Andean Archaeology and Ethnohistory - Anthro 326: Class 10

The Initial period: Temple mania

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- Announcements
  - No class meeting next Thursday, March 9 -- sorry!
  - Start thinking about your research poster. Your proposed topic is due Tuesday, March 14
  - Potential summer volunteers: please give me a CV plus a written list or explanation of any other experience, skills, etc. that bolster your case, by March 14.

- Initial Period
  - so called because it was the time of the first (initial) use of ceramics
  - start and end dates depend on what article you read
    - Some suggestions (you don't have to know these)
      - conventionally dated from 2,000 to 800 cal BC
      - Moseley dates it from 1,800 BC (uncal?) to various events around 900, 800, and 400 BC.
      - Burger dates it to 2,000 to 600 cal BC
    - the disagreement in the start dates is because the adoption of ceramics was gradual, and is not well dated in many places
    - the disagreement in the end dates is because the beginning of the next period is tied to the spread of the Chavín style, the dating of which is currently being revised
  - we will go with 2200-1000 cal BC
    - based on dates of 1800-900 uncal BC from a recent study by Sylvia Kembel

- On the coast:
  - subsistence shifted from
    - mostly marine resources with some naturally-watered floodplain agriculture in the Late Preceramic
      - Caral was a precocious exception?
    - to a heavy commitment to inland, irrigated agriculture in most coastal valleys
  - some of the population moved inland, up the valleys
    - Moseley suggests this was because it is easier to build canals inland
      - rivers are steeper inland, so a short canal can get farther from the river and irrigate more land
      - vs. closer to the coast, where the land is flatter and canals must be longer and more carefully engineered to be no steeper than is necessary to keep the water flowing
    - this population movement divided people into coastal fishers and inland farmers
  - this created an economy based on specialized food production and large-scale exchange of staple foods: seafood and farmed crops
    - same pattern as in Late Preceramic Supe valley, but now widespread on much of the coast
  - farming involved
    - root crops (potatoes, oca, ulluco, etc.) plus beans, peanuts squashes, fruits
    - maize remained rare or absent on the coast

    - Maize became important in the intermontaine valleys first, and was only adopted on the coast later, at the very end of the Initial period
    - This is surprising, since maize was very important on the coast in later times
- no consensus on why the shift to more irrigation agriculture
  - as we discussed earlier in the context of the Maritime Foundations Hypothesis
  - population growth required more food than fishing could produce?
  - long-term climate change?
  - a long but temporary dry and dusty period roughly 2500-1500 cal BC?
    - suggested by Moseley, supported by my far south coast work
  - social factors - incipient elites emerging from the process of monument building, using their position to invest in production of food that they or the temple institution could control?
    - suggested by Burger
- Do Initial Period canals and monuments imply corporate, political groups and hierarchy?
  - Moseley suggests that canals must have been built by corporate groups, and that individual farmers would not have owned their own land
    - rather, that land belonged to the ayllu, and was allocated and re-allocated to individual families
    - as is still the practice in parts of the highlands
      - by ethnographic and ethnohistoric analogy
      - the allyu grants rights to individuals to use certain lands and to irrigate with a certain flow rate of canal water for a certain period of time
      - in order to keep getting these rights, people have to participate in the group's projects
        - such as cleaning the canals
        - or rebuilding the ceremonial center
    - Moseley sees this as giving the group leadership "totalitarian" power
    - that might be overstating things
  - but ethnohistorian Maria Rostworowski and others have documented how relatively independent, small kin groups on the coast managed, and maybe built, canal systems that served multiple groups
    - so we should not jump to conclusions about the scale and power of corporate groups or polities based only on canal systems
- most valleys had several or even numerous canal systems
  - in general, each associated with one ceremonial center
    - although in many cases this is assumed, not proven, since the canals are not always still detectable
  - so it looks like each canal system and ceremonial center served one economic and religious unit, separate from others in the same valley
  - Moseley sees these groups as essentially corporate, with power over members' lives
    - he sees canal building, politics, etc. as organized through the ceremonial centers
  - Rostworowski, Burger, and others see these canal/temple units as associations of smaller, independent groups (probably ayllus/kin groups/villages) that worked together on irrigation and ceremonial projects but were not necessarily "corporate" in other contexts

    - that is, the ceremonial centers were not particularly causes of organization, but were just one of several kinds of results of neighboring groups cooperating on certain tasks
  - these could well be different ways of looking at the very same thing
- pottery production began, maybe for boiling starchy crops
  - pottery had been invented or adopted much earlier in Ecuador and the jungle
  - coastal and highland Peruvians did not adopt ceramics for a long time, maybe due to lack of plentiful fuel for firing
  - But with increasing dependence on starchy food crops, the benefits of cooking in pottery began to outweigh the costs
    - This is a nice story, but the reality was probably more complex
    - since, as I have mentioned before, people in the Supe valley (Caral, etc.) and in my research area in the far south coast Osmore valley committed to agriculture centuries before adopting pottery
  - Rather than adopting the Ecuadorian or jungle pottery traditions, the Peruvians apparently experimented and developed their own, some with influence from the existing traditions
  - pottery remained rare for a long time
    - and fire-cracked rock (boiling stones that would have been used in basketry, gourd, or wooden containers) continued for a long time alongside the early pottery
- textile technology changed from twining to weaving
  - allows much faster, more efficient production of cloth
  - presumably increased demand for cotton and wool, encouraging more farming and herding
- settlement
  - highly variable, regional pottery styles suggest lots of small, closed, self-sufficient groups, possibly sharing ceremonial gatherings
  - total population clearly rose, with many more sites occupied
- much greater elaboration of monumental architecture
  - similar to Late Preceramic but
    - many more monumental sites than before
    - much bigger and more elaborate
    - sites located inland near farmland, rather than on the coast near marine resources
  - continued the tradition of interment and rebuilding
  - appearance of large adobe sculptural friezes, often painted in bright colors, visible to crowds in plazas
  - Moseley suggests that concern with supernatural forces might result from increased dependence on highly variable irrigation water supplies
    - vs. relatively constant food supply from marine resources
  - he also suggests that local groups may have both built their own monuments and contributed towards regional ones
    - which might have been not only bigger and richer, but also more eclectic as a result of the larger, more diverse population they served
  - There is a lot of variation in Initial period ceremonial architecture
    - don't worry about keeping track of the categories used by either Moseley or Burger
    - and don't worry about the developmental stages Moseley mentions
    - but do notice the architectural themes in general

  - Moseley suggests that this variation is partially due to crosscutting sets of ritual ideas (different deities, rites, architectural designs, etc.) from which each group would select, mix, and match in their own centers
- U-shaped mound complexes (Initial period, 2000 - 800 cal BC) (roughly what Moseley calls the Paraiso tradition)
  - About 20 major U-shaped complexes known
    - U-shaped arrangement of central and flanking mounds with interior plaza
    - stairway up the center front, dramatic entrance to top of main mound
    - roughly oriented to open to the northeast
      - but too variable to be an astronomical alignment
      - probably just oriented with opening towards mountains, away from coast
      - but which were they "facing"? With the shaman on the stairs looking towards the mountains, or the people in the plaza looking towards the sea?
    - variable construction methods
    - often emphasizing plastered and painted surfaces
  - much larger than preceramic constructions
  - continued the tradition of carefully interring and preserving walls, stairs, etc. when rebuilding over them
    - one case (Cardal) had over 30 construction episodes, and it was not one of the longer-lived centers
  - Huaca la Florida
    - ~2,100-2,000 cal BC (3 dates)
    - 6.7 million person-days to build the structure, not including leveling the area, plastering, modeling, or painting the outsides (~ 18,350 person-years)
    - And there are others even bigger!
    - Plazas up to 30 ha!
  - Las Haldas
    - ~2,000-1,400 cal BC (7 dates)
    - *shicra* bagged fill
    - note the central stairway
    - we will come back to this site when we look at the end of the Initial period
  - Garagay
    - ~1,600-1,400 cal BC (3 dates)
    - 3.2 million person-days
    - Burger describes the evidence for drug-related rituals there
      - a low relief with a curl coming from its nose…
      - a small figurine (one of two apparently placed as offerings) had spines of the hallucinogenic San Pedro cactus tied to it
      - more of these spines also found in adobes in the fill
    - Also for possible violence
      - an entryway flanked by figures with round shields
  - Cardal
    - late: ~1,350-850 cal BC (26 dates)

  - A smaller U-shaped center, happens to have been well excavated recently by Burger
  - entrance stairway flanked by painted clay frieze of a gigantic mouth with interlocking teeth and canines 1 m long
    - painted cream, yellow, red, and black
  - small habitation areas nearby
  - contemporary with similar centers, one just 1 km away, another 5 km away
    - this close spacing suggests that small groups built and used each center
  - on top of central mound, several burials
    - both male and female
    - presumably important people
    - but limited goods: a few ordinary ceramics; one old man with a necklace of sea lion teeth and earspools from porpoise vertibrae
- Huaca de los Reyes
  - dates from ~2,100-950 cal BC, but it may not have actually been used that long
  - further north on the coast
  - U-shaped complex with colonnades facing three sides of a main rectangular plaza
  - facades had large, modeled clay sculptures of anthropomorphic heads with fangs, toothy feline mouths, etc, painted in green, cream, and black
  - estimated 960 person-years to build (350,400 person-days)
- Generalizations about the coastal Initial period
  - huge monumental sites
    - apparently designed for large audiences in plazas to view rituals performed on stairs, terraces, and doorways of large mounds
    - maybe smaller numbers participating more directly
  - located among irrigation farmers in valleys
    - who also traded with fishers and shellfish gatherers living on the coast
  - no defensible sites, suggesting little warfare or raiding
  - no craft workshops known
    - few or no goods (other than the ceremonial buildings themselves) that were not made at the household level
    - thus little opportunity for individuals to be obviously wealthy
    - or for institutions to fund themselves through wealth finance
  - stratification
    - might be implied by large building projects and rituals involving many people
      - that is, many participants organized by a few leaders, presumably of higher status
    - might be implied by some elite burials (as at Cardal)
      - but not a lot of wealth or status difference indicated other than by their location
    - might be implied by some residences on top of main mound at Cardal
      - but their refuse is like ordinary houses
    - i.e. weak stratification
      - no elite with clearly greater wealth or better material standard of living
    - maybe the monuments were achieved through a cargo system that did not create a permanent elite class?

        - or maybe leadership status was acquired, not hereditary
            - and thus did not allow for accumulation of wealth from one generation to the next
    - no evidence that the centers linked were into a single hierarchy
        - that is, political/economic/ceremonial communities were probably not too big
            - small enough to have several in each valley, one associated with each canal system
        - although some suggest that such large architecture would require large corporate group organization
    - highly varied ceramics from region to region
        - again suggesting small groups with limited interactions
- The Initial period in the Casma valley: an extreme case?
    - well described in the Pozorski and Pozorski article and by Burger
    - the Casma valley is made up of two rivers that join 10 km from the coast
        - they obviously had intimate contact, unlike other, isolated valleys
    - Casma in the Initial Period had an unusual number and size of monuments
        - initially five, then six major centers
    - Sechin Alto (site)
        - one date at 1,720 cal BC, seven in range ~1,550-1,300 cal BC
        - huge
            - Twice the volume of Huaca La Florida
            - 300 m long, 250 m wide (about 975 feet x 810 feet)-- just the main mound!
                - 7.5 ha (1 hectare (ha)=100x100 meters)
                - this one mound would cover the entire SSU main quad and all of Stevenson, Darwin, and Salazar halls
            - 44 m high (143 feet) at the highest point
                - like a 9-story building
            - plus the long plaza in front, lower flanking mounds, etc.
                - four successive rectangular plazas
                - 3 with sunken circular courts
                - total monument complex is 1.4 kilometers long (almost a mile)
            - over 13 million person-days to build
                - that is 36,000 person-years (without weekends off!)
        - final form is the result of about 1,000 years of building and rebuilding
            - originally adobe, with adobe friezes
            - stone facing later
    - Cerro Sechin (site)
        - only about 2 km from Sechin Alto
        - much smaller than Sechin Alto
        - not a mound or U-shaped structure, but a room complex at the foot of a hill
            - originally adobe
            - entry was flanked by painted large black felines with orange paws and white claws on a yellow ground
            - later, it had a façade with painted and incised murals
                - upside-down human with eyes closed and blood (?) flowing from skull

  - later yet, bottom tier decorated with a pair of huge fish
- around 1520 cal BC, this complex was covered by a reconstruction episode
  - that turned the complex into a low platform mound with three steps
  - with a decorated stone retaining wall supporting the lowest step
  - with a gap in front (containing a stairway up the front?)
  - (this date differs from Moseley's)
- this outer retaining wall was covered in relief carvings
  - granite came from the hill behind the mound
  - Burger and others see the sculptures as two columns of warriors approaching each other through the remains of their victims
  - as though coming out the back door, going around, and meeting at the front staircase
  - each "column" headed by a "banner"
  - all the figures are naturalistic humans, no animals or supernatural features
- What does the wall mean?
  - “Medical school” (not very likely)
  - Warfare?
    - residential sites were not defensible at this time
      - sites were on flat land near irrigable areas, not on hilltops or ridges
      - they don't have defensive walls
    - and no other evidence of significant warfare
      - like lots of burials with traumatic injuries
      - or lots of weapons in burials or other contexts
    - Burger sees the wall as indicating small-scale raiding and violence
      - while large-scale organized warfare does not appear until later
      - along with defensible, fortified sites
      - My cautions on this:
        - the sculptured scene does not look like a "small-scale raid" to me!
        - it shows a large number of victims
        - and warriors with standardized, formal regalia
        - if raids like this really happened with any frequency, surely people would defend themselves by moving to hilltops or slopes, building walls, etc.
    - maybe warfare was real but rare?
    - or even so rare as to be a historical to mythical memory?
    - Commemorates a single, specific real or mythical event?
    - Burger also suggests that it might refer to a historico-mythical event, rather than a real one commemorated by the wall like a war monument
      - because the mound was built and used with other, less violent, more supernaturual themes for many generations
      - since the "war" scene was only added in the last rebuilding episode, Burger suggests that it was not the primary reason for the mound
      - hmm… certainly it wasn't at first, but that is a lot of unprecedented sculpture for something that was not important…

- or was it some sort of ritualized conflict different from our concept of warfare, such that defenses around villages were not needed?
  - the Andean concept of *tinkuy*
    - scheduled, organized fight between allyus or other groups
    - usually at boundaries
      - especially at places called tinku:
      - coming-together places like river confluences
    - often resulting in real injuries or deaths
    - but contained and finite
- Sechin Bajo (site)
  - another smaller center, not well known yet
- Pampa de las Llamas-Moxeke (~1,900 - 1,500 cal BC) (site)
  - Another huge complex, totaling about 220 ha!
    - over twice the area of the entire SSU campus
    - a big pampa (more or less flat area) with buildings, plazas, and roads
    - Two very different mounds facing each other across a huge plaza
      - Moxeke and Huaca A
    - plus smaller mounds and foundations of perishable buildings, probably residences
      - also aligned with the mounds and plaza
  - Moxeke (mound at Pampa de las Llamas-Moxeke)
    - 30 m high mound, 160 x 170 meters
      - about 1/3 the size of Sechin Alto
    - also originally conical adobes, later stone faced
    - stepped pyramid/platform mound with rounded corners
    - front had huge niches containing gigantic adobe sculptures on the front, 10 meters above plaza level
      - sculptures originally around 3 m tall
        - only the lower 2 m survive
      - painted in bright colors: red, blue, white, black
      - show what Burger calls elaborately dressed figures in tunic, short skirt, and mantle
        - to me they look a lot like the victims cut in half at Cerro Sechín…
      - Burger sees one as holding bicephalic (two-headed) snakes in upraised arms
        - but these could be single-headed
        - could represent hair, blood, etc. if same conventions were used as in later periods
      - flat space between niches decorated with incised and painted geometric designs
        - pink, blue, white
    - note similarity to Sechin Bajo iconography
    - Moxeke was presumably the setting for ceremonies to be viewed by people in the plaza, which could hold a very large crowd
  - Pampa de las Llamas (the main part of Pampa de las Llamas-Moxeke)
    - Huaca "A" (mound at Pampa de las Llamas-Moxeke)
      - very different from Moxeke or other mounds
      - similar in size to Moxeke (136 x 119 meters)

- but the platform is much lower, about 9 m (about 30 feet) high
  - more like a high platform with lots of space for rooms on top
- large amount of rubble suggests very high walls atop the platform (5m - 16 feet)
- originally painted white, with huge feline (cat) paintings around entrance
- lots of restrictions to access
  - main log gate, a serious barrier
  - sliding pole barriers, could only indicate that a doorway was closed (easy to duck under)
  - suggests overseers or respect for authority
- storage rooms?
  - pollen from niches suggests cotton, beans, potatoes, peanuts
  - rodent bones also suggest storage
- administrative rooms?
  - stamp and roller seals- for administration of storage, as in Mesopotamia?
  - but no explicit indication of an accounting system, numerical notation, or writing
- or were they ritual rooms, related to the Kotosh or Supe traditions?
  - unlike Kotosh tradition, no hearths, which seem crucial
  - unlike Supe tradition, many similar, repeating rooms with regular layout
  - if Huaca A was for ritual, it was pretty different from any other known examples
- smaller platform mounds along the sides of the main plaza
  - with rooms on top and behind them, built of plastered, painted fieldstone like the walls on Huaca A
  - the back rooms of some of these mounds were residences
- large areas of irregular, cane-walled houses flanking the mounds and plaza
  - are these commoner housing, compared to higher-status housing at the small mounds around the plaza?
  - we'll look at that next time…
- maybe a total of 2,500 people lived at Pampa de las Llamas-Moxeke

- Taukachi-Konkan (site)
  - ~1,850-1,200 cal BC
  - Another big complex around a central plaza, something like Pampa de las Llamas-Moxeke
  - but with a very large mound only at one end
  - this mound, the Mound of the Columns, has
    - a front terrace comprising a single large walled court
    - a higher middle terrace with rectangular rooms like those of Huaca A and a smaller plaza with verandas or roofs held up by many columns
      - made of bundles of cane and/or branches tied with rope and covered with mud plaster
      - some of the rectangular rooms have niches that start lower in the walls - maybe seats for meetings or rituals?
    - a still higher back terrace with large rectangular rooms and an area of irregular rooms that could be residential, but no evidence of cooking

- behind the mound is an area of irregular architecture with many hearths, a stone-lined cooking pit with lots of burned stones and fish bone
  - presumably the kitchen area to serve the high-status people in the rooms atop the mound
  - linked to the "residential" area on top of the mound by a narrow, covered staircase up the side of the mound, hidden behind a short cross wall
  - presumably the servants' entrance
- Pozorski and Pozorski interpret this building as the residence and administrative or ceremonial court of an extremely high-status household
- The Pozorskis see these sites as comprising a single political system that spanned the whole Casma drainage and looked a lot like a state
- Others, such as Burger, think the centers were independent and served relatively small, not very hierarchical groups, each with slightly different variants of ceremonial architecture
- we will look at this debate about the complexity of Initial Period social organization in the Casma valley more next time

- Meanwhile, in the northern highlands
  - increasing dependence on rainfall agriculture and short canal irrigation
    - very patchy, with some groups farming and keeping herds while nearby groups continued mostly hunting and foraging for many centuries
  - the Kotosh tradition, which had started in the Late Preceramic, continued in the northern highlands for the first 1000 years or so of the Initial period
  - Late in the Initial Period, northern highland people stopped building Kotosh-style rectangular ceremonial rooms, and started building mounds with central staircases, often on the same sites
    - Burger calls the Kotosh Religious tradition a "little tradition" that goes on at a family, popular level, while a "great tradition" of public ceremony developed at the limited number of sites with larger mounds and buildings
    - although these were far smaller than the huge Initial period centers on the coast
  - one example: Layzón
    - one of a pair of mounds located opposite each other
    - on opposite sides of a ravine in the western slope of the Cajamarca basin
      - that is, east of the continental divide, on the western edge of an intermontaine valley
    - six-tiered stepped platform
      - volcanic tuff blocks and shaped bedrock
      - stairway in center
      - elaborate curvilinear carvings on the walls
      - internal stone-lined drainage canals
    - a “spring” appears on the slope above the site
      - feeds a canal that splits in two to pass right alongside each of the two mounds, on each side of the ravine, then rejoins to run down to the farmland below
      - carrying a trivially small amount of water
      - clearly some sort of supernatural thinking related to irrigation water
  - Cumbemayo canal

  - the source of Layzón's "spring"
  - takes water from the Pacific drainage on the western side of the mountain ridge
    - and moves it across the continental divide to the Atlantic drainage
  - first 850 m cut into the bedrock, in unnecessary straight, curved, and zigzag patterns
  - carvings on the rock of the canal walls match the style of those on Layzón's facade
  - the canal goes underground and crosses under the ridge to reappear as the "spring" above Layzon
  - shorter canals could have gotten water to all the same points
  - there must be some meaning to this, not just delivering water

- in the southern highlands
  - a completely different set of cultural and religious ideas
    - neither the Kotosh tradition nor the coastal traditions seem to have reached here except in the most general ways, like the use of sunken courts
    - still not well understood
  - economies based on camelid herding, rainfall agriculture, probably some limited canal irrigation
  - especially along the shores of Lake Titicaca, which provided naturally-watered lakeshore farmland and fishing
  - many modest villages
  - many had their own modest ceremonial sites; Chiripa is an example
    - none begin to approach the scale of the coastal centers
    - the biggest may approach the range of the larger northern highlands mounds
  - typical pattern
    - a mound or leveled hillside terrace with a central sunken rectangular or trapezoidal court
      - the mound and court walls may be stone faced
      - typically with a standing stone (stela) in the center
    - in the more elaborate examples, surrounded by separate but closely spaced rectangular houses or buildings
      - unusually substantial construction, unlike regular houses
      - with double-jamb doorways
      - at Chiripa, the doorways have slots in the thick walls suggesting sliding doors (!)
      - generally have interior niches, small rooms or bins probably for storage of something special
    - at Chiripa, signs of regular, repeated burning and refurbishing of these rooms, apparently intentionally
  - We will return to how this tradition developed around Lake Titicaca later…