Science and Technology in Non-Western Contexts

By Professor Ruben G. Mendoza

Field Exercise

- 1. You are to observe the process of stone tool production and creation. Please be prepared to consider the values and knowledge that underlie your understandings and appreciation of the technologies in question. The cultures to be considered are as follows:
 - Ohlone Mutsun: American Indians from 5,000 BC to Present
 - Spanish Colonial: AD 1797 to 1821Mexican Republican: AD 1822-1848
- 2. Be prepared to describe the process involved in the creation of the tools in question, and consider for the moment, artifacts from daily life (and your classrooms) that incorporate aspects of creative thinking and production.
- 3. Consider the following archaeological criteria for understanding and interpreting the functions and significance of the artifacts created during the course of this study:
 - Process
 - Cultural Significance
 - Context
 - Function
 - Cultural significance
 - Material Type
 - Form versus Function

Lab Questions

- 1. How were the tools created? If called upon to describe the process entailed in their production, how would you start your narrative and explanation?
- 2. How might the production of the artifact in question have served to enhance the survival of the groups or individuals involved in the production process?
- 3. What social, cultural, economic, ritual, and political associations inform our understandings of the artifacts and their production? How might our preconceptions about technology serve to inform or misinform our valuation and appreciation of the cultures that produced the artifacts in question?
- 4. Drawing on the form and function of the artifacts created, how do you believe said tools or artifacts were used, and how do you know this for a fact?
- 5. Why were such tools created in ancient societies, and why are they so dominant in much of our pre-historic past? Why might stone tools continue to be so dominant in many tribal and non-Western contexts?
- 6. What material types were used in the production process and what does such material tell us of cultural interaction and trade? What does this same material tell us of the geology of California and the West?
- 7. Finally, how does the artifact's respective form or shape provide clues to the interpretation of its original use and intent?