



Ceramic production during changing environmental/climatic conditions

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Ceramics, with regard to their status as largely everlasting everyday object as well as on the basis of their chronological sensitivity, reflect despite their simplicity the technological level of a culture and therefore also, directly or indirectly, the adaptability of a culture with respect to environmental and/or climatic changes. For that reason the question arises, if it is possible to identify changes in production techniques and raw material sources for ceramic production, as a response to environmental change, e.g. climate change.

This paper will present results of a research about Paracas Culture (800 – 200 BC), southern Peru. Through several investigations (e.g. Schittek et al., 2014; Eitel and Mächtle, 2009) it is well known that during Paracas period changes in climate and environmental conditions take place. As a consequence, settlement patterns shifted several times through the various stages of Paracas time. Ceramics from three different sites (Jauranga, Cutamalla, Collanco) and temporal phases of the Paracas period are detailed archaeometric, geochemical and mineralogical characterized, e.g. Raman spectroscopy, XRD, and ICP-MS analyses. The aim of this research is to resolve potential differences in the chemical composition of the Paracas ceramics in space and time and to compare the data with the data sets of pre-Columbian environmental conditions. Thus influences of changing environmental conditions on human societies and their cultural conditions will be discussed.

References

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