Do Form Measurements Have A Place In Archaeometry? Conjoining Diversity Indices with Chemical Analyses of Pottery from Petén, Guatemala

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Introduction

All the time of the Spanish contact in Petén Guatemala (16th century), as many as five socio-political groups occupied territory in the central Petén lakes region (Jones 1998:6). Spanish documents and pollen records date the occupations and expansions of these groups document their presence (especially that of the Itza and the K’iche), their changing alliances and dominance relations in Petén, and their repeated migrations to and from northern Yucatán to central Petén. The documents suggest that Petén was divided into ad

socio-political groups occupied territory in the central Petén lakes region (Jones 1998:18). The documents also collected the same measurements for Postclassic and Classic period pottery from Tikal (cited at Southern Illinois University Carbondale, 1973). The results indicated that the Classic period pottery had higher rim diameters and thicknesses than the Postclassic period pottery. Possible rim diameters and sherd thicknesses were calculated using one-way ANOVA statistics.

While conducting fieldworks in Guatemala from 1995-1996, Cecil collected rim diameter and sherd thickness measurements for Classic period and Postclassic period pottery from Tikal. The documents also collected the same measurements for Postclassic and Classic period pottery from Tikal (cited at Southern Illinois University Carbondale, 1973). The results indicated that the Classic period pottery had higher rim diameters and thicknesses than the Postclassic period pottery. Possible rim diameters and sherd thicknesses were calculated using one-way ANOVA statistics. Possible rim diameter and sherd thickness variability of the Postclassic period was tested and then compared to other between-group variability of the Postclassic period.

Results

Early Pottery (Figure 4)

- Macanché Island, but are within range of other Late Postclassic plates.
- Augustine 1, Augustine 2, and Augustine 3 rims and thicknesses do not vary. However, Early Group 1 and Early Group 2 do not exhibit variability in rim diameter and sherd thickness.
- Plates in Early Group 1 are larger than Trapiche plates from Macanché Island.
- Plates in Early Group 2 are smaller than Augustine group plates and thicker than most other plates.
- Augustine plates have the greatest overall thickness. However, they are larger and thicker than most Postclassic samples.

Late Pottery (Figure 5)

- Late Postclassic plates have larger rim diameters than those produced at Macanché Island, but are within range of other Late Postclassic plates.
- Because Trapiche pottery was made at only one location, variation is minimal. However, thickness varies between Topiskal Group 1 and Topiskal Group 2.

Conclusions

Archaeometric analyses of pottery manufacture and exchange typically focus on the composition of sherds. While this focus is essential for understanding provenance and exchange patterns, it cannot always address the more economic aspects of variables such as variability and exchange. The archaeological data sets from Petén suggest that different Late Postclassic ceramic groups were manufactured by different groups. The archaeological data sets from Petén suggest that different Late Postclassic ceramic groups were manufactured by different groups. The results of the archaeological data sets from Petén suggest that different Late Postclassic ceramic groups were manufactured by different groups. The results of the archaeological data sets from Petén suggest that different Late Postclassic ceramic groups were manufactured by different groups.