
Hypothesis of technological linking between metallurgy and ceramics activities of Tumaco-La Tolita tradition

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Abstract

The archaeological ceramics of America have been appreciated for its diversity, iconography, style, and uniqueness. However, they have received little attention in interpretative aspects as the organization of production and manufacturing technology. This fact has spread to not recognize the relationship between different kinds of technologies; such as ceramic and metallurgy technologies. Consequently, interpretations of the technology developed in America in pre-Hispanic times are shown as separate activities and developments of a particular social group.

An example of this, are the ceramic and metallurgical technologies Tumaco-La Tolita traditions. The metal objects and potters expressed their artistic preferences and complex technological processes. These technologies have been studied separately and the ceramics are the main sources of the archaeology. Chronology of this tradition has been mainly reconstructed on the ceramics studies. In addition, metallurgy studies have also done independently, moreover the contribution has been much lower for archaeology because most of the objects proceeds of looting or "huaquería" and their studies have expressed the lack of context in collections of ancient metallurgy in Colombia.

Accordingly, this project aims to answer the following research question: Does the evidence in Tumaco's ceramic technology developed in pre-Hispanic times shows several relationships of this activity with the metallurgical technology developed? To answer this question several ceramic figures and metal objects belonging to the ICANH and Museo del Oro Colombia were analysed. The comparison of the operational sequences revealed the potters and metalworkers understood the properties of the materials and its influence on the quality and successful achievement of the final product. Since the results showed selection of the different raw materials suitable for their purposes. These involved decisions of the quantities, sizes, and proportions to obtain mixtures with appropriate characteristics for handling and use. The use of conformation techniques such as: modelling, moulding, compaction of the mixture and plastic deformation that implied strategies reflecting a creative intention. Management, control, and evolution of the pyrotechnology: first, firing of ceramic objects in open furnaces of difficult control and its passage to the necessary use of furnaces and fuels for the control of the atmosphere and temperatures required for metal objects. Finally, the objects analysed showed evidence of finishing operations such as polishing, slip and paint in ceramics and polishing in metals in order to demonstrate the importance in the final appearance of these objects.

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