

ANT 309 Lecture Outline January 27 2010

Processing, Dating, and Stratigraphy

VII Post Field

A Return from the Field with:

- 1 Artifacts
- 2 Ecofacts
- 3 Descriptions of Features (Burials) and associations
- 4 Descriptions of Contexts (Level records and profiles)
- 5 Human remains (?)
- 6 Everything marked with provenience

B Laboratory Processing

- 1 Washing
- 2 Sorting
 - a Artifacts
 - i Material: Flaked stone, ground stone, shell, bone
 - ii Formal vs Informal (debitage)
 - b Ecofacts
 - i Faunal (Bone versus shell)
 - ii Floral
 - c Human remains

3 Catalog

VIII Dating and Stratigraphy

A Relative dating

- 1 Stratigraphy and the Law of Superposition
 - a Visual stratigraphy
 - b Cultural stratigraphy
 - c Terminus post quem -- date after an artifact or feature had to have been deposited or constructed.
 - d Terminus ante quem -- date before which a feature was constructed or an artifact was deposited.
- 2 Obsidian hydration (Invented by Friedman and Smith)
 - a hydration rim or band in microns
 - b Thomas Origer and Brian Wickstrom showed that obsidian hydration readings from projectile points patterned in a temporally meaningful way.
 - c factors that influence
 - i The chemistry of the glass- different obsidians hydrate at different rates
 - ii The environment-- obsidian hydration rims develop more rapidly in warm places than in cold places—
 - iii Difference in surface versus subsurface hydration environments

- iv Water content in the obsidian before hydration begins
- v Hydration rims can fall off.-- definitely when a forest fire goes through
- vi The problem of re-use-- obsidian scavenging can lead to multiple hydration rims on a single artifact

B Absolute dating techniques

- 1 Radiocarbon Dating Invented by W. F. Libby in 1949.
 - a Associations key
- 2 Dendrochronology (A.E. Douglass)