I

History and Potential

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History of Pottery Studies

INTRODUCTION

Pottery tends to arouse strong emotions in archaeologists: they either love it or hate it. For some it has an indefinable fascination, and is potentially full of information, which has to be teased out by careful and painstaking study. At the other end of the scale, it is seen as the most common of archaeological materials, whose main functions are to slow down the real business of digging, fill up stores, and behave as an archaeological black hole for post-excavation resources. Between these extremes there is a whole spectrum of opinion: some, for example, see pottery as an unavoidable chore, a material to be processed as quickly as possible before being reburied (either in the ground or in a store), rather like low-level nuclear waste. A sign on a laboratory door that read 'Danger: pottery processing' satirised this view. Others take a more mystical view, believing the humblest sherd to be full of the most amazing information – 'Show them a piece of worn pottery and it's the rim of a centurion's favourite cup' (read in a local newspaper) – which only the pottery specialist, as some sort of guru, can unlock.

There is an element of truth and an element of caricature in each of these descriptions. While it will be clear where our feelings lie, our aim in this book is to take a balanced view of the potential contribution of pottery studies to archaeology, neither too optimistic nor too pessimistic. To do this, we first need to look at the history of our subject, on the grounds, familiar to archaeologists, that to understand the present we first need to study the past. It is natural for archaeologists to attempt to divide their material into chronological phases; the history of archaeology in general, and of ceramic studies in particular, is no exception. Shepard (1956, 3) saw three phases, but she did not try to put dates to them: the study of whole vessels as culture-objects, the study of sherds as dating evidence for stratigraphic sequences and the study of pottery technology as a way of relating more closely to the potter. Matson (1984, 30)

applied two of Willey and Sabloff's (1974) phases – the Classificatory-Historical Period (1914–60) and the Explanatory Period (1960 onwards) – to American ceramic studies. Van der Leeuw (1984, 710–18) saw three phases: the typological (up to 1965); the 'three levels of research' (1965–80), continuing the previous tradition, with a 'micro' level below it and a 'macro' level above it; and the 'study of the cultural element' (1980 onwards).

Here we attempt to draw together these views by setting the history of ceramic studies into three broad phases – (1) the art-historical, (2) the typological and (3) the contextual – admitting that the last is characterised mainly by its diversity of approach, encompassing studies of technology, ethnoarchaeology, questions of style and problems of change (or the lack of it) in ceramics, all approached from widely differing viewpoints. These phases can be seen to move in step with changes in the scale at which pottery is studied, from whole pots (art-historical) to sherds (typological) to a whole range of scales, from the microscopic detail of fabric to the inter-comparison of whole assemblages, not just of ceramics but of all artefacts (contextual). The splendid but elusive term 'ceramic ecology' was coined (Matson 1965, 202) to describe this holistic cradle-to-grave (or dust-to-dust; see van der Leeuw 1984, 707) approach to pottery. In our view, progress in this phase has been uneven, with study at the broadest level (the assemblage) lagging behind progress at other levels, partly because of the lack of the necessary methodological tools; one purpose of this book is to try to redress the balance.

We do not try to impose a rigid 'Three-Age system', like a latter-day Thomsen, but see a regional pattern of development, with new ideas being adopted at different times alongside the old ones, which are rarely totally rejected but subsumed into a wider approach. Progress is often patchy, even within a single organisation. In Britain, for example, many field archaeologists seem still to be in the typological phase, demanding 'dates' and little else from their ceramicist colleagues. We are writing this book in the hope that it will be read by at least some of them.

Four related topics have provided inputs into archaeological ceramic studies at various stages of their development – ethnography, production and technology, archaeometry and quantification. Ethnographic pottery studies, although existing alongside archaeological studies for some time, only 'came in from the cold' when archaeologists moved away from the typological approach and began to look at pottery in a wider context. Archaeometry, by contrast, has been able to contribute information at all stages, from technical studies of, for instance, Greek figure pottery to the identification of the source of a particular ware to a wide range of scientific techniques aimed at a wide range of questions. Quantification has been something of a poor relation in this family. While acknowledging, at least implicitly, the need

Table 1.1. *Summary of the main phases and themes in the study of archaeological ceramics*

Phase	Art-historical	Typological	Contextual
Date	1500+	1880+	1960+
Scale	whole pots	sherds	microscopic to assemblages
Parallel theme	archaeometry technology	archaeometry quantification technology	archaeometry ethnography quantification technology

to quantify assemblages before they can be properly compared (e.g. for seriation or for distributional studies), archaeologists have often failed to grasp the theoretical issues that lie behind the debate over the choice of a measure of ceramic quantity, preferring practical arguments – Is it easy to do? Does it give the answer I want? – and gut feeling. We shall try to make a reasoned assessment in Chapter 13. The place of each of these topics in the history of ceramic studies is shown in Table 1.1 and will be discussed in more detail later in this chapter. Our views on their potential value will be set out in Chapter 2.

THE ART-HISTORICAL PHASE

Written evidence of interest in excavated pottery goes back to at least the fifteenth century. Ebendorfer (d. 1464) described prehistoric pots found at Stockerau as man-made objects, countering the common views that they were 'magic crocks' that had grown in the ground or had been made in mines by gnomes (Sklenář 1983, 16). In 1587, Petrus Albinus excavated prehistoric vessels in the Meissen area to gather evidence that they were man-made and published his findings in what has been called 'the first proper excavation report in prehistoric archaeology' (Sklenář 1983, 38; referring to Albinus 1589). In 1603, John Stow described pots he had acquired from the Roman cemetery at Spitalfields, London, in 1576 (Stow 1603). In the seventeenth century, attention seems to be focussed on burial urns (e.g. Browne 1658; van Mellen 1679), perhaps because of interest in attitudes towards death at various times, rather than in the pottery in its own right. The eighteenth century was the great age of the collector, with Etruscan, Greek and Roman 'vases' coming to the fore. Following an early treatise by Groevius and Gronovius (1694), there were many publications

of individual vessels or collections, of which perhaps the grandest was by Hamilton (1766). Emphasis was on admiration of the artistry and techniques of the pottery and on interpretation of classical scenes.

Interest in 'sepulchral' pottery continued through this period (see e.g. Weber 1719; Litzel 1749; Colt Hoare 1812); towards the end of the eighteenth century and more especially in the nineteenth century, it broadened out into a more general interest in pottery of various periods and sources. Local pride seems to have stimulated an early interest in the history of Italian majolica (Passeri 1752) and in 'gallo-Roman' pottery in France, starting with Grignon (1774) and Grivaux de la Vincelle (1807). In Britain, finds of Roman pottery from London were published in 1787 (Combe and Jackson 1787) (see Figure 1.1) and 1832 (Kempe 1832) and from other major towns from the 1840s onwards (e.g. Shortt 1841), and the same can be said of Germany (Lauchert 1845).

The emphasis was still very much on the 'fine' wares rather than the 'coarse' wares, but as evidence accumulated through the nineteenth century, attempts were made to draw developments together and produce coherent histories (e.g. Birch 1858; Garnier 1880) and popular handbooks (e.g. Binns 1898).

The study of post-classical European domestic ceramics was slower to develop. At first, only decorated medieval floor tiles were thought worthy of attention, for example in England (Hennicker 1796) and France (de Caumont 1850) and as late as 1910, the pottery of the period was thought to have little to offer: 'to the ceramic historian they [the decorative tiles] supplied enlightening evidence that could tell us more about the capabilities of the early potter than any earthen vessel of the same period' (Solon 1910, 602). Early studies of tiles generally referred to a single building, but general histories started to appear in the second half of the nineteenth century (e.g. Amé 1859). Except for German stoneware (see von Hefner and Wolf 1850 for the first illustrations and Dornbusch 1873 for the first serious study), European medieval pottery received relatively little attention until the twentieth century, from the archaeologist Dunning in the 1930s (Hurst 1982) and the art historian Rackham (1948). Before them, 'early English' pottery usually referred to material of the seventeenth and eighteenth centuries deemed suitable for collecting (see Church 1870), and it was usually regarded as rather quaint in comparison with the dominant position of porcelain (Hobson 1903, xv).

Outside Europe and the Mediterranean, attention was directed to 'Oriental' wares, mainly Chinese and Japanese. After an era of collecting, attempts at historical accounts were provided for China by Julien (1856) and for Japan by Noritané (1876–9). An interesting approach to the question of trade in Chinese ceramics was provided by Hirth (1888), who by studying the historical records of

FIGURE 1.1. Examples of early illustrations of excavated pottery (from Combe and Jackson 1787, by permission of the Society of Antiquaries of London).

Chinese trade dispelled various myths, for example about the origins of Celadon ware.

Study of the early pottery of the United States began in the late eighteenth to mid-nineteenth century, often as part of surveys of the monuments and antiquities of particular regions, for example by Squier and Davis (1848), but also in their own right (e.g. Schoolcraft 1847). An advance was marked by the foundation of the Bureau of American Ethnology in 1879 and by some particularly valuable work by Holmes (1886). Work in Central America (de Waldek 1838) and South America (Falbe 1843) progressed in parallel to work in North America and alongside exploration.

THE TYPOLOGICAL PHASE

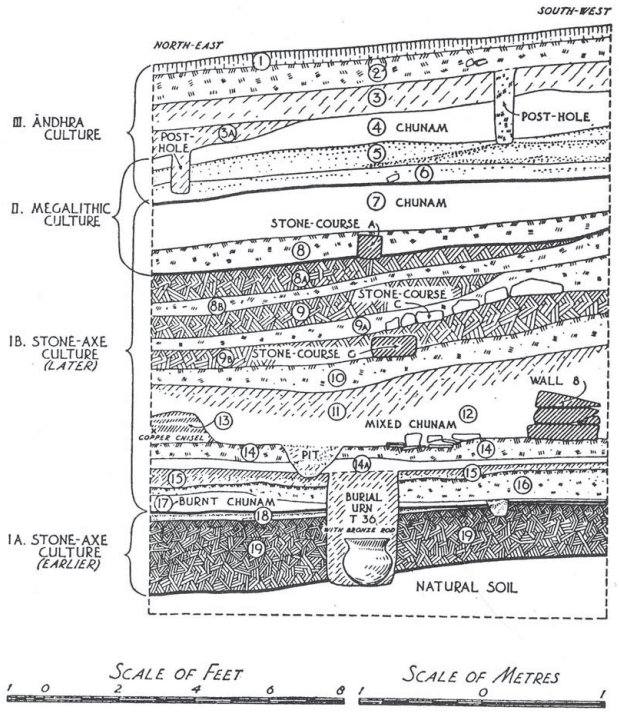
As excavations in France, Germany and Britain produced ever-increasing amounts of pottery, especially Samian wares, pressure for classification must have grown, if only as a means of coping with the sheer quantities involved. A very early example is Smith's 'embryonic Samian form and figure type-series' (Rhodes 1979, 89, referring to Smith 1854). Coarse wares were also considered at this early date: Cochet (1860) attempted to classify pottery to date burials but his work was dismissed because 'the terra-cotta pot . . . remains stationary' (Solon 1910, 83). Pottier (1867) made a simple classification of Norman pottery of the thirteenth to fifteenth centuries.

The typological phase can really be said to start in the 1880s, at the same time as Pitt-Rivers was developing his typological approach to other classes of artefact (Pitt-Rivers 1906, based on a lecture of 1874). To come to grips with vast amounts of material from Lezoux, Plique (1887) devised a classificatory system for the pottery, setting a trend for the corpus of Samian ware type-series (e.g. Dragendorff 1895; Déchelette 1904; Ludowici 1904; Knorr 1906; Walters 1908) which continues to this day. The other side of the coin – the relationship of pottery to stratigraphic sequences – seems to start at about the same time, for example in Flinders Petrie's work at Lachish, Palestine (Petrie 1891), where he observed Phoenician, Jewish, Greek, Seleucid and Roman pottery in successive strata. The first distribution map of a class of pottery finds appears to be by Abercromby (1904), although a more general map showing find spots of Roman pottery in London had been produced as early as 1841 (Craik, in Knight 1841).

In the United States, this phase can be said to start with Kidder's excavations at Pecos (1915–29) and his integration of stratigraphy, regional survey and ceramics (Kidder 1924; 1931). This work was a model for much that was to follow, through to the 1960s (e.g. Colton 1953; Griffin 1950–4; and many others). Bar graphs were first used in 1915 (Roper 2008).

The emphasis in this phase was on vertical (chronological) and regional spatial distributions, with pots (or, more usually, sherds) being treated as type-fossils in a thoroughly geological manner that harked right back to Smith (1816). The vertical emphasis was inevitable, given that pottery was one of the main, and certainly the most abundant, sources of dating evidence, at a time when archaeological attention was focussed on cultural history and development (see e.g. Wheeler 1954, 40–61) (Figure 1.2). The 'horizontal' studies served two purposes:

(i) to tie together sequences found at related sites in a region to form a master chronological sequence. This would enable any absolute dates determined from one site (e.g. through inscriptions, documentary evidence, etc.) to be transferred to other sites in the master sequence ('cross-dating', first used by Petrie in the 1880s [Petrie 1904, 141–5]).
(ii) to help define cultural areas, using the sort of definition provided by Childe: 'We find certain types of remains – pots, implements, ornaments, burial rites, house forms – constantly recurring together. Such a complex of regularly associated traits we shall term a "cultural group" or just a "culture"' (Childe 1929, vi). In Childe's view, many other classes of artefact had to be taken into account, but in practice pottery often had a dominant role.



LAYER	I. STONE AXE	II. MEGALITHIC	III. ĀNDHRA
1	. .	. .	52, including 1 yellow-painted sherd
2	. .	. .	384, including 10 yellow-painted sherds
3	. .	. .	480. including 68 yellow-painted and 1 rouletted sherd
3a	. .	. .	67
4	. .	36	269, including 51 yellow-painted sherds
5	. .	68	219, including 10 yellow-painted sherds[1]
6	26	115	405, including 7 yellow-painted sherds
7	63	407	. .
8	150	199[2]	. .
8a	36	. .	. .
8b	89	. .	. .
9	76	. .	. .
9a	196	. .	. .
10	46	. .	. .
11	33	. .	. .
12	23	. .	. .
13	26	. .	. .
14	48	. .	. .
14a	15	. .	. .
15	198	. .	. .
16	7	. .	. .
17	45	. .	. .
18	25	. .	. .
19	321[3]	. .	. .

FIGURE 1.2. The vertical emphasis of the typological phase. Deep stratification (left) combined with counts of sherds of different types from successive layers (from *Archaeology from the Earth* by Sir Robert Eric Mortimer Wheeler (1954), figures 9 and 10 on pp. 50–1, by permission of Oxford University Press).

The main methodological tool for the chronological task was seriation (see Chapter 16). It was created as a way of ordering grave-groups from cemeteries with little or no stratigraphy, using the presence or absence of artefact types in each group (Petrie 1899). The idea that this approach could be applied to surface collections of sherds was suggested by Kroeber (1916) and implemented by Spier (1917). At about the same time it was observed that the proportions of types in successive layers of a stratigraphic sequence tended to follow regular patterns ('percentage stratigraphy') (Nelson 1916). The idea that such patterns had a cultural interpretation seems to have come later (e.g. Ford and Quimby 1945), and the use of seriation as a formal tool for recreating cultural chronologies from percentage data (usually sherds) in the partial or total absence of stratigraphy followed (e.g. Ritchie and MacNeish 1949, 118), culminating in Ford's manual on the subject (Ford 1962). At this stage, proportions were based on sherd counts; this reflects partly the nature of the collections but partly the lack of serious consideration of the alternatives. Ford (1962, 38) defended the use of sherd counts, dismissing other possible approaches as 'purist'. We shall return to this point when we look at the theme of quantification. In Europe, the main use of seriation seems to have continued to be to order grave-groups or other 'closed' groups (e.g. Doran 1971; Goldmann 1972). Theoretical inputs came from Brainerd (1951) and Robinson (1951), followed by Dempsey and Baumhoff (1963), and the theory was integrated by a return to Petrie's work and a mathematical study which showed the equivalence of the two main approaches then in use (Kendall 1971). In the 1970s, attention turned to the appropriateness of the theory for real archaeological problems (Dunnell 1970; Cowgill 1972; McNutt 1973), and the topic was thoroughly reviewed by Marquardt (1978). Both the mathematical aspects (e.g. Laxton 1987) and the archaeological aspects (e.g. Carver 1985) developed for a while, but then appeared to stall.

But above all, this was the age of the 'type', although the term was given subtly different meanings on each side of the Atlantic. Common to both was a belief that types were more than just a convenient way of subdividing material. Once created they could be ordered according to ideas of 'development' and could be used to demonstrate chronological sequences. Such arguments could easily become circular and were gradually replaced as more direct (e.g. stratigraphic) evidence became available. In the Americas, the idea that sherds could, and indeed should, be sorted into types, goes back to before 1920 (Kidder and Kidder 1917) and was well-established by the 1930s (Colton and Hargraves 1937). The definition of a type was usually as later formalised, for example by Gifford (1960, 341), as 'a specific kind of pottery embodying a unique combination of recognizably distinct attributes'. As more work was done and more and more types were defined, it became apparent