

# People, trees and charcoal: some reflections about the use of ethnoarchaeology in archaeological charcoal analysis.

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**Summary:** *The aim of this presentation is to put together the different ethnoarchaeological approaches that charcoal specialists have proposed for firewood management. Analyzing these works within the framework of the theoretical development of both the charcoal analysis discipline and ethnoarchaeological studies, we expect to start reaching a consensus in relation to the possibilities and the limits of ethnoarchaeological studies, and to the issue of interpretation in archaeological charcoal analysis. We propose the orientation of these studies towards the socio-ecological analysis of firewood management considering the no suitability of ethnoarchaeology to discuss the palaeoecological representativeness of archaeological charcoal analysis (explored in detail from statistics, taphonomy or experimental archaeology) through the universalization of current social behaviour.*

**Key words:** *firewood, ethnoarchaeology, charcoal analysis, ethnobotany, human-environment relations.*

## INTRODUCTION

In the last 20 years ethnoarchaeological studies carried out by charcoal specialists have occasionally turned up in bibliography, specially focusing their attention on domestic firewood. Robert F. Heizer already pointed out in 1963 that domestic fuel had been a neglected research topic in social sciences (Heizer, 1963). From an archaeological point of view, he looked for interpretative models of fuel management in non-Western households in ethnographic literature, observing that this had been an unattended aspect of human social life (Heizer, 1963). At the end of this paper, R. Heizer pointed at ethnography as a source of inspiration for archaeologist to address the question of fuel in its social depth (Heizer, 1963: 192).

This suggestion has been taken into account since the 1990s, when, after a period of intense introspection and debate on the analytical potential and limitations of archaeological charcoal analysis, the aims and scope of the discipline have been expanded at length (Asouti and Austin, 2005). These new perspectives have boosted the search for new fields of study and the formulation of new theoretical and methodological corpus. Ethnoarchaeology and experimental archaeology have been pointed out as relevant venues of inquiry (Asouti and Austin, 2005).

Since then, ethnoarchaeology has been tempted in different scenarios by various researchers with diverse objectives. Ethnoarchaeology itself has not been defined or systematized as an academic discipline and ethnoarchaeological fieldwork is developed in a multiplicity of situations, which makes the standardization of methods and even aims difficult (David and Kramer, 2006). Ethnoarchaeological studies made by charcoal specialist focusing on firewood are not an exception in this sense.

## THE ETHNOARCHAEOLOGY OF FIREWOOD

During the 1990s some of the ethnoarchaeological studies addressing firewood were used to test the methodology of charcoal analysis in relation to landscape reconstruction (Ntinou *et al.*, 1999). Another kind of studies that has received attention from charcoal specialists is the one known as “firewood paleoeconomy” in hunter-gatherers societies. This kind of study uses ethnographical observation to “test” the paleoeconomical models theoretically constructed by charcoal specialists in relation to fuel management. Researchers address this question both through ethnoarchaeological fieldwork in contemporary societies (Henry *et al.*, 2009) and by comparing recent archaeological sites with ethnographic accounts made by 19th and 20th century travellers or ethnographers (Piqué, 1999).

Beyond this paleoecologic–paleoeconomic dichotomy, some ethnoarchaeological studies of firewood have been oriented towards the improvement of the interpretative background of archaeological charcoal analyses. In some cases, a specific ethnographic scenario is analyzed and compared to an archaeological case in order to “test” the theoretical assumptions (Zapata *et al.*, 2003; Dufraisse *et al.*, 2007). In other cases, the methodological and theoretical background of charcoal analysis is discussed through an ethnographical analysis of current cases without a specific archaeological problem (Picornell *et al.*, in press). Furthermore, the ethnoarchaeological study of forest management and cultural perceptions of the environment are directed towards the study of the cultural constraint of firewood management (Guiot, 2002)

## DISCUSSION AND CONCLUSIONS

Given this diversity of aims and theoretical assumptions, our presentation is going to explore this variety of situations with the aim to start reaching a consensus in relation to the possibilities and the limits of the ethnoarchaeological studies of firewood management in human societies of the past, and even of the present, considering this specific human activity within the framework of human-environment relations and everyday landscape practices.

In relation to this aim, we will suggest some discussion points as: the orientation towards the anthropological analysis of firewood management from a socio-ecological point of view as a way to connect charcoal analysis with archaeological and anthropological theoretical agendas; the suitability of ethnoarchaeology to discuss the palaeoecological representativeness of archaeological charcoal assemblages by universalizing current social behaviour, or the methodological concern in relation to the critical application of ethnoarchaeological and ethnobotanical qualitative and quantitative methods.

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