Four Centuries of Athenian Pottery

Susan I. Rotroff

INTRODUCTION

The four centuries of ceramic development that are the topic of this paper (400 BC to the beginning of the Common Era) fall into no less than three of the standard chronological divisions of antiquity: the Classical, the Hellenistic, and the Roman periods. These have traditionally been the preserves of different scholars, and it is for this reason that the ceramic chronology is rooted in three different works of scholarship: for the fourth century, Brian Sparkes' and Lucy Talcott's analysis, published in 1970 in volume XII of the Agora series; for the ensuing Hellenistic period, Homer Thompson's 1934 Hesperia article, "Two Centuries of Hellenistic Pottery"; and, for the 1st century, Henry Robinson's 1959 publication of Group F, in *Agora* V.¹ Not surprisingly, the points at which these three great fabrics join are not seamless; there are gaps and overlaps that would not have been there had the weaving been in the hands of a single craftsman. Furthermore, significant new evidence has come to light since the publication of these authoritative studies, now making it possible to refine some of their conclusions. I would like to contribute below some thoughts about the methodology used in the construction of the Agora chronology, along with a review of the chronology itself as I now see it, in light of the most recent discoveries (both archaeological and intellectual) in the field of Greek ceramics. Overstepping the boundaries set by the organizers of the conference, I carry my summary down to the end of the 1st century because, as I will make clear below, the Hellenistic ceramic tradition survived at least that long.

EVIDENCE FOR THE AGORA CHRONOLOGY

The Agora ceramic chronology rests on two main props: fixed chronological points, i.e. deposits that contain a large amount of ordinary Attic pottery, which also can be associated with a dated historical event; and "closed" deposits, stratigraphically isolated groups of material with a limited range of date, most commonly the contents of wells and cisterns. A third form of evidence – material from physically superimposed layers – has traditionally been cru-

cial in the formation of ceramic chronologies. Few such sequences, however, have been recovered at the Agora and consequently this kind of evidence has played almost no part in the development of the Agora chronology.

Historical fixed points

In evaluating the Agora chronology, an obvious question to ask is, how sturdy are these two props? First let us consider the historical anchors. There are only a handful: the destruction of Olynthos; the foundation of Alexandria; the occupation of Koroni; the destruction of Corinth; and finally, the attack of Sulla on the city of Athens. We might add the purification pit on Rheneia for, although it falls before our period, it provides the only mooring until we reach the middle of the 4th century. The date emerges from Thucydides' account (3.104) of the purification of the sanctuary at Delos undertaken by the Athenians in 426/425. The association of the pit – rich in both figured and black gloss pottery as well as much earlier material – with the purification has not been challenged, but the presence of some indubitably later material urges that it be used with caution.²

The large collection of pottery at Olynthos, destroyed by Philip II in 348, is the linchpin of 4th century ceramic chronology.³ The presence of later 4th century coins on the site, and the fact that, according to Diodoros Sikulos (19.52.2), much of the population of the new foundation at Kassandreia in 316 was drawn from among the Olynthians, have prompted some scholars to challenge 348 as a reliable *terminus ante quem* for pottery from this site, and to suggest that the mass of ceramics there should be dated well down in the 4th century, rather than in its second quarter.⁴ It is certainly true that the city was not completely deserted after 348, but Nicholas Cahill's recent analysis of the distribution of the post-348 coins demonstrates that most of the rehabitation was in the northwestern section of the North Hill.⁵ In this part of the excavation, Robinson contented himself for the most part with tracing walls; few floors were excavated, and almost none of the published pottery comes from this part of the site. We can still, I believe, rely on the bulk of the pottery from the remainder of the site for a view into the mid-4th century cupboard.⁶ Just how much of that pottery is Attic, however, remains open to question. David Robinson thought that most of the black and plain wares and lamps were of local manufacture,⁷ while Peter Corbett and Lucy Talcott felt confident that much of the fine pottery was Attic.⁸ The issue remains unresolved. If the pottery is not Attic, we may well ask how useful it is for framing an Attic chronology, for it is quite likely that the products of different centers of production, even if heavily Atticizing in character, would follow somewhat different developmental paths.

Alexandria provides a likely *terminus post quem* of 331, the date of its foundation, for deposits excavated there – although we cannot affirm that no one was living there earlier. Even if we discard the notion of earlier settlers or visitors, it is difficult to evaluate the pottery found in the earliest cemeteries. We can say that it was buried after 331, but we cannot tell how long after. Nor can we be certain that any single object was not an heirloom brought from abroad, decades old at the time of its inhumation. It is problematical as well that much of this material was excavated early in the 20th century and is not published to a standard that makes it easy to use for the investigation of fine chronological questions. Fortunately, Alexandrian archaeology is undergoing a revival, and new excavations have brought to light more material from the early years of the city. Even so, we are again plagued by the question of the origin of the pottery: is it Attic, or not? Some scholars are convinced that much of it is; others have expressed doubts.⁹ In any event, the site, no matter how meticulously excavated, is unlikely to be as useful as contained sites with a *terminus ante quem*.

Such a site is the Ptolemaic encampment on the headland at Koroni, on the east coast of Attica, excavated in a short, three-week season in 1960.10 The modest ambition of the project was to determine the date and nature of ruins long visible on the surface. The results, however, were an archaeological bombshell. Coins found on the site enabled the excavators to date its occupation to the reign of Ptolemy II, and furthermore to associate it with the presence of Ptolemaic troops in Attica at the time of the Chremonidean War, between 267 and 262/261 BC. This conclusion led to another and far more wide-reaching one: that the ceramic chronology outlined by Thompson for the first sixty years of the Hellenistic period was too high by about a generation. After a series of initial challenges,¹¹ the dating of the site has achieved widespread acceptance, and Virginia Grace's 1974 downward revision of her Rhodian amphora chronology on the basis of evidence unrelated to Koroni¹² lent important support to the new, lower chronology. It did not, however, resolve the discrepancy altogether, for it gave a date in the late 270's for the amphoras,¹³ which had therefore to be regarded as serving a secondary use as water containers in the latter half of the 260's. Now, however, Gerald Finkielsztejn's further revision of the Rhodian chronology places the three eponyms documented at Koroni - Chrysostratos, Agrios, and Antileon - in the years 267-265.¹⁴ This solves the problem neatly and allows us to imagine that the amphoras were brought to the site fresh from the vintner when the troops occupied the site. Although it has been suggested that there may have been some earlier habitation at Koroni,¹⁵ nothing has happened in the forty and more years since the excavation to undermine c. 261 as a terminal date.

The next fixed point, the destruction of Corinth by Roman soldiers under Mummius in 146, is of only limited usefulness for the Attic chronology. First of all, evidence has been growing over the years that there was substantial squatter activity on the site during the 100 years between its destruction and the establishment of the Roman colony. This is most clearly documented by stamped amphora handles, but imported fine ceramics of the intervening period have been identified as well.¹⁶ Most of the Mummian destruction debris is in secondary deposits, representing clean-up at the time of resettlement a century later, in the course of which later material may have entered the archaeological record. And, finally, the Attic pottery from Corinth remains largely unpublished, further limiting the utility of the site for the purposes of Attic chronology-building. Potentially more useful for the mid-2nd century is the construction fill of the Stoa of Attalos, which, if the foot-high inscription on its facade means anything, must have been constructed during the reign of Attalos II, from 159 to 138. Here, however, we have quite a wide range for *a terminus ante quem*: the fill could have been dumped within the foundations during any one of the twenty-one years of Attalos' reign. In any event, it has never received systematic study and remains unpublished; it is clear, however, that, like many building fills, it covers a very long range of date and is largely composed of very fragmentary material.

Our final fixed point is the sack of Athens in 86 BC by the Roman general Sulla. Several deposits may be associated with this event on the basis of the coins and amphora handles that they contain. The coins are the final issue of the Fulminating Zeus series, marked with Mithradates' star between crescents on the reverse.¹⁷ The Knidian amphoras are those of the latter part of the *duoviri* period, which probably ended in 88 BC. Twenty-three deposits at the Agora contain one or both of these markers, and one has been fully published from elsewhere in the city.¹⁸ None, however, is lying where it fell on the fateful first of March in 86 BC. Like the destruction debris at Corinth, these are secondary deposits, cleared away when the area in question was rebuilt or renovated, often decades after the event. Hence, most of these deposits contain some identifiably later material – be it a coin, an amphora handle, or a fragment of Roman sigillata – and one must remain alive to the possibility that some contain material that is not identifiably later, but is later nonetheless.

"Closed" deposits

No one of the fixed points discussed above – except perhaps Koroni – presents a perfect case, but they are nonetheless indispensable landmarks along the course of Attic ceramic development. The next challenge is to chart the unknown territory between them. For the Agora chronology, these gaps have been elucidated by creating what amount to a secondary series of fixed points, in the form of the so-called "closed" deposits. This approach was a bold innovation by Homer Thompson,¹⁹ the first scholar, as far as I am aware, to use deposits other than graves in this manner. The fine tuning of the Agora chronology of the 4th to the 1st century depends on some 300 "closed" deposits of this sort. Valuable as they are, however, they present significant difficulties.

First: How truly "closed" are these deposits? None is protected by an impervious sealing, such as a cement floor – although some approach that situation, lying at the bottoms of wells, beneath sterile layers of mud or col-

lapsed bedrock. In almost all cases, however, it would have been possible for later objects to enter the cistern or well some time after it was originally filled with debris, or to have sifted down to lower levels from higher ones - in the course of time or during excavation - or to have fallen in from the surface at the time of excavation. Connecting tunnels in cistern systems also offer avenues for contamination. In addition, many of these deposits presented difficult excavation problems: in some cases, partial collapse confounded the contents; danger of collapse made stratigraphic excavation difficult or impossible in others. In cisterns, particularly, it was not easy to sort out the typically cone-shaped layers of accumulation when digging underground, in the dark and in the damp. Direct observation of excavation in progress was difficult, and workmen were often left on their own for long stretches as the cistern was cleared. And of course the possibilities for intrusion in the construction fill of a dirt-floored building are legion. A prime difficulty in the use of this evidence, then, is distinguishing between the original deposit and intrusions of later date. A single fragment some hundreds of years later than the bulk of the material can easily be dismissed; material seemingly only a decade or a generation later than the whole poses a more challenging question. Is it an intrusion, or is it evidence that the deposit was closed later, and that other material within that deposit may also date later? Paradoxically, this problem becomes more acute as the chronology becomes finer.

A closely related problem is the estimation of the terminal date of the deposit. The first step, of course, is an evaluation of the most closely datable objects: figured pottery in the first fifty years of our span, stamped amphora handles and coins thereafter. These are a godsend, but their utility is nonetheless limited, as Figure 1 illustrates. Over half (58%) of the c. 225 Hellenistic deposits included in *Agora* XXIX contain amphora handles, although it is in

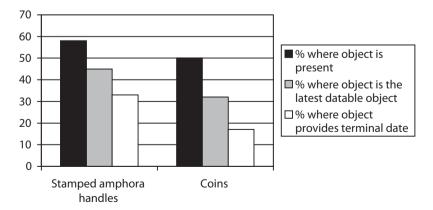


Fig. 1. Percentage of Hellenistic deposits in *Agora* XXIX containing stamped amphora handles or coins.

only 45% of the deposits that an amphora handle is the latest datable object. Even in those cases, other evidence (usually the pottery itself) may indicate that the terminal date must be substantially later. When this is taken into consideration, it turns out that amphora handles are useful in determining the date of deposit in only about one third of the cases. Coins, as it develops, are considerably less useful. Half of the deposits contain coins, largely bronzes, usually badly corroded, and only rarely closely dated. They constitute the latest datable objects in one third of the deposits, but they are instrumental in suggesting a terminal date in only 15% of the cases.

The latest datable object (assuming that we do not reject it as intrusive) tells us only the earliest possible date at which the material could have been discarded. Although the lapse between manufacture and discard is, ultimately, not recoverable, it is essential to scrutinize the state of preservation of the dating object, which may provide some hints. Worn coins must have circulated for some time, and fragmentary and battered objects are likely to be older than whole ones in a given deposit. I have generally assumed ten year lapse after the latest amphora handle – considering that the amphora had to be imported, discarded, smashed to bits, and then thrown away. Complete amphoras must be regarded differently from fragments of handles, but there is ample evidence of long-term reuse of amphoras as storage jars, and we can never assume they were new when discarded.

Occasionally datable objects and other information can be combined to turn one of these deposits into an historically "fixed" point. Such is the case with the debris from abandoned water sources around the Tholos.²⁰ It contains abundant material of a public nature: fragments of official measures, clay and lead seals, fragments of inscriptions, and rooftiles labeled *demosion*. For this reason it had been conjectured ever since its excavation in 1934 that the debris resulted from some event in the chaotic history of Athens in the late 4th or early 3rd century. A somewhat worn coin of the owl-left issue, which John Kroll now dates beginning in 307,²¹ provides a *terminus post quem*, and it seems likely that the damage took place during the brief reign of the tyrant Lachares in 294. The material from these deposits, then, can be placed in the latter years of the 4th century and the earliest years of the 3rd, providing a useful checkpoint between Olynthos and Koroni.

Finally, how homogeneous – in terms of date – can we expect any one deposit to be? The amphoras often cover many decades, and figured pottery in well deposits of the last half of the 5th and first half of the 4th century frequently documents a range of thirty to fifty years, at least for fragments; even wider spans are not unheard-of (see Fig. 2). We can assume, then, that a range of fifty years within a dumped deposit is not unusual – though of course there will be wide variability in the degree of chronological homogeneity.

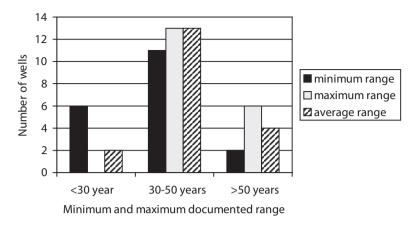


Fig. 2. Range of red-figure in Agora wells containing five or more red-figure fragments (450-350 BC).

Note: absolute ranges cannot be calculated because individual fragments of red-figure are themselves dated within a range (e.g., 410-400, or last quarter of 5th century). Three figures are used here to give a realistic impression of the data. The minimum range is the smallest possible range documented by the fragments. The maximum range is the largest possible range documented by the fragments. The average range for a deposit is the average of the minimum and maximum range figures for that deposit. Data and dates are taken from Moore 1997.

The Komos Cistern

A chronology is like any other structure: once it has been built, it requires maintenance if it is to continue to function effectively; and our chronological evaluation of the deposits must frequently be adjusted to take account of new evidence. The Komos Cistern (deposit M 21:1), excavated by Eugene Vanderpool in 1947, provides a good example of the evolution of scholarly interpretation of a single deposit. Whatever Hellenistic house or workshop it served has left no trace; the cistern itself had collapsed in antiquity, and the resultant hole had been filled with a pottery-rich debris. The physical situation made it impossible to excavate the cistern stratigraphically: instead, a circle something over 1.00 m in diameter was dug through this fill to a depth of 4.00 m and then expanded outwards. Below the pottery-rich fill lay a sterile layer of broken bedrock about 2.00 m thick - the remnants of the collapsed cistern wall - and below it a layer of mud, 40-50 cm thick, that rested on the bottom of the chamber, representing sediment that had accumulated while the cistern was in use. Unfortunately these tidy householders had dropped no significant trash into their water source; the silt contained only a few sherds. (See Fig. 3 for a schematic reconstruction of the excavation situation and the various interpretations that have been proposed).

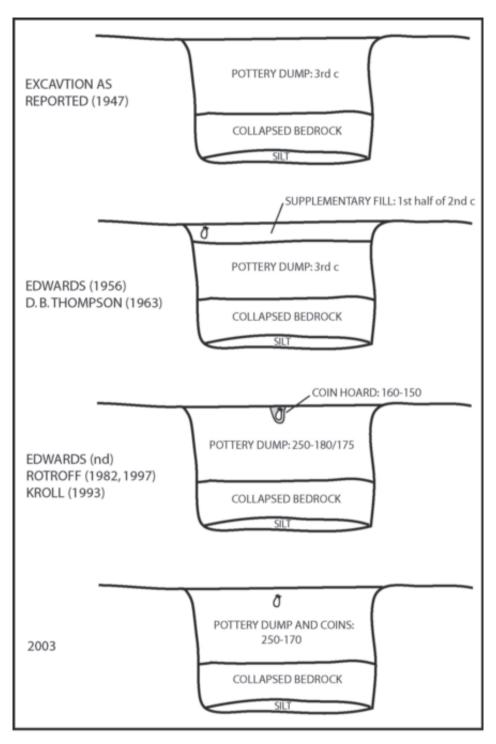


Fig. 3. Schematic representation of the evolving interpretation of the stratigraphy and chronology of the Komos Cistern.

The total of inventoried objects from the Komos Cistern is over 250; in addition, a large amount of uninventoried pottery was retained. This material includes many terracotta figurines and one mold for their manufacture, along with at least seven molds for moldmade bowls, wasters, and kiln furniture, indicating that it is at least in part the refuse from a potter's workshop. Most of the moldmade bowls and molds could be associated with the workshop of Bion, one of the earliest producers of moldmade bowls at Athens, which makes this deposit particularly important for the chronology of this type of object. Consequently, it has been scrutinized with some care, by me, and before me by Roger Edwards.

Vanderpool thought that the pottery-rich debris was a single fill: "because of the way we were forced to dig the cistern, no stratification can be recorded. There probably is none, however," he wrote in the field notebook in 1947. Subsequent study, however, cast doubt on this conclusion. In 1956, Roger Edwards discussed the Komos Cistern in a letter to Dorothy Thompson, responding to a query from her about its date. He suggested a wide range for the material - the whole of the 3rd century - but identified nothing he would date after 200. This conclusion was in line with the dating of the thirty-four stamped amphora handles, as it was then understood. Thompson, however, thought that some of the terracottas were later;²² to which Edwards replied "if some of your material is a bit later than 200, I would settle for ascribing it to a supplementary fill it wasn't possible to distinguish in digging." As he explains, "It is very usual in cisterns, as I'm sure you appreciate from your own experience, to have a supplementary fill since the original filling inevitably settles," adding parenthetically "architects won't erect buildings on a fill until it has settled for 7 years, I'm told." This reasonable suggestion also had the advantage of accounting for the numismatic evidence, which pointed to a later date as well. While the latest legible Athenian bronze coins from the deposit appeared to date in the 3rd century, there were eight silver coins of Histiaia dating between 196 and 146. Seven of these were found in a concreted clump, suggesting that this was a hoard or a lost purse. The level at which they were found was not recorded, but the eighth appeared on the first day of excavation; the hoard, then, is likely to have been located near the top of the deposit, and it could therefore be assigned to the supplementary filling. This hypothetical supplementary filling went on to become published fact in Thompson's article on the terracottas from the Komos cistern, published in Hesperia in 1963. She wrote, "A supplementary filling presumably occurred before the middle of the 2nd century," quoting a 1961 letter from Roger Edwards to that effect.²³

Edwards, however, was also able to envision another scenario. In an undated typescript²⁴ that he has been kind enough to share with me, he wrote: "It is not unreasonable to suppose, since the associated house apparently continued in use after the filling [of the cistern] occurred, that the hoard was deposited beneath the floor level for safekeeping by one of the inhabitants

at a much later date and was actually intrusive in the filling." In this case, the hoard need have no impact whatsoever on the chronology of the other material in the deposit.

So the matter stood until the post-Koroni revisions were applied to the amphoras from the Komos Cistern. These indicated a date of c. 186 for the latest Rhodian handle, which names the eponym Kallikratides II. The chronology of Athenian coinage of this period has also been revised, as reported by Kroll in *Agora* XXVI, with new dates based in part on the amphora chronology. On this new reading, the latest of the Athenian coins, representing early issues in the Fulminating Zeus series, date after c. 190.²⁵

A date of deposit *post* 186 might seem to solve the problem of the Histiaian coins, which had been dated 196 and 146. But in the estimation of numismatist Malcolm Wallace, who examined them shortly after they were excavated, these particular coins do not fall near the beginning of the series; furthermore, the degree of wear he observed on them suggested to him that the coins were sequestered "considerably after 170, say 160-150."²⁶ A gap of at least twenty-five years therefore remained between these coins and the next latest datable object. Consequently, in my discussions of the deposit in *Agora* XXII and *Agora* XXIX I adopted Roger Edwards' suggestion that the Histiaian coins constituted an intrusive hoard.²⁷ Kroll, too, in *Agora* XXVI, regarded them as intrusive.²⁸

Now, however, the implications of Finkielsztejn's revised amphora chronology must be considered. As it turns out, if the lower dating is correct, the chronological inconsistencies of the Komos Cistern all but disappear. The new date for the latest Rhodian eponym, Kallikratides II, falls between 175 and 173,²⁹ not so very much earlier than the proposed 160-150 for deposit of the coins. Remembering that Wallace's estimate of the date was just that – an estimate – we may claim the flexibility to suggest the coins might have been deposited as early as 170 or so. It now looks as though we can discard both of the explanatory scenarios and regard the deposit, lost purse and all, as the result of a single ancient event – just as Vanderpool originally thought.

The Komos Cistern is only a single deposit, though a rich one. In an edifice as elaborate as a ceramic chronology, however, each adjustment has multiple implications. If the Komos Cistern is a little later than we thought, then other deposits with closely similar contents may be a little later too. A simple, wholesale downward shift or stretching of the chronology is unlikely to bring satisfying results; each case needs to be reexamined in the search for a more precise estimate of ancient dates. That type of thoroughgoing revision is a major research task, requiring review of the original data, and hence beyond the scope of most users of the chronology. This inescapable fact fosters a conservatism in the assignment of dates, as people must continue to refer to the published or conventional chronology, even while realizing that it is in need of revision.