2

The Potential of Pottery as Archaeological Evidence

AIMS

The aims of this chapter are to look at the archaeological uses made of pottery in the various phases of study described in Chapter 1, to see which have stood the test of time, to point the reader forward to chapters that will deal with such themes in more detail (Part III) and to provide a general rationale for the practical approaches described in Part II. Clearly, not all assemblages, or even all sites, will yield evidence of all the types to be described below.

Discernment is needed to know what sort of questions can reasonably be asked of a particular group of pottery – this is best (perhaps only) learnt by experience, but we hope that the theoretical discussions of Part III will help the reader to avoid the twin pitfalls of under- and over-interpretation. It is nevertheless true that when excavating and recording pottery we do not know all the questions that are likely to be asked of it, and that therefore some ideas of 'good standard practice' in recording and summarising pottery assemblages are very useful, although they may be augmented by special information to meet special needs. We hope to provide such practices in Part II, without giving the reader the claustrophobic feeling of a rigid system fixed for all times and all places. We should make it clear before starting that just because an idea belongs to an earlier phase of study, or paradigm, that does not mean it is of no use to today's worker.

In this chapter we shall look at three levels of evidence, from raw (or foundational) data through aggregated (or integrated) data to fully synthesised data (interpretation):

(i) *Foundational data*, relating to individual vessels or sherds, and to questions that could reasonably be asked of them, though with varying degrees of success.
(ii) *Integrated data*, built up from (i) and relating to assemblages, since the interpretation of a single vessel or sherd in isolation is usually impossible (and

certainly inadvisable), and that information on assemblages is needed as a step towards interpretation. For example, to know that a vessel found at site A was made at site B is not particularly useful, unless we know at least whether this is a common or an unusual event.

(iii) *Interpretation* is seen here as the attempt to fit ceramic data into a bigger picture, to say what it might mean in terms of the social organisation behind it, rate of change (or the lack of it), relationships between contemporary societies, and so on. In broad terms, it is the telling of part of the human story. It is likely to involve data from several sites.

FOUNDATIONAL DATA

If you ask archaeologists in an unguarded moment what they use pottery for (or why excavated pottery is kept and not thrown on the spoil-heap) they will probably reply 'for dating evidence'. If you give them more time, or ask someone who has worked with pottery or at least read about it, they will probably come up with three questions that one could reasonably ask of excavated pottery:

(i) when was it made?
(ii) where and how was it made?
(iii) what was it made for?

These questions are based on the obvious facts that every pot was (1) made or used at a certain time, (2) made at a certain place and in a certain way and (3) used for certain practical or symbolic purposes. The interesting question is how much we can glean about them from a handful of mute sherds: we shall look at these questions in detail in Chapters 16, 17 and 18 respectively. To some extent, these questions pose further ones about (1) how was production organised?, (2) of what was a pot made? and (3) what shape was it?, which we shall consider in Chapters 12, 13 and 14, respectively.

When Was It Made?

Pots vary. Contrary to Solon (1910, see Chapter 1) the terra-cotta pot does *not* remain stationary. At any site, the pots in use vary over time in terms of how they were made, of what they were made, for what they were used, probably where they were made, and certainly by whom they were made. Such differences will be reflected in

the fabric, form, technology and decoration of the sherds excavated from different contexts.

At an empirical level, we can build up a picture of how these aspects vary by studying the co-occurrences of different types or characteristics in different contexts – this is known as seriation (Chapter 16) and enables us to create a sequence of relative dates. To provide absolute dates, we need to find 'fixed points' in the sequence, either from intrinsic properties of the pottery (e.g. by rehydroxylation, see Chapter 16) or, more likely, from other sources of evidence, such as documentary evidence (including coins, which are a special sort of document) (Chapter 16) or from scientific techniques applied to material other than the pottery (e.g. ^{14}C or dendrochronology), which has to be carefully related to the pottery sequence (Chapter 16). Interpolation between the fixed points of the sequence will probably be needed.

At a more theoretical level, we may perhaps observe developmental trends within such sequences. In the early days of the typological phase, material was sometimes ordered according to supposed trends of development, which were given chronological significance. Generally, such trends were seen in terms of 'improvement' or 'increasing complexity' and can with hindsight be linked to nineteenth- and early twentieth-century beliefs in 'progress'. Today it is clear that pottery manufacture in stable external circumstances does not automatically 'improve' (whatever that may mean). A well-known example is the history of the successive Samian-ware industries of Roman Gaul – South Gaulish, Central Gaulish and East Gaulish (see Johns 1971). Within each industry there is a trend of declining standards, so that 'by the beginning of the second century, South Gaulish ware had become very poor and unattractive' (Johns 1971, 23), and 'exports [of Central Gaulish ware] end at the end of the second century, but inferior Samian continues to be made [in Central Gaul] in the third century' (p. 25), and again 'The standard [of East Gaulish ware] declined steadily until . . . the moulded ware had become very crude and primitive' (p. 26). Looked at in a wider perspective, the picture is of long-term decline (over at least 200 years), punctuated by bursts of improvement as a rival source area picks up the role of principal exporter.

Even if a developmental sequence can be established, there is no guarantee that it progressed at a steady rate. An application of catastrophe theory (Renfrew and Cooke 1979) suggests that sudden changes, triggered by apparently minor external factors, may punctuate long periods of relative stability or steady change. An example of this sort of change (in this case an anastrophe, or 'good' catastrophe) is the 'explosion' of the black-burnished ware industry (BB1) of Roman Britain around the year AD 120 (see Farrar 1973; Peacock 1982, 85). Until that date, BB1 was a purely local industry of central southern England, producing hand-made pottery fired in simple kilns, in

a tradition that went back at least 100 years to the late pre-Roman Iron Age. After that date, BB1 is found in large quantities on both civil and military sites across most of Roman Britain, as far north as Hadrian's Wall (500km from its source). Despite widespread copying of its forms by potters using the wheel (the BB2 industries), BB1 remains in the hand-made tradition and in fact outlasts its more sophisticated competitors.

The possible role of the individual innovator should not be overlooked. In documented cases, such as the Andokides painter's part in the introduction of Athenian red-figure ware in the sixth century BC (Boardman 1975, 15), this role can clearly be seen; in undocumented situations it would obviously be much harder to identify. The extent to which innovators are part of their social setting and the extent to which they stand outside it is a thorny question.

Finally, there is the interesting question of how precise we can expect dates provided by pottery to be. If we could set a theoretical limit to the precision, even under ideal circumstances (by analogy with the ± attached to ^{14}C dates), we would know which chronological questions it was possible to answer from the evidence of pottery, and which it was not, and potentially avoid the angst of asking questions that can never be answered. Some work has been done on the lifespans of pottery of different types (Chapter 19), and to this source of uncertainty must be added the uncertainty about the date of manufacture. Bringing these two factors together for Romano-British pottery of the first to second century (considered to be among the best-dated periods in Britain) suggests a minimum margin of error of twenty to thirty years that must be attached to any one pot; the margin attached to an assemblage decreases as the quantity of pottery increases (Orton and Orton 1975). It seems that the better a type can be dated, the greater the life expectancy of pots of that type, so that the overall margin of doubt remains the same – a sort of chronological analogy of the Uncertainty Principle of physics or Murphy's Law of everyday life.

Where and How Was It Made?

Pots also move about. They may be manufactured at a production centre and traded in their own right over great or lesser distances, they may be traded as containers for wine, foodstuffs (for example sardines, see Wheeler and Locker 1985), fuel (such as oil, see Moorhouse 1978) or other material (for example mercury; see Foster 1963, 80), they may be exchanged as gifts or brought back as souvenirs from travels (Davey and Hodges 1983). Documentary evidence can shed light on unexpected aspects of 'trade', as shown by this extract from a letter from John to Margaret Paston,

dated 1479: 'Please it you to know that I send you . . . 3 pots of Genoa treacle, as my apothecary sweareth to me, and moreover that they were never opened since they came from Genoa' (Davis 1971, 512). Much information is potentially contained in the geographical distribution of pots, but to gain access to it we must be able to identify the source from which particular pots come. This will usually involve study of the fabric, and especially of the inclusions in the clay (Chapter 13).

A whole spectrum of approaches is possible here, from simple visual observation with no more equipment than a low-powered binocular microscope to the latest scientific techniques for physical and chemical analysis (Chapter 13). There is a delicate trade-off between the two ends. Some questions (for example of sourcing clays with only sedimentary tempering) may need very sophisticated techniques, but the overall role of techniques that can only, because of cost, be used on a very small proportion of an assemblage, must be in doubt. The uses to which such techniques can be put are varied; apart from the obvious ones of sourcing clay or temper there are also technological questions that can be answered. Portable devices for analysis are becoming available (e.g. pXRF spectrometers – see Chapter 1), but the analysis conditions are too uncontrolled, including lack of sample preparation and other factors (compared to laboratory-based scientific analysis instruments) to produce analysis data of the quality required for reliable sourcing alone. A useful role would be to rapidly examine large numbers of sherds to categorise into broadly different chemical composition patterns for subsequent laboratory analysis of representative examples of each group (Speakman et al. 2011). However the quality of the data generated could well limit the ability to detect subtle changes in clay chemistry, and groups so defined could prove to contain more than one clay chemical pattern when more carefully controlled analysis was undertaken.

It is tempting to link particularly distinctive forms with their source, if known, but this can be misleading since at many periods forms were copied from one production centre to another. Indeed, the very success of the products of one centre may lead to the copying of particular forms by other centres. It is therefore important that those responsible for excavating production centres be able to characterise their products so that they can readily be identified elsewhere, and equally unfortunate that the sheer quantities of waster pottery often found at such sites can easily overwhelm the excavator, delaying or even preventing the dissemination of important information.

If we are able to identify the sources of most of the pottery from a site, we need to consider how different modes of distribution may affect the proportions of pottery from different sources at this and neighbouring sites (Fig. 2.1) (sites cannot be studied in isolation for this sort of analysis). We need to build or find models for distribution by various modes (for example through local markets, by travelling packmen, by

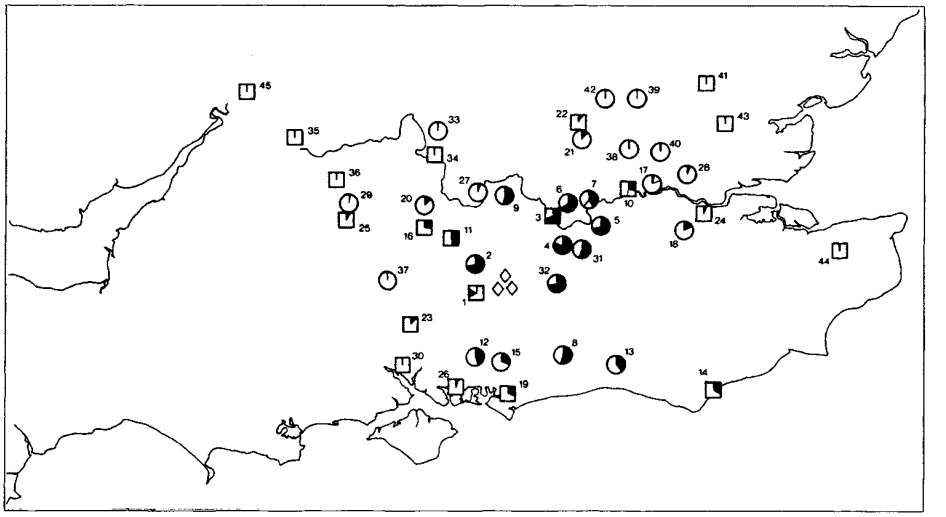

FIGURE 2.1. Diagram to show proportions of pottery from the Alice Holt kilns found on different sites in south-east England in the period AD 270–420. The shaded zones show the proportion of Alice Holt ware at each site. The kiln site is shown as lozenges (Lyne and Jefferies 1979, fig. 47, by permission on Malcolm Lyne).

consumers collecting pots from production centres, by centres dedicated to supplying a particular site, and so on), and compare them with our data. This lies within the province of spatial analysis (Conolly and Lake 2006) which is based on geographical theory but for which archaeology generates its own peculiar problems, such as differential densities in fieldwork due to the distribution of archaeologists (Hodder and Orton 1976, 21–4).

There has been a tendency to believe that such studies are relevant only for fine wares, and that for many periods and many places the coarse wares are indeed 'stationary', geographically if not chronologically. This position began to crumble with Shepard's work on the Rio Grande pottery in the 1930s (Shepard 1942), which showed that coarse wares could be moved over surprisingly long distances. More and more examples of quite mundane wares being moved over long distances have come to light, and it is clear that as the blinkers are removed and pottery is studied on a broader scale, more can be expected to be found.

Curiosity about how thing are made and how they work seems almost to be an innate part of human nature, witnessed by the continual popularity of books with titles like *How it works*. But curiosity alone is not sufficient justification for the effort put by pottery workers into studying details of the manufacture of their excavated pottery. We have seen (Chapter 1) how the old ideas of technological progress have given way to a model of a mosaic of different techniques and details of production, so what can we still hope to learn by studying how a pot was made?

It can help us to characterise the products of certain sites. Often, idiosyncratic details can be more useful than broader but more readily copied characteristics. As an example we compare late medieval jugs from sources in France and southern England. Although forms and especially decoration can be quite similar (certain French styles were copied by potters in the London area and elsewhere), there are very diagnostic technical features in the ways that handles and spouts were made. Handles on the English jugs, whether of 'rod' (round) or 'strap' (flat) section, were made by 'pulling' from a lump of clay or by rolling out a 'sausage' of clay. The French approach was completely different: the potter threw a cylinder of clay which was then sliced both horizontally and vertically, thus creating several handles at once. This was more efficient for the potter, but from our point of view it leaves important diagnostic traces in the form of throwing marks running vertically down the inside of the handle. It also gives a different shape (in effect, a rim) to one edge of the handle compared to the other, leading to an asymmetrical cross-section, sometimes known colloquially as the 'French roll' (Ponsford 1983, 222) (Fig. 2.2). The technique was not (so far was we know) copied by English potters; some earlier English jugs have apparently wheel-thrown handles (Pearce et al. 1985, 26), but they have a symmetrical cross-section and do not show throwing marks. A similar contrast applies to spouts: the English spout was usually formed by folding or pinching the rim of the jug itself, or by making a tube of clay. The French approach was to throw a small conical shape and cut it vertically to produce two halves, each of which could be applied to a jug rim to form a spout, the corresponding part of the rim being cut away (Ponsford 1983, 222).

Such idiosyncrasies can sometimes be narrowed down to individual sources rather than broad regions (e.g. Pearce 1984). Some workers would go further and claim to be able to distinguish, not only between production centres, but between individual potters at a centre, by identifying personal idiosyncrasies and quirks (Moorhouse 1981, 106). This may be so as a tour de force in particularly favourable circumstances, but we do not believe it is possible to generalise from such experiences.

Important, if sometimes rather negative, sources of information about production techniques are attempts to replicate the manufacture and firing of pots of a particular type or period. This branch of experimental archaeology will be discussed in Chapter 11.

What Was It Used For?

This is generally recognised to be the most neglected of our three questions (for example by Fulford and Huddleston 1991, 6). This may be because it is more difficult

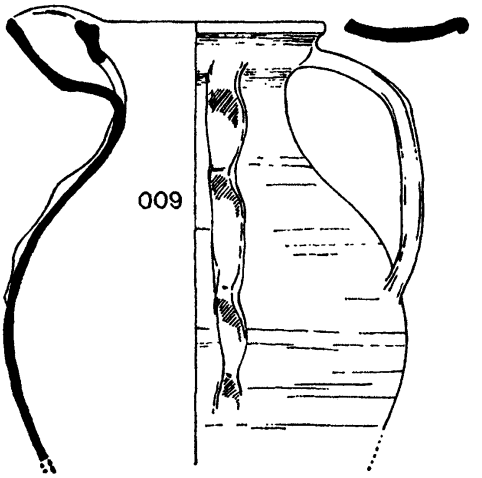

FIGURE 2.2. Thirteenth-century French jug from Southampton, showing characteristic cross-section of the handle (Platt and Coleman-Smith 1975, fig. 182, no. 1009, by permission of Professor Colin Platt).

to gain information on the function of a pot than on its source, and cautionary tales about very small differences in visible characteristics reflecting large variations in function abound (see Miller 1985) or because archaeologists believe such information can be gained from other sources of evidence (for example structural) or simply because they are not asking such questions.

Nevertheless, useful information on the suitability of a pot for certain functions can be obtained from a study of its form and physical characteristics (Chapter 18), even if we cannot say that a pot was used for the purpose to which it was apparently most suited – sometimes technological considerations may overrule practical ones. Alternatively, a pot may possess features which are irrelevant or even detrimental to its purpose or manufacture, but are present because they were relevant to prototypes made in a different material, for example metal. Pots with such features are called *skeuomorphs*. A good example comes from fifteenth-century Dutch ceramics: early attempts to copy bronze cauldrons imitated them down to the last detail, including the angled shape of the handle (Fig. 2.3). This shape makes perfect sense in bronze, but is a source of weakness in ceramics – such handles cannot in fact bear the weight of a full pot (Ruempol and van Dongen 1991, 76).

Status, or symbolic function, is perhaps even less accessible than practical function. It is often overlooked that pottery is only one of many materials that can be used to fulfil certain functions, and that other materials may be far less apparent in the archaeological record, perhaps because they can be recycled (glass, metal) or perhaps because they degrade more readily (for example leather, wood). Thus status may be

reflected more by choice of material than by variations within a material, and this may vary from one form to another. For example, Dyer (1982, 39), in a discussion of the British late medieval pottery industries, contrasts the widespread use of metal (brass) for cooking pots with the very restricted use of metal jugs. This means that the presence of a high-quality ceramic jug does not imply a highest-status site, since at the highest level the jugs are likely to be of metal, not ceramic. On the other hand, the presence of a metal cooking pot (in the unlikely event of one surviving) does not indicate status either. Competition from other materials may come from below as well as above: Dyer points out that the great increase in ceramic cups, plates and bowls at the end of the medieval period represents potters moving into a market previously dominated by *treen* (wooden vessels), and not an overall change of function in domestic utensils. It may have been brought about by a change in relative price levels (Moorhouse 1979, 54).

Sherds in the Soil

Discussions of the archaeological value of pottery often start with its ubiquity and apparent indestructibility. While it is true that pottery as a material is more robust than most archaeological materials (bone, leather, wood, and so on) and is of little practical use once broken, it is also true that pots as objects are very breakable, and at each successive breaking of a pot we potentially lose information about its form and function. Even the basic material of fired clay is not as indestructible as we might think, and certain soils are said to 'eat' certain fabrics. Even if sherds remain undestroyed in the ground, they may not always be found in excavation. Experiments have shown that sherd colour can have an important role in the chance of a sherd being spotted by an excavator (Keighley 1973), and sieving for seeds and small bones almost invariably produces an embarrassing crop of small (and sometimes not-so-small) sherds. Even different parts of the same pots may be retrieved at different rates; for example Romano-British colour-coated beakers have thin fragile rims and thick chunky bases. The rims break into small sherds which easily evade detection, while the bases may well not break at all and be easily found. This raises severe questions about the way such wares are quantified.

However, the apparently irritating way in which pottery breaks up and is moved about can be used to good effect, as discussed in Chapter 19. Over the course of time, sherds from the same pot may be dispersed, sometimes over surprisingly long distances, and recovered from different contexts (and even, in urban excavation,

FIGURE 2.3. Fifteenth-century bronze cauldron from the Netherlands (left) and its earthenware copy, also fifteenth-century and from the Netherlands (right) (photos: Museum Boymans-van Beuningen, Rotterdam).

different sites). They can tell us about the way in which deposits were moved about after the pot was broken and discarded, as they act as a sort of 'tracer' for soil movements (Chapter 19). The degree of breakage can, under favourable circumstances, yield parameters which can be of great value in interpreting a site (Chapter 15). Another aspect of this movement, the degree of abrasion, can also be very useful (Needham and Sørensen 1989). To take advantage of these possibilities, however, requires a site where the pots are sufficiently distinctive for it to be possible to sort which sherds belong to which pots, not so abundant that this task is overwhelming (in terms of space, time or money needed) and not so sparse that the outcome cannot be interpreted reliably.

INTEGRATED DATA

In Chapter 15 we set out the theory we need in order to be able to describe, discuss and compare assemblages rather than individual pots, and in Chapter 19 we look at what can happen to pots after their useful life is over – the problems this can cause and the information it can give.

Establishing the function of an individual pot should lead on to ideas about the function(s) of a site, or different parts of a site, although this is complicated by (1) the need to work at the level of the assemblage rather than the individual pot, since not all pots in an assemblage can be assumed to have identical functions. Indeed, a particular function may require more than one form for its fulfilment – as a simple

example, cooking pots and their lids, and (2) the relatively small proportions of pottery found in 'primary' contexts (Chapter 16).

Of course, other sources of evidence (for examples structures and other classes of find) will need to be taken into account. In our view, this should be approached by comparing the compositions of assemblages relating to different sites or parts of sites (i.e. comparing the proportions of different functional types in those assemblages). Ideally, and this is now possible thanks to statistical advances (Chapter 15), assemblages of all classes of artefact (not just pottery) should be considered. We shall give a case-study when we look at the quantification of assemblages (Chapter 15); an earlier example is provided by Ciolek-Torillo (1984), who classified rooms at the Grasshopper Pueblo into six classes, corresponding to the domestic activities of manufacturing, storage and food-processing, and their combinations, on the basis of the compositions of the finds assemblages in the various rooms.

A study of technology can help set pottery production in its social context, which is an important aspect of the contextual phase of study. We can learn about the scope and scale of equipment needed – wheels, kilns, specialised tools, settling tanks, and so on, although it is to be hoped that structural evidence would be available for many of these. It certainly would be if excavations of kiln sites regularly covered potting areas other than just the kiln itself (a common complaint, see Moorhouse 1981, 97). These in turn may lead on to questions of the pottery 'industry' in the local or even regional economy – the degree of investment required, bearing in mind the low level of surplus above subsistence requirements for much of mankind over much of his past (Braudel 1981, 74), part-time or full-time, seasonal or year-round, individual or communal, division of labour between different tasks and so on. Ethnographic parallels may help us to see the alternative modes of production that are possible, between the poles of domestic production for one's own use and large-scale industrial manufacture (Peacock 1982). Linked with distributional studies, we can even start to see how different areas articulated their production and trade, though we must remember that potting was almost always a relatively minor industry (Blake 1980, 5) and generally of low status (e.g. Le Patourel 1968, 106, 113) and that its very visibility may give a false impression of its importance. However, it has been argued (see Davey and Hodges 1983, 1 for both sides of the argument) that pottery acts as a marker for less visible economic and social activities, so that its visibility can be put to good effect. This is likely to be so in a positive sense – it is hard to imagine large amounts of pottery being moved from A to B without a high level of social contact of some sort – but the opposite is less clear: does the absence of pottery from A at B indicate a lack of contact?

INTERPRETING DATA

To interpret their data (or someone else's) archaeologists will have to rely on

(i) their imagination in thinking up ideas, probably dignified by the title of hypotheses,
(ii) their skill in deducing properties of excavated pottery assemblages that are in principle capable of supporting or refuting their hypotheses, and
(iii) the ability of a site or (more likely) several sites to provide enough data to either refute a hypothesis or convincingly fail to do so.

This makes pottery a happy hunting-ground (or playground) for those with ideas and aspirations about the less tangible aspects of material culture, for example the symbolic value of decorative styles and motifs (Chapter 18). This is an enormous area, and too open-ended for us to be able to comment on more than very basic general principles. This we are glad to do, because it is very easy to overlook principles about the relationship between theory and data in the excitement of pursuing a new idea. So we make the points that

(i) it must be possible to deduce observable and recordable characteristics of pots or assemblages from our initial ideas, so that we can use data to either refute or support them,
(ii) if our ideas involve observed differences between assemblages (and it is likely that they will), differences due to hypothetical causes must not be confounded with differences due to extraneous causes, such as site-formation processes, and different methods of recording. A simple example may make this point clearer: if our argument depends on different proportions of different types in two assemblages, and if our proportions are based on counts of sherds, any observed differences may simply reflect the fact that one assemblage is more broken than the other – the true proportions may be the same. Problems of this sort are examined in greater detail in Chapter 15.
(iii) it is not valid to use the same data to generate a hypothesis and then to validate it. Validation is very important, and if it is unlikely that we will be able to obtain further data to test our ideas, we must split our original dataset in two, and use one half to generate ideas and the other to test them.

A classical case-study is Hill's (1970) work on the pottery from Broken K Pueblo. He studied the spatial distribution of ceramic style elements to provide evidence for matrilocal residence groups. But it was later shown that the patterns he described

could just as well be explained by chronological or functional variations in the pottery (Plog 1978).

IMPLICATIONS FOR PRACTICE

The possibility that their excavated pottery could, in principle, be used for any of the above purposes places a heavy burden on excavators and primary processors or recorders of the material (e.g. the on-site finds assistant). This is especially true in Britain where funding arrangements may well mean that only a very basic initial record can be prepared, and detailed or comparative research will depend on the outcome of a later 'assessment' stage, and the ability to fund any future activity that it recommends. The worker's role may be simply to set up signposts for future research. What is needed in such circumstances?

As we have hinted above and shall argue in detail in Chapter 15, the prime task of pottery research is comparison – of pot with pot and assemblage with assemblage. This means that pottery must be grouped and recorded in a way that facilitates rather than hinders comparison.

Wherever possible, this implies the use of existing form and fabric type-series. Form type-series often exist for kiln material and should be employed on occupation sites where material from that source is found. The creation of a new type-series should be seen as a last resort, rather than a way of perpetuating one's name – it may be very gratifying to achieve immortality by calling a form a Bloggs 111, but is it useful and in the best interests of the subject? However, if the nearest type-series is based on such distant material that it is unlikely to refer to pottery from the same source(s) as ours, then we may be forced to set up our own. Advice on doing this is given in Chapters 5 (forms) and 6 (fabrics).

Similar remarks can be made about drawings of pottery. Does the archaeological world really need yet another drawing of a well-known type? If not, why draw it? If it is necessary to draw a substantial number of pots (for example for a new type-series) they should be in a consistent style, even if drawn by several people; there is no room for the solo virtuoso performance. Drawings should obviously show accurately the shape and decoration of a pot and should also carry information which is difficult to describe in words, such as surface texture. Advice on these matters is given in Chapter 7.

When it comes to creating a catalogue, or archive, one must remember that it is primarily for the use of others. What sort of questions are they likely to ask? A very basic one (at the level of the individual pot) is 'have you got any of these?' The

'these' will usually refer to specific fabrics or forms, often from a kiln site. Use of an established type-series will make this question easier to answer, but indexing is also important, so that researchers can easily lay hands on just those sherds they need to examine, and can be confident that none has been missed. More complex questions may be 'how much of this do you have?' (usually in percentage terms) or even 'do you have any assemblages like this one?' To answer such questions, we need a reliable method of quantification. Archiving in general is discussed in Chapter 8 and quantification in Chapter 15.

The rapid increase in the volume of excavated material, especially in the UK, has raised questions about disposal vs. retention, and of sampling as a way of reducing the volume of material retained. There are no easy answers, but forewarned is forearmed. Our views are expressed in Chapter 8.

Finally, there comes publication, which is only the tip of an iceberg, the bulk of which is the archive and the retained material itself. The aims of publications vary greatly, depending on the nature of the site and its pottery, the amount and nature of previous work done in the area, the existence of relevant type-series and the opportunity (or lack of it) to raise one's nose from the grindstone and synthesise a little. But at the very least, the publication should act as a set of signposts to its archive and through it to the objects themselves, so that readers can tell whether they need to consult the archive and/or examine any of the artefacts.

Some archaeologists find publication psychologically difficult: it has an awful finality not unlike that of death. Part of the dread comes from the mistaken belief that what we say will be the last word on the subject, so it had better be 'right'. But in archaeology there are no last words, all is provisional, and if no-one ever improves on our work it is not because it is perfect but more likely because it is terminally boring. Approach publication in this spirit, and with the advice of Chapter 9 in mind, and it may not seem quite such a burden.