D-2

## Core Cultures of the Pacific Rim: Japan and the Western Hemisphere

- I. Archaeological Dating Techniques
  - A. Relative (= relatively inaccurate)
    - 1. Stratigraphy
      - a. can be done in the field
      - b. based on principle that each era produces its own unique trash
      - c. assumes that the deeper the trash the earlier the date
      - d. problem of contamination between layers
    - 2. Historical Linguistics
      - a. attempts to construct history of each language and dialectic
      - b. example in SW United States:
        - (1) similarity of Navajo language with Apache language
        - (2) called South Athapaskan
        - (3) similarity of South Athapaskan with languages in Alaska and NW Canada (called North Athapaskan)
        - (4) no similarity of South Athapaskan with Pueblo, Pima, or other languages of SW
        - (5) therefore, Navajo-Apache came to SW later than others
  - B. Absolute (= absolutely inaccurate)
    - 1. Radiocarbon—dates organic matter
      - a. invented by Willard Libby in 1949
      - b. once an organism is dead, no C-14 can enter or leave it
      - c. C-14 has a half-life of 5,730 years
    - 2. Thermoluminescence—dates pottery, glass, etc.
      - a. used for dating crystallized material like pottery
      - b. measures time by amount of light given off when reheated
      - c. can date material up to 35,000 years old
    - 3. Other Techniques
      - a. potassium-argon dating
      - b. uranium disequilibrium
      - c. fission tracks
  - C. Written Texts
- II. Origins of the Japanese Culture
  - A. Earliest Absolute Dates
    - 1. February 11, 660 B.C.—traditional date for beginning of Japan
    - 2. A.D. 57—first mention of Japan in Chinese histories

- B. Archaeological Periods
  - 1. Jōmon (rope pattern), 8000–300 B.C.
  - 2. Yayoi, 300 B.C.-A.D. 300

## III. The Populating of Turtle Island

- A. Stages and Cultures of Settlement in North America
  - 1. Earliest Sites
    - a. Sandia—named after Sandia ("Watermelon") Mountains near Albuquerque (discovered in 1936)
    - b. Meadowcroft—site in western Pennsylvania (occupied as early as 16,000 to 22,000 years ago
  - 2. Great Plains Culture
    - a. Clovis (Llano)—first discovered near Clovis NM
    - b. Folsom—first discovered in Folsom NM
    - c. Plainview—remains of 1000 big-horned bison near Plainview TX
    - d. Plano—Yuma County CO and Eden Valley WY
  - 3. Desert Culture—9500 B.P. (Danger Cave UT)
    - a. oriented toward plants as primary food source
    - b. characterized by baskets for transporting and storing grain
    - c. cave dwellers in Arizona, Nevada, Oregon, and Utah
  - 4. Eastern Archaic—more than 10,000 sites
    - a. trade networks (bordered by Florida, Lake Superior, New England)
    - b. Modoc (IL) Rock Shelter (9000 B.P.)—oldest site
    - c. oriented toward small animals as primary food source, including deer, elk, raccoon, opossum, fish, turtles, snails, mussels, ducks, geese
    - d. "primary forest efficiency"
      - 275 species of plants used for medicine
      - 130 species of plants used for food
      - 31 species of plants used as magical charms
      - 27 species of plants used for smoking
      - 25 species of plants used as dyes
      - 18 species of plants used in beverages
      - 52 species of plants used for miscellaneous purposes
    - e. Adena Culture-mound builders
- B. Cultures of Ancient Mesoamerica
  - 1. Zapotec (Formative Oaxaca) (2300–600 B.C.)
  - 2. Olmec (1200–400 B.C.)—contact with Africa?
    - a. irrigated agriculture

- d. calendar
- b. towns—handicraft industries
- e. written language

- c. elaborate religion
- 3. Preclassic Maya (2300 B.C.–A.D. 300)

## C. Andes Mountains

- 1. Chincharro (ca. 5000 B.C.)—mummies before those in Egypt
- 2. Chavin (850–250 B.C.)—contact with Japanese?
- 3. Nazca (100 A.D.–800 A.D.)

## **Recommended Reading:**

- Peter Farb, Man's Rise to Civilization: The Cultural Ascent of the Indians of North America,
  2nd ed., New York: E. P. Dutton, 1978.
- Eric Lurio, A Fractured History of the Discovery of America, New York: Dell, 1992.
- Thurston Shaw, "Archaeology and the Dating of the African Past," in *Africa Discovers Her Past*, ed. J. D. Fage, London: Oxford University Press, 1970, pp. 26–31.
- Robert Silverberg, *The Mound Builders*, Greenwich, CT: New York Graphic Society, 1970.
- H. Paul Varley, *Japanese Culture*, 3rd ed., Honolulu: University of Hawaii Press, 1984, pp. 1–13.