

---

## Ceramic Typologies in the Valley of Mexico

WILLIAM J. MAYER-OAKES, University of Oklahoma, Norman

### INTRODUCTION

In the last year, two detailed studies of archeological ceramics from the Valley of Mexico have appeared in print. Tolstoy (1958) presented a surface survey of the northern part of the Valley, utilizing a sophisticated version of the seriation technique developed by James A. Ford of the American Museum. Mayer-Oakes (1959) detailed the ceramic stratigraphy from an excavation at the site of El Risco on the west side of Lake Texcoco, but still in the northern portion of the Valley. Both these studies utilized the concept of type characteristic of the seriation technique. That is, the type was explicitly considered an artificial construct of the investigator, based, to be sure, on the observable facts of form and physical characteristics. In each of these studies tentative types were defined on the basis of visible sherd characteristics. The tentative types were then plotted for distribution in time and space. Tentative types with "significant" distributions then became formal types.

Because of inherent differences between Tolstoy's raw data (a series of collections from the surface of a wide variety of sites) and my own (a

single collection from a stratified context at one living site), there are certain important differences in the typologies formed. However, the geographic area is small enough and the time spans represented overlap enough to imply a basic identity between the two sets of raw data. Our separate analyses were coordinate enough to allow mutual use of the same typology.

#### THE PROBLEM

Since the time of Boas and Gamio (1913), a three-fold Archaic-Classic-Aztec sequence of cultures has been recognized in the Valley. Tolstoy brought this concept to his study and after establishing perfectly useful seriation types and naming these he arbitrarily restricted the time range of these types. One set of types appeared during the Post-Classic period while a completely different set was defined for the Classic.

At El Risco the uppermost layers are clearly late Post-Classic in time. Progressing downward in the cut at El Risco there are no apparent conformities in cultural deposit, yet the lowest four (of 12) layers contain significant quantities of distinctive Classic pottery types. They also contain significant proportions of Post-Classic types which are distributed from top to bottom of the deposit. Does the Post-Classic monochrome utility pottery known as Texcoco Brown suddenly become the Classic monochrome utility pottery known as San Martin Brown when distinctive (i.e., decorated) Classic types appear with it in the cut? A basic problem here is the fact that monochrome body sherds can be notoriously nondistinctive. But the mechanical problem of changing typologies in midstream, so to speak, is a significant barrier to understanding the cultural processes that must relate the Classic to the Post-Classic periods.

#### THE TYPE-VARIETY CONCEPT

In order to solve the problem of an increasingly large number of ceramic types in the Southwestern United States, Wheat, Gifford, and Wasley (1958) recently proposed what they call the type-variety concept. Defining a new unit they call a "type cluster," the idea of a central or primary type with associated varieties seems to be a useful way of interrelating analytically separable categories. This is essentially a terminological unification of minor variations on a central theme. As such this is a concept of type that can be called "real." Presumably Wheat *et al.*, tried to define types in terms that relate the taxonomic unity to past human behavior patterns. If so, this is quite a different concept of type than the "abstract" or seriation type discussed above for Mexico. Whether they consider the types as behavioral or analytical is not crucial, however. What the concept of type cluster does is to consolidate and thus clear up some of the confusion produced by a proliferation of types.

The second major goal of Wheat *et al.*, was to derive meaningful groupings of a higher order. "Groupings of this kind are necessary in the derivation of cultural interpretations from archeological materials" (Wheat *et al.*, 1958, p. 34). The higher order term which they proposed and defined is "Ceramic system." The definition offered is this:

A "ceramic system" is a grouping of type clusters which are related in design, style or surface manipulation when present, vessel form, and general technology (broadly speaking, a class of pottery), and which range over a wide area, but are roughly contemporaneous. . . . The relationship of type clusters contained within a system rests on broad characteristics which transcend individual types or clusters.

#### VALLEY OF MEXICO APPLICATIONS

Detailed attention to ceramic types in the Valley of Mexico is essenti-

ally a development of the last decade, and, consequently, here we are not yet so heavily overpopulated with named ceramic types as the Southwest. The trend in this direction seems inevitable however, and thus I felt it wise to attempt to apply the type-variety or type-cluster concept to the Valley of Mexico. Here, where pre-Spanish cities held sway, we certainly want to make good and complete cultural interpretations. So the ceramic system concept to the data from the Valley was applied.

This initial attempt to impose the new Southwestern taxonomy on the Mexican data was not impressively productive. From some 51 types for the Classic and Post-Classic periods it was possible to consolidate 32 type-clusters. This activity was much more satisfactory than the attempt to derive ceramic systems. Seven systems for Post-Classic and three systems for Classic were established, but there was a significant residue in each period that seemed not to make up a system. And most of the systems defined conformed to either the technological criteria or the chronological criteria, but not both together.

#### DISCUSSION

There are several possible reasons why an application of the Southwestern taxonomy has not yet revolutionized Valley of Mexico archeology. First is the fact that the application needs to be done more systematically from the very origins of an excavation. Imposition over another scheme (as I have done) is not likely ever to be the most satisfactory procedure.

Next is the problem of the type of type involved. In the work done by Tolstoy and myself the concept is explicitly one of an analytical tool, and such tools are not required (by definition) to be related to each other in the sense implied by the type-cluster concept. Whether the Southwestern concept of type is an artificial (i.e., abstract) or a real (i.e., behavioral) one is not of prime significance. The seriation kind of type is not necessarily a uniform one since it is pragmatic and depends for its justification on a significant distribution in time and/or space. Thus a technological "variety" may have a significant enough temporal distribution to use it as a "type" in the seriation sense.

Finally, it seems to me that there are significant differences in the kind of societies being dealt with here. The Southwestern villagers and townfolk certainly represent a much simpler kind of urban society than do the various units of the civilized society in Mexico during the Classic and Post-Classic times.

Elsewhere, Mayer-Oakes (1955, p. 177) suggested that the complex of ceramic styles in a given community at a given time should approximate a three-part division:

1. The majority style or styles representing consensus of potters' opinions and actions.
2. A minority style or styles representing a residue of styles more popular in times past.
3. A minority style or styles representing patterns, some of which will become more popular in the future.

This hypothesis should be true in complex as well as simple societies, but we would expect differences in rate of change as well as other differences to distinguish the simple from the complex. I am thinking here of the obvious correlation of differing proportions of types with different social, occupational, or functional contexts within the same complex society at any given time level.

From the study of lower class ceramics through time at El Risco it was noted that this particular sub-culture or sub-society was characterized by what I called both "distinctive" and "continuous" ceramic types. This again seems to be applicable as an hypothesis to both simple and complex societies, but with expectable differences to distinguish them. Distinctive types may appear with great frequency in complex societies, while continuous types are probably longer-lived in simple societies.

The very nature of a complex society with the potential for relatively separable archeological complexes within it (e.g., social class units) poses a number of problems for any realistic approach to pre-historic study. It may be necessary to posit class, occupational and dwelling units in advance of excavation of representative samples of each of these. Correlation and interpretation then must go forward utilizing entirely different assumptions about the significance of technological and stylistic variations. For example, where there is lack of good evidence for chronological separation as at Teotihuacan, Xolalpan and Tlamimilolpa may be regarded as contemporaneous residences (at different distances from the ceremonial center) of two grades of priesthood. Xolalpan, closer to the Pyramid of the Sun and more finely furnished and elaborately planned can be seen as used by senior priests. Tlamimilolpa, further away, less finely furnished and less carefully planned, may be interpreted as the dormitory for novices. Without C-14 dates or superpositions it is still possible to make another interpretation and arrange Xolalpan and Tlamimilolpa in a typological sequence, but is the sequence one of progress or regression?

#### BASIC ARCHEOLOGICAL THEORY

Having been involved for some time now in our discussion of important details of classification and analysis, let us back off and take an overall view of the archeological situation. Willey and Phillips (1957) presented a logical view of the steps or levels of procedure which apply to archeological as well as presumably all scientific activity. The first step is considered as "observation," followed by "description" or what may more aptly be termed culture-historical integration. This is followed by "explanation" or processual interpretation. Rouse (1953) pointed out a number of different goals that are pertinent to archeological activity in addition to processual interpretation. Taylor (1948) started with the formation or definition of "problem." I suggest that such a simple scheme should not be considered too rigidly. Problems are constantly being reformulated at any stage of the sequence and the end product interpretation may often include a problem definition and thus be the starting point all over again.

In any case, it is clearly at the level of description that much of what we call "analysis" goes on. Because much of an archeologist's time is spent excavating and studying miserable fragments of old pots, he is naturally quite concerned with ceramic classification. Rouse (1959) recently presented a paper that distinguishes several kinds of classification and relates their purposes to their nature. Defining classification as a technique for comprehending data, he suggested that there are two basic kinds of archeological classifications:

1. Analytic classification attempts to get at behavior patterns (standards, concepts and customs) by deriving modes as basic units. These modes may be either conceptual (having to do with shape, material or decoration) or procedural (having to do with behavior). Modes are inherent in any collection and can be indicated either directly or indirectly by the attributes of the artifacts in the collection.

2. Taxonomic classification on the other hand attempts to get at types which are in a sense imposed on the data. Types derived may be either historical types, that is, with significant time-space distributions, or descriptive types—which express differences in the nature of the artifacts.

Discrimination between these two kinds of classification, and the two kinds each of modes and types, is a useful operation since it clarifies purpose in any given analytical operation and relates the interpretive goal to a specific procedure designed to reach that goal.

If Wheat *et al* had made these distinctions they would see that the implied reasons for their search for higher order units should best be served by using units other than the type. Since types are artificial or investigator-constructed in Rouse's scheme, the more general arrangements into systems does not of necessity reflect cultural process. These units are simply convenient ways the archeologist structures his data. Modes on the other hand are assumed to derive from and reflect past human behavior patterns, so generalized units here or even time-space distribution data on modes would seem the best source of information on general cultural processes.

#### PROBLEM RESTATED

At this stage of the paper it is apparent that we have moved in rambling fashion a long way from the original statement of problem. As neatly summed up in a letter from Tolstoy:

"The fact is that the Classic-Post monochrome problem is a technical or, if you will, mechanical problem. Either Texcoco Brown is San Martin Brown or it isn't, depending on whether it suits your purpose or not."

Where I boggle is at the kind of interpretation of cultural process that is implied by working within such an artificial framework. And here is the crux of the matter that has turned me to a consideration of the type-variety and related concepts. This type-variety scheme is now clearly stated (at least by Gifford in his latest article, 1960) as a multiple-purpose one, attempting as it does to describe, type, relate in time and space and genetic development all in one. There seems to be no explicit basis for assuming the interpretive potential or validity of the ceramic system, but because it is of greater generality it is presumed to have behavioral reality. Gifford's latest published paper on this in fact quite dogmatic on this point.

In the Valley of Mexico the use of explicitly "artificial" types has led to conflicting interpretations of cultural process, or rather conflicting positions with regard to the extent and nature of interpretations legitimately to be derived from such systems.

#### CONCLUSION

It is obvious to me that our Valley of Mexico activities, in the realm of formal analysis, have been essentially confined to taxonomic classification. Interpretations have been made based on these types, but such interpretations are generally unsatisfactory and shaky. A proper analytic classification needs to be made before interpretations of cultural process can be clearly related to evidence. I hope to be able to carry out such a classification on materials from another Valley of Mexico site in the very near future.

## LITERATURE CITED

- Gamio, M. 1913. *Arqueologia de Atzacapotzalco, D. F., Mexico*. Proceedings of the 18th International Congress of Americanists, pp. 180-193. London.
- Mayer-Oakes, W. J. 1955. *Prehistory of the Upper Ohio Valley; An Introductory Archeological Study*. *Annals Carnegie Mus.*, 34. Pittsburgh.
- ..... 1959. *A Stratigraphic Excavation at El Risco, Mexico*. *Proceedings of the Amer. Philosoph. Soc.*, 103 (3): 332-373. Philadelphia.
- Rouse, I. B. 1953. *The Strategy of Culture History*. *Anthropology Today*. Edited by A. L. Kroeber, pp. 57-76. University of Chicago Press. Chicago.
- ..... 1959. *The Classification of Artifacts*. Paper read at 1959 Annual Meeting, Society for American Archaeology.
- Taylor, W. W. 1948. *A Study of Archeology*. *Memoirs of the American Anthropological Association*, 69. Menasha.
- Tolstoy, Paul. 1958. *Surface Survey of the Northern Valley of Mexico: The Classic and Post-Classic Periods*. *Trans. Amer. Philosoph. Soc.*, 48 (5) New Series. Philadelphia.
- Wheat, J. D., J. C. Gifford, and W. W. Wasley. 1958. *Ceramic Variety, Type Cluster, and Ceramic System in Southwestern Pottery Analysis*. *American Antiquity*, 24, (1): 34-47. Salt Lake City.
- Willey, G. R. and P. Phillips. 1958. *Method and Theory in American Archaeology*. University of Chicago Press. Chicago.
-