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SPECIAL SECTION: NEW DIRECTIONS IN THE STUDY OF MESOAMERICAN LITHIC ECONOMY

INTRODUCTION

Over the past four decades the interpretive capacity of lithic analysis in Mesoamerica has changed dramatically. Lithic studies have grown from simple artifact descriptions to a powerful approach for studying and interpreting pre-Hispanic economy. The linchpin for this change was the development of the lithic technology approach (Collins 1975; Crabtree 1968; Flenniken 1981) and its use in asking culturally meaningful questions about the Mesoamerican past (Sheets 1975; Spence 1967). The utility of this approach is as obvious to those who employ it, as it is elusive to those who do not. It involves the recovery, analysis and interpretation of flaked stone residues, that is, the large and small flakes and chips produced when stone tools are manufactured and used. Moreover, it is the study of the mundane to view the mundane, and obtain a window onto the economic patterns of everyday life. The reward from studying thousands of ordinary flaked stone remains comes from the insight it provides for reconstructing and modeling past economic behavior.

Lithic economy refers to the ways stone tools were procured, produced, distributed, and consumed in prehistoric societies. It is especially relevant for Mesoamerica because the societies in this region remained stone tool users throughout their development from mobile foragers to sedentary states. Furthermore, it permits investigators to examine and compare the scale and complexity of tool use in different domestic, political and religious settings. Investigators study the lithic economy by examining the context and behavior of stone tool use. Context supplies information about the time, place, and social, political, or religious settings in which tool use occurred. The behavioral dimension looks more closely at the specific economic activities that can be inferred from the technology and materials associated with stone tools. It is here that we learn about patterns of production, distribution and use. When used together these two orientations can supply a great deal of information about how systems of procurement were organized and how they developed through time.

This special section examines the contributions that obsidian studies can make to expanding our understanding of Mesoamerican lithic economy. Although many excellent studies have been conducted in this field, Mesoamerican lithic studies remain in their infancy with a significant amount of analytical potential still untapped. The reason is that there are a multitude of questions that lithic analysis can profitably address that have yet to be asked. The contributors to this section explore some of these questions. Rather than focusing on a single contextual question (e.g., craft production in a particular time or place), the contributors explore a range of different behavioral questions. As a group they illustrate a range of new questions that researchers can profitably pursue. They are presented in the hope of stimulating young scholars to pursue the study of pre-Hispanic economy in new and interesting ways.

There are six papers in the section. The first paper by **Kenneth Hirth** examines the important economic institution of the marketplace and how it may be studied using lithic materials. The marketplace was the location where producers and consumers came together. From the perspective of obsidian craftsmen it was where they often sat and worked. The information presented from Xochicalco, Mexico provides important insight both into how the marketplace was organized, and how lithic studies can contribute to the identification and study of pre-Hispanic marketplaces.

The ubiquity of stone tool use throughout Mesoamerica transformed the production of obsidian tools over time. In many areas of Mesoamerica obsidian blades were the cutting tool of choice and they were produced and distributed in large quantities to the consuming public. The paper by **Dan Healan** explores the commoditization of the obsidian prismatic blade as well as how and when he feels this came about. The concept of the obsidian blade as a common commodity in the Mesoamerican economy is an important new way of viewing why it was adopted and circulated as widely as it did.

The paper by **Jason De León** and collaborators examines the question of obsidian distribution in Mesoamerica. Chemical source analysis has made it possible to identify where obsidian came from with a high degree of precision. Reconstructing *how* it moved and was distributed is a much more difficult task. De León addresses this question by modeling three forms of obsidian distribution: whole-blade trade, processed-blade trade, and local-blade production. The authors then examine the evidence from three areas during the Formative period to see which form of distribution best accounts for the movement of obsidian blades over space. As an analytical approach it demonstrates how to distinguish between different forms of exchange using archaeological remains.

The paper by **Alejandro Pastrana and Silvia Domínguez** examines how changes in the intensity and organization of obsidian exploitation effected exploitation and mining operations at a major obsidian source. Obsidian from the Sierra de Las Navajas is well know both for its green color and for its importance as a long distance trade item. The authors examine how the source was exploited by Teotihuacan, Toltec, and Aztec craftsmen for a range of domestic, political, and religious products. Their study illustrates how mining operations can change and reflect modifications in the scale and organization of resource exploitation over time.

Zachary Nelson's paper is more traditional in the sense that it explores the organization of craft production at the site of Teotihuacan. What makes this paper different from the others in this section is that it does not focus primarily on obsidian blades. Instead, it examines the specialized production of obsidian bifaces that were exported and used throughout Central Mexico during the Epiclassic Coyotlatelco period. This workshop is important

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because it demonstrates that the demand for bifaces was large enough to support a production workshop where independent non-elite craftsmen without state support could engage in the production of a single specialized commodity for interregional distribution.

The final paper in this section by **J. Heath Anderson and Kenneth Hirth** discusses the question of craft consumption and how to address it in the archaeological record. Obsidian is known to have been employed in a range of craft activities where sharp cutting tools were required. Establishing the parameters to identify these consumption contexts is important for identifying many other forms of craft production where physical residues are sparse or do not preserve. The study examines obsidian blade production and their use in craft consumption at the site of Kaminaljuyu, Guatemala. In addition to discussing the archaeological signatures of craft production, it examines the relationships between the craftsmen who produced obsidian tools, and the craftsmen who used them.

Within the holistic approach to ancient Mesoamerica advocated by this journal, obsidian studies hold a prominent position. Obsidian is a ubiquitous material found at most archaeological sites in the region, and because of the relatively secure sourcing of the varieties of obsidian it comprises one of the best artifact classes for broad economic studies. The papers in this special section represent the state-of-the-art in *lithic economy* studies, moving beyond traditional descriptions to venture into such anthropologically interesting realms as the organization of production, commoditization, and consumption in craft production. With these provocative papers it is hoped that obsidian studies will be further energized in new and innovative directions.

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