G4210: Rise of Andean Civilization

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The Initial Period

Overview of changes

- 1. Initial Period derives its name from appearance of simple ceramic vessels
 - a. rapidly came into use for cooking and storage
 - 1. in association with staple agriculture
 - b. pots: indisputably useful chronological markers
 - 1. but importance of transition from Preceramic lies more in the nature of society
 - 2. than in advances in craft technology
- 2. sociopolitical development: focus of lecture today
 - a. Q: were societies ranked, stratified, or state-level by the end of the Preceramic?
 - 1. A: probably ranked
 - b. Initial Period
 - 1. at least complex chiefdom
 - 2. state not likely
 - a. scale of integration less extensive than would be expected with a state
 - b. e.g., possibly multiple polities within valleys
- 3. several elements important in Initial Period: already present in Late Preceramic at least in an incipient form
 - a. economics
 - 1. agriculture already integrated into subsistence system
 - a. wide variety of cultigens in use
 - b. small-scale irrigation
 - 2. fine craft objects already manufactured
 - 3. organizational principles present to coordinate large-scale public labor
 - b. ideology
 - 1. large public monuments constructed along coast and in highland Peru
 - 2. some shared concepts of layout
 - c. social differentiation
 - 1. some degree of ranking represented in the mortuary record
- 4. Initial Period: major changes
 - a. shift to heavy reliance on irrigation agriculture
 - 1. reflected in settlement shift inland

- b. introduction of ceramics
- c. woven textiles
- d. change in complexity and scale of social organization
- e. widespread shared ideology
 - 1. along 500⁺ km of coastline
- 5. lines of evidence
 - a. settlement diversification: still shaky area
 - 1. ceremonial centers: focus of most research
 - 2. population centers
 - 3. small villages
 - b. monumental architecture: best evidence
 - 1. enormous labor investment
 - 2. differential distribution of residential units with respect to fancy architecture
 - c. burial treatments: few data
 - 1. differential access to certain kinds of material goods
 - a. e.g., shells in burials
 - d. also little evidence yet for things like differential diets
 - 1. or control of manufacture or consumption of other critical resources
 - e. economic specialization
 - 1. only modest evidence
- 6. major developments in three areas
 - a. central/north coast
 - 1. population relocated up to 35 km inland
 - 2. erected some of the most spectacular ceremonial complexes in the Andes
 - 3. similarities in design
 - a. suggest that builders shared basic cosmological notions
 - b. even if nature of ideas remains elusive
 - b. western valleys
 - 1. continuation and expansion of occupations from Late Preceramic
 - 2. e.g., Tablachaca Valley: La Galgada
 - 3. Huaricoto
 - c. intermontane valleys and eastern slopes
 - 1. also continuity from Late Preceramic
 - 2. esp. in Huacaloma and Cajamarca regions
- 7. disagreements over complexity of societies involved
 - a. Moseley: coercive social authority was present
 - 1. for construction of canals or pyramids with dedicatory human burials

- 2. even in late Preceramic
- b. Burger: many early monuments arose from addition of multiple layers
 - 1. each required only modest labor investment
 - 2. some valleys contained several coeval mounds built over centuries
 - 3. _ small, fairly simple societies could have erected many of the mounds
 - a. by means of intermittent collaborative efforts
- c. alternative view: variety of social forms present
 - 1. earliest canal systems at least could have been organized communally
 - 2. erection of ceremonial architecture may reveal <u>lack</u> of coercive power on the part of elevated social groups
 - a. needed to rely on religious sanction to maintain status
 - 3. military iconography implies significant role for coercion in forming larger polities
 - 4. i.e., different sources of power (economic, ideological/political, military) operated differently in differing situations

Subsistence changes

- 1. major shift to agricultural subsistence base
 - a. new settlements lay where the topography made construction of irrigation intake canals convenient
 - b. some maritime-oriented sites were still occupied
 - 1. e.g., Tortugas (Casma)
 - c. move inland signaled commitment to agriculture
 - d. midden analyses
 - 1. wider range and higher proportion of cultivars
 - 2. industrial plants: cotton, gourds
 - 3. foods: squash, beans, maize, achira, peppers, peanuts, pacai, lúcuma, avocado, and guava
 - 4. recall: crops not introduced as a package
 - a. adopted gradually at differing rates in differing areas
 - b. e.g., maize did not make a significant appearance in the Casma Valley until the advent of the Early Horizon
 - 1. i.e., at end of second millennium BC
- 2. shift to agriculture improved productivity per unit of land
 - a. supported larger populations
 - b. gains may have been partially offset
 - 1. lowered return on labor investment

- 2. shortened life spans
- 3. increasing malnutrition and communicable disease
- c. hints of problems appeared centuries earlier: in some settled foraging villages
 - 1. became especially noticeable with shift to staple crop agriculture
 - a. esp. osteoporosis
 - 2. likely populations were unaware of drawbacks
 - a. at least until no reversal could be attempted
 - 3. but La Paloma shows that foraging was not necessarily inimical to health of populations
- d. societies were thus larger
 - 1. not without cost
- 3. some continuity in coastal communities: e.g., Las Haldas
 - a. no freshwater source nearby
 - 1. despite reports of a spring
 - b. abundant seafood remains: proximate to ocean
 - 1. indicates subsistence based on intensive exploitation of marine resources
 - c. marine-related artifacts: shellfish hook, metal hook (late phase), woven fishnets, weights
 - d. other artifacts
 - 1. lithics: no points, only crude percussion tools
 - 2. wooden implements of unidentifiable function
 - 3. gourd vessels
 - 4. various ceramic vessels
 - e. cultigens
 - 1. quantity is small, but diverse
 - a. corn, cotton, avocado, lúcuma, common bean, squash, gourd
 - 2. corn only found in Late basurales: only kernels
 - 3. premise: cultigens were grown in the Casma Valley
 - a. probably traded in for marine products
 - b. closest inland site in Casma is Chankillo
 - 1. 20 km away: at least 5 hr walk
- 4. overall Initial Period subsistence pattern
 - a. diversification
 - b. rapid elaboration of irrigation agricultural economy
 - c. localized exchange of foodstuffs

Settlement Organization

Peruvian coast

- 1. still fairly poorly defined
 - a. sites with ceremonial complexes
 - 1. often contain discrete areas of organized residential architecture
 - b. but much the populace lived in smaller villages
 - 1. or was dispersed among the farmlands
- 2. population estimates: still conjectural
 - a. largest settlements may have housed a few thousand people
- 3. Santa Valley: Wilson
 - a. Las Salinas: Cerro Prieto/Preceramic
 - 1. 36 sites
 - 2. almost all habitation: <1 ha
 - 3. mostly shell middens along the coastline
 - b. total population estimate: 1000, assuming contemporaneity of all sites
 - 1. 27 persons / site
 - 2. about 60% of population along the coast

Ceremonial Architecture

- 1. <u>Late Preceramic</u>: largest known concentration of early settlement with corporate construction projects lies on coast between Rimac and Chicama Valleys
 - a. date to Cotton Preceramic: 2500-1800 BC
 - b. complexes do not appear south of Mala or north of Supe
- 2. Initial Period
 - a. many sites contained monumental architecture
 - 1. laid out in U-shape
 - 2. open end roughly toward east or upstream
 - 3. large pyramids formed the base of U
 - 4. long mounded arms enclosed open plazas
 - a. often contained sunken circular pits
 - 5. iconographic depiction on mounds
 - b. 45 sites with this layout: 27 with pits

- 1. recorded between Mala and Moche Valleys
- c. El Paraiso: layout may have anticipated these sites
 - 1. Initial Period complexes dwarfed their antecedents
- 3. coastal Initial Period examples
 - a. Jequetepeque: Limoncarro
 - b. Nepeña: Cerro Blanco, Punkurí
 - c. Rimac: Garagay
 - d. Lurin: Cardal
 - e. Casma: Sechín Alto, Sechín Bajo, Taukachi-Konkan, Cerro Sechín, Pampa de las Llamas-Moxeke, Las Tortugas, Las Haldas

Eastern slopes

- 1. highland societies: do not seem to have kept pace with coastal developments
 - a. main late Preceramic centers
 - 1. often enlarged and elaborated
 - 2. no constructions on the scale of major coastal settlements undertaken
 - b. e.g., Kotosh, La Galgada
- 2. La Galgada area: Bueno and Grieder
 - a. 11 Preceramic settlements in valley
 - b. all in area where valley widens: offers agricultural possibilities
 - 1. 10-km long strip
 - c. many occupied into Initial Period
 - d. population estimates not provided
 - e. site refurbished numerous times
 - 1. shift from asymmetric architectural construction
 - 2. to axial symmetry: rectangular structure at center
 - f. spectacular burials
 - 1. burials placed in former ritual chambers
 - 2. 3-5 bodies placed in flexed or extended positions
 - 3. accompaniments
 - a. fancy twined textiles: bird, snake or geometrical designs
 - b. shell pendants and bone hairpins: common
 - c. beads of turquoise-like stone
- 3. Kotosh: 2000 BC
 - a. several moderate-sized courts built by group labor

- 1. enclosures built and used successively
- b. niches ornamented the interiors of plastered masonry walls
 - 1. friezes depicting crossed human forearms on one wall
- c. structures were not domestic nor residential
 - 1. specific kinds of behaviors pursued are not clear
 - 2. nor is the nature of the authority that commissioned their construction
- 4. Layzon: Cajamarca Valley
 - a. complex dating from Late Preceramic through Initial Period into Early Horizon
 - b. Initial Period occupations similar to those of other coastal and highland sites of the same period
 - 1. i.e., building groups with interior hearths and canal systems

Exemplary major pyramid sites: Initial Period

- 1. Casma Valley: home to greatest concentration of monumental architecture of era
 - a. major sites
 - 1. Las Haldas
 - 2. Pampa de la Llamas-Moxeke
 - 3. Sechín Alto
 - 4. Cerro Sechín
 - 5. Huerequeque
 - 6. Pallka
 - 7. Taukachi-Konkan
- 2. Las Haldas: Seichi Izumi
 - a. long occupational continuity from about 2000+ BC
 - 1. centered around temple structures
 - 2. during latter stages of Preceramic
 - a. i.e., during Kotosh Mito phase
 - b. archaeological remains: cover an intermittent area of 2 km²
 - 1. high quantity of marine products
 - 2. overlooks sandy and rocky littorals
 - 3. lots of mounded basurales
 - 4. apparently not the result of contemporaneous construction
 - c. basic plan
 - 1. central mound
 - 2. 2 long arms extending up valley: i.e., toward the east
 - d. temple complex is large-scale construction: 60m _ 600m

- 1. role of sunken circular court unclear
- 2. some adult male burials present
- e. Early phase basural architecture: generally small
 - 1. overall plan and relationship to temple construction remains largely unknown
- f. single construction episode in the Middle phase?: remains questionable
 - 1. series of partial expansions during the phase can be recognized
 - 2. construction materials: stone and mud
 - 3. wall stones: quarried at two locations
 - a. on the south side of the natural outcrop on which Terraces I-III were built
 - b. near seashore
- g. construction techniques
 - 1. retaining walls: loosely netted totora sacks filled with crushed stones used as backing for enlarged sections of Terrace III
 - 2. collapse of a single section of wall support: suggests a single event
 - a. followed by a long-term accumulation of sand on top
 - b. maybe a torrential rain
 - 3. some masonry walls of Early phase: 1 min height
 - 4. most stone walls of Late phase: no more than 1-2 courses

2. Pampa de las Llamas-Moxeke

- a. largest early center in southern tributary of the Casma Valley
- b. in early Initial Period: entire complex formed one active center
 - 1. often mistaken for two
- c. principal mound at Moxeke
 - 1. 160 _ 170 m _ 30 m high
 - 2. tiered rectangular platform with rounded corners
 - 3. mass of conical adobes with some stone finishing
 - 4. series of clay sculptures around outer face of 3rd platform level
 - a. situated in large wall niches
 - b. sculptures initially about 3 m high: 2m remain
 - c. finely dressed anthropomorphic figures
- d. occupied 1800-1400 BC at least
 - 1. and probably later
- e. Huaca A: complex of stone chambers
 - 1. Pozorskis: storage function
 - a. plausible, but difficult to substantiate
 - b. most rooms empty: a few turquoise beads, an anthracite mirror, some textiles, wooden figurine
 - 2. Burger: religious activities implied
 - a. cut and polished stone: human hand and double-headed snake inscribed

- b. relief clay frieze of felines at entrance implies religious function
- c. perhaps storage facility for ceremonial activities
- 3. Sechín Alto complex: largest of all
 - a. covers about 56 ha
 - a. all laid out according to a basic axial arrangement
 - b. immense main pyramid
 - 1. largest construction in New World during 2nd millennium BC
 - 2. 250 300 m at base
 - 3. max height: 44 m
 - 4. stone facing: late Initial Period renovation
 - c. four plazas with associated architecture
 - 1. extend 1.5 km out from main mound
 - 2. two plazas contain spacious pits
 - 3. 50 and 80 m across
 - d. dating: 1721 BC C-14
 - 1. fits with ceramic types
- 4. Cerro Sechín
 - a. late Initial Period: covered 5 ha
 - b. 3-tiered stepped platform
 - 1. flanked on either side by two smaller buildings
 - c. central pyramid
 - 1. quadrangular with rounded corners: 53 m on a side
 - 2. multiple phases of construction and renovation
 - d. facing of pyramid
 - 1. _400 granite sculptures
 - 2. 302 recovered before excavation of southern wall
 - 3. gruesome deaths and body parts
 - 4. apparently arrayed as single scene
 - a. two sets of warriors advancing along lateral walls
 - b. through carnage of their adversaries
 - c. banners displayed at head of columns
 - d. prolonged debates over the dating and character of iconography
 - 1. dating consensus: antecedent to Chavín developments
 - 2. disagreement over importance of warfare
 - a. e.g., small-scale raiding (Burger 1992:78)
 - b. Pozorskis: imagery indicative of conquest
- 5. San Jacinto: Chancay Valley

- a. exemplifies scale of construction
- b. $2,000,000^+$ m³ of earth were moved
 - 1. solely for leveling (Williams León 1980)
- 6. <u>La Florida</u>: Lurin Valley (Patterson)
 - a. 11 km inland: Rimac
 - 1. initial construction: end of Preceramic, before 2150 BC
 - 2. abandoned before 1750 BC
 - b. labor investment
 - 1. main pyramid: 1,010,500 m³
 - 2. 6,736,670 man-days of labor: 500-1,000 people for two centuries
 - b. labor force
 - 1. 21 villages in region
 - 2. probably agriculturally specialized
- 7. no complexes built at single blow
 - a. Sechín Alto: exhibits at least five such phases

Development and Functions of Ceremonial Complexes

- 1. questions as to nature and size of labor force and leadership
 - a. do size and complexity necessarily imply a large number of fishermen and farmers as laborers?
 - b. does temple construction imply existence of powerful priests?
 - 1. who presumably organized and directed large labor force of special personnel?
 - 2. architects as well as religious leaders?
- 2. management of space
 - a. visual impact must have been great for their time
 - b. imposing imagery on massive pyramids
 - 1. pillared entrances
 - 2. stairwells
 - 3. friezes
 - 4. probably brilliantly colored: clay
 - c. scale of participation greatly enhanced over Late Preceramic ceremonies
- 3. Williams: similar orientation suggests astronomical orderings
 - a. TND: but they are also pointing toward the mountains
 - 1. or toward the sea, depending on how you look at them

- b. this form shows up all over the Central Andes in the second millennium BC
- c. common element: orientation NNE or E
 - 1. just a few degrees differences from one valley to the next
- d. from S to N: orientation shifts to the E
 - 1. significance unknown
 - 2. but it follows the river
- 4. general pattern
 - a. northern focus on sunken court complexes
 - b. central focus on U-shaped pyramid complexes
- 5. variants on the general theme exist
 - a. actually, no structure is exactly like another
 - b. giant size suggests that some could not have been built without planning or prior experience
 - 1. e.g., San Jacinto
 - a. 30 ha of open space
 - b. 1.5-2.0 million m³ of earth moved to create flat surface
 - c. 15m high central pyramid
- 6. postulated sequence: according to Williams
 - a. enclosures flanked by elongated mounds: El Paraiso
 - c. elongated rectangular depressions with low pyramids at the narrowest extreme
 - 1. La Salina: Rimac
 - 2. Salinas: Chancay
 - 3. Barbacay: Huarmey
 - d. associated habitation
 - 1. on flanking arms: El Paraiso
 - 2. adjacent to the field: La Salina, etc.
 - a. central space was probably sacred
 - b. no habitation allowed
 - d. final stage: baroque forms
 - 1. more complex architecture: principally in the nucleus
 - a. e.g., Cardal
 - 2. circular patios and ceremonial pits
 - a. e.g., Cardal, Garagay, San Jacinto
- 7. compare sequence based on carbon dates from Pozorski and Pozorski book: 1987:6-7
 - a. Cotton Preceramic
 - 1. Huaynuná, Las Haldas

- b. Initial Period
 - 1. Pampa de la Llamas-Moxeke, Tortugas, Sechín Alto, Cerro Sechín
 - 2. Huerequeque
 - 3. Pallka, Sechín Bajo, Taukachi-Konkan
- c. Early Horizon
 - 1. Pampa Rosario, Huaca Desvio, San Diego, La Cantina, Chankillo

Social Organization

- 1. social elites probably drew their elevated status from a combination of
 - a. kin ties
 - b. political negotiation
 - c. religious sanction
 - d. military leadership
- 2. no solid evidence yet for development of hereditary social classes
 - a. e.g., segregated burial grounds
 - b. distinctive and segregated residential sectors

Burial data

- 1. mortuary information that we have at present is limited
 - a. probably not a representative cross-section of society as a whole
 - b. few cemeteries excavated
- 2. Ancón: fishing village: four classes of burials encountered
 - a. general cemetery
 - 1. most of the population
 - 2. little distinction among graves
 - 3. shallow pits, flexed position
 - 4. wrapped in cotton cloth, places on reed mat
 - 5. single, used cooking vessel
 - 6. read ochre around head
 - 7. body covered with stones: like Preceramic
 - b. one adult male
 - 1. _30 yrs old
 - 2. between knees: cebus monkey covered with mica flakes
 - 3. string of stone beads
 - 4. necklaces and armlets

- 5. fan of feathers: read, yellow, and green
- 6. various other bowls and single-spout bottle
- 7. mortar and pestle with red pigment and cotton cloth
- c. 20-30 yr-old woman
 - 1. buried with 5 6-month fetuses
- d. dedicatory offering
 - 1. body of small child: 3-5 yrs old
 - 2. beneath corner of residential structure
 - 3. eyes replaced with mica sheets
 - a. stomach replaced with gourd
 - b. heart with clear rock crystal
- 3. Cardal: civic-ceremonial center
 - a. excavation of penultimate atrium area of central mound
 - 1. level used as cemetery
 - b. 16 individuals in tightly flexed positions
 - c. usual items
 - 1. cotton cloth, fiber mats, stones
 - 2. charred cooking pot or a few spindle whorls
 - d. one adult male distinctive
 - 1. necklace of sea-lion incisors
 - 2. red-painted bone earspools
 - 3. bone tool in left hand
 - 4. no pottery of other offerings
 - e. other isolated simple burials found
- 4. these burial data point to relatively simple level of social organization
 - a. at least among the people represented
 - b. not clear, however, what part of the populace is represented here

Explanatory Theories

- 1. Moseley: coercive centralized authority
 - a. posits that development of large-scale architectural complexes mark the shift from maritime to agricultural subsistence economies
 - 1. radical economic restructuring
 - 2. labor reorganization
 - 3. required new kinds of ritual ratification
 - a. e.g., ritual hearths: example of new religious activity

- b. coordinated with a shift to inland locations
- c. notably at intake areas for irrigation: La Florida
- d. ritual manipulation of water may have been key
 - 1. note Williams' argument concerning ritual crops in the U-shaped areas
- 2. Burger: multiple small-scale polities
 - a. many apparently coeval monuments in same valley
 - b. structures built by accretion over hundreds of years
 - c. no evidence for elite burials
 - 1. such as we see later
 - d. general character of society
 - 1. multitude of weakly stratified small-scale societies
 - 2. with highly developed religious institutions
 - e. civic-ceremonial centers occupied by independent and equivalent small-scale societies
 - 1. tied together by economic interdependence
 - a. to shoreline villages
 - b. and specialized inland farming hamlets
 - 2. linked to other large centers by shared beliefs
 - 3. perhaps by marriage alliances
 - 4. occasional cooperation in raiding or defense
 - f. no overarching hierarchical political structure
- 3. D'Altroy [after Wright 1984]: turn to chiefly ideology
 - a. chiefs maintain power through combined
 - 1. military
 - 2. sacred
 - 3. and economic activities
 - b. leadership sacralized
 - 1. system: highly ranked noble or chiefly class and a commoner class whose rank is minimal
 - 2. developed from simpler patterns of ascribed rank
 - 3. repeated definition of rank distinctions as communities developed
 - 4. increasingly far-flung relations among ranking families must be documented with lengthier genealogical histories
 - a. exotic origins come to be emphasized
 - b. ritual actions of higher ranking chiefs is thought to sustain the universe
 - 5. widely shared ideology links populace in two ways
 - a. vertically: ties leadership to general populace
 - b. horizontally: ties elites of various polities together

- c. key to testing propositions about ideology: occurrence of complex of motifs and materials in a context of ritual use
 - 1. existence of symbolizations specifying nobles and the major events important in their lives in terms of cosmic forces
 - a. more precise indication that a system of beliefs of cosmic power was operating
 - 2. e.g., naming of nobles with calendrical signs: clear in Mesoamerican Formative
 - a. or military leadership in action: e.g., Cerro Sechín iconography
- 4. some sort of political centralization or integration is probable within valleys
 - a. some evidence for settlement hierarchies
 - b. centralized monumental construction
 - c. territoriality is very unclear
 - 1. no good evidence for stylistic boundaries in territories
 - d. however, larger polities very unlikely
 - e. more likely that some valleys were unified
 - 1. and that some were not

Summary

- 1. archaeologists are at odds over organization needed to build the ceremonial complexes and irrigation systems
 - a. one view: coercive social authority was present
 - 1. for construction of canals or pyramids with dedicatory human burials
 - 2. even in late Preceramic
 - b. second view: earliest canal systems at least could have been organized communally
 - 1. paradox: erection of ceremonial architecture may reveal <u>lack</u> of coercive power on the part of elevated social groups
 - a. needed to rely on religious sanction to maintain status
 - c. third view: many early monuments arose from addition of multiple layers
 - 1. each required only modest labor investment
 - 2. some valleys contained several coeval mounds built over centuries
 - 3. _ small, fairly simple societies could have erected many of the mounds
 - a. by means of intermittent collaborative efforts

- 2. nevertheless: clear evidence for exchange or sharing of ideas over long distances
 - a. standardization of large-scale architecture
 - b. long-distance exchange of commodities that were valued over a wide area
 - 1. e.g., Spondylus
- 3. many key changes occurred before ceramics as pottery
 - a. and before shift to agriculture
 - 1. as dominant source of subsistence
 - b. implies: sociopolitical changes do not necessarily coincide with changes in other areas of society and culture
 - 1. that have traditionally been associated in explanations
 - 2. e.g., economic change: stratification without agriculture
 - 3. social complexity without pottery
- 4. however, shift to irrigation agriculture and use of ceramics coincided with
 - a. major leap upward in scale of constructions
 - b. possible emergence of valley-wide polities
 - c. perhaps emergence of conflict as major force
 - 1. NB: Cerro Sechín