ANALYSING POTTERY

Processing – Classification – Publication

edited by
Barbara Horejs – Reinhard Jung – Peter Pavúk

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Preface

Archaeologists working on ceramic finds from long-term, large-scale excavations all face similar problems: heaps of pottery from hundreds of contexts of diverse quality, more often than not re-deposited in a secondary or even tertiary position. There can be no general approach since each site has its own specific characteristics, be it a flat settlement lasting just a couple of generations or a tell-settlement in use for millennia. Likewise, pottery with simple or no decoration must be viewed from a different perspective than pottery with complex decoration. Hand-made pottery will pose different problems to mass-produced wheel-thrown ceramics and sherds from a settlement must be treated in yet another way than whole pots from a cemetery.

It was, therefore, our intention to produce an edited volume offering fresh insight into modern approaches to processing large amounts of ceramic finds from settlement excavations, going 'back to basics' so to speak. The volume focuses on archaeological practice and more specifically on factors that determine the methodological choices made by researchers under specific working conditions. In other words: which methodological approach is appropriate to which kind of ceramic assemblage and for which type of stratigraphic context, especially if the analysis is supposed to be completed in a reasonable period of time. The choice of a suitable method also depends on the questions for which we seek answers by analysing the material: chronology, pottery production and use, social structures etc.

We believe that there is no general answer to these questions and that a methodological pluralism is justified by the specific problems which arise from the nature of the material and its archaeological contexts. Nevertheless, by concentrating on practical case studies it should be possible to assemble a list of conditions that determine which methods of analysis – and especially which statistical methods – can be employed in order to analyse most effectively certain kinds of pottery from certain types of contexts.

At this stage the volume can look back at a history of its own. Initially, a group of young archaeologists working in Slovakia, Austria and the Czech Republic met for a two-day workshop in Bratislava on 28th-29th November 2003, funded by the Österreichisches Ost- und Südosteuropa-Institut. We then attempted to bring the topic to a pan-European level and organised a session at the XII. Annual Conference of the European Association of Archaeologists in Cracow held on 22nd September 2006. Finally, to round off the issue thematically and geographically, other colleagues were invited to contribute to the volume, along with the participants at the two meetings. We are now pleased to offer perspectives ranging chronologically from the Bronze Age down to the Early Middle Ages and geographically covering the Aegean, Anatolia, the Levant, Egypt, as well as Central Europe. It was decided to arrange the volume by subject, which in the end proved a daunting task since many contributions covered several aspects and were not easy to categorise.

Even if a specific model developed for a particular site cannot be applied en bloc to other sites, there is always something inspirational about other people’s models. We therefore humbly hope to offer some inspiration with the contributions collected in this volume.

Bratislava, Salzburg and Vienna, 20.11.2009
Introductory remarks, or What Should Be Done with a Pile of Sherds

BARBARA HOREJS, REINHARD JUNG, PETER PAVÚK

We are not going to reinvent the wheel in the present volume – not even the potter’s wheel – but if you ever stood in front of a huge pile of sherds or stacks of whole vessels, you will know what a difficult task it is to make any historical sense, or any sense at all, of boxes full of ‘ugly’ sherds or rows of shelves with pots on them.

Many colleagues before us have tried to classify ceramic finds in many different ways and usually also attempted to make such classifications universally applicable. However, no unified treatment of archaeological ceramics has so far materialised or been agreed upon. This is partly due to the marked differentiation in archaeological sciences in general, and strong and long-lasting research traditions in the various regional and chronological micro-disciplines. It appears that pre-programmed standards, in the more detailed fields of archaeological research at least, are achieved only with great difficulty. Therefore the following is a list of problems or issues one encounters when studying pottery, the hope being that at least some of the answers may be found in the papers collected in this volume.

There are four steps to publishing ceramic finds: 1. familiarisation with the material to be studied, 2. documentation of the finds, 3. analysis and 4. publication. The stringent execution and implementation quality of our methodology in taking each of these steps decisively determine the range of choices and possibilities that may follow. Let us imagine, for example, that a certain factor or aspect becomes apparent only at a later stage of the documentation, and that this factor turns out to be crucial for the entire analysis. In the worst case this factor is so decisive that it requires a complete re-study of the material. However, at some stage this may no longer be feasible, either due to time or money constraints – which is even more likely to be the case if the finds are stored in a foreign country and the funding is limited. Therefore, a systematic strategy developed before the commencement of the study should help to eliminate such problems. However, no matter what we do, some problems will always come up in the process of the work.

Familiarisation

Back to our pile of sherds. In case we were not present during the excavation, we first need to establish how the material was excavated, sorted and stored. Was it excavated stratigraphically or by arbitrary levels? Was it stored and sorted by context numbers, by stratigraphical layers, building levels, by fabrics or types? Secondly, what is the amount of material to be studied? After all, the estimated number of
finds has an influence on the study method. Thirdly, one must also check the preservation conditions and the range of shapes and types of decoration. Another major question is: what should be studied in detail and what can be left aside? What sample strategy should be applied? Will it be possible to manage it all alone or should one include assistants/students, who will need to be trained beforehand (and also paid for their services).

When is it possible to start the process of studying and documenting one’s findings? Has the search for joins been thorough – was this already done while the excavation was still ongoing or would it be advised to schedule more time for restoration work and if so, how much? The answers will necessarily vary depending on the context categories. In the case of grave inventories with broken pots found in situ, it is surely desirable and achievable to restore full profiles and vessels. However, the issue is different with settlement deposits. A search for joining fragments is not only important for a better typological understanding of the material, but it also provides valuable insight into depositional processes and the taphonomy of the finds. However, when is the right moment to say: from now on, a potential increase in the number of vessel profiles no longer justifies the time-consuming search and restoration work?

**Classification**

At some point of the study the fabrics or wares must be defined. Here, the first problems with classification and terminology arise. How fine should the groupings be? Which parameters should be taken into account and what terminology should be used? At this early stage one must already think about the problem of defining the fabric in a way that future readers, who may never have the opportunity to personally examine the sherds and vessels, will understand the classification. This in fact is possibly one of the most problematic issues in publishing ceramic finds: how will readers understand one’s categories? Moreover, how can we establish sufficient memory-tools for ourselves so that we will recognise similar or identical fabrics in future material studies elsewhere? To what extent should we use quantitative methods in describing the fabrics, for instance the number of inclusions per cm² or colour descriptions from colour charts? Do these methods really make the descriptions more objective or do they rather render more difficult the understanding of reality? In our everyday language we generally use terms such as ‘many’ or ‘few’ for indications of quantity, and ‘buff’ or ‘orange’ for indications of colour. Another unanswered question is whether it is indeed necessary to prepare a catalogue with detailed descriptions in addition to tables and statistical charts. And if so, how many finds should be described in such a detailed manner? Issues surrounding the classification and description of fabric are treated in two of the contributions in this volume.

Typology is another kind of classification. Here, the fundamental question appears to be how much one should rely upon already existing typologies and to what degree the specific characteristics of one’s own material require the establishment of a new typological classification. On one hand, a reference to previously accepted typologies allows a better understanding among colleagues and a better comparability with already published finds; on the other, there is a danger that potentially important details are not taken into consideration or at least not to the extent required. A hesitation to develop new typological categories may also be caused by doubts as to whether they will be accepted or whether the new system may prevent the publication from being favourably received by other scholars (a particularly difficult aspect for a young archaeologist looking for a permanent position, for example). Yet another issue is whether the typological classification should aim at identifying functional types or whether it should be strictly confined to morphological characteristics that can be quantified. While functional types imply an understanding of ancient habits which usually only emerge at the end of the analysis and thus may remain hypothetical to a certain degree, purely morphological types also come with their own set of problems, as they may classify vessels in a way that is actually quite far removed from ancient reality. Several papers in this volume deal with these questions.
Documentation

Depending on the typology of shapes chosen, one must decide which categories will receive particular attention during the study and documentation and which will not. Likewise, one must decide which contexts will be analysed in detail and which ones will only be studied in summary, i.e. on the basis of a number of so-called representative sherds. Working on settlement material, it appears to be a crucial question whether one should study all the sherds or just the diagnostic fragments (rims, bases, handles, decorated sherds). If the latter approach is chosen, what happens to the many undecorated body sherds? Which fragments should be counted, which ones weighed? Which finds should be kept, which ones can or must even be discarded? The regulations of many museums (or antiquities services) are very strict these days and request that at least some of the finds are discarded because funding is often too limited to rent or build extensive storage facilities. Since the discarded material will obviously be excluded from further study, how much detail is required for the documentation and publication of the discarded finds?

Having established the choice of finds for further study, we must then decide on how they should be recorded. Just to name a few details: should we note the size of every sherd? If yes, how do we catalogue the information? Should we measure the percentage of rim or base preservation, the so-called eves? Should we also write down the maximum preserved height of the sherd? In the case of body sherds, should we measure the wall thickness or is a subjective differentiation between large and small vessels based on wall thickness and vessel profile sufficient, although this can obviously not be checked without the sherds themselves once the documentation phase is completed? Finally, how should we document the typological characteristics of decorated sherds? How detailed should our catalogue of motifs be? How should we note the position of different motifs on the body of the vessels? How should we enter partially preserved motifs in the database?

Databases are good servants but can turn into bad masters. In many instances it is only the huge amount of material, which forces us to finally familiarise ourselves with a database software. The tools have improved considerably over the years and fortunately we no longer have to search for applications that run on both Microsoft and Apple platforms for example. However, the structure of the intended relational database is certainly an issue, which should be resolved before one embarks on the study, especially if one’s IT specialist will not be available if a crisis situation arises while one is locked up in a local museum without a functioning Internet connection.

Analysis

When it comes to analysing and publishing the data collected, it is important to select meaningful parameters from a multitude of data and to analyse them using an appropriate statistical method. This is also something we shall learn more about from the contributions in this volume. What matters, however, is the establishment of correct categories, which on the basis of previously defined typologies of fabric, shape and decoration will group together only comparable characteristics: rim sherds with rim sherds, bases with bases, body sherds with body sherds. This may seem self-evident, but there are in fact publications that provide sherd counts which include rim and body sherds without differentiation, which in any case bears a high risk of double counts. A different value may also be attributed to whole vessels from house floors as opposed to sherds from refuse pits or street layers. While the former surely represent the very last moments of the settlement’s lifespan, the latter may in fact be more representative of the complete range of shapes in use during a certain chronological phase. As randomly discarded material such sherds depend less on any specific historical circumstances at the moment right before the vessels were deposited.

In recent years, a whole new field of material culture studies has emerged, dealing specifically with technological aspects of ceramic production, such as the introduction of the potter’s wheel and forming
techniques in general, the organisation of the craft, as well as its incorporation into the social structure of the society concerned. This is quite clearly where we see the future of ceramic studies in the new millennium. The only problem is that archaeologists usually have two hands, one head and one lifetime only, and it is not easy to live up to all the standards set by both old and new trends in research. This volume largely deals with the presentation of primary data, while material culture studies were deliberately not covered, as they form a category of their own and usually come as follow-up investigations after the primary presentation of the material has been completed.

Publication

Let us end with a word on publishing: how can we provide access to the raw data to allow others to test our statistical analyses? They will hardly go to the museum storage facilities and re-examine the material; nevertheless, we should bear this possibility in mind when storing our finds at the end of our study. The difficulties that come with publishing ceramic raw data in printed form increase with the amount of material. Electronic media do not provide an easy solution to the dilemma. Of course, it is possible at a low cost to include a CD-ROM for example, but how long will computers be able to read the CD? How long will it actually preserve the data? The limited durability of this medium is well known at this stage. The Internet may not be the best solution to the problem either, since websites depend on the institutions which host and maintain them. A further problem may be the database software, which is constantly being developed and changed. How long will it be possible to extract data from an old database?

Finally, regardless of the strategy we choose for our study, documentation, analysis and publication, it is important that we make it very clear to potential readers what we did with the material and why we did it. Of course, everybody has their own reasons for working with a particular assemblage in a particular manner, but these reasons can only be understood and thus accepted if properly explained and published.