Violence & Abandonment

Mesa Verde: how it ended & where they went
Conditions at the end of PIII

- Population high
- Climate in drought
- Sites defensive
- Culture hypermorphic
- On the brink of collapse?
Archaeology of Violence

- Premortem trauma
  - Parry fractures
- Perimortem trauma
  - Skull trauma
- Postmortem trauma
  - Taphonomic
Archaeology of Violence

- Weaponry
- Rock art
- Defensive architecture
Violence in Mesa Verde

• Dates back to BMII (AD 200 to 500)
• Roughly 100 people killed & buried in Cave 7
• More violence at the end of PII
  – Some evidence of anthropophagy
• Again in late PIII
• Tends to correlate to periods of drought
PII Anthrophagy

- Cowboy Wash (5MT10010)
- About AD 1150
- Human myoglobin
  - Pottery residues
  - Coprolites

www.technet.pnl.gov
Cowboy Wash

From Marlar et al. 2000, Nature
Architecture

• Wooden and masonry stockades
• Towers w/connecting tunnels
• Defensive locations
• Difficult to access entrances
• Cliff dwellings = ultimate defensive location

• PIII buildings burned at abandonment
  1) Violence?
  2) Ritual closing?
Knowledge of weapons

- Blunt force trauma to skulls = axes
- Hide and basket shields
- Bow and arrow from rock art
- Anthrophagy = pottery residues

Figure 16.7. Drawings of petroglyphs on Castle Rock depicting a combative scene.
Evidence at Castle Rock & Sand Canyon

- Castle Rock (pottery residues)
  - Sensitive antigen-antibody reaction to ID
  - Tested positive on mug & cooking pottery

- Sand Canyon (skeletal evidence)
  - Multiple individuals died violent deaths
  - Perimortem skull damage
  - Decapitation

From Kuckelman et al. 2002, *American Antiquity*
Figure 2. Locations of all human remains found and of artifacts that tested positive for human myoglobin, Castle Rock Pueblo.

From Kuckelman et al. 2002, *American Antiquity*
Figure 3. Locations of remains of individuals who died violently at Sand Canyon Pueblo.

From Kuckelman et al. 2002, *American Antiquity*
Effects of Violence in Mesa Verde

• Record of violence is small (sampling & preservation)
• Location affected
• Aggregation affected
• Populations affected
• Culture affected

• Eventual abandonment
Mesa Verde Abandonment

- Why did they leave?
- How did they leave?
- Where did they go?
- Why did they go there?
Why did they leave?

• Enemies, climate, drought, crop failure
• Other droughts had happened
  – What made this one special?
  – It wasn’t
    • More crowded
    • Population declined in previous droughts
Other reasons...

• Political reasons (Lipe)
  – A redistribution system broke down
  – Power struggles led to conflict

• Migration to Casas Grandes (Lekson)
  – Effective leadership to new areas

• They “ran for their lives...” Cameron, pp. 140
How did they move?

• Long distance trade and marriage ties (analogy)

• Direct analogy
  – Early 1800s Hopi migration to Zuni
  – During “starving time”
  – Also, Tewa to Hano after Pueblo Revolt (1680)
Where did they go?

- Casas Grandes
- Point of Pines
- Pinnacle Ruin
- Northern Rio Grande
Casas Grandes
Pinnacle Ruin

- SW New Mexico
- Mesa Verde Pottery
- Mesa Verde masonry
- Deep middens
Point of Pines

- East-central Arizona
- Kayenta Anasazi
- 800 rooms
- 70 rooms ≈ 50 Anasazi families
  - Distinctive: larger rooms, storage, food processing
  - Kayenta style decorative pottery
  - Corn, squash varieties Kayenta
Point of Pines

Immigrants for 20 years
Rooms burned
Were they forced out?
Migration Push Factors

• Environmental deterioration
• Crop failure
• Conflict
Migration Pull Factors

- Better social, environmental conditions
- Rio Grande water, floodplain soils
- Better climate
- Bison to east
- Timber
- Religion (Kachina)?
Modern Pueblo viewpoints!

- Ancestral Pueblos not “abandoned”

- http://www.archaeologychannel.org/content/Vidmap/Vidmap.html