

ANT 309 Monday February 22, 2010

- XII. Human Remains (or Bioarchaeology)
 - A. Types of Remains
 - B. Basic Traditional Description
 - C. More recent elaborations
 - 1 Ethical Considerations
 - 2 Paleopathologies (signs of ancient diseases and other
 - 3 Signs of trauma
 - a Harris lines
 - i Example in central California study by McHenry- Fewer Harris lines with adoption of the acorn economy
 - b Dental hypoplasia
 - c Signs of inter-personal violence
 - i Healed head wounds in the Santa Barbara Channel: Head bonking (sub-lethal conflict)
 - 4 Reconstructing Diet from stable isotopes
 - a Carbon: C12 versus C13
 - i stable isotope ratios are passed up the food chain, leaving distinctive signatures in bone tissue of consumers. The diet can be reflected in these ratios as found in human bone
 - b Carbon pathways and photosynthesis
 - i Mid latitude plants employ C3 pathway in photosynthesis that discriminates against ¹³C
 - ii Tropical plants (maize) employs C4 photosynthesis that discriminates less against ¹³C
 - iii Ratios expressed as parts per million from a standard (thus have negative values)
 - iv Example: Maize in the Tehuacan Valley
 - c ¹⁵N versus ¹⁴N ratios Example: Santa Barbara
 - 5 Regional Variation
 - a Osteometrics
 - b DNA
 - i Mitochondrial
 - ii Y Chromosome (Nuclear)
 - c Language, and DNA: Native American Haplogroups
- XIII Middle Range Theory: Ethnoarchaeology and Experimental Archaeology
 - A Definition: Middle Range Theory refers to a series of theories or propositions that bridge the gap between empirical observation

(what we see, taste, feel) and broad, abstract general or high level theories. Lewis Binford said we must distinguish between:

- 1 Systemic context : the context in which living people use/manipulate/discard/loose objects of material culture
- 2 Archaeological context: objects of material culture found in the context of the archaeological record.

B Behavioral archaeology - Michael Schiffer – tried to bridge the gap between systemic context and archaeological context. In thinking about how things move between the systemic and archaeological contexts, it helps to distinguish between site formation processes:

- 1 Depositional process
 - a Natural sedimentation and erosion
 - b Anthropogenic – people involved
- 2 Reclamation process – from the archaeological context to the systemic. Later people reclaiming things of earlier people and using them for same or different purposes.
- 3 Disturbance processes (within the archaeological context). For example, plowing, construction, people living on the site, earthworms, animals, plants – anything that changes the original layers of soil.
- 4 Reuse processes – moving single object through number of behavioral settings (arrowhead reworked into drill)
- 5 Ways to gain information about these processes
 - a Ethnoarchaeology; Watch people do it
 - b Experimental archaeology: Do it yourself
- 6 Examples
 - a Mussel collection on the central coast
 - b Agta Foragers
 - c The Garbage Project