

The Andes: The Casma valley in the Initial Period

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- Initial Period 2000-800 BC
 - so called because it was the time of the first (initial) use of ceramics
 - these dates fall around the end of the latest periods we looked at in Mesopotamia and Egypt (and the Indus region, had we gotten there) but are roughly contemporary with the Lungshan Horizon through the Shang Dynasty

- in many valleys, subsistence shifted from mostly marine resources to a mix with more irrigated agriculture, as people moved further up into the coastal segments of the river valleys, away from the shore
 - that is, some people moved further inland to farm
 - this split groups into coastal fishers and inland farmers, a division that continued into historical times
 - this process had already happened in the Supe valley in the late Preceramic period, with Caral located well inland
 - but so far it looks like this trend did not become widespread until the Initial period
 - root crops (potatoes, oca, ulluco, manioc [*yuca*] etc.) plus beans, squash, 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 people shifted to depend more on irrigated crop production
 - population growth required more food than fishing could produce?
 - but the populations were still low relative to carrying capacity estimates
 - no increase in stress indicated by bones
 - no shift to less-preferred foods
 - maybe manioc, beans, etc. were more dependable than marine foods, due to the effects of occasional disastrous El Niño events?
 - adding more farming to the mix might make food supply more dependable, since depending on diverse food sources is always more reliable than depending on just one source
 - but farming often suffers just as badly as fishing in El Niño years -- often worse
 - also, why would the sea suddenly seem unreliable to people in many different valleys at the same time?

- another suggestion, from Richard Burger:
 - weak, incipient leaders may have developed in the Late Archaic through coordination of monument construction and ritual activities
 - they would have little income, because fishers and shellfish gatherers are hard to control or extract resources from
 - these people might have used their positions to get canals built

- creating productive farmland that would belong to the group, institution, etc. that the leader represented
- part of the crops could be claimed by the institution that mobilized canal construction, allocated water, resolved disputes about water, land, and labor, etc.
- giving it a source of income (staple finance)
- and giving the leader(s) more resources to use for additional projects, influencing people, living well, etc.
- this is just a guess, though. How could it be checked?
- climate changed?
 - no evidence for climate change archaeological remains themselves (yet?)
 - I did some research that shows that the far south coast, culturally very removed from the area of the Initial period, also made a similar shift towards inland farming around the same time
 - this is unlikely to be a coincidence
 - the shift to more inland agriculture corresponds roughly with ice core climate records and other information suggesting that there was a major global dry period for several centuries around 2000 BC.
 - this may have somehow encouraged the adoption of inland agriculture
 - but why would a drought encourage people to farm more?
 - maybe because wild or naturally irrigated crops were less productive than before?
 - maybe land close to coastal fishing villages became less productive, driving people into and up the valleys in search of plant foods?
- people began making ceramic vessels, maybe for boiling starchy crops
- weaving replaced more laborious hand-knotting methods of making cloth
 - allowed larger production of cloth
 - this presumably accompanied greater production of cotton from farming and wool from camelid herding
- But still little or no obvious craft specialization
 - most ceramics and cloth were probably made by many people, maybe most families
- Initial period social organization
 - highly variable, regional pottery styles in different parts of many coastal valleys suggest lots of small, self-sufficient, relatively isolated groups
 - many of the larger valleys had several ceremonial centers at this time, each center apparently associated with a small, local canal system
 - presumably, each center served one social group
 - with the larger valleys accommodating several such groups
 - Moseley sees the groups as having formed around and because of the ceremonial centers
 - that is, people came together in order to build and use the ceremonial centers
 - and this group identity and organization allowed them to coordinate canal construction

- Burger sees the centers as products of villages or kin groups that lived in the same area and were interacting anyway
 - that is, local groups and alliances between them existed just because of where they lived and who was nearby
 - these groups built both the ceremonial centers and the canals
 - so the centers simply reflect larger social groups, rather than causing them
- in any case, the canal systems were still of a scale that one or a few villages could manage
 - no state organization or large regional leadership is implied by them

- much greater elaboration of monumental architecture
 - similar in concept to the Late Archaic, but
 - many more ceremonial sites
 - generally bigger and more elaborate constructions, some very much bigger
 - continued the practice of repeated interment and rebuilding
 - structures started to feature large adobe friezes, often painted in bright colors, visible to crowds in plazas
 - Burger divides these Initial period centers into several different traditions, but we will just lump them together here

- U-shaped mound complexes (Initial period, 2000 - 800 BC)
 - About 20 major U-shaped complexes known
 - U-shaped arrangement of central and flanking mounds defining a plaza
 - stairway up the center front, forming a dramatic entrance to the top of the main mound
 - much larger than Late Archaic constructions
 - Repeatedly interred and rebuilt
 - Huaca la Florida
 - ~2,100-2,000 BC
 - 6.7 million person-days (18,400 person-years), not including leveling the area first, plastering, modeling, and painting the outsides
 - And there are others even larger!
 - Plazas up to 30 ha! (about a third of the entire SSU campus)
- Las Haldas
 - ~2,000-1,400 BC
 - another large (8 hectare) Initial period U-shaped mound complex
- Garagay
 - ~1,600-1,400 BC
 - 3.2 million person-days (about 8,800 person-years)
 - evidence of ritual use of hallucinogens
 - painted relief of shaman (?) using a hallucinogen?
 - 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 (the name is similar, but this is NOT the same site as Caral)
 - late: ~1,350-850 BC
 - A smaller U-shaped center, notable mostly because it happens to have been well excavated recently (by Richard 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
 - suggests that small groups built and used them
 - a few residences were on top of main mound at Cardal, presumably for elites - may be very late in the use of the site
 - but their refuse is like that in ordinary houses
 - on top of central mound, several burials
 - both male and female
 - presumably important people
 - but grave goods were limited: a few ordinary ceramics; one old man had a necklace of sea lion teeth and earspools made from porpoise vertebrae
 - that is, the most elite burials we have found associated with these huge mounds show few trappings of high status
- Huaca de los Reyes
 - further north on the coast
 - dates range from 2100 to 950 BC, but it may not have actually been used that long
 - 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) (seems low...)
- Generalizations about the Initial period coastal U-shaped mound tradition
 - 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
 - implied by large building projects and rituals involving many people?
 - some elite burials (as at Cardal)

- but not a lot of wealth or status difference implied by them
- some residences on top of main mound at Cardal
 - but their refuse is like ordinary houses
- i.e. weak stratification
- maybe a cargo system?
- or acquired, not hereditary, status, so that wealth did not accumulate over generations in certain families?
- highly varied ceramics from region to region
 - suggesting small groups with limited interactions
- no signs of settlements with over a few thousand people

- Initial period in the Casma valley: an extreme case
 - well described and discussed in the excellent, readable article by the Pozorskis
 - Casma in the Initial Period had an unusual number and size of monuments
 - initially five, then six major centers
 - Sechín Alto (a site)
 - oldest date is 1720 BC, mostly from 1,550-1,300 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 Sechín (a site)
 - only about 2 km from Sechin Alto
 - much smaller than Sechín Alto
 - not a mound or U-shaped structure, but a room complex at the foot of a hill
 - originally adobe, with large cats and fish modeled and painted on the front at different times
 - stone sculpture wall built around 1520 BC, after numerous earlier rebuildings and expansions
 - What does the wall mean?

- “Medical school” (not very likely)
- Warfare?
 - residential sites were not defensible at this time
 - sites are 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
 - maybe warfare was real but rare?
 - or even so rare as to be a historical to mythical memory?
 - or it was some sort of ritualized conflict different from our concept of warfare, such that defenses were not appropriate?
 - the Andean concept of *tinku*, documented historically and by recent ethnographers, now controlled by the Peruvian government
 - scheduled, organized fight between villages or descent groups
 - often resulting in real injuries or deaths
 - intended to shed blood as an offering to the earth
- Pampa de las Llamas / Moxeke (1900 - 1500 BC) (another Casma valley site)
 - about 220 ha
 - over twice the area of the entire SSU campus!
 - a complex with two big mounds connected by plazas, and a lot of smaller ceremonial and residential buildings
 - Moxeke main mound at Pampa de las Llamas-Moxeke
 - stepped pyramid/platform mound with rounded corners
 - 160 x 170 m at base (a bit over a third the area of the Sechín Alto main mound)
 - would cover most of the main SSU quad and Salazar hall
 - 30 m high (98 feet)
 - 10 m (33 feet) up on the sides were huge sculptures in niches, clearly for viewing from the ground
 - painted in red, blue, white, black
 - front had huge niches occupied by sculptural figures
 - presumably the setting for ceremonies meant to be appreciated by a sizable crowd located in the plaza
 - Huaca A (a mound at Pampa de las Llamas-Moxeke)
 - very different from Moxeke main mound
 - broad platform with a complex of rooms on top with very high walls (4-7 m, roughly 16 feet), many with niches
 - 136 m x 119 m (a little smaller than Moxeke main mound)
 - 9 m - 15 m high (29 to 49 feet)
 - tall, but much lower than main mound
 - more like a high, broad platform covered with high-walled rooms
 - mostly built of fieldstones set in mortar
 - originally plastered and painted white

- with huge feline (cat) paintings around both entrances
- no evidence that people lived in Huaca A
 - no hearths, no food garbage
- lots of restrictions to access
 - main log gate, a serious barrier
 - many interior doorways had sliding pole barriers that could only indicate that a doorway was closed (easy to duck under)
 - suggests overseers or respect for authority
- maybe the rooms were for storage?
 - very little evidence of what would have been stored there
 - not surprising; if it had any value, it would have been removed
 - pollen from niches suggests cotton, beans, potatoes, peanuts
 - but it could have blown in on the wind
 - pollen comes from flowers; it is not typically plentiful on the parts of plants that would be stored, like peanuts or potatoes
 - lots of rodent bones also suggest storage
- maybe they were administrative rooms?
- maybe they were for ritual, like some highland Late Archaic sites?
 - but there are no hearths in the rooms
 - the many, regular, repetitive rooms are not like the structures at Aspero or Caral, nor like the Kotosh tradition, in which each room has independent access from outside
 - if Huaca A is for ritual, it must have been fairly different from earlier traditions
- Numerous platforms along the edges of the huge plaza between Huaca A and Moxeke main mound
 - some had high-status residences behind them
 - built like the Huaca A rooms (plastered, painted rubble-filled walls)
 - but with hearths and domestic refuse
 - and with storerooms that contained
 - large jars
 - niches
 - storage pits
 - these were presumably residences of the elite "bureaucrats" working at the attached small platform mound
 - pottery figurines
 - stone mortars and pestles for red pigment
 - wall and body paint?
 - stamp and cylinder seals
 - 2 stamp seals have red pigment, suggesting stamping on cloth or skin
 - apparently *not* used like Old World seals; no clay sealings found
 - all this suggests high status residents? or specialized ritual activities?
- but the garbage in these residences is similar to the plainer ones we will look at
 - so do the architectural differences and special artifacts indicate a status difference, or not?

- possibly low-status housing a little further away from Huaca A and the plaza
 - perishable buildings, with probably cane walls set along stone footings
 - less regular plans
 - hearths smaller
 - not connected to or aligned with public architecture
 - yet the domestic refuse is similar to that in the better-built residences
- See Pozorski and Pozorski (an excellent article) for a different point of view and more on 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
 - 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
- generalities about the Initial period Casma valley
 - no defensible sites
 - but warlike, violent iconography on both Cerro Sechin and Moxeke
 - no craft workshops known, nor fine goods that would imply craft specialists
 - except the ceremonial buildings themselves, with sculptures and paintings on the walls
 - no really large concentrations of population
 - Pampa de las Llamas probably had no more than 2500 people
 - no large-scale irrigation works
 - still no impressive elite burials
 - evidence of some people living better than others is ambiguous, as discussed above
 - But--
 - huge monumental architecture
 - storage (at least at Pampa de las Llamas) (maybe!)
 - administration (at Pampa de las Llamas) (maybe!)
 - possibly higher-status residences associated with the fancy buildings
- so is it civilization yet or not?
 - consider Burger's "state-free" achievement definition

- the Pozorskis use a more standard state definition
- The Initial Period State Debate
 - Burger's view of Casma sociopolitical organization
 - doubts that the Initial Period Casma sites were united in a state organization
 - does not see evidence of expected state features:
 - no standardized government architecture (is that true?)
 - no artifacts emblematic of state bureaucracy
 - little evidence of occupational specialization, other than fishers vs. farmers
 - few artifacts suggestive of specialist craft producers
 - no workshop areas known
 - Burger argues that the variation in residential architecture is *not* evidence of two socioeconomic classes
 - because the garbage is similar, i.e. the food and goods used by the people living in both areas was similar, not different
 - no clearly high-status burials
 - one burial from a "high status" area and one burial from a "low status" area
 - both were in simple sub-floor pits with only broken pottery as offerings
 - this sample is somewhat limited...
 - Burger suggests that high status may have been linked to leadership in ritual and construction work
 - but was not translated into class differences
 - and thus not evidence of a state
 - prefers to see the Casma valley as a patchwork of independent but similar "pre-state polities", each with its own territory, canal system, and monumental site
 - other doubts about the complexity of the Initial Period societies in the Casma valley
 - the population would have been pretty modest in size, both at any given site (no clear cities) and in the whole valley system (not a very large regional population)
 - the evidence for Huaca A being a storage structure is not strong; it might have been a ritual building, without the economic functions the Pozorskis ascribe to it
 - no evidence of a writing or recordkeeping system
 - nor of a seal system for tracking goods
 - the evidence for considering all the Casma valley sites to be part of a single hierarchical system is weak
 - they could have been a bunch of relatively simple, independent groups
 - some bigger than others
 - the large buildings might differ not because they had different functions in a single system, but because each group had different ideas about ritual
 - if there was no state in the Casma valley, home of the most complex and impressive sites of the Initial Period, presumably there was none anywhere in the Andes in the Initial Period
 - The Pozorskis' alternative view
 - They see a "civilization" in the Casma valley at 2000 - 1500 BC
 - They note the potential for state administration inherent in irrigation agriculture

- they see all the sites (Pampa de las Llamas/Moxeke, Cerro Sechin, and others) as being part of a single political-religious system
- they consider the differences in size and details of the sites to mean that they had different functions
 - implying many different specialized roles for people
 - probably with differing degrees of status, power, wealth
 - and complex political and economic interactions between the different centers
 - all of which played different roles necessary for the functioning of a valley-wide state
- partially because several sites include an artistic motif showing a cluster of three or four squares, as on the hats of the warriors at Cerro Sechin
 - they think this could be a symbol of a ruling elite, ethnicity, or government that was recognized throughout the valley, at all sites
- Pampa de las Llamas / Moxeke: they estimate that the residential sectors of held 2500 people of various economic statuses
 - they see Huaca A as a managed warehouse
 - full of access control devices, appropriate for a warehouse
 - lots of repetitious square rooms that could be for storage
 - no food garbage or hearths to suggest people living there
 - i.e. similar to Mesopotamian temple storage and redistribution complexes
 - they think that the smaller mounds were offices for managing flow of these goods
 - Pozorskis see storage features in the attached residences as being for personal wealth of occupants
 - and thus evidence of an upper class
 - they also note seals and traces of pigments in these buildings that might have been used to mark higher status
 - these relatively few high-status residences would contrast to the larger area of low-status cane-walled homes further from the monuments and plaza
 - Moxeke would be a setting for ritual performances to be watched by crowds in the plaza
- Cerro Sechin: a different kind of ceremonial center that people would get closer to, and that involved themes of human violence, rather than supernaturals
- Sechin Alto: ritual setting comparable to Moxeke, but bigger and different in details
- Taukachi-Konkan: the residence, storehouses, chapels, meeting rooms, and offices of very high-status leading family, like the palace of a king
 - big columned, roofed patio spaces for large group events
 - high-niched rooms could be storerooms
 - low-niched rooms could be meeting rooms; important people would sit in the niches
 - irregular rear rooms could be residences for very high status people, maybe rulers of the whole valley system
 - located at the highest part of the mound, so presumably high status
 - hidden side stairway entrance from area with signs of food preparation - the court's kitchen?
- Which is right? People still argue, but the Pozorskis are in the minority
- On the other hand, as evidence mounts for social complexity even earlier in the Supe valley (Caral), the Pozorskis' claims about Casma seem less radical than they used to...