# ROMAN POTTERY IN THE ARCHAEOLOGICAL RECORD



J. Theodore Peña

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## Roman Pottery in the Archaeological Record

This book examines how Romans used their pottery and the implications of these practices for the archaeological record. It is organized around a flow model for the life cycle of Roman pottery that includes a set of eight distinct practices: manufacture, distribution, prime use, reuse, maintenance, recycling, discard, and reclamation. J. Theodore Peña evaluates how these practices operated, how they have shaped the archaeological record, and the implications of these processes for archaeological research through the examination of a wide array of archaeological, textual, representational, and comparative ethnographic evidence. The result is a rich portrayal of the dynamic that shaped the archaeological record of the ancient Romans that will be of interest to archaeologists, ceramicists, and students of material culture.

J. Theodore Peña is Chair of the Department of Classics at the University at Buffalo, SUNY. A specialist in the archaeology of the Roman economy and ceramic analysis, he is the author of *The Urban Economy in the Early Dominate:* Pottery Evidence from the Palatine Hill and The Mobilization of State Olive Oil in Roman Africa: The Evidence of Late 4th Century Ostraca from Carthage.

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En memoria de mi padre, José Ángel Peña, quien siempre anheló parir un libro.

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#### Introduction



Pottery represents the most abundant category of portable material culture to come down to us from the Roman world, and it is thus by no means either surprising or inappropriate that pottery studies have enjoyed a position of some prominence in Roman archaeology. Whereas investigations carried out in the early years of Roman pottery research were concerned primarily with questions of typology and chronology, in the 1970s students of Roman pottery embraced the realization that pottery constitutes an important source of information regarding various aspects of the economic life of the Roman world, and much of the research that has been carried out since that time has focused on topics such as the geography, organization, and technology of pottery production; the mechanisms and intensity of pottery distribution; and the consumption, use, and performance characteristics of pottery. More recently, with the introduction into Roman archaeology of theoretical perspectives and research methods drawn from post-processual archaeology and material culture studies, students of Roman pottery have begun to explore ways in which pottery evidence can be mobilized to investigate topics such as the definition of individual and group identity, opening windows onto a range of social and ideological issues, such as native acceptance of and resistance to incorporation into Roman social, political, and economic systems, and the expression of gender in the Roman world.

Although the typological, chronological, economic, and sociological analysis of Roman pottery generally involves the study of groups of materials that represent the end result of a complex set of behaviors on the part of those who produced, distributed, and used pottery, students of Roman pottery have shown themselves largely indifferent to the investigation of these behaviors and their implications for how and when different kinds of pottery came to be incorporated in different amounts and in different conditions into different kinds of archaeological deposits in different kinds of locations. As a result, we know surprisingly little about these questions, and Roman pottery specialists have been, and are at present, operating on the basis of a set of unjustifiably optimistic, untested, and – to some extent – false

assumptions regarding the origin and significance of patterning in pottery data, leaving open to question the significance of the results of much pottery research.

The purpose of this book is to begin the process of redressing this regrettable situation by articulating a general model of the life cycle of Roman pottery that will enable pottery researchers to more effectively envision the set of behaviors that governed the formation of the Roman pottery record – here defined as the universe of archaeological deposits containing Roman pottery that were formed during the Roman period - and to gain some appreciation of both the general and specific effects that these behaviors had on the nature of this record. Chapter 1 introduces the model, which takes the form of a flow diagram incorporating eight discrete behaviors – manufacture, distribution, prime use, reuse, maintenance, recycling, discard, and reclamation – that governed the passage of Roman pottery through its life cycle and its incorporation into the archaeological record. After Chapter 2 considers various topics that represent essential background information for the discussion that follows, Chapters 3 through 10 present systematic examinations of each of the eight behaviors included in the model, illustrating the nature of the evidence for these and the ways in which they operated through the discussion of examples drawn from the body of relevant textual, representational, material cultural (i.e., archaeological), and comparative evidence. The final chapter, Chapter II, then synthesizes these observations, considering their implications for a broader understanding of material culture in the Roman world, identifying the individual and collective effects that the eight behaviors included in the model had on the nature of the Roman pottery record, and identifying directions for future research aimed at improving our understanding of the life cycle of Roman pottery and its implications for the Roman pottery record.

It is the author's hope that by presenting a general and systematic description of the behavioral system that governed the formation of the Roman pottery record, this study will serve to make students of Roman pottery more fully aware of the overall nature and scope of the challenge that faces us if we are to attain an adequate understanding of the sources of patterning in pottery data. Beyond this, by presenting detailed observations regarding the relationship between specific behaviors on the part of those who produced, distributed, and used pottery and the nature of the pottery record in those areas where we possess fairly good information, this study

will enable students of Roman pottery to approach the collection, analysis, and interpretation of pottery evidence in a somewhat more informed and sophisticated fashion than would otherwise be the case. Finally, by highlighting those areas where our understanding of these behaviors is either more limited or lacking altogether, this study will serve to indicate directions for future research aimed at improving our understanding of the nature of the Roman pottery record.

It is the author's hope that both the method employed in this study and some of its specific results will be of interest to scholars working outside the field of Roman pottery studies. Specifically, because, as already noted, pottery represents the most abundant category of Roman material culture available to us, some of the behaviors that can be documented in relation to its use and discard may be of interest to scholars concerned with broader issues in the production and use of material culture in the Roman world. In addition, because the body of evidence regarding the behaviors that governed the life cycle of Roman pottery and the formation of the Roman pottery record is substantially richer in many regards than that available for several other complex societies that are the object of archaeological investigation, this study may prove to be of interest to archaeologists and students of archaeological pottery more generally. In recognition of this second possibility, the author has adopted several descriptive conventions, which, although perhaps the source of some irritation to Romanists, will facilitate the use of this book by readers whose area of expertise happens to lie outside the Roman world.

One drawback to the generalizing approach adopted in this book is that it implicates a body of evidence so vast that no single researcher could possibly command anything approaching the whole of it. It is inevitable, then, that the evidence taken into consideration is weighted toward the areas of the author's own experience and expertise. This means that the preponderance of the archaeological evidence is drawn from the region of west central Italy and dates to the imperial period. More particularly, many of the illustrative examples employed belong either to the pottery assemblage from the Palatine East excavations in downtown Rome, a project for which the author serves as chief ceramics specialist, or to the pottery assemblage from the excavations at Piammiano, a small Etrusco-Roman settlement situated on the right bank of the Tiber River 80 kilometers to the north of Rome, probably to be identified as Roman Statonia, where the

author has served as co-director of research. In the area of textual evidence, the Latin sources are exploited more extensively than those in Greek and Late Hebrew/Aramaic. On account of these limitations, a substantial amount of relevant evidence has no doubt been overlooked.

In closing this brief introduction it may prove helpful to indicate some of the definitions and conventions employed in this study. The Roman world is defined as those regions under the political control of the Roman state from the late republic down to the end of the empire – that is, from roughly the second century B.C. to the sixth century A.D. The term pottery is understood to refer to ceramic containers and related items, including lamps. Items such as terracotta sculpture and architectural ceramics, including brick, tile, drainpipes, vaulting tubes, and related items, such as terracotta sarcophagi, are thus excluded from consideration. All dates given are A.D. unless otherwise indicated. Settlements and geographical regions are generally referred to by their modern names, with the Roman-period name, when this is known, following in square brackets on the occasion of a locale's first mention in the text. The locations of all settlements and archaeological sites mentioned are shown in Maps 2-9 at the back of the book. The regio [quarter], insula [block], and doorway addresses conventionally assigned to structures at the sites of Pompeii, Herculaneum, and Ostia are presented in their full form on the occasion of a structure's first mention, rather than in the abbreviated fashion normally employed in the specialist literature. In the interest of facilitating the use of this book by non-Classicists and non-Semiticists, all passages in Latin, Greek, and Late Hebrew/Aramaic are accompanied by translations in English. All terms in these languages are also translated into English on the occasion of their first use, with those in Greek and Late Hebrew/Aramaic given both in Greek or Hebrew characters and in transliterated form, with the latter employed for all subsequent uses. All translations of texts in Latin and Greek are the author's, whereas the sources of translations of texts in Late Hebrew/Aramaic are indicated in the notes. Literary works in Greek and Latin are referred to by their full titles rather than by the standard abbreviations normally employed by Classicists. Citations of passages in Late Hebrew/Aramaic drawn from the rabbinic sources indicate both the division and tractate to facilitate the locating of these by readers not familiar with the organization of these works. Latin epigraphical texts are rendered according to the set of standard conventions employed for the Corpus inscriptionum Latinarum [The Corpus of Latin inscriptions, abbreviated

CIL] (Krummrey and Panciera 1980), with the exception that all texts produced on pottery (graffiti, tituli picti/dipinti, and stamps) are presented in uppercase letters, with the letter V employed in the place of U, ligatures indicated by rendering the relevant letters in boldface type, and letters of problematic reading indicated by underlining.

## A Model of the Life Cycle of Roman Pottery



The persons who produced, distributed, and used Roman pottery engaged in various actions that determined how, when, where, why, and in what condition and quantity pottery came to be incorporated into the archaeological record. It seems a reasonable assumption that, from the time of its manufacture through to the time of its incorporation into the archaeological record, a substantial portion of Roman pottery was subjected to these actions in a more or less regularly recurring order that may be thought of as constituting a sequence akin in certain regards to the life cycle of an organism. In consideration of this observation, this study employs as its organizing basis a general model of the life cycle of Roman pottery. This construct is of value in that it not only helps identify the various actions that governed the formation of the pottery record, here termed behavioral practices, but also elucidates the ways in which these worked individually and in concert with one another to do so. This chapter presents this model, discussing its conceptual basis, describing its general organization, defining its individual components, and considering its limitations.

To construct a model of the life cycle of Roman pottery, this study takes the general model of the artifact life cycle – a conceptual scheme formulated by Schiffer in the early 1970s (Schiffer 1972: 157–60) that went on to gain wide acceptance in Americanist archaeology – and modifies this to take into account the specific set of circumstances relevant to Roman pottery. The general model of the artifact life cycle assumes that an artifact is normally subjected to a sequence of four distinct behavioral practices: manufacture, use, maintenance, and discard. Manufacture consists of the fashioning of an artifact from one or more raw materials obtained from nature; use is the utilization of an artifact for the purpose or purposes for which it was manufactured, followed in some instances by its use for some other purpose or purposes; maintenance involves the upkeep or repair of an artifact

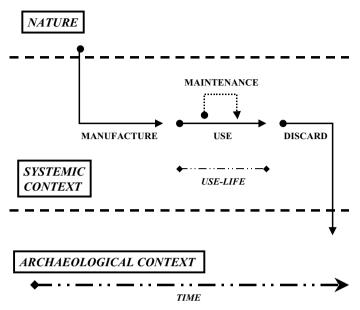


FIGURE 1.1. Flow diagram representing general artifact life cycle. After Schiffer 1972: 158. fig. 1.

so that it can continue to serve for the purpose or purposes for which it is being used; and discard consists of the abandonment of an artifact at the termination of its use. The amount of time that an artifact remains in use is generally referred to as its use-life (Mills 1989: 135–41; Shott 1989, 1996: 463–4). Maintenance is considered an optional practice, in that not all artifacts are regularly subjected to it. Following discard, durable artifacts are sooner or later incorporated into archaeological deposits, thereby becoming part of the archaeological record. In the terminology employed in formation theory – the body of concepts concerned with the processes involved in the formation of the archaeological record (Shott 1998) – this involves the passage of an artifact from the systemic context, that is, a situation in which it is involved in a human behavioral system, to the archaeological context, a situation in which following discard it is no longer involved in a human behavioral system (Schiffer 1972: 157; 1996: 4). This set of concepts can be expressed in the form of a simple flow diagram, as shown in Figure 1.1.

It is necessary to revise this scheme in several ways to obtain an adequate representation of the life cycle of Roman pottery. An additional behavioral practice, *distribution*, must be introduced between manufacture and use to

reflect the fact that nearly all Roman pottery was manufactured by specialist producers and came into the possession of those who used it by means of some more or less complex set of exchange mechanisms. The regularity with which vessels and vessel parts were employed for some purpose other than that/those for which they were manufactured at the conclusion of their use for this purpose/these purposes makes it useful – if not strictly necessary – to divide the use portion of the life cycle into two distinct practices: *prime use* and *reuse*. A second new behavioral practice, *recycling*, must be added to reflect the fact that vessels and vessel parts were regularly employed as a raw material in some manufacturing process at the conclusion of manufacture, distribution, prime use, or reuse. Finally, a third new behavioral practice, *reclamation*, must be introduced to accommodate the fact that vessels and vessel parts were sometimes retrieved following their discard for use in some reuse or recycling application.

This set of concepts can be expressed in the form of a second flow diagram, as shown in Figure 1.2. All of the behavioral practices other than manufacture are here represented as optional (i.e., by means of a dotted arrow), in that no single vessel was necessarily subjected to any one of them. Maintenance is shown as occurring in the course of manufacture, distribution, prime use, and reuse, whereas recycling and discard are represented as following on from any one of these same four behavioral practices. Reclamation is shown as leading to either reuse or recycling as a raw material. In recognition of the fact that vessels and vessel parts were regularly employed in recycling applications, the zone at the top of the figure, labeled *nature* in the flow diagram for the general model of the artifact life cycle, has been relabeled as *raw material*. Finally, two distinct lines are presented for use-life – one for prime-use use-life, and one for reuse use-life. Readers will doubtless find it helpful to refer back to this somewhat complicated diagram on various occasions in the course of the chapters that follow.

It will prove useful at this juncture to provide an explicit definition for each of the eight behavioral practices included in the revised model:

**Manufacture:** The fabrication of a vessel from one or more raw materials.

**Distribution:** The physical transfer of a newly manufactured vessel from those who manufactured it to those who will use it.

**Prime use:** The use of a vessel for the application or applications for which it was manufactured.

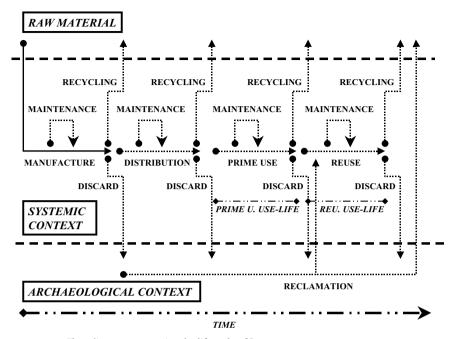


FIGURE 1.2. Flow diagram representing the life cycle of Roman pottery.

**Reuse:** The use of a vessel or a vessel part for some application after the conclusion of its use for its prime-use application.

**Maintenance:** The upkeep or repair of a vessel so that it can continue to perform some application.

**Recycling:** The use of a vessel or a vessel part as a raw material in a manufacturing process.

**Discard:** The deliberate and voluntary abandonment of a vessel or a vessel part by those using it with the intent of no longer using it.

**Reclamation:** The acquisition of a vessel or a vessel part after its discard.

Some of these definitions require further discussion to clarify the nature of the practices to which they refer.

#### 1.1 / Prime Use and Reuse

The division of use into prime use and reuse, although helpful for certain elements of the discussion that follows, is to some extent problematic, in that it is based on two simplifying assumptions. First, there is no way of

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ascertaining either the extent to which Roman potters had assumptions regarding the ways in which the vessels that they manufactured would be used. or the extent to which those who acquired newly manufactured vessels actually employed them for these purposes. To take some account of this problem, one may wish to expand the definition of prime use to include an alternative definition, as follows: The use of a previously unused vessel for the application or applications for which it was acquired. Second, the assumption that the use-life of every vessel was marked by a specific moment at which it was retired from use for its prime-use application or applications (henceforth application), thereby setting the stage for its use for some new application that should be regarded as an expression of reuse, is no doubt a simplification and, to some extent, a misrepresentation of what were actual patterns of pottery use. In some cases the boundary between prime use and reuse was likely a fuzzy one, with a vessel coming to be employed for some new and different application while it continued to be used for its prime-use application, with the one perhaps eventually coming to replace the other.

In some instances the disposition of a vessel in the context either of a prime-use application or of a reuse application effectively removed it from contact with or manipulation by people. As examples of this phenomenon one may cite the placing of a vessel in a tomb as a grave offering or the incorporation of a vessel into a structure such as a drainage feature. In instances of this kind, although the vessel was still in a technical sense being used, it had, in effect, been removed from the systemic context. Whereas Schiffer considers instances of this kind to represent discard (Schiffer 1996: 80–89), they are here regarded as constituting expressions of prime use or reuse, with the general phenomenon referred to as *depositional use*.

This study recognizes three distinct types of reuse as determined by the nature of the application and whether or not it involved any physical modification to the original vessel. These three types of reuse, here termed Type A, Type B, and Type C for ease of reference, are as follows:

**Type A:** Reuse involving an application similar to the vessel's prime-use application without any physical modification to it.

**Type B:** Reuse involving an application different from the vessel's prime-use application without any physical modification to it.

**Type C:** Reuse involving an application different from the vessel's prime-use application involving physical modification.

Although readers may wonder why instances of Type A reuse are not simply regarded as representing prime use, the acknowledgment of cases of this kind as a form of reuse allows the recognition of practices that involved the use of vessels manufactured or initially acquired to serve their primeuse application for a finite number of episodes beyond the span of their intended use-life. In the Roman case, it is particularly useful to be able to make this distinction with regard to *amphorae* – packaging containers that were probably in most cases manufactured to serve for a single episode of use.

In some instances vessels suffered a production defect during the manufacturing process or damage during the course of distribution of a sort that rendered them unsuitable for use for their intended prime-use application. Although most of these vessels were probably disposed of by means of recycling or discard, some were presumably employed for an application different from their intended prime-use application. In cases of this kind the vessel is considered to have passed directly from manufacture or distribution to reuse, without being subjected to prime use.

#### 1.2 / Maintenance

The various operations subsumed under maintenance include both those concerned with the routine upkeep of a vessel, such as the washing of a cookpot following its use, and those involving the repair of nonroutine damage, such as the reattaching of a handle that broke away from a vessel when it was accidentally dropped. Whereas operations of the first kind presumably were carried out by and large in the course of prime use, those of the second kind were likely undertaken in the course of manufacture, distribution, prime use, and reuse.

#### 1.3 / Recycling

In recycling, the artifacts and artifact parts employed as raw material in a manufacturing process lose their original identity (Schiffer 1996: 29–30). By way of illustration, an artifact manufactured in glass can be melted down, mixed with molten glass derived from one or more other artifacts, and then formed into an entirely different class of object. The possibilities for operations of this kind are more circumscribed in the case of pottery, because a ceramic paste that has been transformed into a ceramic body through firing cannot be returned to a plastic state for forming into a new object. Fragments of pottery can, however, be employed as inclusions or filler in a compound artifact (e.g., a concrete wall), and applications of this kind are here classified

as instances of recycling in cases where the utility of the pottery fragments employed in the operation derived entirely from their volume and/or from the fact that their presence promoted a particular chemical reaction rather than from some specific morphological characteristic that harked back to the form of the vessel to which they originally belonged.

#### 1.4 / Discard

Discard, as here defined, excludes occurrences such as the accidental loss of a ceramic vessel or the abandonment of ceramic vessels in the context of the more general abandonment of the locus of their use or storage.

Artifacts and other substances such as human and animal waste that have been marked for discard are here referred to as *refuse*, with those discarded at the location of their use, storage, or generation termed *primary refuse*, and those moved from the place of their use, storage, or generation to some other location for abandonment termed *secondary refuse* (Schiffer 1972: 161–2, 1996: 58–64). The discard of secondary refuse frequently involves its transfer from the place where it is generated to the locus where it is abandoned in a series of discreet steps (Deal 1985; Needham and Spence 1997: 77–8), with this flow of material termed a *waste stream* (Schiffer 1996: 66). In many cases, artifacts that have been retired from prime use are subject to what is termed *provisional discard*, that is, temporary caching at or near the locus where they are used or stored so that they can either be appropriated for reuse or recycling as may prove expedient or transferred to some other location for abandonment at some later time (Deal 1985: 253–9; Kamp 1991: 25; Schiffer 1996: 66).

The incorporation of durable artifacts and artifact parts that have been discarded into an archaeological deposit is not instantaneous, but rather may be considered to have occurred after the passage of some period of time. For the purposes of this study this is considered to correspond to the period during which there are living persons who possess direct knowledge of the act of abandonment, either because they undertook it themselves or because they witnessed it. The period of time falling between the abandonment of an artifact or artifact part and its incorporation into an archaeological deposit is here termed its period of *abandonment deposition*.

#### 1.5 / Reclamation

Vessels or vessel parts may be reclaimed either from abandonment deposition or from an archaeological deposit and employed for some reuse or recycling application (Schiffer 1996: 106–11). In cases in which vessels or vessel parts

are employed for a reuse application, they reenter the systemic context. Readers should note that for ease of representation the flow diagram in Figure 1.2 depicts reclamation as operating exclusively on materials that have been incorporated into an archaeological deposit, ignoring the phenomenon of reclamation from abandonment deposition.

It should be emphasized that not all Roman pottery passed through the complete life cycle. As already noted, some vessels were employed in depositional use applications that saw them effectively removed from further involvement in the systemic context. In other instances, vessels were accidentally lost during the course of their use-life. As examples of this second phenomenon we may cite vessels being used on board a ship that were swept over the side in a storm, or water jars that were dropped down a well. In other cases, vessels were abandoned in the context of the more general abandonment of occupation of the locus where they were being used or stored (Cameron and Tomka 1993).<sup>2</sup> In some cases this would have been a gradual and/or planned abandonment, as may have occurred, for example, when a family migrated from the countryside to a town for economic reasons, whereas in others it would have been a sudden and/or unplanned abandonment, as frequently occurred in the case of shipwreck, military attack, or a natural disaster, such as an earthquake or a volcanic eruption (Joyce and Johannessen 1993: 139).

The model for the pottery life cycle employed in this study embodies certain limitations. Specifically, it must be acknowledged that it does not recognize several factors that played an important role in the formation of the Roman pottery record and that certain of the assumptions on which it is based have been subject to significant criticism by archaeologists and/or students of material culture. On the first of these two counts, it should be acknowledged that by focusing exclusively on human behavioral practices deliberately directed at the manufacture and use of pottery, the model fails to take account of certain human practices (e.g., construction work, plowing) and various nonhuman factors (scavenging and burrowing by animals, the decomposition of organic refuse, wind and water erosion) that generally play roles of considerable significance in the formation of the archaeological record. These factors are, of course, of considerable importance to any effort to understand the nature of the Roman pottery record, and the synthesizing discussion presented in the concluding chapter does take some account of them. It should also be noted that the model does not extend the pottery life cycle to include the re-entry of pottery into the systemic context in the form of archaeological finds, relics, curiosities, and so forth in post-Roman times.

Although this phenomenon raises issues of some archaeological interest, these are not the focus of the present study, and this phenomenon is not therefore incorporated into the model.<sup>3</sup>

On the second count, it must be acknowledged that certain members of the post-processual/contextual school of archaeology have argued that the general model of the artifact life cycle on which the model is based and, more broadly, certain of the basic assumptions made by the Schifferian/formation processes school of archaeology of which it is a product represent significant misunderstandings or distortions of the nature of material culture, the relation between human beings and material culture, and the practice of archaeology.

The most extended critique of this kind was presented by Thomas in his book *Time, culture and identity: an interpretive archaeology* (Thomas 1996: 55–64), and it is worth considering – if only briefly – the main points of Thomas' critique and responding to these. The main elements of Thomas' critique can be stated as follows:

- 1. The formation processes school wrongly assumes the existence of a sharp distinction between nature and culture.
- 2. The formation processes school wrongly conceives of the archaeological record as being akin to the fossil record, whereas it is more fruitful to consider it as being similar to a text, in that it contains encoded information, is the object of interpretation, and is susceptible to multiple interpretations.
- 3. Human beings retain ongoing relationships with material culture from the past, and artifacts do not therefore "die," passing from a systemic context to an archaeological context, as is assumed to be the case by the formation processes school.

The first of these three points is largely a product of Thomas' mistaken assumption that the site formation process school regards discarded material culture as somehow returning to nature, with the archaeological record, in effect, a part of nature, and need not be of particular concern to us. The second is also of little consequence, as it reflects a set of understandings that is at present widely accepted in one form or another within archaeology and that does not, in and of itself, represent any fundamental difficulties for a life-cycle approach to the evaluation of material culture. The third point, in contrast, does have clear implications for the approach employed in this study, and for this reason merits some consideration.

Thomas' point that human beings regularly retain ongoing relationships with material culture from the past reflects a view that is widely accepted and, in its general outlines, at least, completely uncontroversial in contemporary archaeology.<sup>4</sup> Although this phenomenon is both interesting and of some significance for an understanding of material culture, it is the author's view that Thomas greatly exaggerates its importance. Specifically, although it is easy enough to agree with Thomas that an item of material culture such as Stonehenge – a continuously visible, highly conspicuous, unique, and inherently evocative monument – has retained a place in the consciousness of many people over the millennia since human beings ceased to employ it for the purposes for which it was originally constructed, it is quite another thing to make a claim of this kind for the other example of material culture that he chooses to adduce in connection with his argument – conveniently for this study – a sherd of pottery recovered in the excavation of a Roman villa. Although such a sherd most certainly does have a number of potential meanings in various spheres in the contemporary world (e.g., scholarly, popular, legal), on the day prior to its excavation by archaeologists, because no person is at that time aware of its specific existence, it cannot reasonably be said to actually have any of those meanings. Thomas, himself, seems to acknowledge this fairly obvious point, when he states, "When we undertake archaeological analysis, what we are doing is taking some part or parts of the material world out of the continuous stream of history and constituting them as objects" (Thomas 1996: 62). To employ the fact that certain items of material culture continue to operate within a behavioral system long after they have been abandoned by those who originally produced and used them (or are reintroduced into behavioral systems one or more times) to obscure the fact that a great deal of preserved material culture does not continue to operate in this way, and, following on from this, to dismiss the distinction between systemic context and archaeological context as an archaeologically useful concept strikes the author as disingenuous.

The model for the life cycle of Roman pottery presented in this chapter is not without certain weaknesses. Among other things, in the interest of representing a neat, regular, systematic scheme, it embodies assumptions that simplify complex and, to some extent, interesting realities, as is the case, for example, with the distinction drawn between prime use and reuse. Again, some of the concepts that it embodies, such as depositional use and abandonment deposition, are defined on the basis of assumptions that may be regarded as open to question. Given these defects, it is important for

readers to keep in mind that this model is not here presented as a definitive representation of what was doubtless a highly complex and somewhat messy set of past realities, but rather as a heuristic device designed to facilitate the consideration of the various practices that governed the formation of the Roman pottery record.

In the chapters that follow an effort is made to illustrate the nature of the eight behaviors included in the model and the ways in which these governed the passage of pottery through the life cycle and its incorporation into the archaeological record. The three behaviors that constitute the initial part of the life cycle – manufacture, distribution, and prime use – played only a limited role in the incorporation of pottery into the archaeological record and are accordingly provided a somewhat abbreviated treatment that focuses primarily on those aspects that are of interest from this point of view. The other five behaviors – reuse, maintenance, recycling, discard, and reclamation – played a more salient role in the incorporation of pottery into the archaeological record and, as the evidence allows, are treated in a more comprehensive fashion. The aim is to provide as full an exposition as possible of those aspects of the behaviors treated, drawing on the fullest possible range of evidence. This naturally results in a generalized and composite picture not strictly applicable to any one specific time or place. It also results in a highly uneven exposition, with some aspects of some behaviors for which there is little evidence being noted in passing with but a sentence or two, whereas others, for which there happens to be a rich body of evidence, are discussed at considerable length. Again, in some instances, specific evidence is discussed in a considerable degree of detail where this seems useful.

## 2 Background Considerations



Before advancing to a consideration of the eight behavioral practices incorporated into the model described in the preceding chapter it is necessary to consider three topics that represent essential background information: the forms of evidence available for the examination of these practices, the different functional categories of Roman pottery, and the economic value of Roman pottery.

#### 2.1 / Forms of Evidence

Four different forms of evidence provide information regarding the behavioral practices here under consideration: textual, representational, material cultural, and comparative.

#### 2.1.1 / Textual Evidence

The textual evidence pertaining to the practices under consideration can be assigned to three distinct categories: documentary, epigraphic, and literary. Documentary evidence consists of texts that were produced for record keeping and similar purposes. In the case at hand, these comprise almost exclusively *papyri* from Roman Egypt, for the most part of imperial date and written in Greek. Epigraphic evidence, in turn, consists of texts inscribed in stone or some other durable material for purposes of public display. Literary evidence consists of texts composed for circulation to a broad readership.

Some of the literary texts that are of particular importance for this study warrant specific mention. *De re coquinaria*, a compilation of recipes probably drawn up during the fourth century and attributed to the first-century cook Apicius, provides a wealth of information regarding the ways in which pottery was used in connection with food preparation activities. The *Digesta*, a compilation of legal opinions composed by Roman jurists between the first century B.C. and the third century that was drawn up in the A.D. 520s, preserves important information regarding a variety of subjects relevant to the topics under consideration.<sup>2</sup> The four surviving Latin treatises on farm

management, namely Cato's De agri cultura, Varro's De re rustica, Columella's De re rustica, and Palladius' Opus agriculturae, which date to the second century B.C., the first century B.C., the first century, and the fourth century, respectively, provide much useful information regarding the ways in which pottery was used and maintained in connection with agricultural activities. Also a useful source of information on these topics is the Geoponica, a tenthcentury compilation in Greek drawing on an array of agricultural treatises dating primarily to the Roman imperial period. Several technical treatises regarding land surveying composed during the imperial period by authors referred to collectively as the agrimensores provide useful glimpses into practices of the reuse and discard of pottery in the Roman countryside. Finally, the rabbinic sources – texts concerned with questions of Jewish law composed partly in Late Hebrew and partly in Aramaic between the second and the sixth century, including the Mishnah, the Tosephta, the Talmud Yarushalmi, and the Talmud Babli - provide important insights into the use, reuse, and maintenance of pottery among the Jewish segment of the empire's population.<sup>3</sup> Scattered references to the use, reuse, maintenance, recycling, discard, recovery, and reclamation of pottery occur elsewhere in the surviving corpus of Latin literature and Greek literature of the Roman period.4

#### 2.1.2 / Representational Evidence

The representational evidence pertaining to the practices here under consideration consists of a small number of fresco paintings, mosaics, and reliefs from the Roman world that contain scenes depicting the reuse and maintenance of pottery.

#### 2.1.3 / Material Cultural Evidence

The material cultural (archaeological) evidence pertaining to the practices under consideration consists of Roman pottery and other relevant material remains, including the structures, facilities, and portable artifacts with which pottery may be associated and the preserved contents of pottery vessels.

The pottery evidence may be thought of as consisting of three distinct kinds: pottery from use-related contexts, pottery from discard contexts, and pottery irrespective of its context. Turning to the first of these, pottery from use-related contexts – that is, pottery recovered in the location in which it was being used or stored – is of particular importance, since it is frequently possible to infer what a vessel was being utilized for on the basis of its

association with other artifacts or features or due to the preservation of its contents. In some cases evidence of this kind permits one to determine that an unmodified vessel was being employed for some purpose other than its prime-use application or the specific reuse application for which a modified vessel was being employed. Many contexts of this kind come from sites abandoned due to some catastrophic event and subsequently subjected to little postabandonment disturbance. The examples that come most readily to mind are, of course, the sites buried by the eruption of Mount Vesuvius in A.D. 79, including the towns of Pompeii and Herculaneum and several villas located in their environs (henceforth referred to collectively as the Vesuvian sites) (de Vos and de Vos 1982), and much of the pottery evidence cited in this study originates at these sites. Other examples include sites abandoned due to military action, such as the Cave of Letters in Israel (Yadin 1963), sites destroyed either by fire, such as the Caseggiato dei Molini (Regio 1, Insula 3, doorway 1) at Ostia (Bakker 1999: 16-60, 145-64), or by earthquake, such as the town of Kourion on Cyprus (Soren 1988; Soren and James 1988), open-water shipwrecks (Parker 1992a), and in-harbor ship sinkings, such as the several vessels recently unearthed at San Rossore, near Pisa (Bruni 2000). Given the potential importance of evidence of this sort, it is indeed unfortunate that only a limited number of sites of this kind have been subject to both careful excavation and comprehensive publication.

Pottery from discard contexts may also shed light on the practices that governed the formation of the Roman pottery record. Specifically, by studying the relative representation of specific forms, wares, or vessel parts, it is sometimes possible to draw inferences regarding the ways in which pottery was used, recycled, and/or discarded (Schiffer 1996: 19).

Finally, Roman pottery may provide evidence regarding the practices involved in its use and maintenance regardless of the context of its recovery. Thus, a pot or portion of a pot may bear evidence of modifications undertaken in connection with its repair or reuse, such as the drilling of holes for the insertion of a lead clamp or the removal of the rim and neck for conversion from a jar to a basin. Similarly, abrasion of a vessel's surface and the deposition of incrustations on it may provide evidence for its prime-use or reuse application. Finally, texts, either scratched into or painted onto a pot, known as *graffiti* and *tituli picti* (the latter also termed *dipinti*), respectively, may provide evidence for its reuse, as when a wine *amphora* was provided with a text indicating that it was filled with wine on more than one occasion

or that it was at some point employed for the storage of a substance other than wine.

#### 2.1.4 / Comparative Evidence

This term is here used to refer to evidence regarding the use, reuse, maintenance, recycling, discard, and reclamation of pottery in cases other than the Roman one.<sup>5</sup> Ethnographic, ethnohistoric, ethnoarchaeological, and archaeological information of this kind may alert the researcher to archaeological evidence relevant to understanding the processes here under consideration and provide insights that assist with the interpretation of this evidence.

#### 2.2 / The Functional Categories of Roman Pottery

For the purposes of this study the corpus of Roman pottery is divided into six more or less distinct categories on the basis of a vessel's assumed prime-use application. These categories (henceforth referred to as *functional categories*) are as follows:

dolia (singular: dolium): extremely large fixed or semifixed jars (capacity ca. 400–3000 l) employed for the storage of wine, olive oil, or grain (Figure 2.1);<sup>6</sup>

*amphorae* (singular: *amphora*): portable jars/jugs (capacity ca. 6–150 l) employed for the packaging, distribution, and postdistribution storage of foodstuffs, chiefly wine, olive oil, processed fish products, and fruit (Figure 2.2);<sup>7</sup>

lamps: small vessels employed for lighting (Figure 2.3);

cookwares: vessels employed for the cooking/heating of food and drink (Figure 2.4);

utilitarian wares: vessels employed for the preparation or storage/containment of food, drink, and various other substances (e.g., unguents and perfumes, paint pigments, urine, feces) (Figure 2.5);

tablewares: vessels employed for the serving or consumption of food and drink (Figure 2.6).

Although distinct vessel forms were manufactured for a wide variety of prime-use applications not embraced by this scheme (e.g., incense burners, inkwells, lamp fillers, dice cups, coin banks, dwellings for doormice,



FIGURE 2.1. Representative dolium. Photo: JTP.

beehives, planters, funnels, crucibles), these forms are negligible from a quantitative point of view and need not be of particular concern. The final two categories indicated above – utilitarian wares and tablewares – are somewhat problematic, in that it is sometimes difficult to determine to which of these two one should assign a specific form, and in some cases a single pottery class includes some forms that should be assigned to one category and some that should be assigned to the other. It should also be noted that the tableware category embraces both the various classes of gloss-slipped ware (e.g., Black Gloss Ware, Italian, Gallic, and African *Sigillata*), which are often regarded by scholars as constituting a distinct grouping by themselves (frequently referred to as "finewares"), and various other classes. Given these difficulties, a good case could be made either for the combining of tablewares and utilitarian wares into a single category, or for the subdivision of tablewares into two distinct categories, namely high-end gloss-slipped wares and other classes.



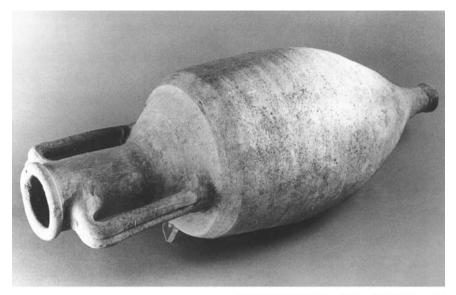






FIGURE 2.2. Representative amphorae. Top: Dressel 2-4 amphora. Ciarallo and De Carolis 1999: 133 no. 110; courtesy Ministero per i Beni e le Attività Culturali. Bottom left: Dressel 20 amphora. Bost et al. 1992: planche XIVc. Bottom right: Late Roman 5 amphora. Hayes 1976: 124 no. 361. With permission of the Royal Ontario Museum © ROM.



FIGURE 2.3. Representative lamps. Ben Abed Ben Khader and Soren 1987: 119 fig. 51.

Much of the evidence considered in this study concerns the *amphorae* functional category, and some more extensive comments regarding the use of the vessels belonging to this category will prove useful at this juncture. This functional category subsumes a wide array of morphologically distinct forms, here referred to as *classes*. Each of these classes was generally manufactured in a single, more or less extensive geographical region and is, on this account, normally attested in one or, at most, a limited number of distinct fabrics. The evidence suggests that in most cases the vessels belonging to a specific class were normally employed for the packaging, distribution, and postdistribution storage (henceforth referred to as *packaging*) of a single, specific substance, here referred to as that class's *principal content*. As mentioned above, the evidence indicates that the range of substances packaged in *amphorae* as their principal content was for the most part restricted to four different categories of foodstuffs: wine [*vinum*] and wine-related products, including sweetened wine [*mulsum*], vinegar wine [*acetum*], must [*sapa*], and

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FIGURE 2.4. Representative cookware vessels. Left: Palestinian Cookware cookpot. Hayes 1976: 119 no. 288. With permission of the Royal Ontario Museum © ROM. Right: Campanian Cookware casserole. Ciarallo and De Carolis 1999: 167 no. 184; courtesy Ministero per i Beni e le Attività Culturali.

various types of cooked or concentrated must [caroenum, defrutum, decoctum]; olive oil [oleum]; processed fish products, including both salted fish preserves [salsamentum] and various kinds of fish sauce [garum, liquamen, allec, muria]; and certain varieties of fruit, including cherries [cerasi], apples [mala], and dates [palmulae].

There are exceptions to each of the statements just made about *amphorae*, and it should be appreciated that these are simplifying characterizations of what was a considerably more complex (and, at present, only partially understood) reality. Thus, the family of morphologically similar containers



FIGURE 2.5. Representative utilitarian ware vessel. *Mortarium* with pestle and stamp. Greene 1992: 11 fig. 3; © Trustees of the British Museum.



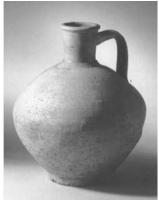


FIGURE 2.6. Representative tableware vessels. Left: African *Sigillata* D vessels. Ben Abed Ben Khader and Soren 1987: 119 fig. 52. Right: pitcher. Ciarallo and De Carolis 1999: 166 no. 182; courtesy Ministero per i Beni e le Attività Culturali.

generally referred to as the Dressel 2-4 amphora was manufactured in several different regions scattered across both the eastern and the western Mediterranean. With regard to principal content, the Richborough 527 amphora appears to have been employed mainly as a container for alum (Borgard 1994: 198; Borgard and Cauaher 2003), whereas stamps indicate that amphorae of some yet-to-be-identified class were manufactured in Calabria expressly for the packaging of pitch (De Caro 1985: 29-32). The African 2 amphora, on the other hand, may have been employed on a regular basis for the packaging of both fish products and olive oil. Again, it seems likely that newly manufactured containers belonging to classes of amphorae generally employed for the packaging of wine, oil, fish products, or the three different fruits noted above were on some occasions utilized for the packaging of some other substance. In particular, there is evidence that certain other foodstuffs, including honey, nuts, cabbages, and grains, as well as nonfood substances, such as pitch, resin, and gum, were in at least some instances, and perhaps regularly, packaged in amphorae. There is also evidence that some classes of amphorae manufactured in southern France, such as the Dressel 9 and 10 similis amphora and some variants of the Gallic 4 amphora, were produced for the repackaging of Spanish products and Italian wine, respectively, that were shipped to France in some other sort of container (Desbat 2003: 49). Finally, there is reason to believe that some newly manufactured amphorae were employed not as packaging containers, but rather as storage jars or for some similar application.