-growing and relatively undefined nation.<sup>67</sup> References to food and dining appear early in Latin literature. These references are rarely just about sustenance: they concern culture, ethnicity, status, and the definition of community. The expressions of foodways in literature, whether they are extended descriptions of dinner parties, or one line fragments about grass-fed geese, reveal that food language is intrinsic to the creation and description of Roman identities. All of these food descriptors and archetypes are interwoven in the complex web of *romanitas*, whether as a reflection of genuine characteristics or of imagined ideals.

Modern classicists who consider foodways have focused almost exclusively on authors writing in the Imperial period.<sup>68</sup> The following discussion concentrates primarily on Republican era authors, specifically agricultural manuals by Cato and Varro, the work of Ennius and Lucilius, and comedies by Plautus. Other (often much more fragmentary) contemporaries of these authors also warrant attention, as do some of the authors in the Imperial period whose writings are clearly informed by these early literary pioneers. Since none of these early authors were from the city of Rome itself, they reflect the interplay of

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<sup>65</sup> Korfmacher 1934, 454.

<sup>66</sup> Gruen 1992, 283.

<sup>67</sup> Fantham (1989, 220, n. 12) and Feeney (2005, 229-230) stress the fact that Rome was unique among ancient societies for its development of a "national" literature.

<sup>68</sup> See for example, Richlin 1988; Gowers 1993; Caston 1997; Bradley 1998; Grocock and Grainger 2006; Grainger 2007; Lowe 2010. The notable exception is Emily Gowers' landmark book on food in Roman literature which contains a thorough discussion of food in Plautus. Gowers 1993.

Romans with the Greek and Italian milieu. These early authors were “cultural brokers,” or mediators, between Greek and Italian culture and were largely responsible for “doing something with or for the Romans and their language” – crafting the genres, values, and behaviors which would become “Roman.”<sup>69</sup>

## 2.1. Interwoven dichotomies

As I discussed in chapter 1, foodways elucidate and create cultural differences. This is a truism observed in all types of societies. Levi-Strauss’ colorful exegesis of the prevalence of food in the origin myths of the Bororo people of Brazil, Bourdieu’s survey of 20<sup>th</sup> century French eating habits, and Goody’s detailed discussion of culinary culture in Asia and Europe, all demonstrate how foodways create opportunities to express difference. What an individual eats is certainly a prime marker of identity, but how an individual eats – where, when, with what characteristic behaviors and with whom – all matter. The ancient Mediterranean context provides a surfeit of examples. John Wilkins considers the famous milk-drinking scene in the cave of Polyphemus and notes that throughout the *Odyssey*, “good men are distinguished from bad and Greeks from foreigners partly in terms of how and what they ate.”<sup>70</sup> Nicholas Purcell suggests that Varro’s *de vita populi Romani* should be read as evidence of how alimentary habits were understood to reflect cultural identity: “Cultural stability was threatened from many angles in the late fourth and early third centuries. It was a propitious moment to model cultural change. Foodways were as vivid a sign of the vulnerability of traditional Greek culture as any other.”<sup>71</sup> Emily Gowers notes how the struggle between Roman-ness and foreign influence is reflected in many cultural customs including those involving food. Expressions of “otherness” also come out in the works of authors such as Tacitus, Strabo, and Dio Cassius through descriptions of foodways; they employ stereotypes of barbarians eating flesh and drinking milk<sup>72</sup> and primitive people who “eat their meals seated on beds of straw.”<sup>73</sup>

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<sup>69</sup> Feeney 2005, 239; Sciarrino 2011, 25. This idea was articulated at least as early as Henry David Jocelyn. Jocelyn 1972, 991.

<sup>70</sup> Wilkins 1995, 3.

<sup>71</sup> Purcell 2003, 349.

<sup>72</sup> Garnsey 1999, 62-72.

<sup>73</sup> Strabo *Geography* C197.

In addition to broader cultural distinctions, foodways in literature connect to several other themes important to a sophisticated conception of Roman personhood. Foodways are used to express one's relationship to one's own body and bodily functions, and one's relationship to other people, either through a guest-host scenario, or through status competitions expressed through feasting activities.<sup>74</sup>

In ancient literature, discussions of foodways are tied into the common rhetorical device of antithesis. Gowers observes that food assists in creating contrasts between not only raw and cooked food, but simple and luxurious, and native and foreign food.<sup>75</sup> These distinctions form essential categories for the definition of Roman ideal behavior and identity.

A prevalent trope at play in the works examined here includes that of *luxuria* versus modesty, which is closely linked to the contrasting ideas of gluttony and poverty. It can be difficult to determine whether the descriptions of vice-ridden, over-indulgent luxury are literal truths or exaggerations arising from a sense of literary license.<sup>76</sup> This particular trope appears in agricultural treatises as well as in comedic genres. According to Gowers, the play on this trope with food in comedy contrasts philosophical ideals, especially as expressed in Epicurean and Platonic discourse. This is particularly evident when we notice that the setting for these philosophical dialogues is often the dining or drinking table. In this context, farcical or inappropriate behavior around the dinner table becomes the "antithesis of Plato's Symposium."<sup>77</sup>

Another closely-associated trope is that of city life versus country life. It is appropriate that this trope began to flourish at a time that Rome increasingly encroached on the surrounding countryside and multiculturalism began to flourish within the city. Rome's maritime contact with the East in the 3<sup>rd</sup> century, and with Carthage in the 2<sup>nd</sup>

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<sup>74</sup> This is described by Brian Hayden (1996, 128-129) and is very appropriate to the Roman context, as suggested by D'Arms 1984.

<sup>75</sup> Gowers 1993, 12.

<sup>76</sup> Lintott, for example, takes Lucan and Sallust's discussion of moral decline in the late Republic literally: "How far had the character of the Italian people changed, especially their attitude to force and the rule of law? Again, was participation in violence and civil war a sign of a loss of scruple throughout society or of extreme economic and social pressure on certain sectors of it?" Lintott 1972, 626.

<sup>77</sup> Gowers 1993, 165.



century, facilitated not just the importation of foreign goods (foodstuffs and other items), but the immigration of foreign people.<sup>78</sup>

It is also possible to identify the contrasting behaviors associated with good manners and “hostliness” versus cheapness and poor hospitality. This is connected to both of the previous tropes in that these contrasting behaviors often occur in the city versus country as a way to demonstrate the vices or virtues of one or the other. This trope helps to elucidate the luxury versus modesty duality since this host is required to make some effort for a party or meal – but not too much.

These trope categories are often expressed within the discourse of the Roman past as if the past were an ideal time. Purcell observes how periods in Rome’s past are grouped by Roman authors according to what was being eaten: Verrius Flaccus in the Augustan period notes that for the first 300 years of Rome’s history, Romans only ate emmer wheat.<sup>79</sup> There are “normative foodways” elaborated as stand-ins for cultural mores of the past in contrast to the present.<sup>80</sup> This is the pervasive history and culture-scape which authors in all genres in the Roman Republic conjured and they are inseparably connected to contemporary agricultural and landscape changes.<sup>81</sup> These tropes ultimately express an increasingly narrowing definition of what “Roman” means as a segment of the population.

Contributing further weight to the idea of expressing identity through foodways, several scholars envision elite banquets as a key venue for the development and dissemination of Roman literature, the *carmina convivalia*, through recitation and singing.<sup>82</sup> This was the active performance of identity in an elite venue:

While reclining on their couches and sharing food with their guests, they watched and listened to these professionals who sang Greek poetry or

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<sup>78</sup> Warmington 1938, ix-x; Raschke 1987, 300

<sup>79</sup> Purcell 2003, 330.

<sup>80</sup> Purcell 2003, 340-341

<sup>81</sup> Purcell 2003, 343; The distant past as an ideal blueprint for the present see Levick 1982, 61.

<sup>82</sup> Levick 1982; Zorzetti 1990 and 1991; Rüpke 2000; Rüpke 2001; Sciarrino 2004a; Goldberg 2005, 1-19; Habinek 2005; Lochhead 2010. Jörg Rüpke makes the prevalence of references to food and banqueting in early Latin part of his argument for the probability of convivial performance; however, I do not risk the circular reasoning of saying that banquets with recitation must have existed because there are a lot of food references, and there are a lot of food references because these plays were performed at banquets. There is however, enough suggestive evidence beyond the contents of the early Latin to suggest that these banquets were happening in elite contexts in archaic and Republican Rome. On elite banquets in archaic Latium and Etruria see, Rathje 1988; Rathje 1990; Rathje 1994; Small 1994; Zaccaria Ruggiu 2003.

recited from their own texts. Moreover, these elite members started to claim literary knowledge not only through professional performances but also by engaging in imitations of similar practices. Accordingly, professional shows and elite displays of new cultural materials during convivial occasions came to serve two significant functions, namely, the augmentation of individual prestige and the articulation of a new and quite distinct class of rulers.<sup>83</sup>

While the reality of a Roman context similar to a “symposium” has been questioned, the possibility of such a venue is meaningful for the following discussion. The articulation of food and foodways as appropriate behaviors in a venue in which people are physically engaging with food and dining makes these references all the more tangible and meaningful.<sup>84</sup>

The following excursus begins with Ennius’ work, moves through comedic works and then focuses on the place of food in didactic texts. I summarize the biography of each author in order to frame their perspectives on food and their place in emerging Latin literature. I then examine references to food in their works and how the context and tone of these references might reflect, and in some cases create, societal expectations and concerns.

## 2.2. Ennius<sup>85</sup>

Quintus Ennius was born in 239 BCE at either Rudiae in Calabria or in Messapia.<sup>86</sup> At a recent Ennius conference, participants concluded that Ennius was “the inventor of Roman history, the grafter of Hellenistic (not just Homeric) tropes onto Roman political and ritual language . . . a ‘South Italian nut’ . . . the national epicist who held sway until his instantaneous eclipse by Virgil.”<sup>87</sup> Unusually for any ancient author, he wrote in many different genres: epic history, verse satire, tragic and comic theater, and philosophy. Discussion of Ennius always needs to be grounded in the recognition that we are exposed only to fragments of his work which were deliberately preserved by later authors. The

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<sup>83</sup> Sciarrino 2004a, 327

<sup>84</sup> For a similar tangibility in a public feasting context, see Banducci 2011.

<sup>85</sup> All translations of Ennius’s short fragments are from the Loeb edition (Warmington 1935). The translation of Ennius’ *Hedyphagetica* is my own.

<sup>86</sup> Breed and Rossi 2006, 400.

<sup>87</sup> Gowers 2007, ix, xi.

longest fragments of Ennius are quoted by Cicero, but they also appear throughout Varro's works, and amongst the opera of many later authors and grammarians including Donatus, Nonius, and Macrobius.<sup>88</sup> The frequency with which he is cited in Latin literature reveals the influence of his pioneering innovations and experimentations.<sup>89</sup>

Though he famously knew Greek and Oscan, it is unclear whether Ennius learned Latin as an adult or in his youth.<sup>90</sup> He probably arrived in Rome when he was about 35 years old, around 204 BCE. It is also unclear exactly what form of relationship he had with the Roman elite. Some scholars imagine that he relied on the patronage of the elite families who are mentioned throughout his *Annals*, while others speculate that Ennius may have been a man of independent means who interacted with the elite on an equal level.<sup>91</sup> Regardless of his financial means, it is notable that "an obscure provincial writer," even one connected to Marcus Porcius Cato and Fulvius Nobilior, wrote the *Annals* – the canonical epic of Roman history.<sup>92</sup>

When we explore how foodways appear in the many works of Ennius, there is quite a bit of variation, likely related to the needs of various genres. The mention of food in the *Annals* is limited mostly to metaphor and luscious descriptors "*fici dulciferae lactantes ubere toto*"<sup>93</sup> "sweet-bearing figs, dripping milk from the whole udder" and "*Cyclopis venter velut olim turserat alte carnibus humanis distentus*"<sup>94</sup> "just as the Cyclops' belly once swelled high stretched with human flesh" and remarks on the power of wine: "*Nunc hostes vino domiti somnoque sepulti*"<sup>95</sup> "And now the enemy, mastered by wine and buried in sleep."

In Ennius' satires, the few fragments which have survived have several references to gluttonous behavior, a theme we will see Lucilius explore broadly and which will feature substantially in the writings of later satirists. One character of Ennius exclaims, "*Malo*

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<sup>88</sup> Zetzel 2007, 3; Warmington 1935.

<sup>89</sup> Zetzel 2007, 12.

<sup>90</sup> Jocelyn 1972, 993, and n. 60. This is Aulus Gellius' famous quotation: "*tria corda se habere dicere, quod loqui Graece et Osce et Latine sciret*" *Attic Nights*, V, 2.4)

<sup>91</sup> A good summary of the various aspects of this debate is Breed and Rossi 2006, 404–405.

<sup>92</sup> Gowers 2007, xi. Badian (1972) and Zetzel (2007, 11) reject the association between Cato and Ennius.

<sup>93</sup> Warmington 1935, *Annals*, fragment 70.

<sup>94</sup> Warmington 1935, *Annals*, fragment 310.

<sup>95</sup> Warmington 1935, *Annals*, fragment 294.

*hercle magno suo convivat sine modo!*"<sup>96</sup> "Let him be one of the guzzlers without limit, and, by god, may he be utterly damned for it!" And there is a familiar image which Donatus credits with inspiring Terence's parasitic characters:

*Quippe sine cura laetus lautus cum advenis inferctis malis expedito bracchio, alacer celsus, lupino expectances impetu -- mox cum tu alterius abligurias bona quid censes domino edde animi? Pro divum fidem is tristest dum cibum servat, tu ridens voras.*<sup>97</sup>

Why, when you come along without a care in the world, gaily spick and span, your cheeks unstuffed, your arm bared ready, tripping a tip-toe, waiting all taut like a wolf – when next you are lapping up another's goods, what do you think your host thinks? By god, he's down in the dumps, while he serves out food and you gobble it with a grin.

Ennius' most explicit discussion of food appears in a relatively long fragment preserved by Apuleius. The *Hedyphagetica* is a poem of unknown original length which survives in 11 lines quoted, supposedly by memory, in Apuleius' *Apologia*:

*Innumerabilis genera piscium enumerat, quae scilicet curiosae cognorat.  
Paucos vorsus memini, eos dicam:  
Omnibus ut Clupea praestat mustela marina!  
Mures sunt Aeni asperaque ostrea plurima Abydi . . .  
Mitylenae est pecten caradrumque apud Ambraciai.  
Brundisii sargus bonus est, hunc magnus si erit sume.  
5 Apriculum piscen scito primum esse Tarenti.  
Surrenti tu elopem fac emas glaucumque apo Kumes.  
Quid scarus? Praeterii, cerebrum Iovis paene supremi,  
Nestoris ad patriam hic capitur magnusque bonusque  
melanurum turdum merulamque umbramque marinam  
10 Polypus Corcyrae, calvaria pinguia, acarnae,  
purpura, muriculi, mures, dulces quoque echini.*<sup>98</sup>

He lists countless types of fish, which he has clearly studied carefully. I remember a few verses which I will recite:  
How the burbot from Clupea beats all others!  
There are mussels at Aenus and scaly oysters in great plenty at Abydos . . .  
The scallop is at Mitylene and in the channel<sup>99</sup> of Ambracia.

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<sup>96</sup> Warmington 1935, Satires, fragment 1. Warmington places this in Satire 1.

<sup>97</sup> Warmington 1935, Satires, fragment 14–19. Parasites, of course, appear much earlier than this in Greek sources. Wilkins 2000a, 71–86; Tylawsky 2002.

<sup>98</sup> Warmington 1935, Delikatessen, 1–11. In Apuleius' *Apologia*. 39.

<sup>99</sup> The translation of *caradrum* is unclear. This is Warmington's translation.

- The bream is good at Brundisium – buy it if it's big.
- 5 Know that the little boar-fish is first-rate at Tarentum.  
 Make sure it's at Surrentum that you purchase your lady-fish, and from  
 Cumae your bluefish.  
 What of the parrot-wrasse? I overlooked that! It's almost the very brain of  
 supreme Jupiter!  
 This one is caught big and fine by Nestor's homeland.  
 And I overlooked the thrush-wrasse, the blackbird-wrasse, the maigre.
- 10 At Corcyra men catch the octopus, fat flounders, sea-perch,  
 the purple and the little purple fish, mouse-fish and sweet urchins too.

### 2.2.1. The Greek Precedent

Before we can properly appreciate Ennius' poem, we first need to consider both the fragmentary nature of these lines and its important Greek precedent, a poem by the 4<sup>th</sup> century BCE Sicilian, Arcestratus of Gela. Arcestratus' *Hedupatheia* or *Life of Luxury* (it also goes by the names *Gastronomy*, or *Dinner-Lore*, or *Cookery-Book*) is preserved in fragments in the *Deipnosophistae* by Athenaeus; 330 lines are sprinkled throughout the text.<sup>100</sup> Arcestratus is referenced by Athenaeus more often than Plato (there are about 62 fragments in all). Athenaeus seems to claim "moral superiority" over Arcestratus by attacking his luxuriousness, yet he exploits Arcestratus' detailed references to quality foodstuffs.<sup>101</sup> Arcestratus' poem is best understood as an epic parody, rather than a didactic or geographical encyclopedia.<sup>102</sup> While the poem appears to begin with a discussion of table settings and starchy appetizers, the majority of our preserved lines focuses on the *opson*, the entrée, specifically in regards to where to find the best fish. This part of the meal could be the most variable because while grain-based cakes could be made or purchased locally, the quality and impressiveness of the entrée depended on what a host was willing to spend. The *opson* provided a great opportunity to demonstrate social and economic difference.<sup>103</sup> Arcestratus is a very enthusiastic proponent of fish species he considered to be of high quality. For example, at one point he suggests to his readers that when they are in Rhodes, if a fisherman is unwilling to sell them thresher shark (*γαλῆδον*

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<sup>100</sup> Olson and Sens 2000, lxvii.

<sup>101</sup> Wilkins 2000b, 35.

<sup>102</sup> Fucarino 1991, 194; Olson and Sens 2000, xxiv–xxxi.

<sup>103</sup> Olson and Sens 2000, xlix–l.

τὸν ἀλωπεκα), they should steal it; it is so delicious, it is worth suffering the consequences of thievery.<sup>104</sup>

In the most recent edition of the poem, the editors, S. Douglas Olson and Alexander Sens, propose that through the *Hedupatheia*, Archestratus was:

reacting against a general societal and culinary trend, and the implicit point of his criticism is that those who follow it mistake indiscriminate lavishness for elegance and expose their own lack of good taste even while going to great expense. . . . [this] represents the intellectual position of the arch-sophisticate, whose aristocratic refinement and *savoir-vivre* bring with them the ability to recognize fundamental cultural distinctions ignored by inferiors who aspire aggressively (and almost by definition unsuccessfully) to the pleasures attendant on a more elevated social position.<sup>105</sup>

This “refinement” is quite explicitly expressed in Archestratus through his discussion not only of where to find the best example of any one fish species, but also how to prepare it. His remarks on sourcing fish are often followed by cleaning, spicing, and cooking instructions; the most telling examples of “sophistication” are the times when different cooking instructions are given for the same fish sourced from two different places. Archestratus makes the distinction, for example, between wrasse from Chalcedon, which can be served plain, and wrasse from Byzantium, which needs to be highly-seasoned in order to make it palatable.<sup>106</sup> This is highly-specialized and somewhat pretentiously-dispensed knowledge.

### 2.2.2. Ennius on the sources of fish

Olson and Sens claim that Apuleius’ introduction to Ennius’ poem make it clear that Apuleius was citing disconnected fragments from memory, rather than one complete 11 line section, and that Ennius’ poem included cooking instructions the way that Archestratus’ does.<sup>107</sup> This is an unfounded claim. There is nothing in the two sentences of Apuleius to suggest either of these points.<sup>108</sup> If the preserved lines of Ennius’ poem do

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<sup>104</sup> Olson and Sens fragment 22, Athenaeus 7.285e-6a and 7. 294f-5a.

<sup>105</sup> Olson and Sens 2000, liv.

<sup>106</sup> Olson and Sens fragment 14, Athenaeus 7.320a-b.

<sup>107</sup> Olson and Sens 2000, 242.

<sup>108</sup> In several verse quotations in the *Apologia*, Apuleius does quote whole text sections from memory. For Apuleius’ use of quotation, see May 2010.

constitute one whole section, Ennius' poem has quite a different tone than Arcestratus'. Most of the fragments we have from Arcestratus consist of a few lines on individual fish and the various places to acquire them and ways to cook them. Ennius' treatment of the fish, in contrast, is much more direct with far less preamble. The preserved lines of the *Hedyphagetica* name many fish and all their best origins in quick succession with little explanation. The only time this structure occurs in Arcestratus is in a section of fragments which conform in several ways with the Ennius fragment.<sup>109</sup> On the other hand, the idea that Apuleius was quoting Ennius piecemeal is supported by the fact that he echoes individual lines dispersed throughout Athenaeus.<sup>110</sup> Yet, these 11 lines of Ennius do not map precisely to Arcestratus' poem; there are notable differences and it is within these differences that some sense can be made of Ennius' work.<sup>111</sup> With lines 2-3 of Ennius, we could understand the beginning of fragment 7 of Arcestratus:

τοὺς μὲν Αἶνος ἔχει μεγάλους ὄστρεα δ' Ἄβυδος  
τὰς ἄρκτους Πάριον, τοὺς δὲ κτένας ἢ Μιτυλήνη.  
πλείστους δ' Ἀμβρακία παρέχει.<sup>112</sup>

Ainos has large mussels, Abydos oysters,  
Parion bear-crabs, and Mytilene scallops.  
But Ambracia supplies the largest number of these. . .<sup>113</sup>

The locations for oysters and scallops are identical to Ennius' version.<sup>114</sup> For Ennius' boar-fish at line 5, Arcestratus suggests Ambracia again, instead of Tarentum.<sup>115</sup>

For Ennius' *elops* or lady-fish at line 6, Arcestratus recommends: τὸν δ' ἔλοπ' ἔσθε μάλιστα Συρακούσαις ἐν κλειναῖς τὸν γε κρατιστεύοντα, "as for the *elops*, eat it especially in famous Syracuse" explaining further that when you get an *elops* from as far

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<sup>109</sup> Olson and Sens fragment 7, Athenaeus 3.92d-e. Of course, the reason this rapid-fire structure does not appear more often in Arcestratus may simply be a question of preservation of his fragments. Athenaeus may have chosen sections of the poem which had more descriptive properties rather than sections which named many fish species. It is estimated, based on the typical length of a scroll and the manner in which Athenaeus cites these fragments, that Arcestratus' poem was no more than 1,200 lines and therefore we have only about 28% of it. Olson and Sens 2000, xxiv.

<sup>110</sup> Fucarino 1991, 200.

<sup>111</sup> These are the lines which several scholars have pointed to as being parallel. Warmington 1935; Fucarino 1991.

<sup>112</sup> Olson and Sens fragment 7, Athenaeus 3.92d-e.

<sup>113</sup> Translations of Arcestratus are from Olson and Sens 2000.

<sup>114</sup> Abydos, on the Black Sea is also referenced as a place for oysters in Vergil's *Georgics* 1.207.

<sup>115</sup> Olson and Sens fragment 16, Athenaeus 7.305e-f.

away as Asia Minor or Crete it has travelled too far and is tough.<sup>116</sup> For glaucus, the bluefish at line 6, Arcestratus suggests Olynthos instead of Cumae, *ἀλλά μοι ὀψώνει γλαύκου κεφαλήν ἐν Ὀλύνθῳ καὶ Μεγάρῳις*, “I urge you to buy a glaukos-head in Olynthos and Megara.”<sup>117</sup> For the parrot-wrasse Ennius’ mentions at line 7, Arcestratus suggests: *καὶ σκάρων ἐν παράλῳ Καλχηδόνι τὸν μέγαν ὄππα*, “As for the parrot-wrasse, the big one in seaside Kalchedon.”<sup>118</sup> Meanwhile for the octopus mentioned at Ennius’ line 10, Arcestratus suggests similarly: *Πούλυποι ἐν τε Θάσῳ καὶ Καρίῃ εἰσὶν ἄριστοι καὶ Κέρκυρα τρέφει πολλοὺς μεγάλους τε τὸ πλῆθος*, “Octopi are best in Thasos and Karia. Kerkyra as well nourishes many and great in their mass.”<sup>119</sup>

It is unclear what either authors’ intentions were in writing these poems; however, their common feature is the cosmopolitan, practically Mediterranean-wide, remit that the hypothetical purchaser or traveller has from which to sample fish. Despite the vast distances, Arcestratus almost exclusively mentions fish from Greek settlements.<sup>120</sup> Several of the places which Ennius mentions had not yet been founded or were not under Greek control in Arcestratus’ time.<sup>121</sup> Ennius’ scope extends to North Africa, Abydos on the Black Sea, around the Italian coast, along the eastern end of modern Greece to Aetolia and Corcyra, and to Ionia. Some of these locational differences may have been made by Ennius to appeal to a Roman audience; they were places with which Romans would be more familiar, for example, the switch from Syracuse in Arcestratus to Surrentum in Ennius.<sup>122</sup> Ennius adds Tarentum and Brundisium, both south-eastern Italian cities with which he himself would have been familiar. Ennius’ choice of Pylos, “Nestor’s homeland,” as the place

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<sup>116</sup> Olson and Sens fragment 12, Athenaeus 7.300d-e.

<sup>117</sup> Olson and Sens fragment 21, Athenaeus 7.295c.

<sup>118</sup> Olson and Sens fragment 14, Athenaeus 7.320a-b. In Fucarino’s version of this fragment (1991, 199), it begins with *σκάρως ἐξ Ἐφέσου ζήτει*, but Olson and Sens include this in a difference section of Arcestratus’ text. Olson and Sens 2000, 64 fragment 13.

<sup>119</sup> Olson and Sens fragment 54, Athenaeus 7.318f.

<sup>120</sup> Olson and Sens 2000, xxvii. The few non-Greek sites mentioned are Caria and Pella which were closely-connected to the Greek world in the 4<sup>th</sup> century, and Phoenicia and Syria from which to important wine and fruits. These are not places the addressee of the poem is expected to visit. (Olson and Sens fragment 54, 26, 31, 55 and Olson and Sens fragment 59, Athenaeus 1.29a-d, and Olson and Sens fragment 60, Athenaeus 3.101b-e).

<sup>121</sup> For example, Clupea was likely founded at the end of the 4<sup>th</sup> century and Surrentum, was Oscan in the 4<sup>th</sup> century.

<sup>122</sup> Fucarino 1991, 199.



to find *scarus* rather than Chalcedon as Arcestratus suggested, might add to the epic parody tone of Ennius' piece.<sup>123</sup>

Ennius' reference to a particular place or channel in Ambracia as a source for scallops hints at possible personal knowledge of the area.<sup>124</sup> Ennius allegedly accompanied Fulvius Nobilior on campaign to Aetolia 189 BCE where he conquered the city of Ambracia.<sup>125</sup> Considering the frequency with which different fish from Ambracia are mentioned (6 times in 63 fragments, more often than any other place in Arcestratus), Ennius' experience in Ambracia may be the reason he became familiar with Arcestratus' poem.

While a few scholars have labeled Ennius' poem a "translation" of Arcestratus, it seems instead to be a re-working of Arcestratus – inspired by or modeled after Arcestratus' poem. Some of the structural elements in Ennius also speak to playful innovation. At line 9, Ennius lists three or four species depending on how you group the words. He seems to be creating a play-on-words by adding the *-que* at the end of the *turdum merulamque*. A *turdus merula* is a blackbird;<sup>126</sup> a *merula* is a blackbird<sup>127</sup> and a *turdus* is a thrush, so *turdus merula* is just a specific designation of thrush.<sup>128</sup> The post-positive *-que* then separates the word *merula* from *turdus* so the meaning of both becomes wrasse more clearly.<sup>129</sup> It is possible that this initial confusion adds an additional element of lavishness by mixing tasty birds in with a meal of tasty fish.

The *Hedyphagetica* has been described as a humorous intellectual distraction for the Roman elite curious about Greek works, or as part of a "transformation of cooking" which resulted in the fear of traditionalists concerned about the creeping intrusion of foreign luxuries owing to the elite being interested in enriching their tables.<sup>130</sup> The possible banquet performance context of the *Hedyphagetica* – focused on foodstuffs and their

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<sup>123</sup> Fucarino 1991, 199.

<sup>124</sup> Skutsch 1968, 38–39.

<sup>125</sup> Cicero *Tusculan Disputations* 1.2 and *Pro Archia* 11.27.

<sup>126</sup> Dalby 2003, 327.

<sup>127</sup> Dalby 2003, 361.

<sup>128</sup> It is the modern scientific name for blackbird.

<sup>129</sup> Dalby 2003, 361.

<sup>130</sup> Fucarino 1991, 201. We also have later emulations of this same concern with the sources of food. Varro's discussion of "local" food details in his *Περί Εδεσμάτων*. Aulus Gellius 6.16.

appealing origins – would make its details even more vivid.<sup>131</sup> Ennius' poem could be read as part of a "hellenization" of his elite Roman audience, because the model for the poem was Greek (albeit, Sicilian Greek). Nonetheless, it was re-imagined in a Roman setting.

### 2.3. The place of food in comedic genres

Ennius' playful and varied writing inspired by Greek models was only the beginning of a vibrant comedic landscape in Republican literature. In this section I focus primarily on Plautus and Lucilius as examples of Republican authors with large corpora from which to base a broad discussion about foodways. References to other fragmentary early authors will supplement this discussion.<sup>132</sup>

#### 2.3.1. Plautus<sup>133</sup>

Titus Maccius Plautus was born in Sarsina, in what is now Emilia Romagna, in the middle of the third century BCE.<sup>134</sup> Food features frequently and vividly in his plays. It has been examined as an identity marker through both its description and etymological tone,<sup>135</sup> as a status marker, as a plot marker,<sup>136</sup> and of course as a humorous device. The importance and significance of food references in the comedies of Plautus stem in part from the fact that they were performed in public venues. In the Republican period, Plautus' plays would have been exclusively performed in public at annual religious festivals with *ludi scaenici* as well as at certain public funerals which chose to sponsor theatrical events. We can imagine a large, engaged audience comprised of men and women of diverse statuses

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<sup>131</sup> Suetonius says that Livius Andronicus and Ennius performed their Greek translations and new works in private homes as well as in public. Suetonius, *de Grammaticis et Rhetoribus*, 1. See Lochhead 2010 for a full discussion of the evidence and implications for Ennius' performance.

<sup>132</sup> The lack of colorful food references in Terence is perhaps explained by his relative conservatism when it comes to his adaptations from Greek precursors. See Karakasis 2003 for a discussion of thematic, stylistic, and metrical difference between Plautus' and Terence's writing. Menander, a main source for Roman New Comedy, has few food references and they are notably bland. Scodel 1993.

<sup>133</sup> All translations of Plautus are by me.

<sup>134</sup> Conte 1999, 49–50.

<sup>135</sup> Lowe 1985a; Lowe 1985b; Gowers 1993; Hallett 1993; Danese 2002.

<sup>136</sup> Banducci 2011.

engrossed by his words as they were expressed aloud.<sup>137</sup> From Plautus we gain a feel for the contemporary sociopolitical climate, rather than just a sense of popularity or public impact might be the case for an author of an agricultural treatise.<sup>138</sup> Nevertheless, reading Plautus for clues to Roman sensibilities is complicated by the fact that Roman playwrights used Greek plot models. Differentiating between the Greek aspects of these plays and the purely Roman additions has been a long-standing interest of philologists. While we confidently recognize these plays as having Greek antecedents, their popularity in Rome attests to the meaning they held for a Roman audience; therefore, they should also be understood to be intrinsically Roman plays.<sup>139</sup>

It is, in fact, the translation and contamination of these plays from Greek which make Roman comedy such a complex and interesting vehicle for the dissemination and understanding of early Roman culture. These plays were an “alien cultural form . . . transformed into an energizing component of civic ritual.”<sup>140</sup> The depiction of characters and settings in Plautus’ plays are Greek. In the action of the plot, Rome is presented as “eclectic” and “absorbent” and Plautus strives to write from a Greek standpoint about Roman barbarism while appealing to a Roman audience.<sup>141</sup>

Emily Gowers’ work has been critical in exploring the word play throughout food references in Plautine drama – even extending to Titus Maccius Plautus’ own name. Plautus seems to mean “flat-footed,” while Maccius is either related to Maccus, a character from Atellan farce, or a translation of the Greek for a mashed grain and vegetable mix. In this way, Plautus represents himself as a “clod-hoping, mash-eating barbarian, a typically Saturnalian travesty of Roman nomenclature.”<sup>142</sup>

Gowers’ main thesis is that Plautus expresses Rome’s hybridity and confusion.

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<sup>137</sup> For the diversity of the audience see Moore 1994.

<sup>138</sup> Harvey 1986.

<sup>139</sup> Plautus, unlike Naevius or Terence, seems to have made a substantial effort to distance his plays from the Attic originals. He may have been weaving Greek plots with farcical plots of his native theatrical tradition in ancient Umbria (Bieber 1971, 150–151). In instances where we do know the specific Greek precedent, Plautus’ language and word play is quite different (Gowers 1993, 63; Conte 1999, 57).

<sup>140</sup> Lochhead 2010, n. 119.

<sup>141</sup> Gowers 1993, 10.

<sup>142</sup> Gowers 1993, 54 first suggested by Gratwick 1973. Judith Hallett connects T. Maccius Plautus’ own name to one of the unknown spices in the *Pseudolus* (829-836), to be discussed below. While this is plausible, it is of only peripheral interest to this work. Hallett 1993, 23.

Plautus' plays employ stereotypes of Greeks and barbarians (Romans) but also demonstrate how these two cultures can interact and indeed blend. These two cultures cross-contaminate just like the "contaminatio" of which Latin playwrights were sometimes accused when translating and mixing different Greek plays. Plautus uses foods as identifiers of Roman-ness: for example the *pultiphagonides* are those who eat mashed *puls* or porridge and Plautus identifies himself and the Romans as "porridge eating barbarians."<sup>143</sup> In other instances, he refers to Romans as those who eat *barbaricum bliteum* or "barbarian spinach."<sup>144</sup> Through neologisms, metaphors, and various food concoctions, Plautus creates a playful representation of this multicultural confusion in 3<sup>rd</sup> and 2<sup>nd</sup> century Rome.

Though we could explore a vast catalogue of all of the ways in which food is mentioned in Plautine plays, in the text which follows I focus on a few of the key themes and characters recurrent in Plautus' work, with specific attention to how they engage with the dichotomies defined at the beginning of this chapter. Playing with antithesis, Plautus expresses Roman values (ideals, preferences, dislikes). Throughout this discussion I also highlight the emphasis in Plautine language on food qualities and textures. These references can certainly be understood as a theatrical device used to tantalize the taste buds of the audience; but we can also read them as an expression of not just the necessity of sustenance for the esurient stage character and the hungry spectator, but as a didactic sidebar on the "right" types and treatments of food.

A consistent feature of Plautine plays is the lavish banquet – the actual portrayal of which usually does not occur on stage or even within the time span of the play. The many examples of anxiety surrounding banquet preparations demonstrate the importance of banquets as a social tool. Hosts express their need to impress guests, and slaves express their need to avoid their masters' rebuke. In the *Pseudolus*, Ballio, the pimp, orders his slaves to begin preparing a banquet and requests:

*tu esto lectisterniator. tu argentum eluito, idem exstruito.  
haec, quom ego a foro revortar, facite ut offendam parata,*

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<sup>143</sup> *Poenulus* 54.

<sup>144</sup> *Casina*, 748. *Bliteum* is trash and *blitum* is spinach. There is literally a play on words here (Gowers 1993, 57).

*vorsa sparsa, tersa strata, lautaque unctaque omnia uti sint.  
nam mi hodie natalis dies est; decet eum omnis vos concébrare.  
pernam callum glandium sumen facito in aqua iaceant. satin audis?  
magnifice volo me viros summos accipere, ut mihi rem esse reantur.  
intro abite atque haec cito celerate, ne mora quae sit, cocus cum veniat.  
ego eo in macellum, ut piscium quidquid erit pretio praestinem.*<sup>145</sup>

You! Be the couch-arranger! You! Clean the silverware and pile it up!  
Have these things prepared for when I return from the forum.  
Everything should be swept, prepped, wiped, spread, and washed and oiled.  
For today is my birthday; you should all celebrate it with me.  
Make sure that the ham, hide, sweetbread, and sow lie in the water. Do you hear me?  
I want to receive elite men magnificently, so that they will marvel at my property.  
Go inside and do these things quickly so there's no delay when the cook arrives.  
I'm going to the market to buy up whatever fish is there.

Here we witness what a character of low status (but substantial wealth) understands to be the requirements for being a good host. Not only are a clean dining room and expensive accoutrements important, but in this passage Ballio directly associates meat acquisition with impressing his higher-class guests.<sup>146</sup> Meat is by far the most frequently mentioned food in Plautus, yet meat did not form a regular or substantial contribution to the Roman diet, further suggesting that the purchase and serving of a selection of meats was deliberately ostentatious.<sup>147</sup> Since Ballio is not a sympathetic character in the play, we might interpret that his emphasis on extreme cleanliness, and allusion to silverware and boiled meats is intended to be comic by dint of an obvious excess which is nevertheless slightly gauche. It is not clear what type of cooking is intended with *in aqua iaceant* at line 166; however, it sounds as if all of the meats are to be combined into a single stew.

This listing of foodstuffs, especially the different types of pork, is a common motif in earlier Roman comedies. In several extant fragments of Naevius, we have phrases along the lines of “*praecisum omasum pernam callos glifis glandia*” or “a cutlet, a tripe, a ham, a hide . .

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<sup>145</sup> *Pseudolus*, 162-169.

<sup>146</sup> Xenophanes of Kolophon, according to a fragment in Athenaeus, advocates cleanliness: “the floor is clean as are everyone’s hands and cups” (Athenaeus 11.426c)

<sup>147</sup> Garnsey 1999, 123. See chapter 7.

.. sweetbread.”<sup>148</sup>

The combination of fish, ham, and sweetbreads at a meal also appears in *Stichus* when the young slave, Pinacium, rushes home to his mistress’ house. He immediately begins ordering the other slaves to prepare for the return of their master who has just arrived at the port. He yells:

*Alii piscis depurgate, quos piscatu rettuli,  
Pernam et glandium deicite.*<sup>149</sup>

You others clean the fish which I brought back from my fishing trip!  
Get out the ham and sweetbread!

Such desperation regarding the preparation of food is a common feature of Plautus’ narratives; a sense of haste and chaos likely emphasizes the comic sense of the scene. The stress of the slave character here also reveals the expectations a wealthy master has for this type of meal.

In *Casina*, the *prandium* is an important goal for the paterfamilias, Lysidamus, and his slave, Olympio. When Lysidamus and Olympio are excited about their joint venture to get possession of *Casina*. Lysidamus orders Olympio to go shopping for a fish dinner, as Chalinus looks on, hidden from their view. Lysidamus begins:

*Tene marsuppium,  
abi atque obsona, propera, sed lepide volo,  
molliculas escas, ut ipsa mollicula est.*  
Olympio  
*Licet.*  
Lysidamus  
*Emito sepiolas, lepadas, lolligunculas,  
hordeías.*  
Chalinus  
*Immo triticeias, si sapis.*  
Lysidamus  
*Soleas.*<sup>150</sup>

Take the purse.

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<sup>148</sup> Naevius fragment 104 (Warmington 1936). It appears also elsewhere in Plautus, see for example in the *Curculio* “*pernam, abdomen, sumen sueris, glandium*” (*Curculio* 323). Shero lists such lists appearing in over 40 works of 18 Greek authors, and Plautus. Shero 1929, 68, n. 10.

<sup>149</sup> *Stichus*, 359-360.

<sup>150</sup> *Casina*, 490-495.

Go and buy supplies, hurry! But I want it to be pleasant,  
tender fillets, just as the girl herself is tender.

*Olympio*

As you wish.

*Lysidamus*

Buy cuddle fish, limpet, little squid, warehouse fish.

*Chalinus*

Rather wheatfish, if you are wise.

*Lysidamus.*

Sole.

Here again we have the device of listing multiple similar foods to create a sense of lavishness, and we have an emphasis on the pleasing texture of food. The host is anxious about putting on the proper dinner for the invited guests. Furthermore, *hordeia* and *triticeias* are both made-up fish names, the former perhaps a result of Chalinus' confused exaggeration and the latter a joke to match.

The slave Pardalisca informs the audience of the happenings inside the house and reminds the audience that the women are trying to delay the preparation of the meal. Pardalisca describes the scene in the kitchen:

*omnes festinant intus totis aedibus,  
senex in culina clamat, hortatur coquos:  
'quin agitis hodie? quin datis, si quid datis?  
properate, cenam iam esse coctam oportuit.'*<sup>151</sup>

All over the house everyone is rushing around.

The old man in the kitchen shouts, encouraging the cooks:

"Why don't you start work today? Why don't you give us the food, if you are going to serve it? Hurry up! The dinner should have been cooked already!"

The emphasis on hustle and bustle (*festinat . . . totis . . . properate*) and sound (*clamat, hortatur*) in the preparation of the *prandium* gives this comic description of Lysidamus' desperation an even livelier feel. The audience might imagine pots and pans banging, chopping and dicing, and people rushing around in the homes beyond the *scaena frons* of the theater.

Often in Plautus, the language of food emphasizes the special or unusually delicious nature of the dish. In *Menaechmi*, when Menaechmus I and Peniculus first meet with

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<sup>151</sup> *Casina*, 763-766.

Erotium they request that a meal be prepared for them for when they return from the forum. Either Menaechmus I or Peniculus, presumably with his mouth watering, exclaims:<sup>152</sup>

*Atque aliquid scitamentorum de foro opsonarier,  
glandionidam suillam, laridum pernonidam  
aut sincipitamenta porcina aut aliquid ad eum modum,  
madida quae mihi adposita in mensam milvinam suggerant:  
atque actutum.*<sup>153</sup>

... and some dainties should be purchased at the market;  
Piggy of Sweetbread, or Bacon, son of Ham,  
or pig's head or something like that,  
which when juicy and placed on the table in front of me, would promote my appetite  
to soar immediately.

Plautus' play with Greek patronymic endings at line 210 has inspired a series of creative translations of the passage.<sup>154</sup> This comic emphasis on the lineage of the pork not only draws attention to the object of the speaker's desire, but also makes it more venerable, almost as if "Piggy" and "Bacon" will be honored guests at the dinner. The description of the meat as *madida* draws further tangible emphasis to its appetizing qualities.

In a similarly colorful scene in *Pseudolus*, Ballio hires a cook to prepare his banquet. This cook then derides the way in which other cooks prepare piles of vegetables covered in seasonings such that the diners are made to feel like herbivorous cattle:

*indunt coriandrum, feniculum, alium, atrum holus,  
apponunt rumicem, brassicam, betam, blitum,  
eo laserpici libram pondo diluont,  
teritur sinapis scelera, quae illis qui terunt  
prius quam triverunt oculi ut extillent facit.*<sup>155</sup>

They add sorrel, cabbage, beet, and spinach,  
On which they put coriander, fennel, garlic, parsley.

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<sup>152</sup> Although Gratwick attributes these words to Peniculus, according to an edition by Ribbeck, the OCT edition attributes them to Menaechmus I based on the Palatinus Vaticanus manuscript 1615 from the tenth-eleventh century. See app. crit. Gratwick 1993, 79.

<sup>153</sup> *Menaechmi* 209-213.

<sup>154</sup> "Miss Piggy Sweetbreadson, Master Porky Baconson" in Gratwick (2000, 161); "kernels of boars' neck, or bacon off the gammon" by H. T. Riley (1912); "Sir Pigling Sweetbread," and "Lord Hog Temple Swinehead" in Gowers (1993: 63).

<sup>155</sup> *Pseudolus* 814-818.



They dissolve a pound of asafoetida.  
The roguish mustard is grated, which makes  
the eyes of the graters shed tears before they have grated it.

It seems like the cook's principal criticism in this scene is the serving of vegetables rather than meat and of over-spicing the vegetables to hide their blandness. Yet he too expresses a fondness for *condimenta* when the scene continues with another ingenious and likely humorous listing of ingredients.<sup>156</sup> The cook promotes the importance of appropriate spice selection over that of the base foodstuff and we get a series of convoluted *hapax legomena* which have been both the bane and the nectar of translators.<sup>157</sup> The cook boasts:

*nam vel duceños annos poterunt vivere  
meas qui essitabunt escas quas condivero.  
nam ego cicilendrum quando in patinas indidi  
aut cepolendrum aut maccidem aut secaptidem,  
eae ipsae se patinae fervefaciunt ilico.  
haec ad Neptuni pecudes condimenta sunt;  
terrestris pecudes cicimandro condio aut  
hapalopside aut cataractria.*<sup>158</sup>

Those who eat the food which I have seasoned will live for 200 years.  
For when I put into the saucepan cookedender, or onionmeg, or clownon, or  
beheadish,  
the dishes themselves immediately become warmed.  
These are spices for the flocks of Neptune; the flesh of the earthly animals I  
season with castoroilapple or halfboiledander or allspiceria.

While the only mention of meat in this passage is the lofty reference to fish,<sup>159</sup> we witness the importance of spices in Roman cuisine, perhaps more specifically, *haute cuisine*. The absurdity of the cook's unique herbs contribute to the exoticism of his food preparation. The list of spices appears to be not quite Latin transliterations of Greek nor simply Latin

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<sup>156</sup> Lowe sees this turn as an inconsistency in the cook's argument which reveals the seam between the Greek original and the Plautine addition. Lowe 1985a, 413.

<sup>157</sup> "cicilendrum, or cepolindrum, or mace or saucaptis . . . cicimandrum, hapalopsis, or cataractria" by H.T. Riley (1912); "a dash of cinnatopsis in the pans, or clovitopsis, or sageolio, or allspiceria . . . cassitopsis, pepitilis or capsicoria" by P. Nixon (1932).

<sup>158</sup> *Pseudolus*, 829-836.

<sup>159</sup> The same association between the territories of the gods and food is made in an unknown comedy by Naevius: "*Cocus edit Neptunum Cererem et Venerem expertam Vulcanom Liberumque absorbuisset pariter*" or "The cook ate Neptune, Ceres, Venus too that had known Vulcan, Liber too he swallowed all at one go." Naevius fragment 30a-c (Warmington 1936).

words, but something else completely. Gowers points out several Greek sounds in both the beginnings of several words, including *κοκκος*, a seed, and *κικι* the castor oil tree, and the endings *-ενδρον*.<sup>160</sup> Roberto Danese argues that the addition of a velar *-l-* before this ending adds a “touch of rustic Sabine” to the Greek. For Danese, this multi-ethnic, multi-linguistic allusion contributes to the cook’s snobbery and the ostentation of his meal.<sup>161</sup> It is not so clear that a contemporary audience would have been able to precisely identify such linguistic intricacies; however, it is easy to imagine an audience having a more non-specific understanding of their quasi-foreignness. James Innes Miller sees a connection between the word *maccis* and mace from South-East Asia noting that the spices have “an authentic oriental ring.”<sup>162</sup> The concerted effort to create not just food imagery, but to activate some other sensory response to food confirms the importance of flavor. Later in the same scene the cook continues:

*Quin tu illos inimicos potius quam amicos vocas?  
nam ego ita convivis cenam conditam dabo  
hodie atque ita suavi suavitae condiam:  
ut quisque quidque conditum gustaverit,  
ipsum sibi faciam ut digitos praerodat suos.*<sup>163</sup>

Why don't you invite your enemies rather than your friends?  
For I'll give the guests a banquet which is so flavorful  
today and I'll season it with such pleasant sweetness,  
that I'll make anyone who tastes each thing I've seasoned  
nibble off his own fingers.

This tangible description of food fits in with the meta-theatrical qualities of *Pseudolus*. Plautus adds self-conscious elements to the dialogue (his “finger lickin’ good” description) to heighten the comedy and, consequently, the audience’s pleasure. Emily Gowers observes the alliterative nature of lines 882-883 as reminiscent of the pleading nature of Plautus’ pimps’ speeches, linking the themes of the pleasure of eating and sex.<sup>164</sup>

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<sup>160</sup> Gowers 1993, 103-104.

<sup>161</sup> Danese 1997, 528-529.

<sup>162</sup> Miller 1998, 9, 58-60.

<sup>163</sup> *Pseudolus*, 880-884.

<sup>164</sup> Gowers 1993, 101.

Though Gowers' work highlights how Plautus' food-related playfulness suggests that he does not wish to take himself seriously (he compares his plays to the little snacks of the theater),<sup>165</sup> we can still understand his narratives as societal models. Their recycled and reworked plots do not teach the audience anything that it does not already know, but the plots do re-enforce values, sometimes by challenging them and sometimes by mocking people who do not fit these values. Plautus' works also constantly exercise common thematic tropes and archetypal characters. These are actually tropes from Greek plots brought to the Roman stage, but are likely meaningful to a Roman audience. Stock characters and structures like the double plot, mistaken identities, the separation and re-unification of lovers all loom large and somewhat monotonously in ancient theater.

Similarly, Plautus' parasite characters are an almost constant feature of his plays. This character type has Greek roots, as recent scholarship on parasites as opportunistic beggar/philosophers has demonstrated, but the parasite's development into a "milder" character who desires to be part of the normative elite only materializes in Roman new comedy.<sup>166</sup> Through their persistent desire for a dinner invitation by loitering and flattering, they provide a demonstration of the extremes of gluttony and bad taste, and the challenges of hosting the proper banquet.

Early on in *Menaechmi*, we meet Peniculus, the parasite who leeches off Menaechmus I and is hoping for a dinner invitation. He explains *Iuventus nomen fecit Peniculo mihi, ideo quia mensam, quando edo, detergeo*. "The young men call me Peniculus because I wipe the table clean when I eat."<sup>167</sup> He goes on to suggest that the best way to keep a criminal captive is to sit him in front of a table of food. Peniculus then describes how wonderful a host Menaechmus I is since:

*ipsus escae maxumae  
cerialis cenas dat, ita mensas exstruit,  
tantas struices concinnat patinarias:  
standumst in lecto, si quid de summo petas.*<sup>168</sup>

He, with great (meat?) dishes

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<sup>165</sup> Gowers 1993, 60.

<sup>166</sup> Gilula 1995, 389; Tylawsky 2002.

<sup>167</sup> *Menaechmi*, 77-78.

<sup>168</sup> *Menaechmi*, 100-103.

gives dinners fit for Ceres, the tables are piled up so high,  
the dishes are arranged in such heaps:  
that you need to stand on the couch if you want to reach something at the top.

Peniculus is expecting to be well fed at Menaechmus I's house, and similarly, the audience is expecting Menaechmus I (whom has not yet been introduced in the play) to be a very wealthy and generous man.<sup>169</sup> This expectation creates humor later in the play when we meet the hen-pecked Menaechmus I and learn of his unsuccessful scheming against his wife.

In the *Stichus* dialogue with the parasite, Gelasimus, and his constant begging for a dinner invitation make up the majority of the play. Gelasimus claims poverty and a destitute family background and constantly begs the main characters (the two sisters and their slaves) for food. Then when their husbands, Epignomus and Pamphilus, arrive home and have become wealthy, Gelasimus is even more excited about the goods he is sure to be granted.<sup>170</sup> When he finally confronts Epignomus for an invitation, Epignomus rejects him explaining:

Epignomus  
*Si possim, velim;*  
*verum hic apud me cenant alieni novem.*

Gelasimus  
*Hau postulo equidem med in lecto accumbere:*  
*scis tu me esse unisubSELLI virum.*

Epignomus  
*At ei oratores sunt populi, summi viri;*  
*Ambracia veniunt huc legati publice.*

Gelasimus  
*Ergo oratores populi, summates viri,*  
*summi accubent, ego infimatis infimus.*

Epignomus  
*Haud aequomst te inter oratores accipi.*

Gelasimus  
*Equidem hercle orator sum, sed procedit parum.*

Epignomus  
*Cras de reliquiis nos volo. multum vale.*<sup>171</sup>

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<sup>169</sup> Perhaps the more cynical and knowing audience members are also expecting that Peniculus, the self-described parasite, is not going to have his wishes satisfied.

<sup>170</sup> *Stichus*, 375-382.

<sup>171</sup> *Stichus*, 484-496.

*Epignomus*

If it were possible, I would want to; but there are nine other people coming to dine at my house.

*Gelasimus*

Certainly, I hardly ask that I recline on a couch.  
You know that I'm a man for the lower seats.

*Epignomus*

But these are orators of the people, the highest men.  
They come here as public ambassadors from Ambracia.

*Gelasimus*

Therefore, let then the orators of the people, the highest men,  
recline on high; I, the lowest man, will go in the lowest place.

*Epignomus*

It is not proper for you to be entertained among orators.

*Gelasimus*

Indeed, by Hercules, I am an orator, but little good it does me.

*Epignomus*

Tomorrow I want us to dine on the leftovers – farewell.

Gelasimus has low expectations for his position in the dining room – preferring to eat well than to be treated as important.<sup>172</sup> Despite these low expectations, Epignomus is not willing to have him present at all among his guests for fear of social reprisal. The banquet occurs off stage while Gelasimus is left alone exclaiming to himself:

*viden ut annonast gravis?*

*viden, benignitates hominum ut periere et prothymiae?*

*viden ridiculos nihili fieri, atque ipsos parasitarier?*

*numquam edepol me vivom quisquam in crastinum inspiciet diem;*

*nam mihi iam intus potione iunceae onerabo gulam,*

*neque ego hoc committam, ut me esse homines mortuom dicant fame.*<sup>173</sup>

Don't you see how expensive food is?

Don't you see that the kindness and philanthropy of men has perished?

Don't you see wit has become nothing, and they themselves have become parasites?

By Pollux, never will anyone see me alive tomorrow.

For now inside I will load my gullet with potion made of rushes

so that I will not incur accusations from people that I died of hunger.

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<sup>172</sup> This is a very early reference to the importance of seating hierarchy in the Roman dining room. This is articulated in Plutarch (*Moralia* 619B-619F) and alluded to by Horace (*Satires* 2.8).

<sup>173</sup> *Stichus*, 632-637.

Plautus' lively use of food in his plays exercises several values likely to have meaning for a Roman audience. There is a strong emphasis on meat, especially the many varieties and forms of meat. The wordplay in several of the pork and fish examples described here is also reminiscent of Ennius' listing of specific fish species – a mocking version of the ideal ingredients. Instead of being knowledgeable about real diverse foodstuffs, Plautus' characters make up unusual-sounding dishes which must be acquired to be a proper host. In this way we can imagine Plautus appealing to an audience's expectation of lavish *opson* as well as critiquing this need. The parasite character, conversely, serves as both a farcical character with which to contrast well-behaved hosts and guests and echoes, perhaps, some real desperation among certain classes both to ease their hunger and to participate in an exclusive milieu of commensality.

### 2.3.2. Lucilius and Satire<sup>174</sup>

The word *satura* is related to food: the *satura lanx*, or full dish, was an offering of mixed fruit for the gods.<sup>175</sup> In a similar way, satire as a literary genre is a mixed offering of themes and styles – especially in its earlier forms. Gaius Lucilius, credited as the originator,<sup>176</sup> or at least primary developer, of satire was both praised and maligned for his apparently heterogeneous, or “inharmonious” writing style. His verses sounded wordy and unpolished.<sup>177</sup> Despite Horace's later criticism of Lucilius, we see how similar Horace's chosen themes and even individual lines are to his predecessor's writing.<sup>178</sup> Gian Biagio Conte attributes Lucilius' apparent roughness in style to a “lively nonconformity” and an attempt at realism.<sup>179</sup> Whether or not this is the case, Lucilius' 30 books of satires became the paradigm for the complicated themes around foodways in the comedic medium.

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<sup>174</sup> All the translations of Lucilius are from the Loeb (Warmington 1938) with slight emendations by me for clarity. The fragment citations are denoted with “M” for Friedrich Marx's edition (1904) and with “W” for Eric Herbert Warmington's edition (1938).

<sup>175</sup> Gowers 1993, 109–110; Conte 1999, 113–114. On satire as a specifically Roman genre, traditionally we have Quintilian: “*satura quidem tota nostra est*” (10.1.93).

<sup>176</sup> Horace, *Sermones* 2.1.62–64.

<sup>177</sup> Horace, *Sermones* 1.10.1–14.

<sup>178</sup> Shero 1923, 129.

<sup>179</sup> Conte 1999, 116.

Gaius Lucilius was born in 180 BCE<sup>180</sup> in Suessa Aurunca, on the border of Latium and Campania. It is not clear if he was a Latin or a Roman citizen.<sup>181</sup> He was of equestrian rank and following his family's migration to Rome, the family gained senatorial status (his brother became a senator). His fragments suggest that he owned land in mainland Italy, Sicily, and perhaps Sardinia.<sup>182</sup> Lucilius was clearly part of the landed intellectual and political elite in the city of Rome, and seems to have chosen not to hold political office: he "could enjoy the combination of internal connections and external detachment – a useful mix for satire."<sup>183</sup>

There are just over 1000 fragments of a line or more attributable to Lucilius.<sup>184</sup> The sample is questionable since the fragments were usually collected and copied for their linguistic peculiarity by later Latin grammarians.<sup>185</sup>

While the focus of recent scholarship on satire has been on the prolific writing of Horace, with some attention to how his work may have been influenced by Lucilius, Lucilius' own work has been largely deemed too fragmentary to conclude much about his place in Republican cultural life.<sup>186</sup> Essentially scholars have predicated the interpretation of Lucilian poetry on the basis of Lucilius' political leanings – with some identifying him as a conservative, and others as a populist in favor of innovation.<sup>187</sup> Rather than being definitive on Lucilius' personal views, it is perhaps best to remember Catherine Keane's

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<sup>180</sup> So says Warmington (1938, ix) and several others as the typical emendation of Jerome's 148 BCE assertion. Gruen reminds us of the problems with this emendation and also of the other proposal of 168 BCE, but suggests that it is adequate to know that Lucilius was born around the first quarter of the 2<sup>nd</sup> century. Gruen 1992, 275–276; Conte 1999, 112.

<sup>181</sup> Marx 1904, xix and Gruen 1992, 278 contra Warmington 1938, ix and Cichorius 14–22.

<sup>182</sup> Warmington 1938, x.

<sup>183</sup> Gruen 1992, 280.

<sup>184</sup> Though Marx's edition has 1378 fragments (Marx 1904), Warmington includes only 1272 as actual quotations which are genuinely Lucilian (Warmington 1938). Raschke (1987, 309) calls Warmington an "eminently sensible" editor and uses both his and Marx's fragment numbers. Everyone else uses only Marx's numbers while seeming to agree (not explicitly) with Warmington's order of fragments and books.

<sup>185</sup> The majority of fragments come from Nonius Marcellus. Scholars who study Nonius are not in agreement regarding his reliability as a documentarian and fragment compiler. This is partially due to that fact that he delegated the compiling of Lucilius' excerpts to at least eight assistants. John G. Griffith has expressed confidence in Nonius' accuracy, at least in terms of book attribution, and he states that Nonius was very careful in his assignation of scribes; however, Lowell Edmunds and others complain of his many inaccuracies and inconsistencies. Griffith 1970, 65; Edmunds 1992, 224–225.

<sup>186</sup> Fiske 1920; Krenkel 1972; Gruen 1992. Yet Ferriss-Hill remarks at the "markedly Lucilian quality" of the character in Horace's Satire 1.9. People seem to get a sense of the kind of verse Lucilius writes even from the fragments. Ferriss-Hill 2011, 433.

<sup>187</sup> Raschke 1987, 304; Gruen 1992, 274–282; Jacotot 2010, 222; Ferriss-Hill 2010, 442.

suggestion about Roman satire: the genre of satire creates rather than reflects external reality.<sup>188</sup>

Lucilius was writing in an anxious and unstable historical period. William Charles Kormacher muses, “Lucilius, the first of the four great satirists, living at a time when Rome was not yet quite sure of her ultimate world destiny, reflects, as it were, some of that uncertainty in his own language and style.”<sup>189</sup> The genre of satire would become an excellent medium in which to exercise the Latin language and to sprinkle in Greek words since its very nature is playful hodge-podge. Lucilius, though explicitly resistant to, and at times outright critical of, Hellenism, does employ Greek words periodically.<sup>190</sup> There are 182 Greek words in the Lucilian corpus.<sup>191</sup> According to Korfmacher’s reckoning, 30 of these words, or 16%, are culinary words, while 8, or 5% are medicinal and the remaining are philosophical, rhetorical, derogatory, or have no Latin equivalent. He attributes the large proportion of culinary words from Greek to a “quickenning influence” of Greek culture in Lucilius’ time from Magna Graecia.<sup>192</sup> In a slightly amusing 1930s era judgment, Kormacher remarks, “Luxury of table, lavish ostentation in house and furnishings, softer and easier modes of life and living were among the less lovable contributions from the Hellenic peoples.”<sup>193</sup> In particular, Lucilius used a number of Greek words that have no appropriate Latin equivalent. This is the case with names of fish species. Much like Ennius’ cataloguing poem, Lucilius mentions: “*amias* (fr. 6), or tunnyfish; the *acharne* (fr. 50) and *helops* (fr. 1276), both of them varieties of sea fish; the *cobius* (fr. 938), or gudgeon, apparently of little worth; the *peloris* (fr. 132), or shell-fish.”<sup>194</sup> Fish, as we have seen, feature frequently in comedic genres.<sup>195</sup>

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<sup>188</sup> Keane 2002, 10. This is more useful and positive approach than the view taken by William Anderson in his review of a recent conference on Lucilius. Anderson concludes that the majority of papers regurgitated already well-worn topics and the few which did cover new ground had over-stretched the evidence Lucilius’ provides about his own opinions or era. Anderson 2003, 154.

<sup>189</sup> Korfmacher 1934, 453.

<sup>190</sup> Lucilius rails against Albucius whom he sees as too Greek-loving at fragment 87-93 in Warmington (Marx 88-94).

<sup>191</sup> This includes everything in Marx’s edition of the fragments, and therefore would likely be slightly less if we were to believe Warmington’s removal of several hundred fragments from the corpus.

<sup>192</sup> Korfmacher 1934, 457.

<sup>193</sup> Korfmacher 1934, 457.

<sup>194</sup> Korfmacher 1934, 457-458.

<sup>195</sup> Gilula 1995, 390-392.



L.R. Shero was the first scholar to focus on the prevalence of food allusions in Roman satire. He emphasizes the contributions of Lucilius, noting that we can get a relatively full picture of Lucilius' themes and perspectives when we read his fragments along with the complete works of Horace.<sup>196</sup> The representation of dining and food behavior has been thoroughly examined in Horace, Persius, and Juvenal;<sup>197</sup> it is worth considering carefully their precursor. At least three individual satires in the extant 30 books of Lucilius have a dinner party as their main setting. The coherence of the storyline and the action of the dinner depends somewhat on the editing choices of the modern editor and on our reading between the lines, so-to-speak, with the echo of Horatian and Juvenalian dinner satires as a model.

Book V, Satire I, features a contrast between Gallonius, apparently a gluttonous eater from the city, with a country host, Laelius. The 32 unconnected fragments attributed to this piece hang together based on the descriptions of two late Roman grammarians. Charisius explains, "*Lucilius in V deridens rusticam cenam enumeratis multis herbis...intubus praeterea pedibus praeternsus equinis.*" "Lucilius in the fifth book, deriding a country dinner, after giving a list of many potherbs says...'moreover endive that is spread out before the feet of horses.'"<sup>198</sup> Pseudo-Acro says,

*Haud ita pridem Galloni praeconis erat acipensere mensa infamis. "Gallonis quidam fuit praeco, qui habebat apparatus convivium, quem Lucilius etiam pulsat. His etiam acipenserem piscem suis conviviis exhibebat."*

regarding Gallonius in Horace: "a certain Gallonius was an auctioneer who held feasts with rich menu; Lucilius also kicks at him. He even used to put on a show of sturgeon fish at his feasts."<sup>199</sup>

This *acipenser*, likely sturgeon<sup>200</sup> appears in Horace's Satire II, 2. In the 1<sup>st</sup> century CE Pliny remarks that although the *acipenser* had been a popular food with "the ancients," by his

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<sup>196</sup> A major concern of some of Shero's work is to show how Horace was influenced by Lucilius and how some of his dinner party satires were *contaminations* of Lucilius' satires (Shero 1923, 129-130). I am less interested in issues of textual originality, and more in how we can use Horace to read Lucilius in the 2<sup>nd</sup> century BCE. The obvious problem of reading Lucilius through Horace is that Horace's own agenda can bias our understanding of Lucilius.

<sup>197</sup> Griffith 1970; Courtney 1980; Gowers 1993; Freudenburg 1995; Caston 1997; Lowe 2010; Ferriss-Hill 2011.

<sup>198</sup> Charisius *G.L.* I, 100, 26 as W 218, M 193.

<sup>199</sup> Pseudo-acro ad Horace II, 2, 47.

time, "it is held in no esteem, which I am the more surprised at, it being so very rarely found."<sup>201</sup> If this retrospective comment is to be believed, we should understand *acipenser* as an impressive thing to display at a feast. The mention of Gallonius' interest in sturgeon and in lavishness in general is emphasized in another reference to Lucilius' satire by Cicero.

We read:

*O lapathe, ut iactare, nec es satis cognitus qui sis! In quo Laelius clamores sophos ille solebat edere compellans gumias ex ordine nostros. "O Publi, o gurges Galloni, es homo miser" inquit. "Cenasti in vita numquam bene, cum omnia in ista consumis squilla atque acupensere cum decimano." . . . [quid bene?] "bene cocto, et condito, sermone bono et, si quaeris, libenter."*

O sorrel, how you are a plaything of scorn, and men know not well enough what you are worth. About this plant Laelius our 'savant' used to shout praises when he was reproaching all our gluttons one by one. "O Publius, O glutton Gallonius, you're a poor fellow," says he. "You've never dined well in your life, even when you wasted all you had on that lobster<sup>202</sup> and on that sturgeon, in size a number ten." . . . What does "well" mean? Laelius will tell us: "with well cooked and well seasoned food, pleasant conversation, and, if you want to know, willingly."<sup>203</sup>

This appears to be a clear reference to the idea of good taste. Even if sturgeon is an expensive food, as it seems to be, its presence does not make the meal. Rather, the meal is deemed to be a good one when it has both the right treatment of the food and the right guests. In his commentary on Horace's imitation and adaption of Lucilius, George Fiske comments dismissively "That the raconteur in such banquet satires would attack the wretched mixture of extravagance, bad taste, and sordidness of the host was an almost inevitable commonplace."<sup>204</sup> Such tropes were not, in fact, commonplace at the time that Lucilius was writing them. They developed in his period and were then elaborated and recycled in later contexts. We have seen the first examples in Ennius perhaps echoing Archestratus. The idea of sophisticated eating or culinary planning is reflective of a general

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<sup>200</sup> This is the translation of this word everywhere else in Warmington's edition and Dalby (2003) cites sturgeon as the modern *acipenser*.

<sup>201</sup> Pliny *NH* 9.27. "*nullo nunc in honore est, quod equidem miror, cum sit rarus inventu*" Dalby (2003, 312) explains that by about 200 CE, *acipenser* seems to have recovered its popularity.

<sup>202</sup> In Warmington's 1938 version, this word is translated as "shrimp." The Oxford Latin Dictionary says it refers to a crustacean of any kind. *Oxford Latin Dictionary* s.v. **squilla**, ~ae (pg 1812)

<sup>203</sup> W 200-207, M 1235-40, 1122-1123.

<sup>204</sup> Fiske 1920, 411.

sense of increased sophistication or knowledge culture among the Roman elite in this period. Nathan Rosenstein observes that within the sphere of public presentation, oratorical skill was reaching new heights of sophistication in the 2<sup>nd</sup> century: “It was no longer enough simply to be a forceful speaker like Cato; one needed considerable coaching and practice in order to construct the arguments and command the rhetoric that would persuade.”<sup>205</sup> He understands this refinement in speaking to be connected to the influence of Hellenic teachers and philosophers. In the same way, increasingly elaborate requirements for hosting were being articulated: “Rather, an increasingly multifaceted and elaborate aristocratic ethos was evolving out of a more unitary system of values as Roman society and culture evolved along similar lines.”<sup>206</sup>

The remaining fragments which modern editors have attributed to this particular satire are difficult to reconcile with its general theme. They are quite generic and their tone is similar to that of other Lucilian fragments. For this reason they are addressed below with Lucilius’ other fragments.<sup>207</sup>

Book XIV seems to be the story of an inept host serving food in an improper fashion. The ineptitude is perhaps heightened because of the mention of appropriate food which is poorly done in some way. For example, “*caesus allium olit*” “the cheese stinks of garlic”<sup>208</sup> and “*macrosque palumbes*” “and lean ring-doves.”<sup>209</sup> In Horace, ring-doves are delicacies.<sup>210</sup> They are usually counted as the fattest of the doves, yet here their lean state suggests that they have been underfed.<sup>211</sup> In the same satire we have: “*anseris herbilis virus*” “the poisonous stench of grass-fed goose.”<sup>212</sup> While the “poison” is likely an exaggeration, feeding a goose with grass instead of grain suggests the host’s parsimony. Shero suggests a further comparison with Horace’s critique of the host Nasidienus in his dinner party in

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<sup>205</sup> Rosenstein 2006, 376.

<sup>206</sup> Rosenstein 2006, 378.

<sup>207</sup> Warmington and Marx’s reconstruction of the satire places several of the same fragments in this satire, but in a different order, and Marx does not include the Cicero reference. Shero is more critical of attributing too many fragments to this satire; however, he regards several of what I read as the more random and generic attributions as confidently part of this piece because of their “mock heroic” tone similar to phrases about vegetables in Athenaeus. This seems exaggerated (Warmington 1938, Marx 1904, and Shero 1929).

<sup>208</sup> W 481, M 454-5.

<sup>209</sup> W 479, M 453.

<sup>210</sup> Shero 1923, 130.

<sup>211</sup> Warmington 1938, 153, n. *b*

<sup>212</sup> W 480, M 1106.

Satire 2.8 when he reads the lines, "*cum illud quid faciat quod manducamur in ore*" "when what we munch in the mouth has some result."<sup>213</sup> He suggests that this is a farcical "vulgar" philosophizing and "shallow and fatuous moralizing" by the host in the manner of Nasidienus or Patronius' Trimalchio.<sup>214</sup> These lines also conjure both flavor and texture.<sup>215</sup>

This satire also seems to suggest the importance and preciousness of meat at the dinner, since two fragments refer to people being eager for and then not receiving meat: "*cenam' inquit 'nullam neque divo proseciam ulla'*" that is, "no dinner' says he, 'nor any cutlet offered to a god'"<sup>216</sup> and "*Dilectum video studiose vulgus habere*" "I see that the common crowd is eagerly holding a choice cut."<sup>217</sup> This stress on the desire for meat seems to be a repeated motif throughout Roman comedic works. A fragment of Caecilius Staius' play *Asotus*, or *The Debauched*, contains the phrase, "*iamdudum depopulat macellum*" or "He has long been pillaging butchers' shops."<sup>218</sup> Similarly, a character in his play *Harpazomene*, the Abducted Maiden, exclaims: "*hunc collum Ludo praecidi iube!*" "Order a cutlet of that neck to be carved for sport!"<sup>219</sup> Although these phrases are completely without context, we do get a sense of both desperation and excitement surrounding the acquisition and consumption of meat.

Next, in Book XXX, we have 10 fragments describing a dinner which may take place at a military camp.<sup>220</sup> Four of them refer to over-indulgence in food or drink: "*Conficit ipse comestque*" "He consumes it and gobbles it up himself,"<sup>221</sup> the redundancy of the line seems to be for poetic emphasis. He explains "*serus cum medio ludo bene potus recessit*" "when at a late hour he (unknown who) withdrew pretty drunk from the midst of the fun."<sup>222</sup> Then we have a reference probably to the host: "*cuia opera Troginus 'calix' per castra cluebat*" "through whose doings Troginus was called 'Pint-pot' throughout the camp."<sup>223</sup> These types

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<sup>213</sup> W 482, M 456.

<sup>214</sup> Shero 1923, 130, 135.

<sup>215</sup> Just as "mouth feel" can be an important component of wine tasting.

<sup>216</sup> W 484, M 473.

<sup>217</sup> W 482, M 461.

<sup>218</sup> Caecilius fragment 11 (Warmington 1935).

<sup>219</sup> Caecilius fragment 51 (Warmington 1935).

<sup>220</sup> This is Warmington's conjecture based on fragment 1021.

<sup>221</sup> W 1019, M 1091.

<sup>222</sup> W 1020, M 1070.

<sup>223</sup> W 1021, M 1069.

of comments have a playful quality and also suggest a critique of the people involved. This moralistic tone is explicit in the next fragment: "*Scito etenim bene longicum mortalibus morbum in vino esse ubi qui invitavit dapsilius.*" "For you know well that in wine there lies a lingering illness for mortal men, when someone has entertained himself too richly."<sup>224</sup> Such a statement could also be part of the host's excuse for offering a less-than impressive spread of food. Later in the satire, someone remarks: "*pulmentaria ut intibus aut aliqua id genus herba et ius maenarum, bene habet; sed mictilis haec est.*" "relishes such as endive or some plant of that kind, and anchovy-sauce – that's all right; but this is piddling stuff."<sup>225</sup> The fish reference here is meaningful, since *maena* is a type of salt-water fish which may have negative connotations. Plautus, Martial, and Persius call individuals *maenae* as an insult.<sup>226</sup> Nonius, who reported this fragment, explains that it refers to *paupercula pulmentaria*, or poor relishes. Unfortunately, capturing the overall tone of the fragment is made more difficult by the fact that *mictilis* is a *hapax legomenon*.<sup>227</sup> Its meaning is guessed either to be a "diuretic" related to the verb meaning "to urinate" or related to *micula*, meaning "morsel" or "crumb."<sup>228</sup>

Also in this satire we have a few remarks on the state of the room and the guests' behavior. The narrator (understood to be Lucilius) observes the rather humble laying out of the dining area: "*unus consterni mobis vetus restibus aptus*" "one couch to be spread for us, an old one tied with cords."<sup>229</sup> "*culcitulae accedunt privae centonibus binis*" "There were added little mattresses, our very own, to two patchwork coverlets for each."<sup>230</sup> "*Clauda una est pedibus carsiosis mensula vino*" "For the wine there was one rickety little table on rotten legs."<sup>231</sup> It is not clear here whether these descriptions of worn furniture are meant to be positive comments on the surroundings (as in, they are not overly lavish, or they are

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<sup>224</sup> W 1022, M 1073-4

<sup>225</sup> W 1032-33, M 1076-1077

<sup>226</sup> Martial 12.32.15; Persius 3.76; Pl. *Poenulus* 1312. The English translations of the word, on the other hand, are various and range from pilchard, a "commercially valuable" fish (H.T. Riley's 1912 translation of *Poenulus*), to mendole or cackerel (Warmington's 1967 revision of Lucilius), to anchovy, substantially confusing the issue by inserting modern English values and impressions of fish into the mix.

<sup>227</sup> Nonius 137, 26.

<sup>228</sup> *Oxford Latin Dictionary* s.v. **mictilis**, ~is (pg 1108).

<sup>229</sup> W 1025, M 1060.

<sup>230</sup> W 1026, M 1061.

<sup>231</sup> W 1027, M 1062.

appropriate to army men), or whether they are meant to be negative (as in, not decorative enough). When compared to the tone and descriptions of dining couches and other furniture in other Lucilian fragments, it appears that the preceding description is meant to be a positive judgement. While the host and others are drinking and gobbling, and the food meagre, the surroundings are an honest attempt at comfort in a temporary setting away from home. This may also be a way to contrast present urban comforts with past rustic experience.

Finally, Book III is written in the form of a letter to a friend and narrates a trip Lucilius took to Sicily between 120 and 116 BCE. Over the course of the story he describes the places and people he passed on the way South from Rome; several of the fragments refer to specific towns along the via Appia, including Capua and Salernum. Lucilius describes the food he encountered (in one or more sittings). "*Ostrea nulla fuit, non purpa, nulla peloris.*" "There was no oyster, no purple fish, no clam"<sup>232</sup> and "*asparagi nulli*" "no asparagus."<sup>233</sup> Here is yet another example of the naming of fish species and perhaps also the suggestion that a choice of fish represents a standard requirement at a dinner hosted for guests. Asparagus may here have a quality of refinement as a desirable vegetable. Lucilius goes on to explain the difference of taste of the locals: "*nam mel regionibus illis incrustatus calix rutai caulis habetur*" "for in those regions the dirt-coated pot and the stalk of rue are esteemed as honey-sweet."<sup>234</sup> Though we do not know where exactly these observations are meant to occur, it is interesting that Lucilius' own family origins are along this road south. His desire to describe the poor offerings is perhaps meant to be a contrast to the urban gourmards of the city from which he is departing. There is no hint of ridicule or criticism in these lines, except perhaps in a fragment which Warmington suggests that Lucilius describes the result of eating this "simple fare" with the explanation: "*exhalas tum acidos ex pectore ructus*" "then you puff out sour belches from your chest."<sup>235</sup>

Beyond these few books with semi-coherent scenes, several thematic and linguistic trends emerge from the disconnected fragments of the Lucilian corpus. The brevity of the

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<sup>232</sup> W 126, M 132.

<sup>233</sup> W 127, M 133.

<sup>234</sup> W 128-9, M 134-5.

<sup>235</sup> W 130, M 136.

fragments means that it is often difficult to read his tone: he may mention a certain vegetable, but his derision or praise is not legible. Firstly, fish, as we have seen, are commonly referred to by Republican authors. Beginning with Ennius' *Hedyphagetica*, the specificity with which fish are mentioned suggests that this type of knowledge was held, or at least displayed, as an impressive thing. The knowledge of fish in the Italian peninsula seems natural given the access to both salt-water and fresh water lake and river fish. The association of fish with specific locations, however, is not always consistent. In another Lucilius fragment, a guest at a dinner party expresses very specific tastes in fish:

*Fingere praeterea, adferri quod quisque volebat; illum sumina ducebant atque  
altilium lanx, hunc pontes Tiberinus duo inter captus catillo.*

... he ordered to be dished up and brought to the table what each one wanted. This man's fancy was taken by pig's paps and a dish of flattened fowls, while the other's was taken by a licker-fish of the Tiber, caught between the two bridges.<sup>236</sup>

Macrobius, who was the recorder of this fragment, explains that Lucilius is referring to a "*poeta ostendit scire se hunc piscem egregii saporis qui inter duos pontes captus esset*" "fish of especially good taste caught between the two bridges."<sup>237</sup> This is a surprising interpretation if we imagine that these two bridges are the Pons Sublicius and the Pons Aemilius; the *cloaca maxima* emptied in between.<sup>238</sup> Furthermore, in several other authors' references to fish from the Tiber, there is a negative implication precisely because of the association with the *cloaca*. In a problematic line from Juvenal's fifth satire, Virro is offered "*glacie aspersione maculis Tiberinus, et ipse uernula riparum, pinguis torrente cloaca et solitus mediae cryptam penetrare Suburae*" "fish of the Tiber speckled with spots, enslaved by the shores, fattening itself amid the flowing sewers and used to finding its way into the recesses of the middle of the Subura."<sup>239</sup> The fish feeds off of waste from the *cloaca*. In the 2<sup>nd</sup> century CE, Galen refers to the perch<sup>240</sup> of the Tiber as an "inferior river fish."<sup>241</sup> In Pliny and Columella *lupus*, or bass, from the Tiber does not have a negative connotation, so A.Y.

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<sup>236</sup> W 601-603, M 1174-1176.

<sup>237</sup> Macrobius *Saturnalia*, III, 16, 17.

<sup>238</sup> This is the suggestion of Warmington.

<sup>239</sup> Juvenal 5, 104-106.

<sup>240</sup> Galen's *πέρκη* is a "river fish" or "perch" according to Liddell and Scott s.v. *πέρκη*, ~ης pg 1394.

<sup>241</sup> Galen 3.29 is discussed in Thompson 1938, 166 and Wilkins 2003, 373.

Campbell concludes that Lucilius is referring also to *lupus*, which differs from Juvenal, and that Galen's comments which must refer to "lower grade pike."<sup>242</sup> If this interpretation is correct, then Lucilius' fragment demonstrates again the importance of precise knowledge of the source of one's food and its quality. It is also an early example of what Marx refers to as "unnecessary choice" in banquets as a way of displaying ostentation.<sup>243</sup>

In Lucilius we have the range of fish choice from the unappetizing to the expensive: "*ad cenam adducam, et primum hisce abdomina tunni advenientibus priva dabo cephalaeaque acarnae*" "I'll bring them to dinner, and when they reach their places, I'll begin by giving them the belly of a tunafish, one each, and bits of fish heads."<sup>244</sup> "*Occidunt, Lupe, saperdae te et iura siluri.*" "O Bass, juices of the sapor-fish and the sheatfish are the death of you!"<sup>245</sup> Warmington understands this to be a God forecasting the death of the bass. Or conversely: "*Hoc fit idem in cena; dabis ostrea milibus nummum empta.*" "This same thing comes about at a dinner; you will present oysters bought for thousands of sesterces."<sup>246</sup> An interest in fish throughout ancient literature inspired Nicholas Purcell to attempt to capture the overall essence of fish references. While the specific cultural context and genre is perhaps more essential to our interpretation of fish references than he allows, his most astute observation is that fish are part of an "economy of luck;" it is related both to poverty and bad luck as well as preciousness and wealth.<sup>247</sup>

Beyond food sourcing, there is also a great emphasis on the quality of food. This is related closely to a physical sense of the food. Smell, for example, comes out explicitly several times and is implied in others.<sup>248</sup> Foods seem to have positive or negative associations depending on their smells. For example, the onion is universally criticized. In his comedy entitled, *The Circumcised*, Gnaeus Naevius writes: "*Ut illum di perdant, qui*

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<sup>242</sup> Thompson 1938, 167; Campbell 1945, 47. Xenocrates of Aphrodisias, a Greek writer from the 1<sup>st</sup> century CE refers to fish from the Tiber positively along with many other fish including *muraena* and oyster. Xenocrates *Περί της από Ενύδρων Τροφής* IX, 82.

<sup>243</sup> Shero 1923, 132.

<sup>244</sup> W 50-51, M 49-50.

<sup>245</sup> W 46, M 51-2. The *saperda* is an unknown species of fish, but which is "*genus pessimi piscis*" according to Paul. *Oxford Latin Dictionary* s.v. **saperda**, ~ae (pg 1690). The *siluri* are revised by Warmington in his 1967 edition to a "Nile fish" probably because of Pliny's reference to "*silurus in Nilo*" (*Nat. Hist.* 15.51).

<sup>246</sup> W 465-66, M 440-41.

<sup>247</sup> Purcell 1995a.

<sup>248</sup> The focus on fish may also be related to this olfactory interest.



*primum holitar protulit caepam!*” “Well, God damn him – the kitchen gardener who first produced an onion!”<sup>249</sup> and similarly, “*cui caepe edundod oculus alter profluit*” “who has one eye streaming because he's eating an onion.”<sup>250</sup> Lucilius, in his Book V, Satire II, already discussed, also clearly informs us of his opinions on the onion: “*flebile cepe simul lacrimosaeque ordine tallae*” “and likewise the weepy onion and tearful onion-peels one after the other.”<sup>251</sup> He observes, “*lippus edenda acri assiduo ceparius cepa*” “an onion-eater, bleary-eyed through eating again and again the pungent onion.”<sup>252</sup> Then, in a fragment with very little clear context, “*Hoc aliud longe est' inquit qui cepe serebat.*” “‘This is quite another thing,’ said the man who was planting onions.”<sup>253</sup> Similarly, the fragment regarding garlic-stinking cheese is another random mention of smell. In Ennius’ own satires, he too emphasizes a dislike of sharp smells and tastes, especially of the onion: “*neque ille triste quaeritat sinapi neque caepe maestum*” “He seeks and yearns neither for harsh mustard nor for the weepy onion.”<sup>254</sup> From all of these references we get a sense of a real awareness of the physical effect of both the preparation and consumption of this type of food. The emphasis on weeping is interesting because in each case weeping is connected to eating rather than to cutting an onion, suggesting that onions were being eaten raw.

Proper dining room arrangement is another theme which Lucilian fragments hint at. Someone remembers, “*nam sumptibus magnis exstructam ampliter atque apte cum accumbimus*” “for when we take our seats at a table garnished plentifully and suitably and at great cost.”<sup>255</sup> Perhaps between courses, “*purpureo tersit tunc latas gausape mensas*” “then he wiped the broad tables with a rough purple cloth.”<sup>256</sup> And presumably at the end of a dining event, “*et velli mappas*” “and that the napkins were grabbed.”<sup>257</sup> These are highly-fragmentary and disconnected; however, they at least give a further sense of expected behavior.

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<sup>249</sup> Warmington 1936, Naevius fragment 18–19.

<sup>250</sup> Warmington 1936, Naevius fragment 20.

<sup>251</sup> W 216, M 194.

<sup>252</sup> W 217, M 195.

<sup>253</sup> W 562, M 531.

<sup>254</sup> Ennius, *Satires* (probably Book IV), fragment 12-13 (Warmington 1935).

<sup>255</sup> W 470-471, M 442-443.

<sup>256</sup> W 598, M 568

<sup>257</sup> W 1238, M 1164. This is reminiscent of events at Nasidienus’ house in Horace’s *Satires* 2.8

There is a close relationship between correctness, quality, and enjoyment in the food of Lucilius. George Fiske names the ideal “midway between sordidness on the one hand and meaningless show.”<sup>258</sup> These ideas of moderation, while Aristotelian in origin, have an important place in the crafting of *romanitas*.<sup>259</sup> Through the anxieties expressed by dinner hosts and the criticisms of observers and guests about those who eat or want or give too much, Lucilius and his contemporaries express expectations for people in their society. The fragments in Lucilius suggest, moreover, that this delicate balance of good taste draws from a privileged knowledge of what constitutes appropriate foods and food-related behaviors. We see the description and dissemination of this knowledge judged and articulated explicitly in didactic texts.

#### **2.4. Knowledge economy in didactic texts<sup>260</sup>**

In her study of food in Roman literature, Emily Gowers comments that Latin fictional genres are more useful for information about food than histories are, since their authors admit that they are crafting their narrative and they claim explicit control over the food they mention: the metaphors and dichotomies created with food references provide insight into the conceptual divisions and connections between foods.<sup>261</sup> While we have seen that comedic works are very rich in their use and application of food references, many of the same tropes presented for amusement in comedy are also evident in agricultural treatises of the Republican period. Their presence in “serious” and “didactic” genres suggests that these ideas were taken quite seriously as entrenched values among Roman writers and readers. In the following discussion, I will focus on Cato’s *de Agricultura*, with reference to Varro’s subsequent *de Re Rustica*, only as a comparison to comment on changes and differences between the two.<sup>262</sup>

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<sup>258</sup> Fiske 1920, 379.

<sup>259</sup> See *μετριοπάθεια* in *Nicomachean Ethics*.

<sup>260</sup> Translations of Cato’s *de Agricultura* are by Dalby (1998); the rest of the Latin in this section is translated by me.

<sup>261</sup> Gowers 1993, 12.

<sup>262</sup> Varro’s *de Re Rustica* can be read in much the same way as Cato’s treatise. Ostensibly a guide to several people in Varro’s life, including his wife, Fundania, the advice is relayed through a long discussion in various venues between family and friends Varro’s life: Agrius, Scrofa, Varro, Stolo, Fundanius, Merula, Passer, Pavo, Pica. They negotiate which topics are appropriate to cover, expound on their own approaches and

Cato was born to a wealthy family of Roman citizens in 234 BCE in Tusculum.<sup>263</sup> He seems to have emphasized his solid Sabine and Roman roots in opposition to the questionable morals of the Greeks.<sup>264</sup> The most famous declaration of Cato's views on Greek culture appears in a quotation in Pliny (29.7.14). Cato calls the Greeks:

*vincam nequissimum et indocile genus illorum, et hoc puta vatem dixisse: quandoque ista gens suas litteras dabit, omnia conrumpet, tum etiam magis, si medicos suos hoc mittet. iurarunt inter se barbaros necare omnes medicina, sed hoc ipsum mercede faciunt, ut fides iis sit et facile disperdant. Nos quoque dictitant barbaros et spurcius nos quam alios Ὀπικῶν appellatione foedant*

a worthless and unruly tribe. Take this as a prophecy: when those people give us their writings everything will be corrupted. Then all the more if they send their doctors here. They have sworn to kill all barbarians with medicine – and they charge a fee for doing it, in order to be trusted and to work more easily. They call us barbarians too and Opici, a dirtier name than the rest.<sup>265</sup>

How much such fragments actually reflect his specifically anti-Greek position is a matter of some debate. Our perception of Cato's personality is drawn both from his own surviving writings, some of which are autobiographical but all fragmentary and from the biographies of him by Plutarch and Nepos.<sup>266</sup> His characterization is two-fold: he is portrayed as austere and hardworking, as well as anti-Greek/pro-Roman, representing a golden age of Roman values and behavior.<sup>267</sup> Plutarch's characterization in particular is ambiguous in its representation of Cato both as an admirable man and as an arrogant caricature.<sup>268</sup> Plutarch emphasizes Cato's *novus homo* status and the fact that he revels in his own austerity: "But

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experiences, and interject into each other's lectures, correcting and adding to each others' advice. The obvious joke of the characters' names in Varro's work – all names related to farming and animals – thus suggest the fiction of this situation. However, the dialogue structure of the book gives a kind of authority to the information being relayed. Unlike Cato's treatise, this is not the opinion of one overly-arrogant individual, but the combined knowledge of many learned men. Varro's characters say little new beyond what Cato tells us, in fact, often explicitly confirming his opinions, but there is a notable difference in tone in Varro's work.

<sup>263</sup> Sciarrino 2011, 3.

<sup>264</sup> Reay 2005, 333.

<sup>265</sup> Plutarch refutes Cato's statement several hundred years later by pointing out: "And seeking to prejudice his son against Greek culture, he indulges in an utterance all too rash for his years, declaring, in the tone of a prophet or a seer, that Rome would lose her empire when she had become infected with Greek letters. But time has certainly shown the emptiness of this ill-boding speech of his, for while the city was at the zenith of its empire, she made every form of Greek learning and culture her own." (Life of Cato, 23.2-3).

<sup>266</sup> Reay 2005; Terrenato 2012.

<sup>267</sup> Smith 1940.

<sup>268</sup> Nepos' biography is only a few hundred lines and focussed more on lineage and life-story than on Cato's perspectives.

Cato, exulting as it were in such things, says that he left in Spain even the horse which had carried him through his consular campaign, that he might not tax the city with the cost of its transportation. Whether, now, these things should be set down to greatness of spirit or littleness of mind, is an open question.”<sup>269</sup> Cato is also frequently portrayed as being displeased with the state of Roman values. He remarks, “It is a hard matter to save a city in which a fish sells for more than an ox.”<sup>270</sup> This line was probably drawn from Polybius, writing in the early 2<sup>nd</sup> century BCE, who noted that Cato complained that: “pretty boys fetch more than fields, and jars of caviar more than ploughmen.”<sup>271</sup>

If we try to deal directly with Cato’s perspective on Greek culture, it is muddled and mired in the fragments preserved in the writing of later authors where Cato already had a reputation as a conservative pro-Roman orator. Beyond Pliny’s remark above, we read snippets in Plutarch which describe Cato in Athens on official business, snubbing the Greeks by speaking in Latin while an interpreter translated his words into Greek.<sup>272</sup> Yet, if we ignore Plutarch’s own construction of Cato, we get a strong sense from fragments attributed to Cato’s writing that he was very familiar with “Greek legends, learning, and traditions . . . [and] various personages from Greek history” using snippets in his oratory and writing.<sup>273</sup> Perhaps then, Cato was more actively pro-Italian than anti-Greek, employing ideas from Greek learning to advocate for the development of Rome.<sup>274</sup> It might be best to read his response to foreigners as part of his creation of *auctoritas*, demonstrating, “cultural mastery over alien and socially lesser cultural traditions.”<sup>275</sup> It is in this way that we can understand his erudition on the topics he covers in his *de Agricultura*, a farming manual which later Latin authors credit as an inspiration for their own encyclopaedic coverage of the natural world.<sup>276</sup> Cato’s didactic farming text began a

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<sup>269</sup> Plutarch *Life of Cato* 5.6. This is the Loeb translation (Perrin 1914).

<sup>270</sup> Plutarch *Life of Cato* 8.1.

<sup>271</sup> Polybius *Histories*, 31, 25.4-5. Polybius credits an increase in Roman luxury to exposure to the Hellenistic world following the Macedonian Wars. Plutarch, instead, was not interested in emphasizing a Greek role in Rome’s decadent decline. On Plutarch’s angle on Roman corruption, see Swain 1990, 127.

<sup>272</sup> *Life of Cato* 12.4

<sup>273</sup> Gruen 1992, 57–58.

<sup>274</sup> Gruen 1992, 80–82; Sciarrino 2004a, 326–327; Sciarrino 2011, 26–27; Jefferson 2012, 323–324.

<sup>275</sup> Sciarrino 2011, 21.

<sup>276</sup> Many comments in Varro’s *de Re Rustica* directly refer to Cato’s instructions on the matter. Columella mused that Cato “first taught agriculture to speak Latin.” Andrew Dalby remarks that the stream of

new genre in Latin. Following a review of the highlights of topics Cato covers, we will move back to consider his intentions and audience.

#### 2.4.1. Farm procurement and farm management

The *de Agricultura* covers an enormous range of topics regarding the selection and maintenance of a farm and the many events which happen at a farm throughout the year. Cato gives very specific instructions with the aim of guiding a wealthy Roman investor and would-be landowner in how best to proceed in his agricultural prospects. Cato's discussion ranges from the merits of farmland in various locations,<sup>277</sup> to detailed inventories of equipment and people one should have on hand and where to acquire them,<sup>278</sup> to rituals to be performed before clearing land,<sup>279</sup> to expectations of the farm manager and his wife and the maintenance of the slave personnel,<sup>280</sup> to descriptions of tasks for different seasons, and details about planting and fertilizing, even including detailed instructions about where and when to use dung as a fertilizer and a healer.<sup>281</sup>

#### 2.4.2. Cakes and Porridges

A notable feature of Cato's text is its numerous recipes for breads, cakes, and porridges. There are 13 separate recipes, many of which are a variation on a cheese-honey-grain concoction.

Table 1. Cato's cake and porridge recipes.

<i>de Agr.</i>	Name	Description
73	panem depsticum	wheat and water bread; cooked under a clay vessel
74	libum	durum wheat, cheese, egg, bay leaves; cooked under a clay vessel
76	placenta	wheat, emmer, sheep's cheese, honey, oiled bay leaves, cooked under a clay vessel
77	spira	variation on placenta, but with more honey, baked in long strips?
78	scribilita	variation on placenta, but no honey, cooked under a clay vessel
79	globi	emmer, cheese, balls fried in fat, coated in honey and poppy seeds
80	encytum	variation on globi, but less fatty?, served with honey or spiced wine

consciousness structure of Cato's *de Agricultura* suggests that he wrote it without consulting Greek or Carthaginian farming manuals which may have existed in his day. Dalby 1998, 16.

<sup>277</sup> *de Agr.* 1-3.

<sup>278</sup> *de Agr.* 11-14, 18-22, 62-63, 135.

<sup>279</sup> *de Agr.* 139-141.

<sup>280</sup> *de Agr.* 5, 142-143, 56-58.

<sup>281</sup> *de Agr.* 6-8, 34, 40. On dung, 7, 28-29. Varro also has a great deal to say about the proper use of dung. See *de Re Rustica* 1.13 and 1.38.

81	erneum	variation on placenta, but cooked in a “baine marie” whose vessel is then broken to release it
82	spaerita	variation on spira, but in balls
84	saevillum	durum wheat, cheese, honey, egg, cooked in an oiled pan, covered in honey and poppy seeds
85	Punic puls	emmer, cheese, honey, eggs, mixed in a “new pot”
86	granae	durum wheat, water, milk
121	Must cakes	wheat, anise, cumin, lard, cheese, bay bark, bay leaves, baked in loaves

These recipes are notable both because they seem out of place in the scheme of a book about property management, and because nothing similar appears in the farming manual by Varro a century later. The characters in Varro’s *de Re Rustica* remark that recipes for cakes and medicines should not be included, as Cato did, because they are not part of the subject of agriculture.<sup>282</sup> Andrew Dalby suggests that Cato included recipes possibly “so that the owner and guests might be entertained when visiting the farm; possibly so that proper offerings might be made to the gods; more likely, I believe so that profitable sales might be made at a neighboring market.”<sup>283</sup> Dalby’s “farmer’s market” argument is not plausible for several reasons. Cato does not seem to be suggesting making a vast number of cakes: his recipes call for small amounts – the ingredients are 1-4 *librae* of flour plus other ingredients, the equivalent of 3-12 cups – so perhaps enough for a household, but not convincingly sellable quantities. Furthermore, the “farmer’s market” model does not hold for the many medicinal remedies described in the *de Agricultura*. There are at least six separate medicinal recipes using farm products (plants, beans, charcoal) and imported spices (cumin)<sup>284</sup> which Cato explains in detail. These are home remedies meant to deal with local concerns, not for mass production and distribution.<sup>285</sup>

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<sup>282</sup> Varro *de Re Rustica* 1.2.25-8.

<sup>283</sup> Dalby 1998, 21. Dalby reiterates this suggestion in the *Classical Cookbook* (Dalby and Grainger 1996, 84). This may be imagined due to Cato’s comment in the preface of his text that he intends to explain farming as a respectable way to be financially successful, notwithstanding the confusion surrounding the translation of the preface in the first place (Gratwick 2002).

<sup>284</sup> For constipation, gout, indigestion, *de Agr.* 114, 115, 122, 123, 126, 127, 156; remedies for oxen illness *de Agr.* 70-73. Cumin is native to the Eastern Mediterranean and it is not clear that it was cultivated in Italy by the 3<sup>rd</sup> century BCE (Dalby 2000). It was not cultivated in Northern Europe at this time (Livarda 2011).

<sup>285</sup> The non-commercial nature of Cato’s medicaments might be hinted at by Plutarch’s criticism that if Cato’s recipes had worked, he would not have suffered the death of both his wife and his son (Plutarch, *Life of Cato* 24.1).

Dalby's other two explanations for the recipes in Cato are worth further consideration. Ritual offerings of cakes certainly existed in the Republican period. Cakes feature in Varro's text, however, as something prepared for the gentlemen: "*Cum haec loqueremur, venit a Menate libertus, qui dicat liba absoluta esse et rem divinam paratam; si vellent, venirent illuc et ipsi pro se sacrificarentur.*" "While we were thus speaking a freedman came from Menates to tell us that the cakes had been offered and the sacrifice had been prepared; if the gentlemen wished they might come there and perform their sacrifices for themselves."<sup>286</sup> Libum appear elsewhere in Latin as a ritual offering;<sup>287</sup> however, there is little suggestion elsewhere in Cato that he is concerned about ritual. Besides the ritual demarcation of the fields for ploughing, Cato only includes one other instruction for sacred rights. Again, these are instructions on how to sacrifice a female piglet as an offering for a good harvest. Here, he specifies the order in which to offer things to Janus, Jove, Juno, and finally Ceres, and what words to proclaim as you make your offerings.<sup>288</sup>

If we turn instead to the idea of cake recipes as being for the benefit of a dinner host, we must consider the host's role in the dinner planning and meal preparation. We don't know how much of a direct role the host had, but we can imagine his displeasure if things do not go well. While early scholarly readings of Cato's recipes assumed that they were collected personal notes intended to assist in the supervision of the cook,<sup>289</sup> it is hard to imagine a host standing over a slave cook relaying Cato's instructions and ensuring that the Punic *puls* was being soaked and stirred properly: "Place 1 lb emmer in water. Allow to soak well. Pour into a clean trough. Add 3 lbs. fresh cheese, ½ lb honey, 1 egg. Mix all together well and turn into a new cooking pot." Rather, we need to imagine Cato's explanations as an example of upper class *savoir-faire*. It was becoming fashionable to know about everything. And in this case "knowing" is not necessarily having accurate knowledge. The amassing and dissemination of knowledge is also demonstrated through Cato's use of Greek-derived names for many of the cakes he references. Placenta, his most

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<sup>286</sup> Varro *de Re Rustica* 2.8.1.

<sup>287</sup> Ovid's *Fasti* 3.761, 4.743-4. This is as an offering to Vesta.

<sup>288</sup> *de Agr.* 134.

<sup>289</sup> Leon 1943, 213-214.

complicated recipe, features as *plakous* in many Greek comedies.<sup>290</sup> We can also note Cato's reference to Punic *puls* and consider why a man who insisted *Carthago delenda est* would proceed to instruct us on their foreign style of food.<sup>291</sup> This was the acquisition and appropriation of foreign foods, rather than the rejection of all foreign things. This "rich variant"<sup>292</sup> on *puls* is elaborating a traditional Italian food, emmer porridge.<sup>293</sup> This type of knowledge acquisition and dissemination comes out even more strongly in Varro's text. Varro refers to agricultural practices throughout the Mediterranean; he is not concerned about the Italian countryside particularly, nor in emphasizing some kind of pride of place in the Italian way of farming.<sup>294</sup>

### 2.4.3. Meat

Cato's references to livestock maintenance and use are comparatively sparse. He provides both specific fodder instructions<sup>295</sup> and ideas for preventing and treating animal illnesses;<sup>296</sup> yet there are few instructions for the consumption of animals. Meanwhile, Varro dedicated two books to animal husbandry with no instructions at all regarding when or how to prepare animals for consumption.<sup>297</sup> Cato explains how to force-feed chickens, geese, and pigeons.<sup>298</sup> Adding to the dubiousness of the *de Agricultura* as a whole, he suggests: *Ei fabam coctam tostam primum dato: ex ore in eius os inflato, item aquam* "first feed roasted cooked beans, puffing them out from one's mouth into the bird's mouth and give water similarly."<sup>299</sup> The Latin instructions here are clear; however, whose mouth is

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<sup>290</sup> LSJ, especially in Aristophanes. It is often translated as "cheese-cake." Dalby 2003, 70. See also Wilkins 2000a, 304–311.

<sup>291</sup> This is before Mago the Carthaginian's farming handbook had entered Rome around 146 BCE and was translated into Greek and Latin for reference (Greene and Kehoe 1995; Dalby 2003, 206).

<sup>292</sup> Dalby 1998, n. 193.

<sup>293</sup> Cassius Hemina explained, likely in his *Histories*, that Numa Pompilius roasted emmer wheat "since it was healthier when it was roasted" "*quoniam tostum cibo salubrius esset*" (Pliny NH, 18.7). Emmer is also very common in the palaeobotanical evidence from ancient Italy: see chapter 7.

<sup>294</sup> For example, *de Re Rustica* 1.7, 8, 10. This might reflect Varro's more relaxed tone of instructions which verge on tongue-in-cheek (Purcell 1995b, 154).

<sup>295</sup> *de Agr.* 54.

<sup>296</sup> *de Agr.* 70–73, 83, 96, 102.

<sup>297</sup> Varro, Book 2 and Book 3. The only mention of dining on the animals mentioned is the indirect remark about having a dining room in an aviary and watching birds fly around as you eat bird. *de Re Rustica* 3.4.3.

<sup>298</sup> *de Agr.* 89–90.

<sup>299</sup> *de Agr.* 90.



supposed be puffing beans into the pigeon's mouth is not specified. These instructions are within a section using the 2<sup>nd</sup> person future imperative construction ending in *-to*. While several scholars have noted the switch between 3<sup>rd</sup> person jussive subjunctive and 2<sup>nd</sup> person future imperatives throughout the text, there seems to be little strict correlation between the intended agent of each of Cato's instructions and the verb.<sup>300</sup> The fowl feeding remains, therefore, ambiguous.<sup>301</sup>

Cato also includes detailed guidelines for preparing a brine for "*vel carnem vel caseos vel salsamenta*" "either meat, cheese, or fish" which involve multiple steps of shaking, filling, testing, and drying in the sun.<sup>302</sup> He also explains how to salt a leg of ham with instructions which sound identical to modern Italian prosciutto preparation.<sup>303</sup> This long-term preservation of meat products echoes Cato's instructions on preserving olives properly.<sup>304</sup>

#### 2.4.4. Wine recipes

Finally Cato makes reference to wine production and processing. He not only has instruction about vine planting and tending<sup>305</sup> but also multiple sections on how to make varieties of wines and wine products.<sup>306</sup> In three instances he describes how to make Greek-style wine, in two of these he specifically references Coan wine.<sup>307</sup> All of these recipes use both sea-water and added salt; however, they vary widely in their length and order of operations. In chapter 105, for example, Cato explains that the amphorae containing the wine must sit "*biennium in sole*" in the sun for two years. This will create wine, "*deterius non erit quam Coum*" "nor worse than Coan."<sup>308</sup>

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<sup>300</sup> Leon 1943; Reay 2005, 342-349.

<sup>301</sup> In Varro's description of feeding pigeons, the foods are left in a trough for the birds to eat themselves. *de Re Rustica* 3.7.8.

<sup>302</sup> *de Agr.* 88.

<sup>303</sup> *de Agr.* 162.

<sup>304</sup> *de Agr.* 116-119.

<sup>305</sup> *de Agr.* 6, 32-33.

<sup>306</sup> *de Agr.* 23-25, 104-113, 152-154.

<sup>307</sup> *de Agr.* 24, 105, 112.

<sup>308</sup> *de Agr.* 105. Sea-water has been shown to enhance sweetness and acts as a preservative. Tchernia 1986; Moore 2011, 91

Cato also includes instructions for its sale both ready-made, and in the form of the grapes on the vine.<sup>309</sup> Since Greek wine was popular already in Cato's time, and there had been a lively movement of Greek amphorae well-before the Roman Republic, it makes sense that Cato would want to imitate and participate actively in the market.<sup>310</sup>

#### 2.4.5. The gentleman farmer?

I have already alluded to the importance of displaying erudition in the *de Agricultura*. This discourse of erudition is not only about Cato, the individual, but also about defining a way of elite behavior. Cato was "self-fashioning"<sup>311</sup> but he was also creating a connection between the illustrious *populus Romanus* of the past and the contemporary ruling elite. It is vital, however, to recognize that Cato was not only a *novus homo* in terms of wealth, but he was also not an urban Roman. Nicola Terrenato suggests that the text could have served as a "rallying cry for a larger group of aristocrats from central Italy."<sup>312</sup> Cato entered the city and explained to a Roman audience how to harness the Italian landscape – both in terms of physical assessment and portioning of the landscape and the exploitation of its materials. Yet, the realities of the advice he gives are very important to consider. The ideological motives for Cato's text within the vast genre of didactic texts from both the Greek and the Roman world have been acknowledged repeatedly in recent scholarship;<sup>313</sup> yet its detail and its seeming precision is unlike its later imitators. Cato's work is rather non-literary in comparison to Varro's fictional dialogue academicizing agriculture, or Pliny's vast encyclopaedia of places and things, or Columella's detailed *de Re Rustica*.

I have highlighted some of the specificity and the banality of Cato's treatment of farming, food, and medical advice. *De Agricultura*'s lack of frills is likely what continues to make it seem such an appealing source for agricultural know-how. Rather than argue that Cato's text is wholly inaccurate, full of "outdated folklore," we can see the strong parallels it

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<sup>309</sup> *de Agr.* 147-148.

<sup>310</sup> Dalby and Grainger 1996, 84.

<sup>311</sup> This is Brendan Reay's phrase (Reay 2005).

<sup>312</sup> Terrenato 2012, 86.

<sup>313</sup> Habinek 1998, 34–68; Reay 2005; Sciarrino 2011, 141–160; Reay 2012; Terrenato 2012.

has to the agricultural literature of 18<sup>th</sup> and 19<sup>th</sup> century England. The authors of agricultural periodicals and newspapers in this period were largely noblemen with an academic interest in agriculture.<sup>314</sup> Though they produced periodicals for a vast readership, historical sources of the time suggest that their readers were other noblemen – the literate class. Nicholas Goddard explains:

Lord Somerville, President of the 'old' Board of Agriculture between 1798 and 1800, apparently complained that farmers were 'not a reading class' . . . . The third Earl Spencer lamented that the Farmer's Series of the Society for the Diffusion of Useful Knowledge was little taken by the ordinary farmer for whom it was especially intended.<sup>315</sup>

Goddard notes that most agricultural laborers never had any contact with these agricultural periodicals at all while as many as half of the landowners were regular readers in the Victorian era.<sup>316</sup> We can place the many farming handbooks of the era together with these periodicals. Books like James Ware's *The Pocket Farrier: Or, Gentleman's Guide in the Management of Horses Under Various Diseases ... Directions for Judging of the Horse's Age, and Useful Observations on the Breeding, Raising and Training of Colts* (1828) or Robert McClure's *The gentleman's stable guide: containing a familiar description of the American stable; the most approved method of feeding, grooming and general management of horses; together with directions for the care of carriages, harness, etc* (1870) have detailed explanations of recipes for animal care, and even diagrams of stable arrangement. McClure's 1870 stable handbook even includes a diagram of a ground plan of an ideal racing stable with the manure pile indicated in the center.<sup>317</sup> Similarly to Cato's readers, was McClure's gentlemanly readership really specifying to their farmhands where the manure should go in their barns?

These works, often written by authors with literary pretensions, did not seem to be well-thought of by the farming class. Clark Hillyard, an outspoken tenant farmer in Northamptonshire wrote his own manual in 1844. In his preface he remarks:

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<sup>314</sup> They had probably also read Cato, Varro, and Columella.

<sup>315</sup> Goddard 1983, 117.

<sup>316</sup> Goddard 1983, 124.

<sup>317</sup> McClure 1870, 55.

There are often well-written agricultural communications from theoretical farmers, that are very amusing to the practical and experienced, from the absurdity of many of their recommendations for general practice; their products proving that they know better how to wield the pen than to guide the plough and to cultivate the land . . . . [these works were] so verbose and so theoretical, and so difficult to be clearly understood, that I soon laid them aside.<sup>318</sup>

This same context of the “theoretical farmer” can be understood for the recipes Cato mentions. The importance of recipe collection and articulation would continue with Apicius in the 2<sup>nd</sup> century CE, Vinidarius in the 5<sup>th</sup> century,<sup>319</sup> and onward, and occurs in many other highly hierarchical societies where the literate people who could read the recipes were probably not the ones doing the cooking. Again, we can point to a British context, where in the 14<sup>th</sup> century, the recipes of Richard II’s favorite foods were recorded. These were deemed authentic and republished in the 18<sup>th</sup> century along with an excursus regarding the importance of changing tastes throughout time and cultural mores and food selections.<sup>320</sup>

The “rustic shtick” which Nicola Terrenato suggests is the case with Cato’s agricultural advice was a constructed collection and dissemination of knowledge.<sup>321</sup> Even banal details of basic farming and quotidian recipes and medicines demonstrated the importance of knowing how to harness the landscape for one’s own financial benefit and health, and the importance of doing it properly. This idea of “correct” behavior is also something which comes out strongly in Cato when we compare his work to the tone of Varro’s *de Re Rustica*. Varro writes much less prescriptively, preferring to suggest that you ask potential neighbors what they think of the local farmland before you buy property and advocating for “imitation and experimentation” in agricultural techniques generally.<sup>322</sup>

## 2.5. Conclusions

Thomas Habinek conceives of the development of Roman literature and self-

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<sup>318</sup> Hillyard 1844, v.

<sup>319</sup> Grocock and Grainger 2006; Donnelly Forthcoming.

<sup>320</sup> Pegge and Brander 1780, 51–60.

<sup>321</sup> Terrenato 2012

<sup>322</sup> Varro *de Re Rustica* 1.18.7-8.

fashioning as part of a Roman “identity crisis” following the Second Punic War.<sup>323</sup> Within this search for identity, foodways emerge as an important tool. This is perhaps because of the ubiquity and frequency of food behaviors; they are essential and habitual. The audiences for this literature were mixed in status and gender. A diverse public would have seen Plautus’ plays performed. A group of elites in a lavish house may have heard Ennius’ fish fable and Lucilius’ colorful quips or perhaps an elite individual read them quietly. Cato’s agricultural advice was probably read by elite men with landowning pretensions or by scholars interested in agricultural sciences. We might even imagine that a literate head slave read this book upon the urging of his master. Everybody eats, typically multiple times per day, making food an easy marker of values which all audiences, in a private banquet, in the public theater, or in a quiet study, can relate to – and have a visceral reaction to.

This chapter has treated identity as broadly-conceived largely in recognition of the fact that cultural identity and status identity were entangled in the Roman world. Though many of the texts treated here are fragmentary and represent disparate genres and authorial intentions, there are clear threads of commonality. The rhetoric against luxury, and in promotion of the right type of refinement, comes through in attitudes towards hosts, gluttons, and parasites. The importance of acquiring food from precise sources, preparing it in particular ways, and supplying guests with choices all point to knowledge about food as being an important facet of operating within an emerging “Roman” cultural context. Some of the concerns expressed in early Latin literature are traceable to a specific Greek source. Authors in Rome gradually appropriated Greek models; they took “Greek cultural patrimony piece by piece . . . mixing it with local cultural material.”<sup>324</sup> Latin authors wrote from the perspective of peninsular Italy about their landscape and settings. These newcomers to Rome used food, and all its tastes, smells, and textures, to incorporate the land and its people into a new Roman cultural patrimony.

A broad audience across the many genres examined in this chapter suggests the developing normativity of these ideas. The textual evidence of such developing societal

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<sup>323</sup> Habinek 1998, 35.

<sup>324</sup> Sciarrino 2004b, 45–46.

expectations for foodways provides a rich backdrop to the archaeological study presented in the chapters ahead.

## **Chapter 3 - *Archaeological Methods***

The ceramic material examined in this dissertation comes from a number of contexts at the sites of Musarna and Populonia. From Musarna, I examine the fills of a number of deep deposits from rock-cut cisterns and rooms, and from Populonia the deposits under study are construction fills and floor features which were sealed and undisturbed to varying degrees.

Before embarking on the material examination, several methodological challenges of ceramics and stratigraphy need to be addressed. The methods used to quantify the archaeological material, both ceramic and the faunal, have a direct effect on the dating of the deposits and in turn my ability to compare the composition of the deposits. The selection of appropriate dating techniques should be governed by the formation processes of individual deposits, and an understanding of the formation processes, in turn, may be influenced by the chosen quantification methods. The quantification methods used in this work allow different types of deposits to be compared while accounting for the biases which the deposit types may introduce.

The complications arising from the interplay of dating and quantification are discussed below, together with a brief summary of relevant approaches other scholars have taken to manage these challenges. This is followed by a discussion of methodology focused on the central archaeological concern of this dissertation: the study of Roman ceramics from a functional perspective. I consider how archaeologists seek to understand function using vessel morphology and how the inclusion of alteration analysis can complement this.

### **3.1. Methodological Basics**

#### **3.1.1. Quantification**

This thesis relies on a systematic use of ceramic quantification methods. I engage in both a diachronic and inter-site study, therefore, my quantification methods need to allow

the dating and comparison of assemblages which are compositionally different and which have different formation histories. As Clive Orton observes, the ultimate aim is to study the original “‘parent’ assemblage” of pottery in archaeological deposits of which only a “sample” of fragments has been recovered “which have been distorted by their post-depositional history . . . we therefore need to use measures which preserve elements of the comparisons between parent assemblages within the observed comparisons between excavated assemblages.”<sup>325</sup> Since the 1960s, the methods which have been most systematically discussed for measuring or estimating the quantity of pottery from deposits include, but are not limited to, four numerical metrics: total sherd count, total sherd weight, minimum number of vessels (MNV) and estimated vessel equivalents (EVE). These are defined in Table 1.

Table 2. Different types of pottery quantification.

Measure	Definition
Total sherd count	The number of individual fragments of each ceramic category <sup>326</sup>
Total sherd weight	The total weight of all the fragments of each ceramic category
MNV (minimum number of vessels)	There are several different methods to determine MNV, but the simplest is to count the fragments of a particular diagnostic element from what appear to be distinct vessels (e.g., the number of different non-joining base sherds within a ceramic category would represent the minimum number of vessels from which all the fragments in the deposit derive). <sup>327</sup>
EVE (estimated vessel equivalents) <sup>328</sup>	This is derived by selecting a diagnostic element, and assessing the percentage of each element (joining or non-joining) that is preserved, and then summing these percentages for each ceramic category to arrive at the total number of vessels of that type in the assemblage.

Because my ceramic material comes from different deposits, the degree of brokenness<sup>329</sup> or fragmentation of the pottery is a result of varying, uncontrolled, and not

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<sup>325</sup> Orton 1993, 177.

<sup>326</sup> “ceramic category” here refers to whatever typological or other grouping the ceramicists happen to be using whether it be ware, class, any other characteristic used to define a set.

<sup>327</sup> Millett 1979b, 77 method e. ii; Peña 2007, 154

<sup>328</sup> Term coined by Orton 1975; This method is most clearly explained by Banning 2000, 106–107.

<sup>329</sup> This is “average number of sherds” into which a vessel of a certain type breaks, and can be formulaically expressed as brokenness=sherd count / estimated vessel-equivalent. See Orton 1985, 114; Orton et al. 1993, 169, 179.



always predictable conditions, both pre- and post-depositional. Sherd count, therefore, cannot be the only measure of ceramic quantity I employ since it would require that I assume that the breakage rate of each deposit was identical.<sup>330</sup> The MNV also has a large potential for bias subject to the formation processes of the deposit. In estimating the MNV, vessels which have undergone more breakage have a tendency to be over-represented as compared to vessels that were broken into larger, more complete fragments.<sup>331</sup> It is therefore not an appropriate measure for comparing assemblages which have undergone different formation processes.

The measurement of ceramic weight can help account for some of the biases created by sherd counts and the MNV measure. It is reasonable to assume that fragments of vessels from the same ceramic class will have similar average thicknesses and material density, and consequently similar unit weights. The level of fragmentation of an assemblage would not affect the proportions of the weights of the different ceramic classes composing it. Sherd weight, when taken in concert with counts, can therefore be a useful measure with which to compare the composition of different assemblages or deposits.<sup>332</sup>

Similarly, the degree of fragmentation of the deposit does not affect the EVE.<sup>333</sup> The main source of bias with this method is that the diameter of individual base or rim sherds cannot be determined if the sherds are so tiny that their curvature is not readily measurable.<sup>334</sup> Therefore, if an assemblage has a formation history which has left the sherds highly fragmented, the EVEs can be so error-prone as to be unusable.<sup>335</sup>

Despite the shortcomings of these individual metrics, sherd count and MNV used in conjunction with weights and EVEs essentially creates summary data that are useful in assessing the formation processes which have affected the deposits under study. I also use

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<sup>330</sup> Orton 1993, 179.

<sup>331</sup> Orton et al. 1993, 169–170; Peña 2007, 155.

<sup>332</sup> Millett 1979b, 78; Evans 1973, 132; Evans 1991, 70; Orton et al. 1993, 169 and 171; Orton 1993, 175; Peña 1998, 10.

<sup>333</sup> Orton 1975; Orton and Tyers 1991; Orton 1993; Orton et al. 1993, 171; Banning 2000, 106; Peña 2007, 155.

<sup>334</sup> The standard minimum for accurately measuring sherd diameter is 5% preservation. Banning is so wary of the possibilities for introducing error into the sample that he recommends estimating error as part of the measurement process and then calculating a confidence interval. Evans 1991, 69; Banning 2000, 107.

<sup>335</sup> Martin and De Sena 2005, 388 say that their more robust African cooking ware and Italian common ware are more represented in EVEs than thinner Italian common ware and ARS.

a ratio of the weight of sherds to the number of sherds (sometimes called “mean sherd size”)<sup>336</sup> when ascertaining the various breakage rates affecting the different deposits. This kind of evaluation informs my dating of stratigraphic layers and subsequent comparison of assemblages from different areas within the same site as well as from different sites.

### 3.1.2. Dating

While we might expect that deposits from the rock-cut features from Musarna are more midden-like and therefore, more “secondary” in their deposition than the materials from construction fills at Populonia (see Chapter 4), this kind of judgment can only be made with detailed analysis of the composition and condition of the deposit contents.<sup>337</sup> Typically in Roman Italy, strata in wells and other deep water features have been dated by their latest datable material, or by a general overall impression of their contents without much consideration for quantification or length of accumulation.<sup>338</sup> Construction fills, like those from Populonia, may be expected to have a high proportion of residual material, or a heterogeneous mixture of material. However, these deposits still have a definable *terminus ante quem* which can be used to consider them in a diachronic study.<sup>339</sup> Because the Populonia deposits were formed differently from those in Musarna, and probably have different accumulation spans, their individual dating needs to be tailored to their particular circumstances.

Quantitative methods to calculate the dates of deposits have been proposed by archaeologists interested in systematizing the dating process.<sup>340</sup> Understanding residuality, the presence of materials in a stratum from much earlier than the stratum’s formation, has been of particular concern for quantitative archaeology. Residual materials can range from

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<sup>336</sup> Bradley and Fulford 1980

<sup>337</sup> While Schiffer refers to garbage dumps as “secondary” deposition, (Schiffer 1987, 265–271; LaMotta and Schiffer 1999), many scholars in the Italian context refer to this as a “*giacitura primaria*.” See Martin 1998, 203; De Sena 2002, 275; Giannichedda 2007, 55.

<sup>338</sup> Donati 1994; Martin 1996; Colonna 1988-1989; Broise and Jolivet 2004.

<sup>339</sup> Evans and Millett 1992, 229.

<sup>340</sup> Latest datable material or “LDM” is used to date the layers at Paestum; see also Archer Martin at Ostia 1996, even though he then re-dates this sequence using quantitative methods in 1998; T.S. Martin acknowledges that using the latest datable material to date strata is common practice in Roman Britain after the “residual and intrusive sherds have been recognised” and then rejected. Martin 2007, 88–89. This “intuitive” removal of artifacts which “don’t fit.”

being “parasites of archaeological data and quantification, capable of diminishing their validity or even launching them into crises, to innocuous and even useful elements” in archaeological strata.<sup>341</sup> Some quantitative methods allow the researcher to essentially “calculate out” the residuality from the layer and therefore determine a probable true date (or date range) of the material in it or to simply visualize dating discrepancies in the layer and then consider how to deal with them. These methods typically depend on an ability to precisely date all of the diagnostic material in the strata and employ rather complex sequences of formulae.<sup>342</sup> Consideration of the median date of production of different ceramic types and the ability to visualize both “event time,” that is, the calendar date of a layer, as well as “accumulation time,” the time-span of the deposit is also important.<sup>343</sup>

While quantitative methods have merit for their analytical approach to dating, a serious caveat applies when they are used with individual contexts and for comparisons across contexts. While generally complimentary of statistical methods, Enrico Giannichedda’s retrospective on residuality warns that in order to determine how to deal with residuality, archaeologists need to consider everything in the layer: the character of the layer itself, the other finds, the character of all the finds themselves (e.g., degree of fragmentation, erosion etc).<sup>344</sup> Thus the determination of a deposit date is directly linked to the deposit formation through issues of quantification, contextualization, and detailed material study. The data collection strategy in this dissertation is designed to amass a body of information which can be used to consider site taphonomy for the purposes of quantification, understanding formation processes, and dating. This analysis illuminates the extent of deposit integrity, homogeneity and, ultimately, the potential for functional examination of ceramics and bone. While the general archaeological principle is that smaller sherds are likely to be residual, this is not always the case.<sup>345</sup> We can combine the examination of sherd size also with sherd condition – the amount of abrasion which may suggest the surface exposure of the fragment, or its movement due to re-deposition,

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<sup>341</sup> Sagui and Rovelli 1998, 175.

<sup>342</sup> Orton and Orton 1975, 285; Evans and Millett 1992.

<sup>343</sup> Martin 1998, 201–204; Terrenato and Ricci 1998, 93–94; Bellanger and Husi In press, accepted manuscript, 3.

<sup>344</sup> Giannichedda 2007, 54

<sup>345</sup> Orton 1993, 176; Evans and Millett 1992, 233; Andrew Wilson, personal communication, June 2011.

ploughing, or bio-turbation.<sup>346</sup> The detailed evaluation and recording of ceramic abrasion information will be explained further below.

## **3.2. Connecting function to morphology**

### **3.2.1. Defining function**

This dissertation examines functional aspects of Roman ceramics. The relationship between vessel function and vessel morphology has been much debated in archaeological scholarship. Firstly, the term “function” warrants explanation. Michael Schiffer defined three types of function which were closely modeled on Lewis Binford’s conception of material function. These are: technomic/technofunction, which refers to the technological function of the object as governed by physical properties that allow the user to adapt to “the physical environment”; sociotechnic/sociofunction, where the object has symbolic meaning and the function is to integrate individuals into groups; and the ideotechnic/ideofunction where the object symbolizes large societal values (i.e., ideologies).<sup>347</sup> Beth Preston makes an important contribution to this discussion by emphasizing the mutability of functions and by further subdividing these three rigid classes into “proper” and “system” functions. For Preston, “proper technofunction” is the primary intended function of an object, whereas, the “system technofunction” is a secondary utilitarian function. The latter is not so normative and is often improvised. An example of “system technofunction” would be standing on a chair to change a light bulb, instead of performing the “proper technofunction” of sitting on the chair.<sup>348</sup>

In this work I focus on the technofunction (both “proper” and “system” form) of ceramic vessels. The identification of functions from morphology requires the specific understanding of a number of physical characteristics. Ericson *et alii* outline the physical qualities needed to identify the “techno-morphology” of a vessel;<sup>349</sup> however, the direct attribution from vessel form to vessel function assumes that ancient users always chose

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<sup>346</sup> Martin 2007, 89.

<sup>347</sup> Binford 1962, 219; Schiffer 1992, 9–12. An object may be considered in terms of any or all of these functional dimensions.

<sup>348</sup> Preston 2000.

<sup>349</sup> Ericson et al. 1971, 88–89.

vessels which assured “optimal performance characteristics,” that is, people were using vessels which were most appropriate for their needs both in material characteristics (e.g. hardness, porosity, etc.) and morphology (e.g. size and shape).<sup>350</sup> Prudence Rice and Daniel Miller both warn of the oversimplification in this one-to-one correlation. Miller’s 1985 census of users of cooking pots in a village in Malwa, India demonstrates that although vessel use was relatively standardized, the vessels used to perform certain tasks were not necessarily those designed to be most efficient for the job, but rather the choice of ceramic form was based in social and ritual norms. When talking with people in the village, it became clear that they did not know why they used the pots they used, although many claimed that they were the most appropriate shapes.<sup>351</sup>

Rice further emphasizes that the creation of strict morphological criteria for determining function is not appropriate across all cultures. She suggests that the more complex the society, the more opportunity there is for complex and varied vessel usage. The analysis of vessel morphology must be combined with use-wear analysis, residue analysis, and most especially, an analysis of both the cultural and archaeological context when considering ceramic function.<sup>352</sup>

### 3.2.2. Applying functional analysis to the Roman context

This dissertation takes account of the criticisms of Prudence Rice and others in its research design. First, I consider the Roman cultural context. While Rice suggests that the more complex the society, the greater variability of use, I posit that in the case of the Roman ceramic corpus, the more complex the society, the greater the variability in form, and therefore the greater the specificity of use. Carla Sinopoli’s study of the ceramic assemblage at Vijayanagara, in India, noted that the variability of forms seemed to parallel the complexity of the hierarchical and multi-religious Indian society.<sup>353</sup> An analogous scenario would neatly fit with what we know of Rome: the myriad of eating occasions, both in public and in private; the complex rituals which involve the processing, presentation,

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<sup>350</sup> Ericson et al. 1971; Braun 1983; Rice 1990.

<sup>351</sup> Miller 1985, 51–68, 158, 197.

<sup>352</sup> Rice 1990.

<sup>353</sup> Sinopoli 1999.

and pouring of foodstuffs and drink; increasingly large scale production and storage of products like wine and olive oil, all suggest that there were reasons and opportunities for form to serve function.<sup>354</sup>

Furthermore, the large amount of research done on Roman ceramic trade has revealed the importance of ceramic morphology to the Roman consumer. While we might attribute the spread of Roman fine wares to their prestige value,<sup>355</sup> the large number of imports and extensive trade of common wares in the Republican period suggest that consumers also wanted specific physical characteristics. We see the presence of locally-produced cooking ware and food preparation vessels alongside imported vessels in Italy and in towns throughout the Mediterranean in this period.<sup>356</sup> For example, in her study of the central Italian common ware, *impasto chiaro sabbioso*, Manuela Merlo observes how quickly the class spread throughout the peninsula from its few initial production centers. Although the distinctive yellow-green volcanic clay was used to make large basins and mortaria as well as closed-form jugs, only basins are found outside of the production towns. Merlo suggests that people wanted these basins for either specific ritual use or for technological reasons, since they appear quite durable as basins, and as mortaria their volcanic inclusions provided excellent surface grit.<sup>357</sup> Thus, it is possible to imagine potters producing vessels to meet the needs of users. Users communicated their functional needs to producers either by actively requesting vessels made in a certain way or by selecting those vessels which suited them until eventually more vessels were produced to meet this selection. This was a change in production resulting from a “progressive symbiosis established with the consumer-customer group.”<sup>358</sup>

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<sup>354</sup> The literary record from Rome suggests that there was a sense of “appropriate” use of certain ceramic forms. Cato, Columella, and Pliny all give strict instructions for the forms of ceramics to be used for the storage and distribution of wine and olive oil, and for cooking of specific foods. These are perhaps singular examples from particularly fastidious individuals writing agricultural treatises and encyclopaedias; the applicability and reality of advice given in works like these will be further explored in chapter 2.

<sup>355</sup> Willis 1997, 38–54.

<sup>356</sup> Shipwrecks along the coast of southern France from the 3<sup>rd</sup> to the 1<sup>st</sup> centuries BCE containing common ware from Italy demonstrate the export of this material. Olcese 1993, 52–56; Aprosio 2004, 108; Ghizzani Marcia 2004. The wide distribution of Aegean and African cooking wares relative to Italian ones in the Imperial period also suggest a market which recognized and purchased quality functional goods. J.T. Peña personal communication, February 2011.

<sup>357</sup> Merlo 2005, 423.

<sup>358</sup> Principal 2006, 47.

In addition to understanding cultural context, in 1986 David J. Hally emphasized the importance of understanding the assemblage context when relating vessel morphology to function. Hally uses ethno-historical accounts of American Indian eating to inform his morphological analysis and maintains that we need to consider the assemblages of whole deposits and whole sites, rather than looking at only one class of pottery of a particular culture, in order to make appropriate conclusions about function based on morphology. Only by comparing forms and fabric, and therefore performance characteristics, of different vessels, can we posit function. He enumerates 21 criteria to determine function of which 17 are morphological (shape and size measurements). The remaining three are traces of use in the form of sooting and pitting, and decoration, which he believes bears little on the mechanical performance characteristics of the vessel.<sup>359</sup>

My study of deposits from both sites includes an examination of all of the ceramic material contained in them, not just the study of an individual class of material. It is only through the contextual study of chronologically-comparable material that we can think about use holistically. I examine the morphology and function of all fine wares and common wares of various varieties relating to food preparation and serving. I do not directly track the morphological development of amphorae; however, their presence and volume is noted. Similarly, I only consider lamps or vessels related to personal adornment like unguentaria for a better understanding of the archaeological formation of the deposit and for dating.

I create a broad set of characteristics which define different forms.<sup>360</sup> The morphological properties which I consider are presented in Table 3.

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<sup>359</sup> Hally 1986, 275. His understanding of sooting, fire blackening, and carbon deposition is not well explained.

<sup>360</sup> Whallon (1972, 15) defines this as the subjective “feeling” approach to vessel typology, but I would argue that modern typologies are based upon similarly vague criteria combining shape, size, and presumed function.

Table 3. Morphological variables examined

Variable name	Definition
Size	Diameter and height (in centimeters), volume (in liters) <sup>361</sup>
Access to contents	Open/closedness; Angle/width of opening suggesting liquid/dry contents <sup>362</sup>
Stability	Center of gravity and base size and shape <sup>363</sup>
Graspability (or hold or purchase)	How easy is it to move empty, full, heated? <sup>364</sup>
Durability	Resistance to thermal and mechanical stress – approximated from macroscopic fabric analysis, not petrography
Surface treatment	Porosity/permeability and slippery/stickiness/friction as they pertain to function and use? <sup>365</sup>
Wall thickness <sup>366</sup>	The width of the wall measured in millimeters

These characteristics are of differing importance and relevance depending on the ceramic class. For common ware, for example, the distinction between functional types can be blurrier than for other classes which may have more rigid formal characteristics.<sup>367</sup> The degree of “natural variability of production” and the degree of standardization of each ceramic class needs to be considered when identifying functional differences.<sup>368</sup> Finally, the variability within an assemblage of different wares and forms is an important consideration. Do certain forms dominate in any one period? Can we see a shift in the relative proportions of forms over time? These two questions can have substantial

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<sup>361</sup> The calculation of volume using sherds of vessels has been experimented with by Prudence Rice (2005), George Wilson and Christopher Rodning (2002) and Louise Senior and Dunbar Bernie (1995). I use a related approach to calculate the volume of several forms. See Appendix 1.

<sup>362</sup> An unrestricted or open vessel is one whose orifice or rim exceeds, constitutes, or is very nearly the maximum diameter of the vessel. A restricted or closed vessel is one whose orifice’s diameter is narrower than the maximum diameter of the vessel. Vuković 2009, 29; Rice 2005, 212; Bats 1988, 23–24. There are several instances in my dataset when this is too rigid, for example, black gloss bowls with incurved rims like Morel 2783/2784 which should be classed as “bowls” even though their walls bow out wider than their rims.

<sup>363</sup> Rice 2005, 225.

<sup>364</sup> Rice 2005, 242.

<sup>365</sup> Burnishing and slip reduces permeability. Ikäheimo 2003, 77; Rice 2005, 231.

<sup>366</sup> For the correlation between wall thickness and cooking and storage see Hendrickson and MacDonald 1983, 630 and Rice 2005, 227.

<sup>367</sup> Pavolini 2000, 80.

<sup>368</sup> Miller 1985, 41–44, fig. 9.

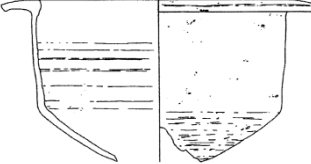


implications for how we understand functions and foodways as well as the shift of the same function (e.g., cooking, mixing) from one form to another.

### 3.2.3. Terminology

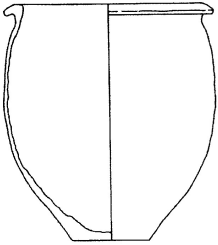
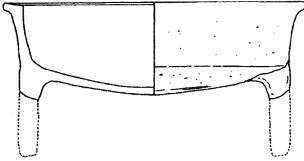
I do not propose an entirely new (chronological) typology, since the goal is neither to re-date ceramics nor to re-group ceramics for the purpose of dating. Instead, I work within established typologies and terminologies which are based upon a combination of ceramic fabric, surface treatment, and form, and usefully inform on the date and location of production. The typologies differ between my two study sites. Within the local typologies, I re-group materials according to function based upon vessel morphology (both in terms of form and a macro-assessment of fabric) according to the characteristics outlined below (Table 4).<sup>369</sup> I use Italian terms for cooking vessels in order to avoid the complications of presumed use with English forms (e.g. “stew-pot” or “casserole dish”) and in order not to introduce new terms into an already very complex list of terms.

Table 4. Vessel forms discussed in this dissertation.

Form	Description	
pentola <sup>370</sup>	This is a roughly open-form, which some call a casserole, whose wall is typically vertical, about as wide as it is tall, usually with a flanged or at least everted rim. The base can be flat or rounded and could be about the same diameter or slightly narrower than the rim opening. This vessel type is found with or without surface slip. The type with surface treatment has a thin layer of red slip coating its entire interior. This vessel can also have 3 to 4 small lugs (1 cm to 3 cm in length) protruding from the edge of the exterior base. These are sometimes parallel to the ground and therefore potentially add stability to an otherwise wide and unstable vessel. Sometimes, however, the lugs are angled downward lifting the vessel base a centimeter or two off the surface on which it sits.	

<sup>369</sup> These somewhat mirror choices Gloria Olcese, Tomasso Bertoldi, and Stephan Dyson made in their subdivision of vessels. Dyson 1976; Olcese 2003, 27; Bertoldi 2011, 67.

<sup>370</sup> This form is called a *casseruola* by Tomasso Bertoldi and the editors of the Crypta Balbi pottery publications. Since “casserole” means several different shapes in English, I chose to stick to a more generic Italian term. Paroli and Venditelli 2001; Bertoldi 2011. On the other hand, *casseruola* is a bowl with a ring foot according to E. Stanco (2001).

Form	Description	
olla <sup>371</sup>	<p>This is a closed-form, with concave walls, typically taller than it is wide, usually with a rounded or everted rim.<sup>372</sup> A popular style of rim from the Republican period is the “almond-shaped” rim.<sup>373</sup> This form also typically has a narrower base than rim opening. This form does not usually have any surface treatment; however, there is a small class of material called “internal slip ware” which has a slipped surface on the interior and wraps around the rim exterior.<sup>374</sup> A variant of this class which has not yet been defined as a separate class, but which appears in my sample from Musarna, is an olla which is burnished around the lip, 2 cm down the interior and around the wide rim of the exterior.<sup>375</sup> The functional quality of this slip and burnishing is unclear. Both qualities would decrease the permeability of the vessel wall for liquid contents;<sup>376</sup> however, the presence of slip at only the opening of the vessel suggests has a different function, both decorative and perhaps also functional. The relatively standard proportions of these vessels at Musarna and Populonia are demonstrated by the linear correlation analysis in Appendix 1.</p>	
Tegame <sup>377</sup>	<p>This is an open-form low-walled vessel with a flat or slightly concave base. The base is very similar in diameter to the rim. This vessel type in Italy most often has a layer of red slip coating its interior and wrapping around the exterior of the rim for a few centimeters. This slip varies in thickness, color, and preservation depending on production location, use, and taphonomy. This type of vessel with or without slip is also found with tripod legs attached to its base. These legs range from 3 cm to 5 cm long and are hand-pulled and attached after the vessel was thrown. The relatively standard proportions of these vessels at Musarna and Populonia are demonstrated by the linear correlation analysis in Appendix 1.</p>	

<sup>371</sup> See Donnelly (Forthcoming) for the textual evidence of *olla* and *aula* in Latin and its varying uses.

<sup>372</sup> I include in this group a yellow common ware double handled vessel even though Bertoldi calls it a krater. See Bertoldi 2011, 66, 87, fig. 72.

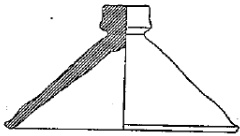
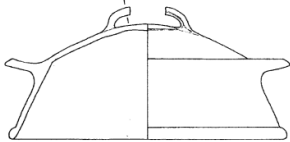
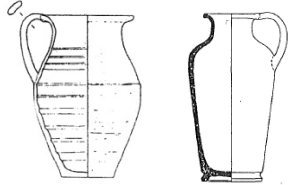
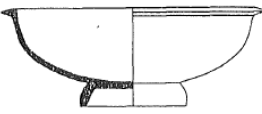

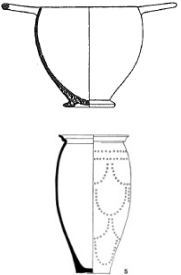
<sup>373</sup> Olcese 2003, 78–80.

<sup>374</sup> Cascino and Di Sarcina 2008, 567.

<sup>375</sup> R. Cascino and L. Ceccarelli, personal communication February 2012.

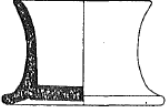

<sup>376</sup> Ikäheimo 2003, 77; Rice 2005, 231.

<sup>377</sup> For Rotroff (2006) this is a *lopas*, after the Greek tradition. For Bats (1988) this is *patina* after Latin.

Form	Description	
Lid	<p>This appears in two variants: One is a shallow open form which is wheel-thrown. It has a simple everted rim which is either slightly rounded or straight. It has a pinched knob in its top center to serve as a handle. The other variant has the same characteristics as the first; but it does not have a knob in its top center and may have served alternately as both a lid or a shallow bowl. Depending on how large the fragment is and how much the lid is preserved, it is often difficult to tell the difference between these two variants.</p>	
Clibanus	<p>This is a cooking bell. It is shaped like a concave lid with a wide flange running horizontally all the way around its belly.<sup>378</sup> There are only 8 of these in the sample.</p>	
Jug	<p>This is a closed-form vessel usually taller than it is wide. There are two variants: one has a narrow neck leading from its wide ovoid body to its rim; the other has an ovoid body with no distinct neck. It is most easily characterized by the presence of a handle or two making pouring out its contents easy. There are also several vessels in this dataset which are virtually identical in form to jugs, but do not have a handle.</p>	
Bowl	<p>This is an open-form vessel whose base is narrower than its rim. In black gloss ware some bowls, specifically the ubiquitous Morel 2783/4, has a slightly narrower lip than maximum diameter; however the difference is very minor and the overall form is of a bowl. Within this category also fall larger-scale vessels of the “bowl” form, like what might be termed a “krater” or “situla” in other contexts, or a basin or mortarium when it appears in common ware fabric.</p>	
Plate	<p>This is an open-form vessel whose base is narrower than its rim. Unlike, a bowl, however, its walls are nearly parallel with the ground, meaning that the angle between the base and the walls is under 20 degrees.</p>	
Cup	<p>This is an open-form vessel with walls which are roughly vertical or slanted slightly outwards towards the rim. It is typically taller than it is wide, as it can appear in thinwall wares, or it can occasionally be wider than it is tall and have a handle or two on its side walls. In this case the vessel appears in thinwall ware and black gloss. In all cases it is of smaller dimension than bowls.</p>	

<sup>378</sup> Cubberley et al. 1988; Olcese 2003; Zifferero 2004.

Some unusual vessel types which appear in very limited quantities (often only with 1 example) are:

Form	Description	
Ink well	So termed by J.-P. Morel, an “ink well” is a small vessel with a flat rim and base with walls which concave in towards its interior. It appears in black gloss.	
Unguentarium	This is a spool-shaped vessel used to contain perfume, probably.	

### 3.3. Ceramic Alteration Analysis

An important methodological contribution of this dissertation is its complete and systematic ceramic alteration analysis on all of the sherds from the selected deposits of both sites. The term “ceramic alteration” is increasingly used in place of the term “use wear” because it includes the study of the alteration of materials arising from both use and non-use. Use-alteration analysis of ceramics reveals “intentional interaction between people and the pottery”, while analysis of non-use alteration reveals alteration resulting from taphonomic or post-depositional circumstances.<sup>379</sup> There are several benefits to combining a morphological study with an alteration analysis in the analysis of vessel function. Traces of wear can be combined with observations made about form to more accurately determine use.<sup>380</sup> Alteration analysis also has the potential to reveal multifunctionality, including both contemporaneous multiple uses of one object as well as the use of an object for its non-intended purpose, potentially capturing the “system” along with the “proper” technofunction.<sup>381</sup> The principle behind alteration analysis is similar to the idea of *chaîne opératoire* as we reconstruct the choices and bodily practices of the human user through the identification of patterns in the traces of wear.<sup>382</sup> Roger Grace explains

<sup>379</sup> Skibo 1992, 42–44.

<sup>380</sup> Hally 1986; Rice 1990.

<sup>381</sup> Preston 2000.

<sup>382</sup> Grace 1996, 218–219.

this pattern recognition as observing the “kinematics of tool use.”<sup>383</sup> My decision to consider not just object identification and form, but also alteration, parallels identical methodological developments in environmental archaeology, especially zooarchaeology.<sup>384</sup>

Alteration analysis has had its most explicit and systematic exploration within the sphere of behavioral archaeology. Michael Schiffer and James Skibo have been at the center of a number of ethnoarchaeological and experimental archaeology efforts to consider how traces of use might manifest themselves on archaeological materials.<sup>385</sup> The principles of alteration analysis have been applied in many small-scale studies examining lithic tools, potential pigments like ochre, and ceramic vessels.<sup>386</sup> Originally, several scholars noted the difficulty of performing alteration analysis on fragmentary ceramic sherds and suggested that it could only be applied to museum-quality, and therefore whole, vessels. Studying alterations on whole pots allows for the understanding of the precise location of different kinds of abrasion and fire damage and aids in the understanding and separation of use and non-use alteration.<sup>387</sup> Unfortunately, the circumstances in which archaeologists excavate whole vessels, primarily tomb and ritual contexts, are limited, and we seldom recover complete vessels from the everyday, non-funerary, non-ritual contexts of interest to this research.<sup>388</sup> However, several successful, albeit brief, studies of fragmentary archaeological ceramics have examined ceramic alteration and are outlined in the following discussion. There are two main realms in which to observe use-alteration of ceramics: abrasion and fire damage. I describe each of these below, and discuss how archaeologists have studied them.

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<sup>383</sup> Grace 1996, 215.

<sup>384</sup> J.M. Maltby, for example, stressed the need for zooarchaeologists not just to identify species but also to examine butchery marks in a consistent manner in every faunal report. Maltby 1985, 19. The reporting and analysis of butchery marks is now standard practice.

<sup>385</sup> Skibo and Schiffer 1987; Schiffer 1989; Schiffer and Skibo 1989; Skibo 1992; Skibo et al. 1997; Beck et al. 2002. While Schiffer’s work on this topic was not the earliest, his and his students’ has been the most constant, long-term, and multifaceted.

<sup>386</sup> For lithics and ochre see for example Semenov 1964; Hayden 1979; Grace 1996; Hodgskiss 2010; Li and Shen 2010. For ceramic studies, see below.

<sup>387</sup> Bray 1982, 136; Skibo 1992, 45.

<sup>388</sup> Cécile Batigne Vallet conducts a limited alteration study of Imperial common ware from the necropolis at Musarna noting that it would be interesting to compare vessels from a funerary context to those from a non-funerary context. Batigne Vallet 2009, 111, 117–123.

### 3.3.1. Abrasion

Abrasion is the removal of a portion of the surface of a ceramic material in the form of linear scratches, patching, chipping, or pedestalling. Pedestalling occurs when the ceramic matrix has been worn away but the more durable mineral inclusions remain, creating a surface on which these inclusions seem to protrude, as if on pedestals.<sup>389</sup> Abrasion on ceramics can be the effect of many different and overlapping actions.

The most obvious source of abrasion on ceramic vessels is tool use. Utensils used for cooking and eating (e.g. stirring, cutting, scrapping, etc.) have prolonged and repeated contact with the interior and sometimes the exterior surface of vessels used for food preparation, cooking, and serving. James Skibo's ethnographic and material study of pottery use by the Kalinga people in the Philippines suggests ways in which we can use abrasion marks to interpret vessel function, cooking practices, and frequency of use. For example, he noted that pots which were used to cook vegetable and meat had heavier interior rim and neck abrasion than pots used to cook rice. Rice pots also have a more confined neck opening. This is because people accessed the contents in the vegetable and meat pots more frequently, both for stirring ingredients and for serving, than they did with rice pots and in a more repetitive fashion. Throughout the cooking and serving processes, a utensil was only introduced into the rice pot when the rice was being served.<sup>390</sup>

In one of the only examples of the systematic tracking of abrasion on Roman ceramics, Janne Ikäheimo notes that on African cooking ware lids, there was far more abrasion on the lip of lid forms without handle knobs, than on those which did have knobs. This suggests that when knobs were not present, the user had to scramble more awkwardly to lift the lid off of the plate, and this caused additional wear.<sup>391</sup>

Traces of tools on serving vessels can also suggest use. In 1989, Dorothy Griffiths studied 18<sup>th</sup> century CE lead-glazed ware from Canadian historic sites and noted linear scratches across the interiors of plates and short nicks and scratches on the interior walls

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<sup>389</sup> Skibo 1992, 112–113; Schiffer and Skibo 1989, 103.

<sup>390</sup> Skibo 1992, 132.

<sup>391</sup> Ikäheimo 2003, 77.

of tea cups. She interpreted these marks as the result of knives and forks on plates and repeated stirring of teaspoons in tea cups.<sup>392</sup>

Alicia Bray compared the decorative schemes of Mimbres pottery at the Arizona State Museum to the traces of wear on the pottery in order to determine if vessels with different designs had different uses. Mimbres pottery is low-fired and slipped with either geometric or representational designs. Bray recorded the type of interior design, assessed the fineness of the designs (i.e. their intricacy, the cleanness of the brush strokes), and scored the extent of the interior abrasion. Although she identified no significant difference in the degree of wear on vessels of different design schemes, she discovered that there was substantially less abrasion on the more finely-painted bowls across both design schemes. This suggests that vessels with finer painting were either not used for the same cooking activities or were used with less frequency.<sup>393</sup>

Indirect or unintentional abrasion is also a very frequent source of alteration on pottery. This is abrasion which comes from occasions of distribution or storage: activities like dragging a pot along a surface, or placing vessels on shelves or banging against other pottery.<sup>394</sup> Griffiths attributed wear on the base and exterior side of her lead-glazed vessels to the ways that they were stacked and leaned in storage. She also noticed the correlation between the amounts of different types of abrasion. Plates with more knife cuts on them also had more worn foot rings, perhaps suggesting a longer use-life.<sup>395</sup>

Another important source of alteration derives from “non-abrasive processes” like the heating of liquid and the acidic properties of foods.<sup>396</sup> Moisture directly affects the resistance ceramics have to abrasive agents. Water opens up the pores of fired ceramic clay exposing it to chemicals which then may react as a solvent and start to break down the ceramic fabric.<sup>397</sup> Furthermore, experimental archaeological trials suggest that immersion

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<sup>392</sup> Griffiths 1978, 71, 75.

<sup>393</sup> Bray 1982, 146–147.

<sup>394</sup> Schiffer and Skibo define the abrasion which happens when a pot is dragged across a floor as an “abrader with a substrate” – the floor is the substrate and the particles on it which are in contact with the pot are the abraders. Schiffer and Skibo 1989, 112; Among the Kalinga people, see Skibo 1992, 112–113.

<sup>395</sup> Griffiths 1978, 73–74.

<sup>396</sup> Vuković 2009, 27.

<sup>397</sup> Skibo and Schiffer 1987, 84.

in water increases the abrasion ceramics suffer from tools or other hard materials.<sup>398</sup> Because spalling, cracking, and the removal of the surface layer of ceramics as a result of these occurrences manifests itself very similarly to pottery which has been deposited in soil of a high pH, the find location of vessels with traces of alteration needs to be tracked.<sup>399</sup>

### 3.3.2. Fire Damage

An important source of alteration on cooking wares in particular comes from vessels' interaction with fire. Discoloration from fire has been classified and treated inconsistently in the archaeological literature. Mislabeling or inconsistent labeling seems to stem from a sincere desire to record as much information as possible, accompanied by a lack of understanding of the sources and causes of this discoloration. Scholars have used terms like "fire clouding,"<sup>400</sup> "fire blackening,"<sup>401</sup> "traces of burning,"<sup>402</sup> "burning marks,"<sup>403</sup> "sooting,"<sup>404</sup> and "scorch marks"<sup>405</sup> to refer to blackening on archaeological ceramics. In fact, discoloration from fire contact is actually the result of several different processes, so the use of a single term to refer to all traces of fire unhelpfully ignores this complexity.<sup>406</sup> Here I will clarify the differences between different types of ceramic discoloration resulting from fire.

Ceramics exposed to fire develop patches of black discoloration on their surface, which, at the most basic level, consist mostly of deposited carbon. The nature of this general blackening, its opacity, and its location on a pot, are the result of the intensity of the

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<sup>398</sup> Skibo and Schiffer 1987, 94.

<sup>399</sup> Vuković 2009, 29. In her study of Neolithic bowls from Blagotin, Serbia, Jasna Vuković the fact that severe wear and the removal of the interior slip begins 2 cm from the top of the interior rim. She identifies this as the "filling level" of the vessel.

<sup>400</sup> Beck et al. 2002, 4; Rice 2005, 235; Welch and Scarry 1995, 410.

<sup>401</sup> Dyson 1976; Moorhouse 1978, 5.

<sup>402</sup> Dyson 1976; Fentress 2010, 147, n.11.

<sup>403</sup> Lis 2006, 12.

<sup>404</sup> Ikäheimo 2003, 76–78; Ikäheimo 2010, 158–159; Fentress 2010, 147.

<sup>405</sup> *Cooking, Cuisine, and Culture: the Archaeology and Science of Kitchen Pottery in the Ancient Mediterranean World, 34<sup>th</sup> Classical Colloquium at the British Museum* (December 2010) there was a lot of use of the term "scorch marks" in discussion, instead of "burning marks" or "sooting" which many of the participants used in their papers. On "burning" marks see, W. Gauß et al., A. Steiner, and B. Lis. (and also Lis 2008) On "sooting" see the papers by G. Schörner, and S. Fourrier, all forthcoming in the conference proceedings.

<sup>406</sup> Welch and Scarry 1995. This is the only report of blackening of archaeological ceramics which distinguishes between different types and sources of fire damage.



cooking heat, the location of the heating source, and the moisture of the pot interior.<sup>407</sup> Experimental archaeology has been quite successful in clarifying the causes and nature of different types of blackening. These can be defined as sooting and charring.<sup>408</sup>

Soot is a byproduct of fuel combustion<sup>409</sup> and David Hally identified three particular sources of soot: distilled resins from the wood fuels,<sup>410</sup> followed by oxidized resins which then carbonize, and free carbon.<sup>411</sup> According to sooting experiments undertaken by both Hally and Skibo, free carbon, the last material to be deposited on the ceramics, wipes off the surface very easily and therefore is unlikely to remain on washed or archaeological ceramics.<sup>412</sup> The material that becomes imbedded in the ceramic body and leaves it black seems to be carbonized resin that manifests itself in various ways depending on moisture conditions and porosity of the pot.<sup>413</sup> This sooting, released from the combustion of flame of the fuel, appears on the exterior of vessels.<sup>414</sup>

Charring is the result of organic material (e.g., food) oxidizing after having lost all moisture. This is a frequent source of blackening on the interior of cooking vessels. From blackening on the interior of the pot, we can identify foodstuffs as having being boiled: as water is added and then boils away, particles of food get stuck on the inside of the vessel and burn away, leaving carbon. If the location of heat is underneath the pot (e.g., if the pot is placed above a fire or sitting in a bed of charcoal) there are two possible origins to this pattern of blackening: the foodstuff at the base of the pot may dry out and carbonize, or water with organic matter in it may have been absorbed into the pot and then burnt during the next heating episode.<sup>415</sup>

Another significant source of non-blackening discoloration from fire is the oxidation of the ceramic body. Oxidation occurs when a vessel or a portion of a vessel is

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<sup>407</sup> Skibo 1992, 148.

<sup>408</sup> Skibo 1992, 152–153. He ignores burning/scorching as a possibility and just sees exterior blackening as sooting which either does or does not come off when the ceramic is washed.

<sup>409</sup> For fuel sources in the Roman world, see Veal 2012.

<sup>410</sup> The evidence for alternative (that is, non-wood fuel) in the Roman world is only beginning to be explored (Coubray et al. 2013

<sup>411</sup> Hally 1983, 7.

<sup>412</sup> Hally 1983, 8; Skibo 1992, 154, 159.

<sup>413</sup> Skibo 1992, 162–168.

<sup>414</sup> See Appendix 3 for sooting experiments undertaken by me for the purposes of this dissertation.

<sup>415</sup> Skibo 1992, 148–151. Technically, interior depositions cannot be of pure carbon, but also consist of some uncarbonized lipid material.

exposed to flames that create an oxidizing atmosphere in which carbon is burnt off. It can occur in the original firing of a vessel or as a result of use. Oxidization appears as a lack of sooting in the middle of an otherwise blackened area, or often as patch which is lighter in color than the rest of the clay fabric surface. Especially when such an exterior lightening corresponds with an interior blackening, it indicates that the pot sat very close to a heat source, or perhaps in or on the heat source, and that the heat was hot enough to re-fire the clay.<sup>416</sup> This oxidization can also be associated with spalling of the ceramic material.

### 3.3.3. Cleaning

The washing of pottery (both by archaeologists and ancient peoples) can greatly affect the visibility and presence of use-alteration either by erasing it or by masking it. Very little information exists about the washing of pottery in the Roman world. While Romans did not have knowledge of microscopic bacteria, they did seem to strive for visible cleanliness.<sup>417</sup> The only textual references for how to clean a ceramic vessel appear regarding storage vessels, not pottery for daily-use. In Columella's 1<sup>st</sup> century CE treatise<sup>418</sup> *On Agriculture* he explains that one of the duties of the farm bailiff's wife is to ensure that the ceramic vessels which have been used to make and store olive oil have been properly cleaned when they are empty. He explains:

*Dolia autem et seriae, in quibus oleum reponitur, non tantum eo tempore curanda sunt, cum fructus necessitas cogit, sed ubi fuerint a mercatore vacuata, confestim vilica debet adhibere curam, ut, si quae faeces aut amurcae in fundis vasorum subsederint, statim emundentur et non calidissima lixiva, ne vasa ceram remittant, semel atque iterum eluantur, deinde aqua tepida leviter manibus defricentur et saepius eluantur, atque ita spongia omnis umor adsiccetur. Sunt qui cretam figularem in modum liquidae faecis aqua resolvant et, cum vasa laverint, hoc quasi iure intrinsecus oblinant et patiantur arescere; postea, cum res exigat, ali<i> pura aqua.*

The barrels and jars in which the oil is stored should be taken care of not only at the time when the fruiting season makes it necessary, but also when

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<sup>416</sup> Skibo 1992, 156. This is then confirmed by his sooting experiments on page 159.

<sup>417</sup> Jansen 2000, 275–276.

<sup>418</sup> *De Re Rustica* was probably published towards the end of Columella's life around 65 CE. See Loeb introduction by H.B. Ash, 1941, x.

they have been emptied by the merchant. Immediately the bailiff's wife should make sure that if some lees or sediment have sunk to the bottom of the vessels, they be cleaned out and washed once again and again with lye which is not too hot, to avoid the wax inside the vessels melting. Then they should be lightly rubbed and washed out by hand with tepid water, and then the moisture should be dried up with a sponge. There are those who when they wash vessels, they dissolve potter's clay to form a liquid sediment which they smear over the inside and let dry. When they use the pot afterwards they wash this out with pure water.<sup>419</sup>

Lye appears rarely in ancient texts. It is mentioned by several Roman and Greek authors as a bleaching agent for drying grapes and dyeing hair. The Latin and Greek words, *lixivia* or *lixiva* in Latin, *κοβία* in Greek, seem to refer to both a liquid substance like modern alkali lye and to an ashy dust.<sup>420</sup> It is referred to as a cleaning agent only by Columella. It is difficult to know, however, whether Roman lye would have been as caustic as modern homemade lye. Certainly if it was used as a liquid detergent, it would have come into contact with human skin and had the potential to be quite damaging if it was at full undiluted strength. One of the few other mentions of liquid lye, and the only one in this same mid-1<sup>st</sup> century period, suggests that lye was commonly diluted. Scribonius Largus, who was probably a court doctor for the Emperor Claudius, wrote a medical treatise prescribing pharmacological solutions for a myriad of troubles.<sup>421</sup> He suggests drinking lye made from the ash of twigs, *lixivio e sarmentorum cinere facto*, as a cure for several stomach ailments.<sup>422</sup> Largus is somewhat of an obscure character in Roman history and little scholarly attention has been paid to his work. His remedies range from the "barely rational to the outrageously fanciful" while some are actually reasonable,<sup>423</sup> so it is difficult to say if his lye drinking suggestion is plausible or dangerous; however, it at least gives the suggestion that lye was an available domestic product which, while effective, may not have been damaging.

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<sup>419</sup> Columella XII, 52, 14-17. This is the Loeb translation.

<sup>420</sup> Pliny uses the clearer phrase "*in cinere lixivo*" or "lye ash" for making raisins in *Nat Hist* XV, 67; Pliny also mentions a *sapo* or "soap" for dyeing hair which is clearly lye, not soap at *Nat Hist* XXVIII, 191. On *κοβία* as a dust in Theophrastus see Gottschalk 1964, 69, n. 4; Lye was probably also used as a cloth mordant for dying Wild 2002, 8.

<sup>421</sup> Pellegrino and Pellegrino 1988, 24.

<sup>422</sup> Scribonius Largus, *Compositioes Medicamentorum* 182, 184, 198, 232.

<sup>423</sup> Pellegrino and Pellegrino 1988, 30.

Pliny the Elder, also writing in the middle of the 1<sup>st</sup> century CE, explained the cleaning of vessels for storing wine. In addition to being positioned in a cool place,

*Quin et figuras referre: ventriosa ac patula minus utilia. Picari oportere protinus a canis ortu, postea perfundi marina aqua aut slasa, dein cinere e sarmentis aspergi vel argilla, abstersa murra suffiri ipsasque saepius cella.*

Moreover the shape of the jars is important: pot-bellied and broad ones are less useful. Immediately after the rising of the Dog-star they should be smeared with pitch, and afterwards washed with sea-water or salty water, and then sprinkled with ashes of brushwood or with potter's clay, and then rubbed clean and fumigated with myrrh, as should frequently be done with the wine-cellars.<sup>424</sup>

This passage's order of operations seems rather strange; the coating of the vessel with pitch and then sprinkling it with ash and earth suggests that the interior of the vessels would have had particles of material stuck to it. This may have been to mitigate the stickiness and flavor of the pitch.

While both of these passages mention raw clay as a potential cleaner, they are quite different in their use of fresh versus salt water and in the mention of what seems to be liquid lye versus ash.<sup>425</sup> Given the context in which these passages appear, both in instruction books for successful farming and exploitation of the natural world, we might assume that these differences are connected to their effect on the taste and longevity of the products being stored. It is very difficult to apply this cleaning advice to the cleaning of serving and cooking pottery. If we were to use Columella's and Pliny's writings as guidelines for Roman dish washing generally, there is no reason to believe that using lye, salt water, and sponges to clean ceramic vessels would remove abrasion or even blackening to a significant extent.

A more relevant concern for the removal and masking of traces of wear is modern pottery washing after the sherds have been excavated. All of the ceramics examined in this dissertation have been washed with tap water and scrubbed with tooth- or nail-brushes.

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<sup>424</sup> Pliny, *Nat. Hist.* XIV, 27, 134.

<sup>425</sup> In rural India, people currently use sand to scrub their cooking pots clean. Carla Sinopoli, personal communication December 2011.

### 3.3.4. Palimpsest and Visibility

Rubbing or wearing of pottery affects different strengths and compositions of pottery in different ways.<sup>426</sup> Similarly, the visibility of these traces of wear differs according to the composition of the pottery. For example, scratches may be easier to see on vessels with a smoothed and uniform surface than on pottery with rougher and more heterogeneous surfaces.<sup>427</sup> Schiffer and Skibo define “plastic deformation” as resulting from contact with an abrader which causes “localized decompression of the surface”, manifested as scratching. They note that such scratches would be unlikely to affect vitrified or glazed surfaces;<sup>428</sup> however, the observation of ceramics in this dissertation suggests that this process is especially visible on slipped sintered surfaces.

The problem of palimpsest, that is, of repetitive traces of wear overlapping and therefore masking each other, needs to be handled and interpreted on a sherd by sherd basis. Find context, the use life of the form, and comparison of different examples of the same form all need to be taken into account when observing or ruling out palimpsest. The same goes for the masking of one type of alteration by another type, for example, soot at the bottom of a pot cushioning it from abrasion.<sup>429</sup>

### 3.3.5. Considering taphonomy

Distinguishing between use-alteration and alteration which occurs as the result of post-depositional processes or “taphonomy” is an issue with which proponents of the potential for use-alteration have been grappling.<sup>430</sup> A further important consideration related both to palimpsest and taphonomy is the masking or changing of use-alteration by post-depositional processes. For example, Beck *et alii* studied the effect of post-depositional abrasion on fire damage on ceramics from three sites. From one site only 21% of sherds were large enough and not completely worn away enough to study. From their

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<sup>426</sup> Schiffer and Skibo 1989, 102, 103 on relative hardness of the abrader vs. the ceramic. In this experiment, they measure abrasion quantitatively calculating the “weight loss” of individual fragments.

<sup>427</sup> This will be discussed below.

<sup>428</sup> Schiffer and Skibo 1989, 103.

<sup>429</sup> Skibo 1992, 122.

<sup>430</sup> Schiffer and Skibo 1989, 101.

second and third sites, 59% and 11% of the sherds were appropriate for study.<sup>431</sup> To determine if a sherd has undergone significant post-depositional disturbance, one must consider the effects of both accretion and attrition on our ability to “read” the sherd. I record both accretion of foreign material and attrition of the surface on my examined sherds. For accretion, staining and the adhesion of mineral crust have the largest potential to mask alteration, but also contribute significantly to the understanding of the post-depositional circumstances of the stratum. For attrition, observing the “the degree of rounding,” especially at the edges of the breaks, is one way to consider how much post-depositional movement sherds have undergone.<sup>432</sup> This observation of sherd condition can be combined with the index of brokenness and sherd size.<sup>433</sup>

I observe and record all alteration on every sherd and then, based on this complete assessment, consider the possibility that each trace of alteration is caused by use, depositional, or post-depositional processes. Generally, pattern recognition especially in the case of abrasion (in degree or extent of alteration, and location of alteration) also aids in determining whether the alteration arose from use or from post-depositional or post-excavation circumstances.<sup>434</sup> The selection of appropriate contexts containing high frequencies of sherds which are not significantly damaged by post-depositional or post-excavation events is an important aspect of this study. By recording all of the attrition and accretion on the studied ceramics, I make the decision to include or exclude the ceramics in an assessment of use-alteration.

My emphasis on context and taphonomy is entirely in line with movements within zooarchaeology to pay close attention to alteration caused by post-depositional processes versus alteration caused by human action. For example, David Orton tracked the appearance of cut marks on faunal material from two different deposit areas at the site of Gomolava, in Serbia. He noted that cut marks are much more frequent on bone fragments recovered from pits than on those from an open heavily trafficked area. He argues that this

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<sup>431</sup> Beck et al. 2002, 3–4.

<sup>432</sup> Beck et al. 2002, 6

<sup>433</sup> This concept is similar to the method in zooarchaeology of considering the Fragment Fracture Index. Orton 2010.

<sup>434</sup> Griffiths 1978, 70.

is directly correlated with the fact that fragments from all the taxa recovered from the open area were more weathered than the fragments from the pits. In this case then, post-depositional processes probably masked or erased use-alteration on the archaeological material.<sup>435</sup>

### **3.4. Data Collection**

#### **3.4.1. Data recording**

In my data collection, I measured and recorded morphological characteristics of all diagnostic and body sherds which are at least two square centimeters in area.<sup>436</sup> I recorded basic measurements of dimension as well as weight and surface area. For diagnostic sherds I record the length of preserved parts (e.g., for a base, the preserved height of the wall and the preserved length of the floor) for reference in later consideration of measurement accuracies and formation processes. I also measure the diameter of rims, bases, and lids, and the preserved percentage of their circumference, for sherds which have at least 5% preserved. I measure all characteristic angles of these sherds, including the rim and/or body angle, and the angle of the base from the foot or floor. I measure the width of the walls at two or three separate points, depending on the preserved size of the sherd.

The surface color of each sherd is described with Munsell values on the interior and exterior of non-slipped wares. On slipped wares, I record both slip color and the color of the internal fabric. I also describe the surface treatment, noting any decoration. I then conduct a macroscopic fabric description observing the break of the sherd with a 7x magnification jeweler's loupe. I use standardized macroscopic fabric terminology based on the conventions developed by Ian Whitbread in the Eastern Mediterranean and by Albert Nijboer and Gert van Oortmersen in central Italy.<sup>437</sup>

Observing and recording of sherd alteration includes the evaluation of the rounding of the edges of breaks. This is scored at three levels. A score of 1 means the sherd's

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<sup>435</sup> Orton 2010, page 13 of the 18 page pdf. For some reason there are no page numbers in this pdf.

<sup>436</sup> Sherds under 2 square centimetres in diameter and smaller are weighed and counted for the purposes of quantification and have a full understanding of the fragmentation of the stratum, but they are too small to consider form or alteration accurately or usefully.

<sup>437</sup> Whitbread 1995; Attema et al. 2000, fig. 21;

fractured edges are “sharp.” A score of 2 means they are “slightly rounded” and a score of 3 means they are “very eroded.” I also record chipping of diagnostic sherds, describe any staining on the surface, and note whether or not the sherd is encrusted with minerals, and if so what percentage of the sherd is covered.

I record fire damage by using diagrams to indicate the location of blackening on the body of the vessel’s interior and exterior (Figure 7). The diagrams are meant to be a relatively precise indication of where blackening appears. However, the fragmentation of the vessel or size of the sherd sometimes means that there is little to distinguish between one location and another. This is particularly the case, for example, with base fragments in distinguishing between location 1 and location 9.

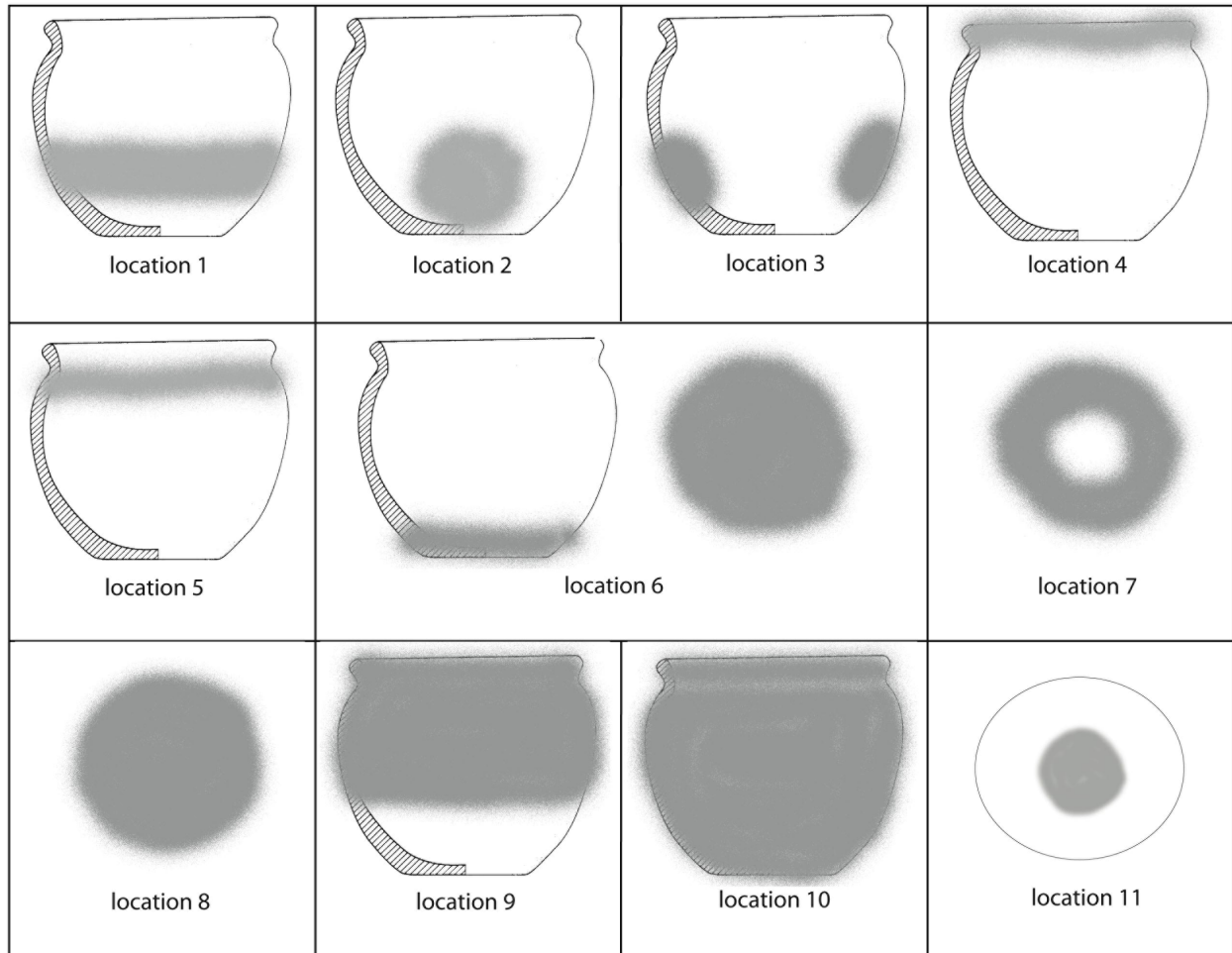


Figure 7. Diagram of blackening locations (applicable for vessel interior and exterior).



This location of blackening is accompanied by an opacity score to indicate the darkness of blackening according to an opacity spectrum which I have composed. This spectrum has verbal descriptors (Table 5).

Table 5. Scores used to describe the opacity of vessel blackening.

Opacity score	Description
1	barely discernible darkening
2	obviously darkened, but vessel color still visible
3	vessel color is barely discernible
4	surface is totally opaque black, but no excess material
5	black material is thick and flakey

The opacity of blackening has not been discussed by any other scholar studying archaeological ceramics or doing experimental archaeology; consequently, its connection to use has not been previously considered.<sup>438</sup> I posit that the level of opacity is indicative of the intensity of a vessel's use. The opacity of the blackening could be a function of the frequency or length of use, fuel type, or temperature. Thus I record opacity of blackening in order to assist in establishing how a vessel has been used to cook in a particular way and also with the hopes of clarifying whether overlapping blackening patterns might indicate a palimpsest of blackening locations. The opacity of blackening may also suggest frequency or longevity of use of a cooking pot and, in the case of interior charring of material, the skill of the cook.

For abrasion, in addition to location on the sherd (interior or exterior), I record the orientation of linear abrasion or the surface area of patches of abrasion (Table 6, Figure 8). This is accompanied by a comment section for verbal descriptions. All sherds are photographed and all diagnostic sherds are drawn.

Table 6. Terms used for the type of abrasion.

Type of abrasion	Description
Concentric	running horizontally, parallel to the potter's wheel marks on the vessel
Radial	running on axis with a radius of the vessel (orthogonal to wheel marks)
Chordal	running along the chord of two radii of the vessel (diagonal to wheel marks)
Patched	abrasion in a patch; the approximate surface area of the patch is recorded

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<sup>438</sup> Janne Ikäheimo assesses the "density" of soot on African cookware using a 5-level scale without an explanation of the implications or meaning of soot density. Ikäheimo 2003, 11, 77-78.

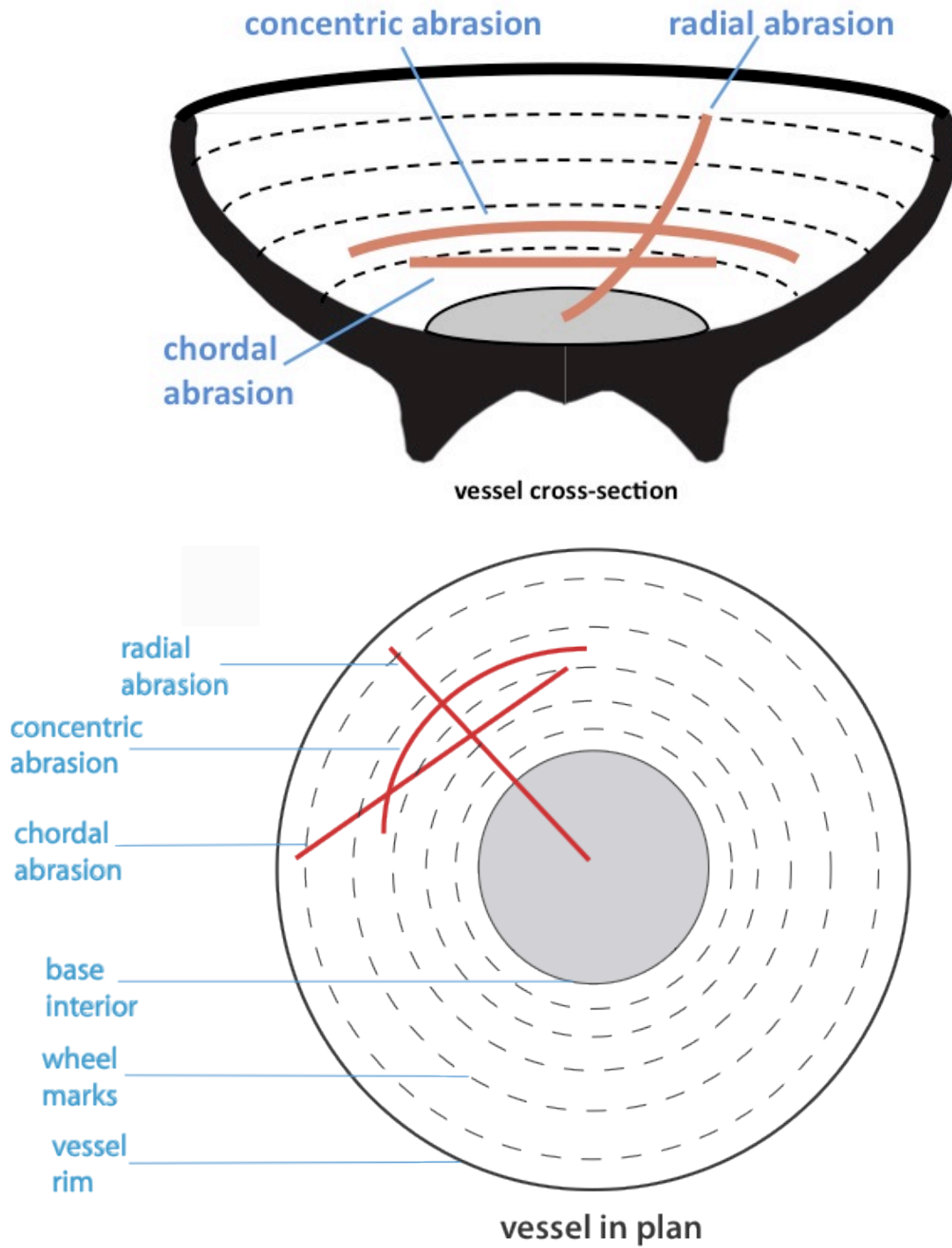


Figure 8. Orientation of linear abrasion.

### 3.4.2. Observation methods

In lithic use-wear analysis, researchers have tended to use high-powered microscopes.<sup>439</sup> This is not appropriate for ceramic analysis. Considering the heterogeneity of ceramics surfaces, the questionable value of observing minor variations in surface texture would not justify the significant effort required to subject every sherd to microscopic examination.<sup>440</sup> Most importantly, it is the patterning in location of abrasion – the “vessel context” – which aids in its identification and governs whether it can be ascribed to use-wear or taphonomy.

For this dissertation, the initial identification of alteration was done with both the unaided eye and with low-powered (7x) magnification. After alteration is identified, I use a 20-to-50x digital microscope to observe detail and photograph the abrasion. There is precedent for using low-power microscopy in the study of ceramic alteration. To observe “soot” patterns as Beck *et alii* used a 5x handheld lens and a 1-to-40x microscope. My data collection form appears in Appendix 5.<sup>441</sup>

### 3.5. Statistical methods for analysis

In my analysis, I use standard statistical tests to determine the statistical significance of patterns in the data. “Statistical significance” is a formal term which refers to the probability that a result would not occur by chance. By convention, most scholars employ a “significance level,” also called a “confidence level” or “*p*-value,” of 0.05 or less in order for results to be considered significant. A *p*-value of 0.05 means that the results have a 5% likelihood of having occurred by chance, or conversely, a 95% probability of being patterned in some non-random, and potentially meaningful way. This being said, a result that qualifies as “statistically significant” may not be meaningful or important in the context of any particular research question. By the same token, results having a *p*-value above 0.05 are typically not deemed “statistically significant,” yet there may still actually be

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<sup>439</sup> Hodgskiss 2010, 3346.

<sup>440</sup> This contention would be an interesting subject for experimental validation at a later date.

<sup>441</sup> Beck et al. 2002. Scholars doing use-wear analysis with ceramics have rarely reported their data collection or observation method. Neither Bray nor Griffiths specify if the magnification that they used, if any, though Griffiths suggests that she sometimes had the aid of a magnifying glass. Griffiths 1978, 73; Bray 1982.

real “meaningful” patterns in the data – though one must be less confident in these results from a mathematically perspective.

A frequent application of statistical testing in this dissertation is to determine the statistical significance of changing sizes of materials over time. These sizes are based on the calculation of mean sizes of a sample group or the distribution of sizes within a group, depending on the number of items in the sample. I also use statistical tests to determine the significance of changing proportions of materials, as well as to test whether or not groups or types of materials are statistically associated with each other. For example, I use chi-squared tests to determine whether the appearance of blackening on the inside of a cooking vessel of a particular form is associated with blackening on the exterior of the same vessel form. From these tests I draw conclusions about whether the material observations in this dissertation likely reflect real patterns of use and real patterns present in material from the study sites at large, or whether they are the result of coincidence or the “vagaries of sampling.”<sup>442</sup> The specific statistical tests employed and their associated formulae are described in detail in Appendix 2.

In this chapter I outlined the theoretical and methodological background for the ceramic analysis used in this dissertation. I also explained the methods I have employed to observe and record my ceramic data. In the following chapter, I turn to a detailed discussion of the two sites from which derives the material examined using these techniques. I will then explain the results of my analyses of ceramic function and use alteration and their implications for foodways in Chapters 5 and 6.

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<sup>442</sup> A phrase borrowed from Drennan 2009, 149.

## Chapter 4 – Musarna and Populonia: Background

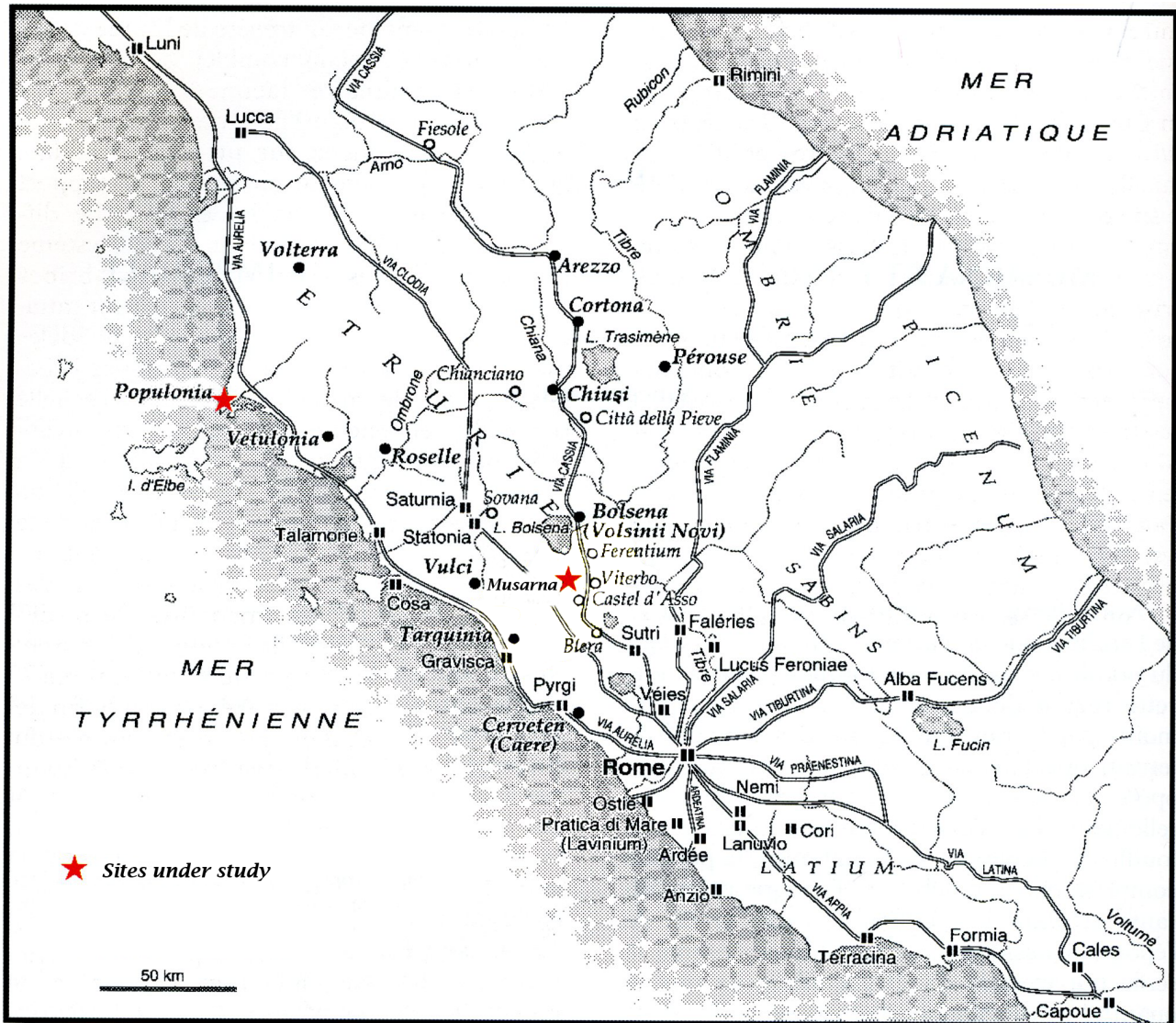


Figure 9. Map of central Italy showing the location of Musarna and Populonia (adapted from Rebillard 2009, fig. 6).

## 4.1. Musarna

### 4.1.1. Site background

Musarna, 90 kilometers northeast of Rome, sits 175 meters above sea level on a plateau overlooking the river Leia. The plateau is now an agricultural field and much of the site's remains have been lost to plow. While evidence for the later periods of the site (the Imperial phase) is largely disturbed, remains from the first three centuries of the site's occupation are better preserved. The earliest material from the site dates to the Neolithic, and there is a significant amount of evidence indicating Bronze Age occupation. Plough marks on the bedrock below the Hellenistic habitation layers suggest the area had been cultivated in the archaic and classical periods before the settlement was urbanized.<sup>443</sup>

Musarna was founded as a town either in the last quarter of the 4th century BCE or early 3rd century BCE by Tarquinia after it signed a 40 year treaty with Rome in 351 BCE. The excavators of the site interpret the founding of Musarna as Tarquinia's way of showing power in the face of Roman expansion. Rome's progressive encroachment on Tarquinia may have been perceived as a threat to its independence since by this time Rome had cast its mantle over Caere to the point of granting it the right of *civitas sine suffragio*.<sup>444</sup> Livy writes of M. Fabius Maximus Rullianus riding at the head of his troops during a reconnaissance mission in 310 BCE and raiding all of the undefended towns in this region.<sup>445</sup> This may have formed part of the motivation for Tarquinia to settle and fortify its hinterland by creating Musarna.

The 27 hectare Musarna plateau was surrounded by a defensive system of ashlar walls with aggers tracing the plateau's irregular edges (Figure 10).<sup>446</sup> Geophysical survey has revealed that the town had an orthogonal street plan, of 14 blocks, up to the walls.<sup>447</sup> If the plateau was entirely built up, the city area was significantly larger than contemporaneous Roman colonies (which ranged between 2 and 6 hectares).<sup>448</sup>

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<sup>443</sup> Broise and Jolivet 1997, 1337.

<sup>444</sup> Broise and Jolivet 1997, 1342.

<sup>445</sup> Livy 9, 36. Cited in Broise and Jolivet 1997, 1342-44.

<sup>446</sup> Broise and Jolivet 1986, 406; Jolivet and Broise 1997a, 1333.

<sup>447</sup> Crogiez et al. 1995.

<sup>448</sup> Broise and Jolivet 1997, 1345-46. The closest is Cosa whose plateau is 16.4 ha.

Modern excavations at Musarna ran from 1983 to 2004, under the auspices of the *École française de Rome*. Large sections of four city blocks were investigated, in addition to the city gate and two necropoleis.<sup>449</sup> The project explored and excavated more than 20 wells, cisterns, sewers, and rooms that had been cut into the rock. All were filled with ceramics. In many instances, the cisterns and wells had been used as water features, then filled with garbage and sealed by the construction of later structures, so their period of use is relatively definable. To-date, the research has been published in three large volumes covering a coin hoard, the Hellenistic baths, and the Imperial necropolis, respectively.<sup>450</sup>

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<sup>449</sup> The necropolis from the Hellenistic period was actually explored in the 19<sup>th</sup> century (de Cazanove and Jolivet 1984, 530–531), but the current French archaeological project has re-studied the materials found therein and mapped the tombs. This is the forthcoming doctoral dissertation of Edwige Lovergne.

<sup>450</sup> Four volumes on other specific insulae and artifacts are imminent.

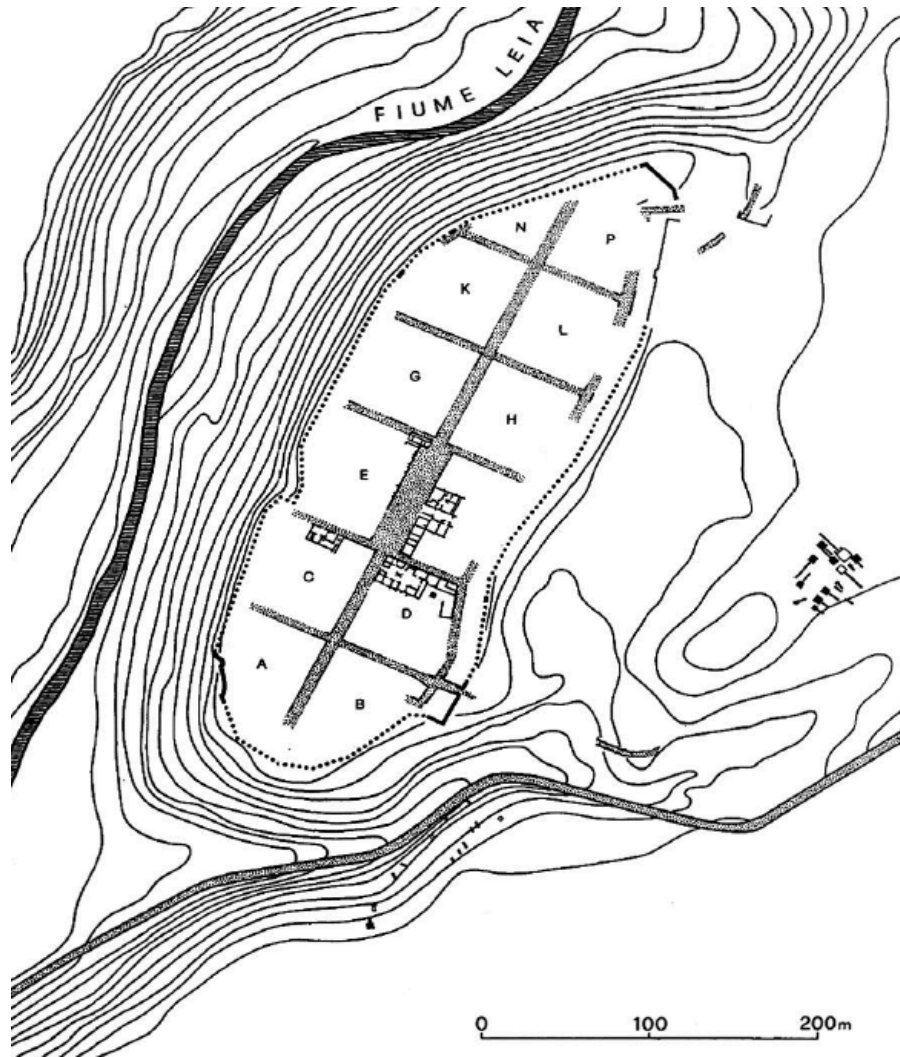


Figure 10. Plan of Musarna plateau with orthogonal layout and excavated areas indicated (Jolivet and Broise 1997a, fig.3).

It is unclear when Musarna officially came under Roman control, but it was likely at the same time as Tarquinia, in the first quarter of the 3<sup>rd</sup> century BCE.<sup>451</sup> By 205 BCE, Tarquinia was one of the Etruscan cities contributing soldiers to Scipio Africanus' army during the Second Punic War.<sup>452</sup> It is not known if Musarna also supplied troops. In the middle of the 2<sup>nd</sup> century, the Hellenistic bath were constructed at Musarna. The excavators, Henri Boise and Vincent Jolivet, draw attention to the fact that the bath construction demonstrates that Musarnan elite were part of a "hellenized koine" and increasing "Roman" practice of bathing, yet the building has a prominent mosaic inscription

<sup>451</sup> Broise and Jolivet 1997a, 1349.

<sup>452</sup> Livy, XXVIII, 45.13-20.



written in Etruscan. Here the baths are identified as evidence of the tension between traditional Etruscan practices versus Roman “modernity” in this period.<sup>453</sup>

#### 4.1.2. Contexts under study

##### Underground room - 452

This is an underground chamber excavated out of the tufo bedrock of the Musarna plateau. This space was located at the corner of a large tetrastyle domus in insula D towards the southern end of the town. The domus' ground plan is 450 square meters and the occupation and abandonment layers suggest that it was built in the 2<sup>nd</sup> century BCE and abandoned around the 3<sup>rd</sup> century CE (Figure 11).<sup>454</sup> Space 452 is connected at its upper level to space 451, and together they have been interpreted as features related to quarrying activity for the monumentalization of the city, but were only briefly used and then filled in before the construction of the domus.<sup>455</sup> Space 452 is a roughly rectangular room, with low rock-cut benches surrounding its walls. The room was divided in two by the foundation wall of the domus from the 2<sup>nd</sup> century BCE (Figure 12). The layer closest to the surface, 452001, which covered this wall as well as the cavern, had been disturbed by ploughing (evidenced by the pieces of plastic and leaves found therein). It contained minimal ceramic material, blocks of tufa and few bones. The main, thickest, stratum in the cavern was 452002, which was 1.7 meters thick on one side of the wall and matched by the material on the other side of the wall, which was a large stratum designated as layers 452006, 452007, and 452008, all of which should be considered as one. These strata, which contain a mass of ceramic and organic materials including bones and charcoal, were deposited over the course of the 3<sup>rd</sup> century BCE. Below this large stratum, sit strata 452003 and 452005, both containing very little archaeological material. I also date these to the 3<sup>rd</sup> century, perhaps

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<sup>453</sup> Broise and Jolivet 2004, 334–336. For a discussion of inscriptions as evidence of cultural identity, see Adams 2003a; Farney 2010; Langslow 2012.

<sup>454</sup> Jolivet and Broise 1989, 519.

<sup>455</sup> Jolivet and Broise 1987, 505; Lovergne 2005, 31. On the quarrying, see Jolivet and Broise 1997a, 1333.

with the understanding that they were deposited at the early part of the century (Table 7).<sup>456</sup>

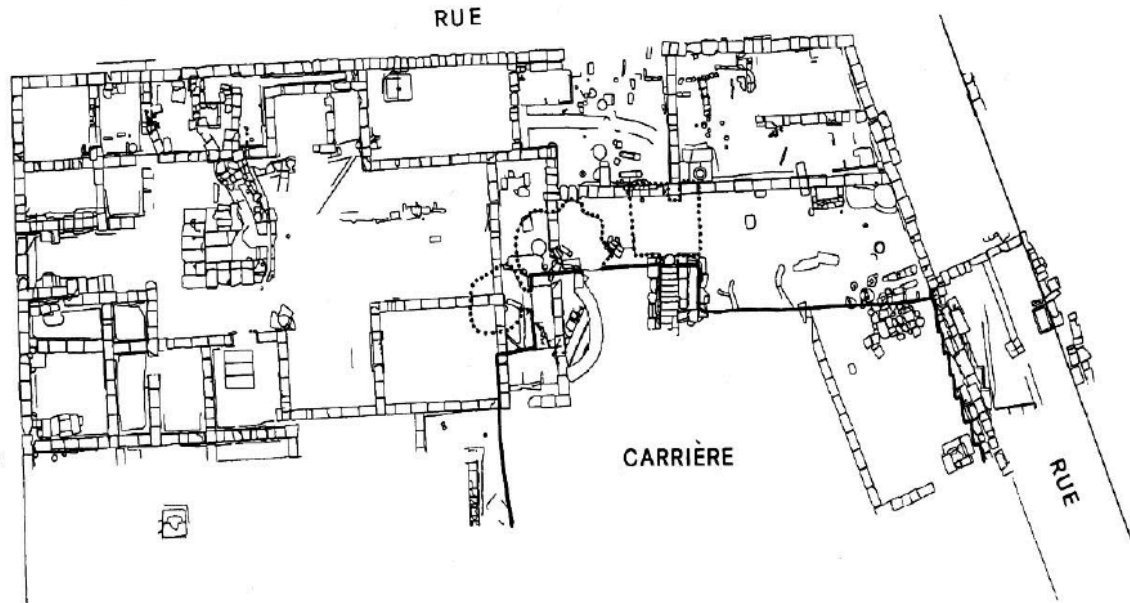


Figure 11. Domus of insula D (Jolivet and Broise 1997a, fig. 5).

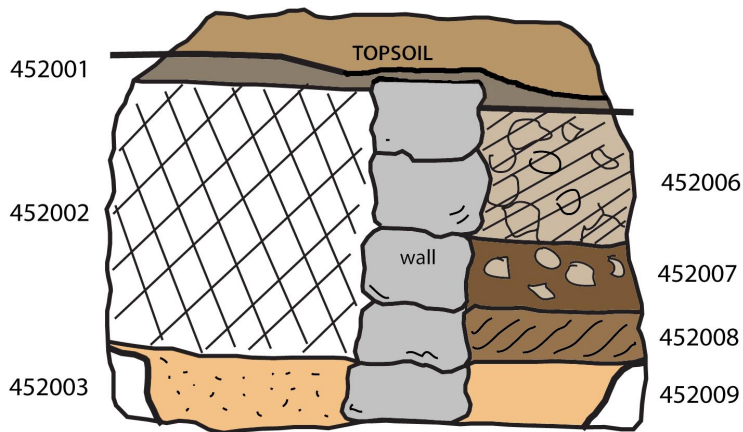


Figure 12. Section drawing of feature 452, underground room (after excavation notes 1988).

### Cisterns 511 and 635

Both of these cisterns are located in insula F, a city block in the center of the urban plateau along the main road (Figure 13). The irregular yet unified plan of the block, the small size of the walled-spaces, the large number of cisterns, and the materials found

<sup>456</sup> This explanation comes partially from Marchesson's 2004 thesis (Marchesson 2004, 19), from my reading the excavation drawn section, and from Lovergne's 2005 thesis (Lovergne 2005, 30-32) explanation and diagram.

therein all suggest that the area was used for artisanal or commercial activities. The excavators refer to the insula as the “market,” for lack of a more specific term.<sup>457</sup> The low quality of the wall and foundation construction and materials and the irregularity of the design suggest that the market was not a restoration of an older building, but rather, was put up in a previously empty public space that may have been used as a temporary market space. In the 2<sup>nd</sup> century BCE, there was also a small bath house incorporated into the north-eastern corner of the insula.<sup>458</sup> Excavations recovered two coin deposits dating from the 2<sup>nd</sup> to 1<sup>st</sup> century BCE in two spaces of the market. The first was an olla containing 994 coins; the second consisted of 96 coins scattered on the floor under small collapsed roof. These are the only artifacts from the market which have been studied and published to-date.<sup>459</sup>

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<sup>457</sup> Jolivet and Broise 1992; Jolivet and Broise 1997b, 444; Andreau et al. 2002, 28.

<sup>458</sup> Jolivet and Broise 1993, 444.

<sup>459</sup> In Andreau et al. 2002.

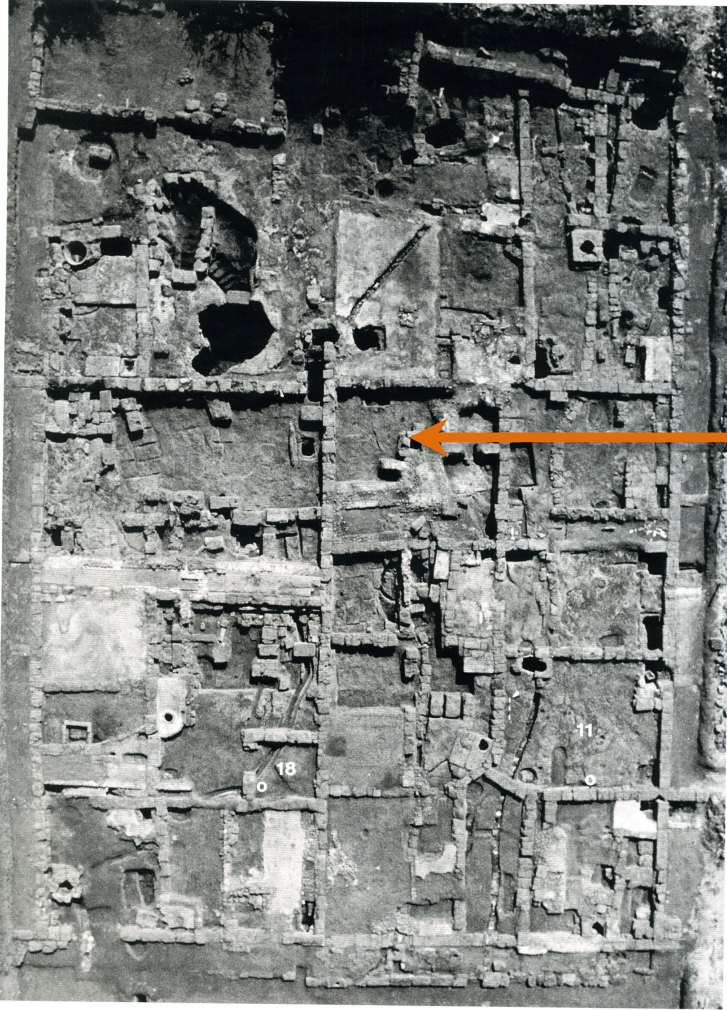


Figure 13. Insula F, with location of cistern 635 indicated (Andreau et al. 2002, fig. 46).

Several buildings in the market area have materials below a roof collapse that suggest that they were abandoned in the Augustan period; however, the insula area in general has ceramic and numismatic materials which suggest it was inhabited until at least the 7<sup>th</sup> century CE.<sup>460</sup>

The cistern (Cistern 635) from insula F whose deposits are examined in this dissertation lies at the center of the insula, perhaps in an unroofed courtyard. The excavations of cistern 635 began in 1995 and continued into 1996. Due to the cistern's depth and the volume of material that came from it, stratigraphic units were defined through a combination of arbitrary and natural levels. Though twelve strata were distinguished within the cistern, only material from the lower seven strata are examined in

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<sup>460</sup> Jolivet and Broise 1994, 457; Andreau et al. 2002, 29.

this work, due in part to the fact that over 60,000 sherds were recovered from the cistern as a whole. Furthermore, given the quantity of material from the cistern, body sherds were excluded from study. The latest, uppermost level examined, 635007, was cone-shaped and ranged in depth from 15 to 40 centimeters. The next stratum, 635008 contained the majority of material in the cistern and was one meter in depth. Stratum 635009 was also cone-shaped and ranged in depth from 25 to 10 centimeters. There are ceramic fragments from these three strata which join together to form substantial proportions of a number of vessels, so it is prudent to consider these strata as one. The material found within them dates from about 150 to 50 BCE. Below these, stratum 635010 at 40 centimeters in thickness is followed by 635011 at 15 centimeters thick (which does not cover the whole surface). Stratigraphic unit 635012 is a sandy layer which contained the broken terracotta rim of the cistern and a number of jugs in a deposit about 70 cm thick. The final deposit at the bottom of the well, 635013, was 25 to 35 cm thick. Because of a number of joining fragments and because of the similarity in the production date of materials found within, I also consider these as one stratum dating from 250 BCE to 150 BCE (Table 7).<sup>461</sup>

Cistern 511 is located immediately across the road from the market in insula E. Unfortunately, the excavation of insula E was discontinued after one season in 1996, so the immediate context of the cistern is unknown. Its interior is arranged similarly to 635, and is linear like a well. Its stratigraphy is relatively straightforward. The uppermost layer, 511001, contains material dating from about 150 to 50 BCE, but has experienced some modern disturbance (it also contained wood, modern metals and plastic). The next deposit, 511002, had minimal disturbance and dates to the second century BCE. The next layer, 511003, was quite distinct from the layers above and below because of its yellow-sandy soil. It contained material dating from about 300 to 200 BCE. Finally, stratum 511004

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<sup>461</sup> Julie Léone's forthcoming doctoral thesis on the thinwall wares of Musarna proposes a somewhat different dating of the later layers of this cistern. Léone maintains that the earliest layers of the cistern were filled at the end of the 2<sup>nd</sup> century BCE based on 9 fragments in 635013 and 12 in 635012. However, considering that thinwalled wares have a high likelihood of fragmentation compared with other Roman pottery owing to their delicacy (see suggestive experimental results in Chase 1985, 215) these fragments are likely to be relatively small, and hence a high probability of intrusion must be acknowledged. Léone also shifts SUs 635009-635007 to the end of the 1<sup>st</sup> century BCE. In contrast it is noted that several examples of transitional local "red gloss" vessels in very good condition (nearly complete) confirm my early 1<sup>st</sup> century date and 9 fragments of terra sigillata contained therein also confirm a mid 1<sup>st</sup> century date.

covered the floor of the cistern and dates at the earliest to 350 to 250 BCE. The depth of these deposits is not mentioned in the database of the excavation notes (Table 7).

Table 7. Chronology of Musarna contexts.

Stratigraphic Unit	Date Range (BCE)	Period
511004	350-250	1
452003	300-200	2
452002	300-200	2
452007	300-200	2
511003	300-200	2
635013	250-150	4
635012	250-150	4
635011	250-150	4
511002	200-100	5
635010	200-100	5
452001	200-50	6
511001	150-50	8
635009	150-50	8
635008	150-50	8
635007	150-50	8

#### 4.1.3. Ceramic materials

A total of 1939 diagnostic fragments were recovered and analyzed from the three contexts described above, with an additional 153 semi-diagnostic fragments, that is, fragments whose origin is evident (e.g. from the base of a vessel), but their attributes could not be measured. Of the diagnostic fragments, 931, or 48%, were rim fragments or vessels whose whole profiles are preserved. I only include specimens which have 5% or more of their circumference preserved, to ensure the accuracy of the diameter measurement.<sup>462</sup> The minimum number of vessels (MNV), according to rims, is 882.<sup>463</sup> These represent an

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<sup>462</sup> An experiment by Warren R. DeBoer and his students (1980) demonstrates that measurements (e.g. of rim diameter or rim angle) made by a single researcher have similar, consistent biases and therefore may legitimately be compared to each other.

<sup>463</sup> The MNV is similar to the total number of rim fragments in this case because the initial processing of the ceramics at the time of excavation was meticulous and joining rim fragments had been glued together prior to my study of the material. Consequently when I count “one rim fragment” in my database it is often comprised of several fragments (as many as eight in some cases) which have been glued together. This increases both the percentage preserved of each rim and also aids in rapidly distinguishing among rims belonging to different vessels.

estimated vessel equivalence (EVE) of 159.79 vessels. Eighty percent of the diagnostic fragments have traces of post-production alteration, either some kind of abrasion or fire damage (Table 8).

Table 8. Ceramic quantities from Musarna

	<b>Sherd count</b>	<b>Weight</b>	<b>Weight/sherd ratio</b>	<b>With alteration</b>
Diagnostic	1,939	91,818 g	47.35	1,558 (80%)
Semi-diagnostic	153	3,877 g	25.34	120 (78%)
Body sherd	2,770	24,581 g	8.87	613 (22%)
Total	4,862	120,276 g	24.74	2,291 (47%)

## 4.2 Populonia

### 4.2.1. Site Background

Populonia is located on the Tyrrhenian coast, 300 kilometers north of Rome, on the tip of the limestone rock of the Promontory of Piombino (Figure 9). Populonia (called *Pupluna* in Etruscan) was a coastal settlement with evidence of habitation from as early as the late 2<sup>nd</sup> millennium BCE. The 4<sup>th</sup> century CE author Maurus Servius Honoratus wrote that the settlement was founded either by Corsicans or by Volterrans: “. . . *alii Populonam Volterrannorum coloniam dicunt. Alii Volterrannos Corsis eripuisse Populoniam dicunt.*”<sup>464</sup> By at least the 8<sup>th</sup> century BCE Populonia had an active elite and the Iron Age burials from Populonia suggest that it was much wealthier and more populated than Volterra at this time.<sup>465</sup> Postholes in the limestone bedrock on the highest point of the promontory and associated ritual deposits are evidence of an elite residence at least as early as the 8<sup>th</sup> century BCE.<sup>466</sup> This structure is currently under study by Sapienza University of Rome. The Etruscan city had cyclopean walls and sat on two hills with a saddle in between, the Poggio di Telegrafo or di Mulino and the Poggio del Castello.<sup>467</sup> The walls were built at least as early as the end of the 6<sup>th</sup> to the beginning of the 5<sup>th</sup> century BCE and are currently under re-study by the University of Siena.<sup>468</sup>

<sup>464</sup> Servius *ad Aeneid* X, 172.

<sup>465</sup> Banti 1973, 140; Cambi 2002, 10–11.

<sup>466</sup> Bartoloni and Acconcia 2006, 14.

<sup>467</sup> De Grossi Mazzorin and Mascione 2010, 325.

<sup>468</sup> Grilli and Russo 2002, 52. One excavation campaign focussing on two tracts of wall was undertaken by the Soprintendenze Archeologica di Firenze in the 1980s; now there is a second campaign under the direction of Franco Cambi.

In the saddle between these two hills sits the *area sacra* of the early Roman part of the town (Figure 14). The *area sacra* contains three temples which were built in succession beginning in the 3<sup>rd</sup> century BCE and which were positioned around an open yard which probably served as a central public space. Bisecting this area is a wide road made of basalt blocks. The road connects the *area sacra* with an upper terrace on which two *domus* were built.<sup>469</sup> The ceramic and faunal material under study in this dissertation derive from these two *domus* and will be described further below. Both *domus* are built against a large stone terrace wall (the side of a platform-like structure which the excavators have labelled “le Logge”). This platform seems to have been modeled after the terrace sanctuaries of Terracina and Palestrina, with a stone arcaded façade and positioned atop the promontory. The platform was 40 meters long and housed a multitude of rooms containing detailed mosaics. All the rooms seem to be built for the purpose of public gathering or cult celebration, and some are certainly bathing rooms.<sup>470</sup>

Populonia’s importance as an Etruscan center on the coast cannot be overstated.<sup>471</sup> It was a key site of iron-extraction and metal-working both at the neighboring island of Elba and its mainland coast.<sup>472</sup> The remains of industrial buildings at the site indicate that the metal industry had begun by at least the 6<sup>th</sup> century BCE and included the production of bronze as well as iron.<sup>473</sup> Dramatic archival photos of early excavations of the necropoleis show workers removing ancient iron slag three meters deep from the top of tumuli tombs and attest to the tremendous scale of the ancient production.<sup>474</sup> Trade in metals with Corsica and Sardinia may have begun as early as the 9<sup>th</sup> century BCE and by the 5<sup>th</sup> century BCE Populonia was minting its own coins in order to cope with its increasingly dynamic and complex commercial endeavors.<sup>475</sup>

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<sup>469</sup> Gualandi 2010, 84–85.

<sup>470</sup> Mascione et al. 2003, 35–49; Pais 2003; Semplici 2008, 106–108.

<sup>471</sup> Cambi (2005, 72) emphasizes the “precocious” urbanization of towns in the Maremma.

<sup>472</sup> Minto 1954; Williams 2009.

<sup>473</sup> On the industrial complexes at Poggio della Porcareccia, see Martelli 1981a, 171; Martelli 1981b, 400.

<sup>474</sup> Semplici 2008, 51.

<sup>475</sup> Semplici 2008, 37.



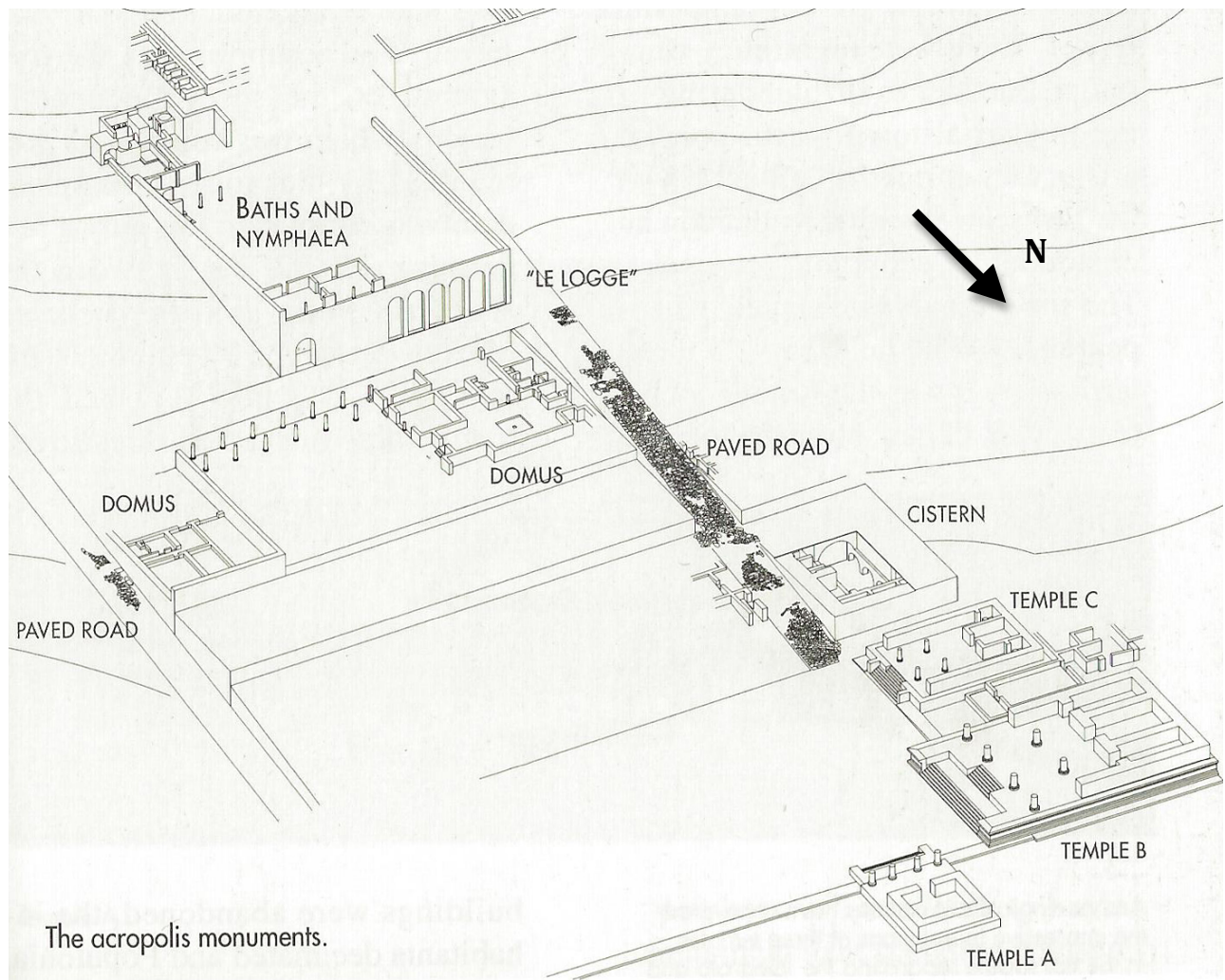


Figure 14. Reconstruction of acropolis of Populonia (Semplici 2008, 99).

It is unclear exactly how Populonia came under Roman control, but as with so many Etruscan cities, this occurred around the middle of the 3<sup>rd</sup> century.<sup>476</sup> The current prevailing view is that Populonia came under Roman control through aristocratic alliances, rather than through violent intervention.<sup>477</sup> Historical and epigraphic records are generally silent about Populonia during the Roman Republic, perhaps suggesting the locals'

<sup>476</sup> Some early 20<sup>th</sup> century scholars interpreted one passage of Frontinus as referring to the besiegement of Populonia in 282 BCE during the war between the Romans and the Gauls (for example, Beloch 1926, 454); however, this would require reading the word "*colonia*" as "*Populoniam*" and has little other external support. Salmon 1935, 26–27; Morgan 1972, 315.

<sup>477</sup> Semplici 2008, 100. For example, one brick stamp of PAAPI may suggest a connection with the consul of the middle of the 3<sup>rd</sup> century L. Emilius Papus (Manacorda 2005, 132–133).

“diffidence” to Roman oversight.<sup>478</sup> Like Tarquinia, Populonia is named among the Etruscan cities which contributed supplies to Scipio Africanus in 205 BCE.<sup>479</sup>

The material evidence from the site generally suggests stability and continuity among the inhabitants until the siege of the town by Sulla in 80 BCE.<sup>480</sup> After this time, evidence of habitation on the promontory tapers off.<sup>481</sup> The geographer Strabo, who apparently travelled through the area in the late 1<sup>st</sup> century BCE or early 1<sup>st</sup> century CE described the declined state of the promontory: “Now it is but a small town that is completely abandoned except for the temples and a few buildings; its port is better populated.”<sup>482</sup>

#### 4.2.2. Contexts under study

The area between the “Logge” and the Poggio del Castello has been under investigation from 1980s to the present under the auspices of a series of universities and is currently under the direction of the University of Pisa and the University of RomaTre. The excavations include an extensive series of soundings guided by a geophysical campaign.<sup>483</sup> Only one sounding contains significant amounts of pre-Roman material.<sup>484</sup> The rest have revealed material beginning from the late 3<sup>rd</sup> century BCE.<sup>485</sup> Details of the excavation campaigns, including studies of topography, architecture, and finds, have been published annually in the site’s periodical *Materiali per Populonia*, since 2001. This means that there is a great deal of published data available; however, its presentation is disjointed and the interpretations of individual excavation areas are continually being revised.<sup>486</sup> The material

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<sup>478</sup> Torelli 1995, 47.

<sup>479</sup> Livy, XXVIII, 45.13-20.

<sup>480</sup> Banti 1973, 145; Cambi 2005, 75.

<sup>481</sup> M. L. Gualandi, personal communication, September 2011. Costantini and Gasperi 2008, 180–181; Semplici 2008, 100.

<sup>482</sup> Strabo V.2.6.

<sup>483</sup> Mascione and Patera 2003, 24.

<sup>484</sup> Mascione and Patera 2003, 18. This is saggio XX. Other soundings have pre-Roman material, but the excavators consider it to be residual.

<sup>485</sup> Camilli and Gualandi 2005, 14.

<sup>486</sup> Given the dynamism and energy of archaeological work at the site, the constant sharing of research at the annual Spring seminar series, and what seems to be an excellent rapport between the directors of the various projects at Populonia, it is surprising that the only broad synthesis of the site is the guidebook to the archaeological park by Andrea Semplici (2008). According to Daniele Manacorda, there is no intention to publish a “conclusive monograph” of results. The excavators have taken the harshly realist view that the site

under study in this dissertation comes from a series of construction fills, leveling layers, and pits associated with the two *domus* on the terrace just below the “Logge,” referred to as saggio IV and saggio IX. The stratigraphic units which were identified and excavated in the field (including fills, cuts, and built features) were re-grouped in the post-excavation phase into “*attività*” or groups of activities.

#### Saggio IV

This sounding was begun in the year 2000 and is still under excavation as of the autumn of 2012. It contains a *domus*, entered from the basalt street to the west which leads up to the “Logge.” The *domus* seems to be based around a room with a central *impluvium*. This central area of the *domus* had its earliest phase in the late 3<sup>rd</sup> century and was then expanded in the early 2<sup>nd</sup> century (Figure 15).<sup>487</sup> By the end of the 2<sup>nd</sup> century, the *domus*

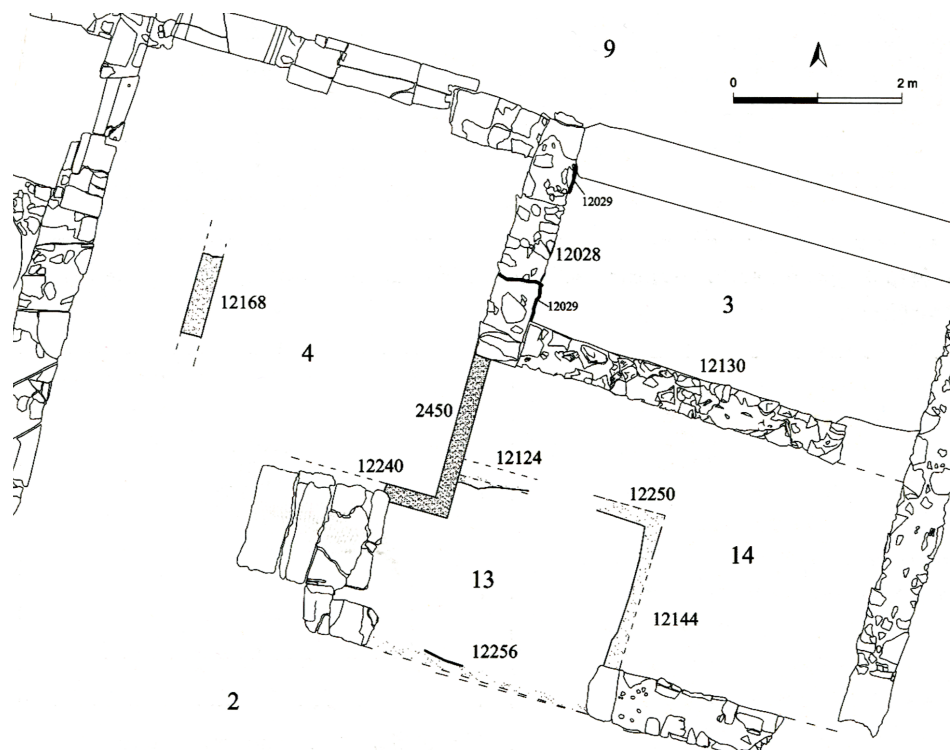


Figure 15. Domus in saggio IV in early 2<sup>nd</sup> century (Cavari and Coccoluto 2008, fig. 1).

is far too complex and there are too many collaborators to imagine a final publication some day. Instead, they have opted for frequent short publications (Manacorda 2005, 131). It should be noted, however, that *Materiali per Populonia* is available in only a handful of circulating libraries worldwide.

<sup>487</sup> Cavari and Coccoluto 2008.

had developed a more standard “atrium house” plan with a series of rooms surrounding a clear *atrium* with an *impluvium*.<sup>488</sup> On the east side of the atrium was a *tablinum*-like room. Beyond the *tablinum* was a peristyle or unroofed garden area, but excavations have so far been inconclusive about the nature of this end of the *domus* (Figure 16).<sup>489</sup> At the beginning of the 1<sup>st</sup> century BCE, the area on the south side of the *atrium* was converted into a small bathing area. A *caldarium* is identifiable by the *pilae* in the floor and was heated by a small furnace. There was additionally a small exedra built into the wall to make room for a basin or *labrum* (Figure 17).<sup>490</sup>



Figure 16. Domus in saggio IV in late 2<sup>nd</sup> century (Coccoluto et al. 2008, fig. 7).

<sup>488</sup> Coccoluto et al. 2008, 63–66, 70, fig. 3 and fig. 6

<sup>489</sup> Coccoluto and Gasperi 2007; Coccoluto et al. 2008, 75; Campus and Della Giustina 2011; Antonio Campus, personal communication, 28 March 2011.

<sup>490</sup> Coccoluto and Gasperi 2007, 92–97; Coccoluto et al. 2008, 76–78.

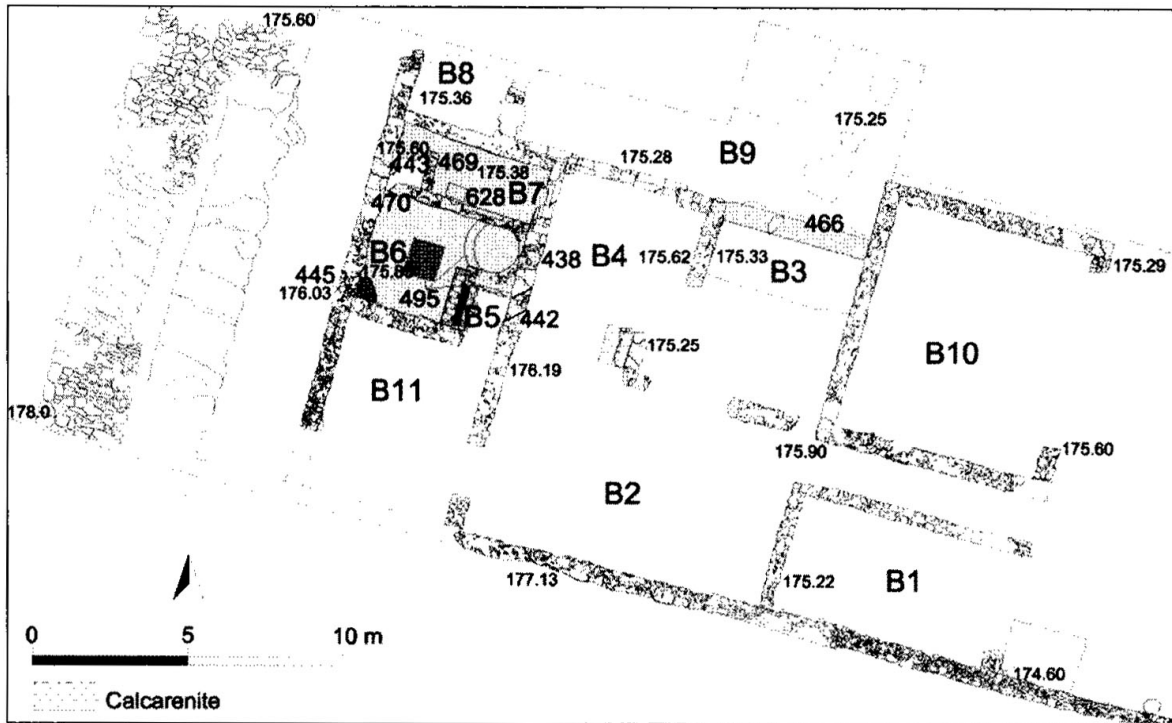


Figure 17. Domus in saggio IV in early 1<sup>st</sup> century (Coccoluto and Gasperi 2007, fig. 8).

From saggio IV, I have examined material from 15 different *attività* which date from the beginning of the 2<sup>nd</sup> to the middle of the 1<sup>st</sup> century BCE (Table 9). The dating of these *attività* has been determined by me according to the material found in them and also in consultation with the published and unpublished Harris matrices for saggio IV.<sup>491</sup>

Table 9. Attività of saggio IV whose contents are examined this dissertation

Att.	Date	Type of deposit	Period
733	300-200	levelling layer into which central canal of the <i>domus</i> is cut	2
723	200-100	destruction level in room 14	5
710	200-100	fill of rectangular cut in 4	5
721	200-100	levelling layer of room 14	5
727	200-100	levelling of room 14 and room 13	5
701	150-50	fire and abandonment of room 4 prior to construction of the column	8 <sup>492</sup>

<sup>491</sup> The published and unpublished matrices do not always perfectly correspond since the excavation and interpretation of the area is ongoing. For example, att. 597 is above att. 451 in the unpublished matrix from 2008, but below att. 451 in the published matrix from the season previous (Coccoluto et al. 2008, 64, fig. 1). Ultimately this relative position does not matter for my purposes since both *attività* occurred in the same broader period. See also the periodization of the site which was revised as of 2008 (Gualandi 2008, 8–9).

<sup>492</sup> The fact that there is only one deposit which dates to this period and the very limited amount of material found therein has meant that it was necessary to include this data in the data for Period 7 (the deposits of which are discussed below).

Att.	Date	Type of deposit	Period
484	100-1	fill of a hole in the road outside <i>fauces</i>	9
589	100-1	fill of cut to remove building material for later construction in room 4	9
593	100-1	layers covering the deconstruction of wall 12168 in room 4	9
594	100-1	deconstruction of wall room 4	9
597	100-1	deconstruction of the walls in room 4	9
714	100-1	deconstruction of wall which defines room 13	9
447	100-1	layer full of plaster and tiles inside room 6 and 7	9
451	100-1	accumulation inside room 4	9
452	100-1	accumulation in room 3	9

With the exception of *attività* 733 and 484, which are from the atrium and just outside the entrance of the house, all of the deposits studied are from the rooms to the south of the atrium. These are construction and leveling deposits arising from the building and renovation of these rooms through the *domus'* history.

#### Saggio IX

This sounding was excavated from 2000 to 2003. It is located on the terrace below the “Logge” immediately to the east of saggio IV, just beyond what seems to be the back garden wall of the *domus* in saggio IV. Saggio IX also comprises a *domus* whose building footprint is about three-quarters the size of the *domus* in saggio IV (Figure 14). The excavators have ruled out the possibility that the two *domus* were connected since the wall in between them is far too wide. Maria Letizia Gualandi has even suggested that this wall formed part of a *temenos* marker for the entire *area sacra* inside which is saggio IV.<sup>493</sup> The *domus* in saggio IX has a rectangular format and sits to the west of a basalt road which runs roughly parallel to the road in saggio IV (Figure 18).

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<sup>493</sup> Maria Letizia Gualandi, personal communication, 12 March 2012.

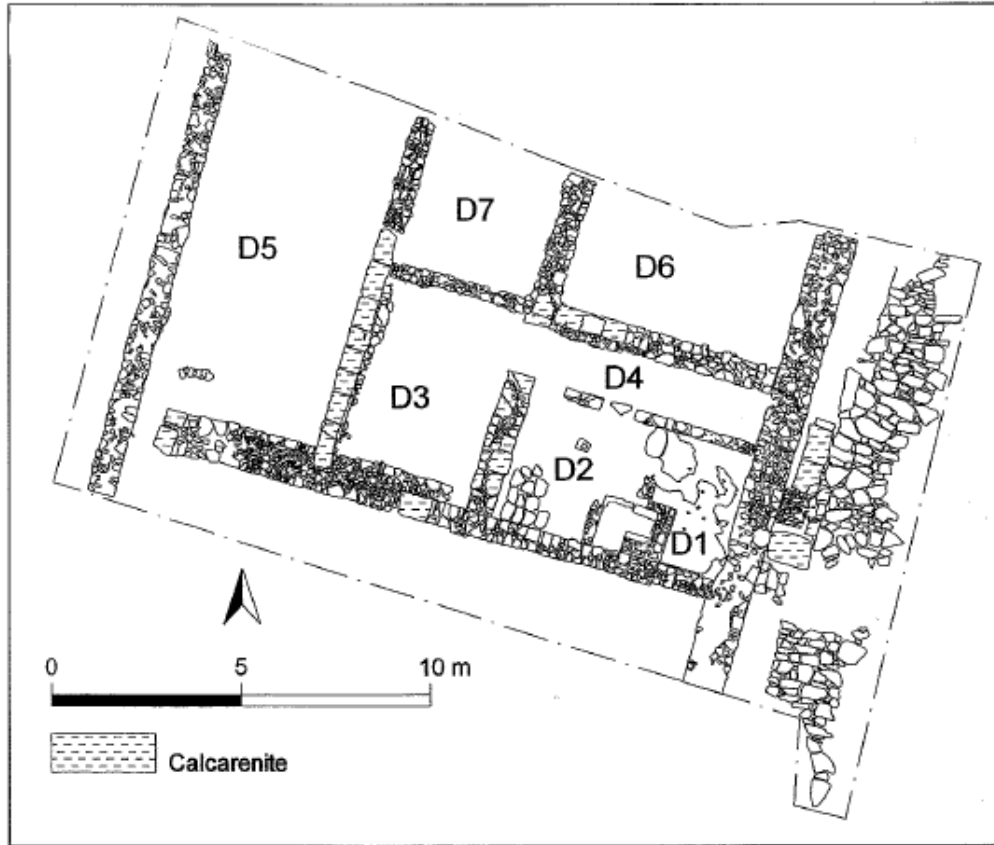


Figure 18. Domus in saggio IX (Mascione et al. 2005, fig. 44).

The house does not seem to have access to this road and its entrance must not have been within the excavation limits of the sounding. In its earliest phase of construction, from the middle of the 2<sup>nd</sup> century BCE the building had an open plan (at a minimum comprised of the floor areas of rooms 1, 2, and 4 combined)(Figure 19).<sup>494</sup> Then, by the last quarter of the century separate spaces were defined. Room 1 has a red and white *cocciopesto* floor which is similar to examples from throughout central Italy in the Republic. This room also seems to have a basin for washing activities. Chemical analyses of the floor surfaces revealed a significant concentration of fatty acids in this room which further suggest it was used to wash human or animal skin.<sup>495</sup> Room 2 contains a stone hearth and the room's identification as a kitchen is supported by the concentration of protein residues in the floor

<sup>494</sup> Mascione et al. 2003, 25–27.

<sup>495</sup> Pecci 2003, 164.

area around the hearth.<sup>496</sup> Room 4 is simply a corridor.<sup>497</sup> At this time there is also evidence of three other rooms, number 3, 6, and 7. The facing of the wall in room 5 probably occurred at the same time. The entrances to rooms 6 and 7 are not within the excavation area. In a later phase, after the beginning of the 1<sup>st</sup> century BCE, rooms 1, 2, and 3 were renovated and re-floored (Figure 20).<sup>498</sup>

Ceramics and faunal material from three *attività* from this *domus* are included in this dissertation (Table 10). All are associated with construction activities. *Attività* 79 and 84 both include stratigraphic units identified as beaten earth floors which have a large quantity of ceramics (especially *ceramica comune da fuoco*) in them and it is not clear what the excavators intended in the identification of these layers as floors. It is also unclear whether the ceramic material was understood by the excavators to be part of the floor aggregate or if it was thought to be kitchen debris which was then trodden or otherwise incorporated into the floor.<sup>499</sup>

Table 10. *Attività* of saggio IX whose contents are examined in this dissertation.

<b>Att.</b>	<b>Date</b>	<b>Type of deposit</b>	<b>Period</b>
73	150-100	construction of the terracing of the hill and the wall on the west side of the <i>domus</i>	7
79	150-100	life of rooms 3 and the corridor room 4 (including a <i>battuto</i> floor SU 4695, 4696)	7
84	100-1	facing of room 3 (including the <i>battuto</i> floor SU 4609, 4699)	9

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<sup>496</sup> Pecci 2003, 164–166.

<sup>497</sup> Mascione et al. 2003, 28–29.

<sup>498</sup> Mascione et al. 2005, 63–75

<sup>499</sup> A *battuto* floor should not have ceramics in it. The excavators at Populonia were unable to give me a satisfactory explanation for this material.



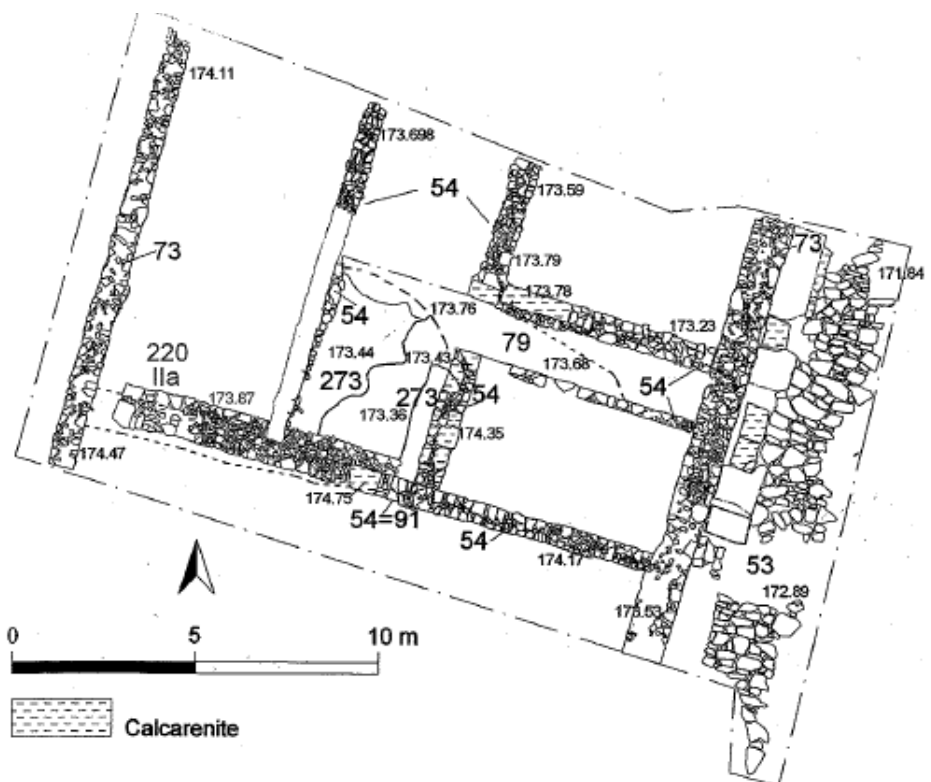


Figure 19. Domus in saggio IX in the middle of the 2<sup>nd</sup> century (Mascione et al. 2005, fig. 47).

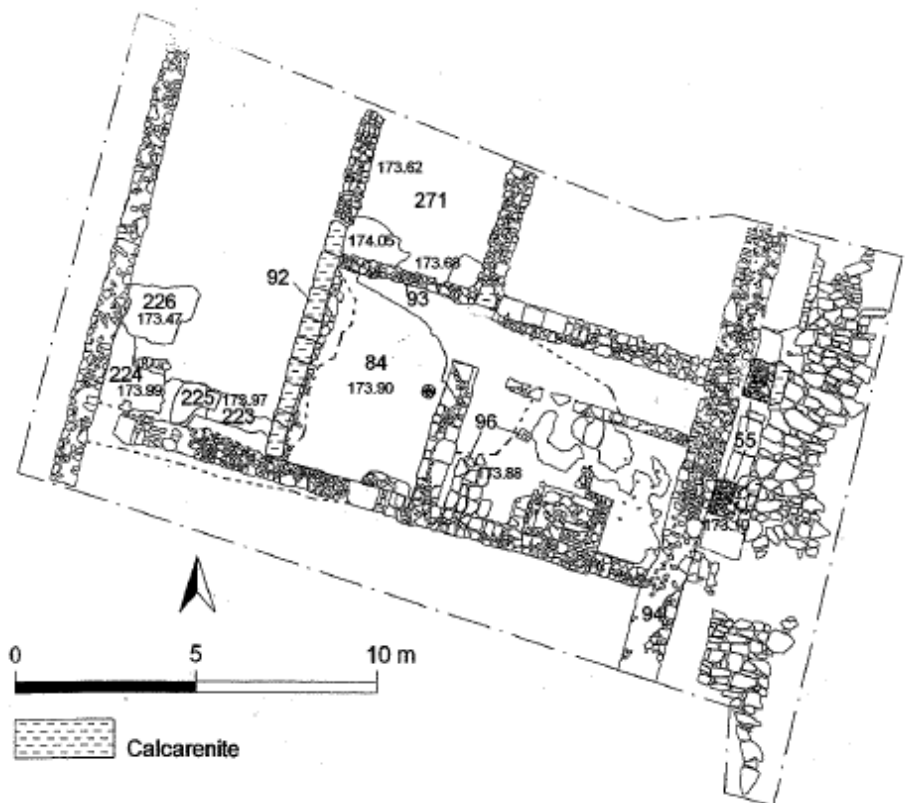


Figure 20. Domus in saggio IX in the 1<sup>st</sup> century (Mascione et al. 2005, fig. 52).

Groups of ceramics from saggio IX have been the subject of several undergraduate theses by students at the University of Pisa.<sup>500</sup> These theses typically concentrated on a single class of ceramic and their study has meant that the material from saggio IX has been selectively removed and transported to several different locations in Tuscany.<sup>501</sup> Every effort has been made to reassemble the complete materials from these *attività* by doing inventories of the two known storage places; however, it may be that I have still not examined everything recovered.<sup>502</sup> The dating of these *attività* is based on my examination of the ceramics found within them, in consultation with the published and unpublished Harris matrices.<sup>503</sup>

#### 4.2.3. Ceramic materials

The deposits from these two *domus* each have very low numbers of finds in comparison to similar types of contexts that I have seen at other sites in central Italy.<sup>504</sup> Though it would not be appropriate to associate the material found in these deposits with cooking and consuming activities which took place in the two *domus* residences specifically, it is unlikely that builders were carrying the soil used as fill from a great distance. While it would have been possible to examine ceramics from the deposits around the three temples at Populonia, my focus on residential deposits, however tertiary, was based on the reasoning that the residential sites would yield material more appropriate to, and more closely associated with, domestic rather than strictly ritual activities.<sup>505</sup>

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<sup>500</sup> Ghizzani Marcía 2003; Paoli 2003; Copede 2005; Ghizzani Marcía 2005; Copede 2006; Quaratesi 2008.

<sup>501</sup> As of April 2012, the ceramics from the acropolis excavations at Populonia are being stored in the dig house on site and in a warehouse/laboratory space in Pisa.

<sup>502</sup> Preliminary quantification of the ceramics was not always completed in every excavation season; therefore it is not possible to compare the material I found with what was originally recovered.

<sup>503</sup> Matrices appear in Mascione et al. 2003, 24; Mascione et al. 2004, 76; Mascione et al. 2005, 65.

<sup>504</sup> I confirmed that no ceramics were being discarded when I was present at the excavations of the saggio IV in September 2011. Gabii, Paestum, Satricum, and the Roman villa at Ossaia, all tend to have much richer deposits.

<sup>505</sup> While we know little about urban rubbish disposal or construction in the Roman world (Scobie 1986; Liebeschuetz 2000; Moormann 2000; Rodriguez-Almeida 2000; Bar-Oz et al. 2007), the study of archaeological formation processes makes this a reasonable conclusion. Schiffer 1987; LaMotta and Schiffer 1999; Kelly 2011.

A significant proportion was re-used for building material (especially material in SU 12127, in *attività* 593) and was therefore heavily mortared. I attempted to dissolve this mortar using vinegar in several instances and a few times this aided in diminishing some of the coverage of these materials. Additionally, the soil is very high in calcium from the natural bedrock so much of the pottery suffered from significant mineral incrustation.

A total of 777 diagnostic fragments were recovered and analyzed from Populonia (Table 11). Eighteen of these are vessels with whole profile preserved. Another 55 fragments are semi-diagnostic. The minimum number of vessels (MNV) based on rims is 763. The EVE calculation for the vessels examined at Populonia is 35.34. Seventy-nine percent of the diagnostic vessels have some sort of post-production alteration on them.

Table 11. Ceramic quantities from Populonia.

	<b>Sherd count</b>	<b>Weight</b>	<b>Weight/sherd ratio</b>	<b>With alteration</b>
Diagnostic	777	27,850 g	35.84 g	614 (79%)
Semi-diagnostic	55	1,435 g	26.09 g	37 (67%)
Body sherd	897	20,076 g	22.38 g	250 (28%)
Total	1,729	48,361 g	28.55 g	901 (52%)

On average, the diagnostic fragments from Populonia are only slight smaller than those from Musarna.<sup>506</sup>

### 4.3. Conclusions

The sites of Musarna and Populonia, both located in Etruria and both coming under Roman political control in the 3<sup>rd</sup> century BCE, form the setting for the remainder of this work's discussion and analysis of foodways and identity. Though they are only two among many towns in central Italy, they serve as solid data points from which direct and indirect evidence of food can be used to consider domestic behaviors in the Republican period. In the following two chapters, I turn in more detail to the analysis of ceramics from these two sites.

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<sup>506</sup> At Populonia, out of all diagnostic fragments: mean=24.30 cm<sup>2</sup>, median=16 cm<sup>2</sup>. Out of diagnostic fragments with 5% or more preserved, mean=28.16 cm<sup>2</sup>, median=16 cm<sup>2</sup>. At Musarna, out of all diagnostic fragments, mean=32.77 cm<sup>2</sup>, median=16 cm<sup>2</sup>, and out of diagnostic fragments with 5% or more preserved, mean=41.38 cm<sup>2</sup>, median=16 cm<sup>2</sup>. The difference in sherd size between the two sites is not statistically significant.