Mesa Verde

Fire, water, pottery & architecture
Finding sites (survey)

• What we can control
  – Survey intensity = how often we look
  – Obtrusiveness = ability to detect based on method

• What we cannot control
  – Site abundance
  – Clustering
  – Visibility
Visibility

- Site size
- Artifact size
- Density of artifacts
- Size of site exposure
- Duration and frequency of site exposure
Mesa Verde Fires

• From 1996 to 2003
  – 5 wildfires
  – 50% of parkland burned
  – Increased site visibility
    • 90% of park had already been surveyed (but low visibility)

• This offered a rare opportunity to survey the park
  – 593 new sites on only two mesas
  – 5 new reservoirs (totaling 9)
  – 344 farming terraces near 89 sites
  – Check dams rose from $n = 191$ to $n = 1189$
Water Management

- 9 large reservoirs in the park
- Paleohydrology intensely studied for four
- Box Elder, Sagebrush = mesa top, stone lined
- Morefield, Box Elder = canyon bottom, diversion

- In general
  - Filled 4 to 5 times each year
  - Required dredging maintenance
  - Provided domestic drinking water
Mesa Verde Pottery

• May have evolved independently in region

• Early examples: Canyon de Chelly
  – Imprints of baskets on exterior
  – Pottery an accidental byproduct of parching trays in baskets
  – Proposed by Earl Morris (1920s)

www.nps.gov
Mesa Verde Pottery

- Alternatively, diffusion
- Pottery making introduced from south
  - Diffusion from Mogollon area
  - Proposed by Blinman
Mesa Verde Pottery

- Intimate outgrowth of basketry
- Imitation of bottle gourd containers
Pottery function

- Water and food storage
  - More permanent storage than gourds & baskets
- Cooking
  - Better control of heat
    - Temper & corrugation
  - Important for beans
    - Protein & soil nutrients
  - Allows dried storage
Temper

• Additive to pottery
  – Sand, crushed pottery, igneous rock
  – Allows thermal expansion and contraction
  – Large, abundant, hard temper = resilient pots
  – “sherd temper” = good for decorated pots
Paste

- Paste = pottery clay
- Relates to color of finished pot
- Different clays fired under the same conditions produce different colors
Decoration

• Firing conditions control color
  – Oxidation tends toward orange (depending on paste)
  – Reduction tends toward gray

• Slips = prefiring watered clay application
  – Brightens paste color after firing

• Paints applied pre-firing
  – Yucca leaf brush
  – Manganese or boiled mustard

www.mesaverdecountry.com
Decorated vs. utility pottery

• Cooking pots
  – Igneous temper (less pretty)
  – Corrugations
  – Allow for control of heat

• Decorated pots have none of these characteristics
  – Probably used for serving and social functions
Firing pottery

- Dig a trench
- Set prefire in trench to get a bed of coals
- Place unfired pots on top of coals
- Build a wooden structure over trench
  - This upper fire pulls heat from the underlying coals upward
- Once upper fire burns down, bury the coals
  - Reduces oxidation, makes pots white (w/ black decorations)

www.ancientarts.org
Cliff Dwelling Architecture
Cliff Dwelling Archaeology

• Artifacts excavated prior to modern archaeology
  – Principle of association cannot be used
• Interpretation relies on architecture (see Nordby)
  – Form of rooms and roomblocks used to assess function
  – Analogy used to fill in the gaps
Households by analogy

• Society probably matrilineal
  – Live in clan groups
  – Husbands move nearby to wife’s matriclan
  – Mother’s brother assumes important role
  – Fathers remain a part of their natal matriclan
Courtyard Complexes

• Several habitation & storage rooms fronting on a kiva plaza
  – Kiva roof = plaza area
  – Cliff alcove offered protected plaza use
• Large living rooms w/hearth
  – Housed nuclear family
• Adjacent storage rooms
  – Small exterior closing doors
More on courtyard complexes

- One room suite per nuclear family
- Usually 1 to 4 suites per courtyard complex
- Courtyard complexes thought to relate to clans
- Number of kivas is often used to predict size
- Courtyard storage rooms = clan resources
Courtyard Kivas

• Center of courtyard
  – By analogy = ceremonial
• Winter residences
  – Heavily sooted
  – Replastered
• A “men’s club”
  – Weaving
  – Tool manufacture
Specialized buildings

• Non-courtyard complex buildings
  – Isolated kivas, great kivas
  – Rooms w/o courtyards
  – Or civic architecture, such as towers

• Thought not to be based on clan identity
  – Probably had “overriding group benefits” (Nordby pg. 115)

• May be based on larger group identities (site level)
Moieties

- Two complementary groups of clans
- Reflect dual division of social/religious responsibilities
  - Occurs in some modern pueblo cultures

This mural portrays the Winter and Summer moieties, the two main societies within the Pueblo, and their most important dances. The Winter Buffalo Dance, in the right-hand sphere, honors the buffalo, once the most important source of food at that time of year, while the Corn Dance, on the left, asks for a plentiful harvest of corn, the staff of life for Pueblo peoples. A plumed serpent, symbolizing power over water, encircles the Winter sphere, and a ceremonial banner surrounds the Summer sphere. During the actual dance, this banner is carried by one man, in front of the line of dancers. This mural was selected for limited reproduction, and prints were presented to major donors to the Mural Project. www.indianpueblo.org
Cliff Palace

- Large “integrative kiva”
- No adjacent residential rooms
- Kiva decorated in halves
  - Two shades of plaster
- Each clan had a two-room building near this kiva
- Similar patterns at other cliff dwellings
Summary

• We can only study kinship by analogy
• But architecture suggests social organization
• Cliff dwellers organized their buildings in similar fashion to modern Puebloans