

Quantities, Possibilities and Probabilities: Some Experiences from the Research of the Roman Age in Slovenia

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Abstract

The paper considers the state of Roman ceramic studies in Slovenia. It questions the legitimacy of current approaches to ceramics, outlining problems in procedure and placing contemporary practise within its historical context. The range of archaeological uses for ceramics is considered and suggestions are made for the extension of ceramic studies using data from the urban area of Emona and a number of Roman cemeteries in Slovenia.

1. Introduction

Knowledge of how often we are able to detect specific objects or features within an individual archaeological record, within a particular findspot or within a specific (larger or smaller) geographical unit, has always been a very important component of archaeological research. It is often the basis on which conclusions are reached. In the language of theoretical archaeology, it could be said that the statistical method of previous developmental phases in archaeology permitted the development of archaeology. The computer has opened undreamed-of possibilities for contemporary research procedures. It would therefore be advisable to recall experience of previous decades. Such examples could help, to some degree, to establish what types of questions should be framed and what the product of research might be. I am, of course, discussing this matter on the basis of my personal experiences, and the literature cited might appear one-sided at first glance - but I am listing here only those of my reports which substantiate these observations.

These experience relate to the Roman Period in Slovenia. This period is, more or less, identical to the duration of the Western Roman Empire, as it is generally known. It is, to a certain extent, a specific period; a range of written sources provide evidence concerning the circumstances of the Roman Empire. Consideration of the data enables the construction of a material world with a number of common features, allowing the application of analogies between distant places. On the other hand, this huge state retained many local characteristics. Moreover, substantial distinctions existed among the small but diverse regions of our country, located in what was, at the time, an important Northern Adriatic - Eastern Alpine passage to the continent. These distinctions are noticeable from the time of annexation. From the time of the late Republic the littoral zone became a part of Gallia Cisaplina. Most probably the majority of the western part of Illyricum became a passable corridor at the time of Augustus' first expeditions into the Adriatic hinterland. The Alpine part, however, was not formally or legally organised as a province before the time of Claudius. These, along with many other undisputed facts, influence and continue to influence, the problems we wish to research.

2. The pottery

This is the field in which I have most experience. The statistical analysis of ceramics, although previously conducted on the basis of piles of hand written slips of paper subsequently became a component part of the new systematic excavations undertaken after

World War II (Horvat M. 1999). The opportunity to publish all finds, along with the entire process of analysis, were far more limited in the past comparison with the situation today. Yet even today the result of much analysis can be presented only in short reports at professional meetings, frequently only to specialists. J. Horvat's (Horvat J. 1999:233) important discussion of analyses based on numeric studies of ceramics, was published in RCRF Acta. Here she comments on the lack of evaluation of criteria and methods used for obtaining comparative data, and this paper serves as an important introduction to this report.

On any occasion when experts from various specific fields meet, it would be in order to dedicate a few words to our established practice of estimating the *number of individual vessels*, from fragments found in individual archaeological contexts or groups. This practice has been introduced, with slight modifications, into our country following its general international use and has, in my view, contributed to the construction of a basis for statistical investigation. I am convinced that this practice is still applicable, all the more so since its completion is accelerated by the use of computers. Over and over again we find ourselves confronted by the task of "translating" the number of fragments into numbers of vessels. Any two results are hardly ever identical and an entirely reliable method is still not available. Even today, none of the detailed research (technical, chemical, etc) of substance and shapes, aimed at achieving this purpose, has been adequately published. Macroscopic analysis, which had been in use from the very beginning of modern archaeological research, still forms the basis for this work - but it demands considerable practice (few hours of practical work in a restoration workshop is the precious source of necessary experience!) and, of course, the time to ponder over it. Almost 90 % of the Roman ceramics found in our country are made on the potter's wheel (in 80 % of cases on a fast wheel) and fired in closed kilns. This manufacturing technique gave the products a unity of surface; but not without exception. Although the product of specialised manufacture, each vessel is to a large extent the result of handicraft and these vessels almost never have the same texture around the entire circumference. They are not equally fired, etc. We must point out that the final, or specially moulded parts of vessels, like the handle or the rim, are almost always slightly different in texture, since intense kneading extracted the larger particles and inclusions from the clay. The question whether several fragments belong to the same or to a different vessels can most easily be resolved in cases of fragments of moulded terra sigillata: this knowledge forms the basis of all the analyses aimed at following the spread of sigillata from southern, middle and eastern Gaul. Work with atypical surface fragments of plain sigillata is

only slightly more difficult (a higher percent of errors might occur, although with experienced researchers these errors do not exceed 10 %), if accompanied by a sufficient number of distinctive parts of vessels, stamps, sections of rims and legs. The same holds for all sorts of semi-industrial pottery, manufactured in larger workshops. In comparison, the error margin for handmade local pottery can reach up to 30-40 % of studied groups!

We never place enough emphasis on the importance of possessing sufficient knowledge of other, previously excavated material from the same site or at least from near-by sites. It is easier to define *shapes* of particular vessels, and these are usually the first to be determined. We therefore arrive, relatively quickly, at the conclusion that amphorae, jugs, plates, pots, etc. can be found within a specific group. The decision on what *function* the individual artefact actually served usually demands additional interpretation: there are particular shapes for specific uses of pottery, which more or less serve the same function at various locations, and then there are other shapes which might have been used for a range of functions, although of course, we cannot exclude the possibility that an old and damaged sigillata cup could have occasionally been used for other purposes (as is often the case today!), for instance for mixing paint or glue. My experience tells me that the conclusion about the use of the vessels from an individual archaeological complex, can in most cases only be reached towards the end of the study. Nevertheless, the terra sigillata or other distinct earthenwares, as well as amphorae and mortars, represent exceptions, due to the fact that their function is usually very clearly defined.

The result of any investigation is therefore determined, above all, by the character of the archaeological group and by the stratigraphic record of the ceramics. For this reason I feel it important to emphasise the necessity (even within a large team, where tasks are very clearly divided among experts) for professionals dealing with the investigation of particular materials to have a good overview of the situation in the field. I believe that I was able to form my conclusions about pottery from several excavation sites within the city walls of Emona because I recorded most of the ceramics immediately as they appeared from the ground and was thus able to examine details while the trench was still open. Even when first recorded it was clear from where material originated, e.g., from the stratum later covered by the pavement of the next building phase and from garden humus. These data were later augmented by all previous data and by the overall results of the excavations, corresponding buildings or other components of the settlement structure.

The material records stored during the excavation used to be the quickest procedure for *dating* an individual stratum or archaeological complex. I suppose it is unnecessary to waste words about this procedure for this particular group of readers. We are all well acquainted with the fact that specific types of ceramics have a general and indisputable dating value. In such cases only the youngest object is significant, quantities play a minor role. From this angle, the most informative record for ceramic study, were for me, those from several excavations of a single stratum within the walls of Emona, a stratum which is almost always present and is the deepest archaeological layer, cut by the foundations of the first built structures and covered by the oldest mortar pavement. Fragments of Iron Age pottery can also be found here. However, the majority of the fragments originate from the Augustan period; several individual fragments are reliably made of sigillata dated

to the late Augustan period and during the first years of Tiberius's reign (Mikl Curk 1973, 1977). It is thus evident that the formation of this stratum ceased at the moment when house construction inside the walled and planned town area was completed.

However, quantification plays a very important role in dating an individual unit where the ceramics (as well as other materials, of course) have a relative chronological value. At this point it is of key importance how the features of any particular period within a complex obtain their dating value, or to what extent those features are disappearing. As an example, let me present some of my observations regarding coarse Roman pottery, partially hand-moulded or moulded on the slow potter's wheel. This kind of pottery is somehow "softer" to the touch, inclusions are often limestone, grains have rounded edges, so that it appears as if the clay had been carelessly kneaded. But quite a lot of coarse pottery made on the fast wheel has been found as well. This type represents the second group of coarse kitchen pottery in Slovenia. It is usually very "hard" to the touch, so well fired that it gives a distinct sound, inclusions are often finely ground, sharp, small grains of flint. The most frequent coarse pottery form is the oval pot, although there exist a number of other objects made of such a ware. The place of manufacture can only rarely be identified, but the majority of these objects are presumed to be of local origin, although we are aware that this pottery was sometimes sold far away from the place of its manufacture. It is most difficult to ascertain how many vessels we are dealing with in an individual context from the recovered fragments of pottery. The possibility of error is greatest in these cases. Undoubtedly, the huge difference in manufacturing techniques cannot be attributed only to chronological causes. The most primitive and the most accomplished types appear side by side in the same situation and in the same closed context. Each individual technique produced vessels suitable for specific purposes – vessels with walls porous enough for food storage, vessels resistant to open fires, etc. Mould details with a wavy line on the surface appear throughout the entire Roman period and at various sites throughout the country. But particular features are not present at all locations or in equal frequencies or equally represented at all periods. It is therefore important to determine which particular features on the ceramics prevail within an individual archaeological group. Accordingly, I presume we could consider, for instance, unevenly kneaded pottery, decoration with a belt of wavy horizontal lines drawn by a comb, as characteristic of some specific environment and of a specific period (near, but not as exactly defined as in Rodrigez 1977, 1992), or for large pots with a surface that gives an impression of being impregnated by wax, as the characteristic of central Slovenia from the same time or even from the Migration Period – the Dark Ages (Mikl Curk 1975, 1992a). Or furthermore, the oval, roughly shaped pots of the early Middle Ages, often defined by an irregular texture and decorated with lines and prints, all of which testify to the use of a more robust potter's tools. However, I must point out, that one individual fragment of a specific kind of pot, is never enough to play a decisive role in determining the archaeological record. The most important statement in the record is: in what percentage is the described feature represented. Due to the modest numbers of finds in the later strata of Slovenia, a single fragment can represent up to 10 % of the total!

The frequency of individual types of ceramics of known origin, provides a snapshot of the *intensity of trading* and indirectly of all kinds of *other connections*. A number of researchers are engaged

in studying this topic both in our country and abroad, so that the working method is well known as is the probability of error. An achievement of the study of ceramics in Slovenia is the study of WHY only particular kinds of terra sigillata are represented in specific archaeological groups, while many of other contemporary products cannot be found. The assumption that the volumes of material transported by sigillata merchants was often quite large (several sets of services) and that therefore the merchants delivered only the sigillata from a single or at least from one smaller group of manufacturers to one place at any one time, has not yet been disputed (Mikl Curk 1987, 1992).

The frequency of finds of vessels, sorted by function, enables us to draw conclusions concerning the activities that took place within specific buildings, *a conclusion about the purpose of a specific building*. Of course these conclusions demand special attention. Stratigraphic data is especially important. All the tools and vessels which had been used in a building do not necessarily remain there after any change, even where a pavement has been left intact. To illustrate: numerous remains of former drinking vessels were left all over the first century AD paved floors of small rooms in the forum of Emona. It is quite probably evidence of the sale and consumption of all kinds of liquids. But at one end the earthen joints used as support for vessels when placed in kilns were also found among the fragments. This testifies that empty vessels were sold as well. The irony is that the early nineteenth century gardens owned by a Ljubljana faïence manufacturer were located at the same site where the Emona forum once stood. For some inexplicable reason the ashes and other remains from the kilns of this faïence factory, which was documented at the other side of the town, ended up there. Ceramic plugs similar to the Roman ones (although not identical in colour and texture) and which were used in kilns as a support for pots were mixed with the top, humus layer, over these remains! On the other hand, practically no finds were discovered in the sandy strata of the forum plateau. Similarly, only a few pot fragments were found in the stratigraphy of the large forum buildings, which L. Plesničar Gec believes to have been built in the third century. This is understandable. The walls and stone paving of these buildings were still partly preserved at the excavation site. In a regulated settlement daily waste, whatever this might have been, was usually removed from site. Moreover, this data in a way supports the presumption that activities in which pottery was used did not take place in the town basilica. Large impregnated pots were found in the stratum covered by these remains (outside the buildings); a discovery which leads me to suggest that this kind of pottery belongs to the period when larger constructions were still standing but were no longer serving their original function. After all, we could hardly imagine that in a regulated town organism the most common food was being prepared and stored or that various common and everyday activities took place close to the external walls of the court basilica or the church portico. The dating of similar ceramics from the late Roman settlement at Vranje in the late fifth century (Knific 1979) confirmed this presumption.

For some other kinds of ceramics dated to the same period and originating from contemporary as well as earlier layers it can sometimes be concluded, that even after changes to the buildings within the constructed area of Poetovio, the ceramics remained close to the location where they originally served their purpose. We thus proposed, on the basis of two distinct locations within the area of Roman Poetovio, an undoubtedly bold and as yet unconfirmed

assumption, that the middle Gallic sigillata had been reserved for the upper, mainly officer class of the town, while Rheinabern pottery was available to the common inhabitant (Mikl Curk 1990).

3. The use of arable land

In our country there are only five, or perhaps six, extensive plains on which were situated all the Roman towns or major settlements. The Vipava valley (Vipavska dolina) which widens in the hinterland of today's Ajdovščina – Roman Castra. The Sava alluvium which stretches beneath the southern foothills of Karavanke Alps from the Sora plain (Sorško polje) to the higher regions of the Sava plain (Savsko polje) north of Ljubljana in the direction of Kamnik. These plains are the wider hinterland of the town of Kranj – the late Roman Carnium, but in the distant past they were mainly the hinterland of Ljubljana – Roman Emona. The Savinja valley (Savinjska dolina) is dominated by the town of Celje – Roman Celeia, the Krško plain (Krško polje) was in Roman times dominated by Drnovo near Krško, now an insignificant settlement, but in those times Neviodunum. The Drava and Ptuj plains (Dravsko and Ptujsko polje) were in Roman times certainly exploited by today's Ptuj – Roman Poetovio. The smaller plain around Slovenj Gradec belonged to the territory of the Roman Colatio, then located at Stari trg near Slovenj Gradec. These plains differ slightly, with respect to the pedological and partly hydrological characteristics, so that reliable conclusions about the extent of cultivation in Roman times cannot be made. Due to the consistent cultivation of these plains, any remains of actual Roman fields are not recognisable even on aerial photos. It is also unknown to what extent the Romans were interested in their agrarian potential. It certainly wasn't their primary interest. Above all, the territory of Slovenia attracted them for its strategic and communication potential, and to a certain degree as a source for material wealth. The existing roads which have been in use for a long time, and the cadastral border-lines, in some places indicate the shape of fields which might have been formed in Roman times (Mikl Curk 1984); yet all these facts are still far from being confirmed. However, we do have a fair knowledge of the traces of settlements and roads constructed during the Roman period on all the above mentioned territories (Mikl Curk 1993a). These traces do not inform us of the cultivated areas, but the plains are measurable and this information can be used for basic calculations. Poetovio was a military camp throughout the whole first century AD. The fact that a legion needed at least 600 tons of corn or equivalent quantity of other crops to pass the winter months, plus a less well known quantity of supplementary foodstuffs. In the eighteenth century in these regions, approximately 150 – 175 hectares of fields would be required to provide such a quantity of corn. For the Ancient World we have to approximate the minimum harvest per hectare. From this we can conclude that a legion could have needed as much as 10 – 15 % of all cultivable land within the reach of the town (Mikl Curk 1993). Of course, we have no knowledge of how many of these areas were already cultivated before the Romans came to the area, nor whether the legion actually supplied itself from the products produced in the surroundings of castra hiberna. Perhaps it might soon be possible to complete and extend this entirely hypothetical study.

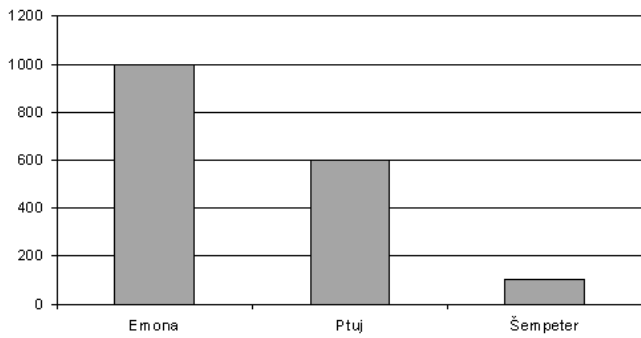


Figure 1: The number of analysed graves.

4. The cemeteries

Funeral gifts and artefacts placed in tombs are in each civilisation characterised by numerous, specific and complicated symbology. In a prosaic sense, they signify the result of an instantaneous occurrence. In almost every cemetery individual tombs differ, although they have common features. The possibility to document varieties and similarities is obvious, as also is the wish to understand their causes. Regarding research on the Roman period in Slovenia (figure 1), the possibilities for such analysis became a reality after the comprehensive studies of the Emona cemeteries were published and after recent research of a large part of these cemeteries (Petru (1972) published the old data and Plesničar Gec (1972) the recent excavations). The first analyses of these and later cemetery data have certainly condensed the chronological aspect and at the same time revealed the popularity of specific methods of burial, with objects in the tombs characterising the deceased by sex (figure 2). Such synoptic tables have already been included in the publications of Emona material. Chronological and typological questions were treated by Plesničar Gec 1977, and several other authors in *Arheološki Vestnik* 30, 1979. The criteria for determining the sex from “male” and “female” jewellery, parts of clothes, knives, mirrors, phials of scents, small chests, needles and similar, are still unreliable; although the results obtained so far are quite good for cremation graves. Experiments with selection of objects and their origin from a specific civilisation (the origin of the type and not the individual product, whether from a Mediterranean or from a local tradition) gave identifiable results concerning the, simplified, ethnical and social affiliation of the deceased (Plesničar Gec 1985, Mikl Curk 1985, 1996). These results are not numerically insignificant. Throughout this work we were aware, and would remain so, that at the starting-point of such studies one meets a range of unexplained facts. It should therefore be taken into consideration that the clear relationships of each human community with the objects it uses in a specific superior or symbolic function (as their funeral use is) are possible only as long as the community can be clearly distinguished from the other communities with which it lives; e.g., for as long as the Italic colonists could be clearly distinguished from the natives, during the first period following Roman occupation. In the next generations these traces would already have lessened.

A fair number of similar problems still wait their turn to be closely studied, and the investigation of those is our future task.

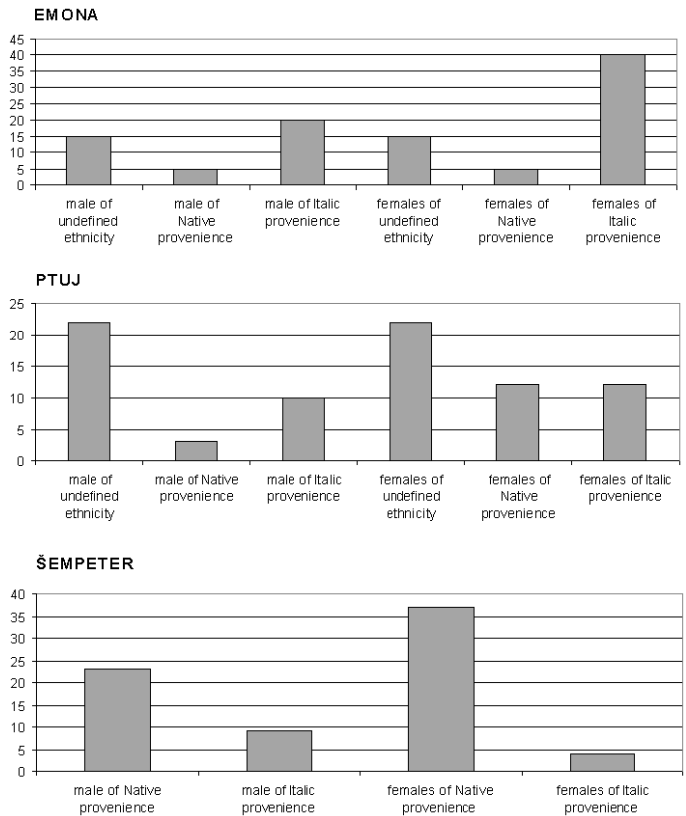


Figure 2: The number of graves, from the same sites, possibly defined by the sex of the deceased but separated upon the groups of men of undefined ethnicity, men of so-called Native and men of Italic provenience, and groups of women of undefined ethnicity, women of the so-called Native and women of Italic provenience.

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