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## **The Palenque Ceramics: Activities Report, First Phase**

*Interim Report*

**Research Year:** 2002

**Culture:** Maya

**Location:** Palenque, Mexico

**Site:** Archaeological zone of Palenque

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### **Introduction**

Many aspects of my proposal have changed from the initial position to this moment as I begin to detail the results obtained from the project's first phase. Aspects relative to the methodology and certain lines of investigation have been modified and vastly enriched a first approach to the work of Dr. Robert L. Rands. The major objectives that inspired my proposal, however, remain unaffected, and even, reinforced: get to know the details of the investigations performed by Dr. Rands on the ceramics of Palenque and their adjacent areas and to learn the methodology applied to his analysis; to contrast the new data obtained from the study of the material coming from residential units with the ones analyzed by Dr. Rands to date; and, to establish academic ties between Dr. Rands and the team of investigators who, directed by archaeologist Arnoldo González Cruz and coordinated by the National Institute of Anthropology and History, (*Instituto Nacional de Antropología e Historia*), are dedicated at present to the analysis of the Palenque Ceramics. This first phase of the project has constituted the initial collaboration that has had very positive results and promises to be very fruitful in the future.

At present, I continue to be part of the team of archaeologists hired by the National Institute of Anthropology and History to work in the "Palenque Archaeology Project," with my principal responsibility being the analysis of ceramic material originating from the excavations of residential units. It is worthy to mention the advances achieved in the

past work season that impelled us to seek the advise of Dr. Robert Rands, who not only has shared part of his information with us, but has also supervised my classification and contributed suggestions and critic that have enriched the development of the investigation considerably. A good part of the ideas expressed in this report constitute the results of such collaboration and I wish to extend my gratitude to all those that have made it possible.

Again I must allude to the atypical nature of my project with the purpose of justifying the preliminary content of the present report. This consists of a description of the activities that Dr. Rands and I carried out jointly, in both his Maryland laboratory and the archaeological camp for Palenque, as well as an explanation of the preliminary premises on which we are divided. The precise data of our work sessions, on the other hand, will be properly detailed in a final report that will include the combined conclusions relative to the analysis methodology, as well a proposal for classification of the ceramics in the study.

Lastly, I would like to mention a concern derived from my close collaboration with Dr. Rands and easy access to the wealth of information that has been generated throughout his fifty years of investigation. Much of his previous work has been part of my learning process and, consequently, has become an integral part of my knowledge about the ceramics of Palenque and my own investigation. Obviously, I want to emphasize the credit that Dr. Rands deserves for his enormous contribution to the study of the Palenque ceramics, as well as his precision in the registry of the data that he is currently sharing with me.

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## **Work Methodology**

Although obvious, I want to highlight the difference between two widely used concepts in the study of the archaeological ceramics: the *analysis method*, that makes references to the procedures used for obtaining and recompiling the data collected in the study and the *classification system*, that consists of creating artificial taxonomic units with the purpose of creating order out of the chaos of data. Such units – as varieties, types, groups or wares – should always be understood as a medium to give meaning to the archaeological evidence. Having this concept distinction in mind, it is necessary to emphasize that the viability of using different systems of classification for the study of

the Palenque ceramics had been one of the fundamental axes of my discussion with Dr. Rands. The methods of analysis used by him, however, have not been the objects of disagreement in absolute and, on the contrary, they have turned out to be one of the fundamental sources of my learning.

### ***Analysis Method***

Dr. Rands has carried out an extensive and meticulous recompilation of data derived from the analysis of his ceramic collection for which he has employed various methods:

- ◆ Petrologic study from the thin sheets and the microscopic observation of the texture and temper.
- ◆ Re-firing of the small ceramics fragments under controlled conditions with the purpose of obtaining a standardized description of color of the paste.
- ◆ Neutron Activation Analysis to identify the different elements of the composition of the paste.

The data derived from the application of these methods form a source of archaeological information as exhaustive as valuable. Thanks to this data, Dr. Rands has been able to establish different groups of paste, to identify extraction banks of the clay and to infer production techniques and cultural practices.

Due to the lack of access to the necessary resources to utilize the methods previously mentioned, my analysis is limited to the direct observation of the material. In this manner I have obtained an initial approach to the formal characteristics and techniques of the ceramic in study that has provided a basic descriptive foundation on which to establish a preliminary classification.

As previously discussed, my data recompilation began with a very elemental description of three paste related attributes: texture (fine, medium or coarse), hardness (insignificant, fragile, hard or compact) and color (according to the Munsell code) As to the firing, I have distinguished between an oxidant atmosphere – that contains free oxygen that facilitates the oxidation of organic matter and the ferrous compounds and usually produces orange, reddish, coffee or beige color pastes – and a reduction atmosphere – lacking of free oxygen in such way that the combustion is very slow and tends to produce gray or black pastes.

The temper, a substance added to the natural clay to modify its consistency, is described in terms of its composition – sand, volcanic ash, quartz, mica, etc., – the thickness of its particles – very fine, medium or thick – and, finally, its proportion with respect to the remaining paste composition – reduced (less than 15%), average (between 15% and 30%) or elevated (over 30%). Again I must emphasize that these are approximated due to the fact that it was impossible to utilize precision instruments at the time of recording this type of data.

For the description of surface finish we considered all treatments to which the vessels were subjected, provided that the degree of erosion would permit their evaluation: smoothed, polished, striated, slipped, fired, and barbotine application, etc. The decoration, on the other hand, refers to all those techniques that modified the ceramic surface: incised, excised, Sgraffito, stamped, impressed, *pastillaje* and polychromed, among others. The nature of the decorative motif – anthropomorphic, symbolic, zoomorphic, phytomorphic, geometric – and its distribution throughout the surface of the vessel are also indicated.

Given the poor state of conservation and enormous fragmentation of the majority of the study sherds, the attribute of form constitutes the key for carrying out an appropriate classification. For its registration I intend to include a brief description of its formal characteristics, an illustration of each of its variants, and a range of measurement that picks up the smallest and highest values of each of the fragments or complete pieces corresponding to the identified groups.

In light of what has previously been discussed, the precariousness of my visual examination in comparison with the sophistication of the methods employed by Dr. Rands is evident. The comparison of the results obtained by both has forced me to consider the need to review some of the guidelines of my analysis, some of which are outlined in the following:

- ◆ Consideration of the paste groups identified by Dr. Rands with the purpose of revising the preliminary classification of my material.
- ◆ Consideration of the origin of the pastes as a result of the neutron activation analysis in order to, in the future, establish possible trade routes and identify different production workshops.
- ◆ Establishment of a mutual agreement as to the terminology employed for the description of the forms, production techniques and decoration of vessels.

### ***Classification System***

Many errors have been made during the process of my analysis and some have yet to be resolved. The necessity to prove distinct methods of classification has conditioned the utilization of diverse systems of quantification that will adjust to the constant novelties provided by the study material. In this sense the ceramics recovered in Group I, most of which lack a good archaeological context, have constituted a good trial material to define the lines of investigation that will be utilized henceforth.

After numerous work sessions with Dr. Rands, through which we both had the opportunity to exchange fruitful experiences of the analysis of our respective collections, we arrived at an agreement related to the classification of the material. Three systems

of analysis will be used in our work with the goal of providing the greatest quantity of information possible:

1. The **Type-Variety** system is the method of classification which I consider most effective to reflect a chronological sequence of the material, so as to make comparisons with the ceramics originating from other Maya area sites. However, the poor conservation of the great majority of ceramic fragments with which I am working has led me to use such system in an unconventional manner. So, being conscious that the surface finish constitutes the key of the Type-Variety system, in some cases I have been forced to create types on the basis of attributes related to the paste and forms. My intention has been to integrate within a system, commonly accepted by most investigators, an atypical material, as much for its state of conservation as its marginality inside the Maya area. With that I have created a flexible system that, though a little rigid in conception, allows for small modifications as long as they are properly justified by the nature of the material and explained in detail in the presentation of the classification.

It is necessary to mention that Dr. Rands is not in agreement with me in the use of the Type-Variety system in an unorthodox manner and, to this respect, we have not reached an agreement. He will use such system of classification as was conceived by its creators and only in those cases in which the conditions of conservation of the ceramic fragments will permit.

2. For the specific study of rims, a second system of classification with respect to the **evolution of forms** over time will be used. Dr. Rands' work in this respect is certainly impressive and my only contribution has been the corroboration of the presence or absence of each form identified by him in my study material. The usefulness of such system resides in the fact that in many cases changes can be detected in the different vessel forms that can serve as chronological references for the establishment of a ceramic sequence. Although these changes are usually subtle, the fact is that the forms not only evolved more rapidly than the types, but also show a greater range of variation. This is not the first case in which an independent use of a system of analysis based on the observation of the forms is proposed in order to complement the information obtained from the use of other more conventional systems. "In Tikal three different and independent systems of ceramic classification were used. The first was the traditional "Type-Variety" system (R.E. Smith, Willey and Gifford, 1960), the second a classification of vessel forms and the last a classification of pastes" (Culbert, 2003:52). In the case of the forms, Palenque also presents important singularities with respect to other Maya area sites (for example, the nearly total absence of handles and spouts in the *ollas* or the extreme thinness of the walls of the larger *ollas* from Murciélagos).

For the recording of all the forms and their variations over the years we have opted to use two levels of classification. The first being, the *classes of forms*, a term coined by Culbert in Tikal (1993) that for the Palenque material has been divided into the following categories: *ollas*, *cazuelas*, *cajetes*, plates, vessels,

beakers, and *tecomates*. It addresses, therefore, at a very general level references to the function and the size of the vessels. The second level of classification is related to the phase that correspond to each class of forms based on the modifications experienced over time, such as the orientation of the rims, the thickness of the walls, or the application of decorative techniques.

With the purpose of connecting these two levels –*class of form* and phase– within the same category of analysis, Dr. Rands is devising a system of nomenclature based on names of birds (for example: *cazuela paloma* would be those that have a greater frequency in the Murciélagos phase). For the moment, I prefer to avoid the use of so many arbitrary names that would entail an effort of memorization, and have opted for a brief and precise description of the diagnostic characteristics that condition the assignation of a class of form to a particular phase (for example: *cazuela* with extended rim and globular wall corresponding to the phase Murciélagos). I do not doubt the viability of Dr. Rands' system as a quicker and more effective method to convey much information based on a single name, and do not discard the possibility of using this system in the future once the structure is perfected.

3. With the **analysis of paste** we introduce a third system of classification. As I mentioned in the section dedicated to the methods of analysis, the achievements obtained by Dr. Rands related to the identification of paste are many. However, for the moment, in my classification I will only use a simplification of the results yielded by the extensive investigation of Dr. Rands. In this manner, three classes of pastes have been most frequently found in my study material:
  - ◆ *Reddish brown paste*; collected from the banks located in low mountain ranges, with a high content of quartz sand in its composition and a reddish color resulting from a process of incomplete oxidation. The use of this clay constitutes a long tradition that extends from the Late Preclassic to the end of occupation of the site and correspond to the local production at the site.
  - ◆ *Orange brown paste*; originates from the plains and, more concretely, from the banks of the Michol river, to the west of Palenque. It is characterized to have a very dark core, resulting from a very high content of phytoliths in its composition. Like the previous case, this class of paste was used practically throughout the entire sequence of occupation of the site.
  - ◆ *Yellowish paste*; originates from the Chacamax river, to the east of the site of Palenque, and is characterized by even still a higher content of phytoliths in its composition. This class of paste began to be used from the Late Classic, probably due to the depletion of some clay banks that were being exploited.

An aspect to keep in mind is the tendency to utilize a particular class of paste for the production of a specific type of vessel. For instance, the reddish brown paste was generally used to manufacture *cazuelas*, *apaxtles*, large *cajetes*, censers and figurines, whereas the orange brown paste proved to be more suitable for the production of

vessels and smaller *cajetes*, generally with some type of decoration. The identification of this type of cultural models requires reflection based on the relation of the material with the associated context. This and many other questions relative to the interpretation of the archaeological evidence constitute the last aim of our study and necessitates a joint study among all the investigators involved.

## Conclusions

The archaeologist not only has the "responsibility of following their own objectives, but also to integrate their work with that of their predecessors and to demonstrate that their methods to collect, to analyze, and to record give rise to a useful archive for future workers" (Orton *et al.*, 1993:53). Thus it is, with my work not only have I sought to apply to my investigations the knowledge acquired as a result of my collaboration with Dr. Rands, but also I wish to leave some very well defined methodological guidelines that will help facilitate the work of archaeologist that follow. With this goal, I am creating a sample book in which the better preserved fragments and/or those most representative of each of the types identified and/or established from my classification are presented in an orderly and accessible manner.

My intention is to share the results of our study with other investigators of the area in such way that it is possible to make comparisons of the materials originating from various sites and thus to obtain greater knowledge of the development of the different ceramic traditions, the degree of cultural interaction between sites, and the chronological margins of the various sequences. Although this is a long term projected task, the fact is that direct access to the investigation performed by Dr. Rands and our discussions relative to the classification methods has constituted a very important first step to establish the foundations for our future work.

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