The Rise of Andean Civilization October 20, 1999 T. D'Altroy

EARLY INTERMEDIATE PERIOD (EIP)

- 1. EIP: period of major transitions in sociopolitical, economic organization
 - a. particularly among coastal societies
 - b. not yet well understood in the highlands
- 2. EIP: not well dated in absolute terms
 - a. 400 BC AD 700: reasonable dates
 - 1. i.e., about a millennium
 - b. state formation: AD 100-600
- 3. name of EIP: misleading
 - a. suggests fractionation of power
 - b. EIP traditionally characterized as time of regional autonomy
 - 1. varying political entities exerted authority
 - 2. free from any pan-Peruvian political or ideological influences
 - c. also regional differentiation
 - c. actually time of great expansion of polities
 - 1. rise of states
 - 2. incorporation of both ideological and coercive elements to means of rule
 - d. settlement hierarchies
 - 1. first good evidence of hierarchical settlement patterns
 - e. also seen as rise of first Peruvian cities
 - 1. artistic florescence
 - 2. population peaks
 - 3. expansion of irrigation systems
 - 4. emergence of craft specialization
 - 5. social stratification
 - f. generalizations not applicable to all parts of Peru
 - 1. e.g., first cities usually attributed to
 - a. South Coast
 - b. Southern Sierra
 - g. other broad statements most applicable to north coast

State Emergence

- 1. basic questions
 - a. how did the transformation occur
 - 1. from complex pre-state formations
 - 2. to states
 - b. how do we recognize the transformation archaeologically?
 - c. what was the balance between
 - 1. radical transformation in some aspects of society?
 - a. e.g., politics, social structure, economic specialization
 - b. settlement organization
 - c. investment of labor in public works
 - 2. vs. continuity in others
 - a. e.g., kin organization
 - b. community rights to resources
 - c. household subsistence
- 2. states
 - a. key features
 - 1. centralized decision-making in hierarchical political system
 - a. first societies in which monopolistic control of force was exercised over the populace
 - 2. elaboration of social classes
 - a. probably present in nascent form in chiefly society
 - b. status ascribed at birth: e.g., infant mortuary practices
 - b. correlates
 - 1. control over a very large area: 100's to several 1000's of km^2
 - 2. well-developed hierarchy of settlement size and functions
 - 3. primary settlements or urban centers of very substantial size
 - 4. rise of legally constituted coercive power or authority
 - a. often derives strength from military force
 - b. manifested in tribute payment, population resettlement, corporate labor projects
 - 5. social stratification
 - a. internal diversification of the primary and secondary centers
 - b. residence based on occupation specialization and class
 - c. mortuary practices
 - 6. full-time craft specialization

- c. key feature to keep in mind: division of activities into categories or roles that we use to describe the societies may not have been well-elaborated
 - 1. e.g., distinction religious, political, social and political leadership
 - 2. i.e., elite leaders may have changed hats to emphasize particular roles in particular circumstances
- 3. EIP: era in Peru when this transformation became apparent
 - a. Moche: probably first South American state society
 - b. parallel developments on central coast
 - c. debate as to whether state appeared at beginning or end of EIP

Cultural chronology

- 1. north coast: conventional chronology
 - a. Vicús (far north): AD 100-600
 - b. Salinar: 450-200 BC, maybe a little later
 - c. Gallinazo: 200 BC 100 AD; to AD 400-500 in La Leche
 - d. Moche I-IV: AD 100-600
 - e. Sipán: AD 100-600??
 - f. Moche V: AD 600-700
- 2. archaeologists have judged for some time that a Moche polity did not really begin to dominate the entire north coast till Moche III times
 - a. i.e., starting about AD 200
 - b. standard view: Moche culture dominated through the succeeding Moche IV phase
 - 1. then southern part of polity collapsed
 - 2. as power shifted northward to the Lambayeque region: ca. AD 600
- 3. situation was far more complex
 - a. e.g., Shimada and Maguiña provide evidence that the Gallinazo and Moche cultures
 - 1. appear to have been sequential in the Virú Valley
 - 2. but existed coevally in the northern Lambayeque region as late as Moche III times
 - b. Kaulicke argues for a long Moche presence in the far north
 - 1. intermixed with local developments
 - 2. Vicús: most prominent local culture
 - a. identified essentially on the basis of a distinctive ceramic style
 - b. focused in the Piura Valley

- c. situation suggests that the Moche expansion along the north coast was not a simple conquest
 - 1. as has often been posited
 - 2. but exhibited nominally pacific relations well into Moche's era as a dominant culture
- d. and there may have been more than one Moche polity within the Moche culture area
 - 1. underscores that we should not mistake cultural similarity for political integration
- 4. central coast
 - a. Lima culture: Pachacamac AD 100-700
- 5. south coast
 - a. Paracas: 300-100 BC
 - b. Nazca: 100 BC-AD 500

Early EIP Settlement Patterns

- 1. best data from north coast
 - a. Santa: Wilson, Donnan
 - b. Virú: Willey, Topic
 - c. Moche: Moche Chan Chan Project
 - d. Lambayeque: Shimada
- 2. settlement studies are key to understanding cultural development
 - a. changes in numbers, size, internal complexity, and location correlate with
 - 1. changes in subsistence focus, canal systems, agricultural intensification, population growth and decline, warfare, and levels of sociocultural complexity
 - b. cultures here described as being sequential
 - 1. but keep in mind overlaps described above

<u>Salinar</u>

- 1. Moche Valley
 - a. Cerro Arena: largest known Salinar site
 - 1. 100s of stone-walled houses strung out along ridge
 - 2. close to area irrigated by the Orejas-Arena S2 canal
 - 3. no evidence that it controlled valley

- 4. but no other settlement could have challenged it
- b. occupation emphasized upper valley, defensible locations
- c. probable significant expansion of irrigation systems
- 2. Virú Valley
 - a. 83 sites with Puerto Moorin occupation
 - 1. concentrated in Huacapongo: 40 sites
 - 2. 9 of 14 Salinar mounds in Huacapongo upvalley
 - b. Huacapongo: favorable zone for early agriculture
 - 1. but limited by restricted amount of land
 - 2. population growth may have forced settlement of lower valley
 - c. considerable scattered population in lower valley
 - 1. many individual farmsteads
 - 2. no large settlements: largest probably max of 100 people
 - d. fortified strongholds
 - 1. construed by Willey as evidence of warfare: presumably from sierra
 - 2. Wilson: but nature and location of defenses imply internal conflict
 - e. no political unity apparent in valley
 - 1. no single site preeminent
 - 2. defensive sites could have protected only a small segment of the population

<u>Gallinazo</u>

- 1. Moche Valley
 - a. poorly understood
 - b. no pre-Moche site to rival Gallinazo Group
 - c. although Cerro Orejas had a large population
 - 1. south side of valley, 8 km north of Cerro Arenas
 - 2. series of agricultural terraces, stone-walled house on platforms above canal, small fortified platform above settlement
 - d. sites generally found in mid-valley
 - 1. i.e., near where Salinar sites were found
- 2. Virú Valley
 - a. Huacapongo virtually abandoned
 - 1. population concentrated in lower valley
 - b. max pop in Late Gallinazo
 - 1. max extent of irrigation system
 - c. Gallinazo Group achieved prominence
 - 1. cluster of sites in northern part of lower valley

- 2. 30,000 rooms in area no more than 5 km^2
- 3. situated to take advantage of irrigated land, delta, and marine resources
- d. shift from fortification of individual sites
 - 1. to centralization in fortification of centers on hilltops
 - 2. at strategic locations
 - 3. narrow passage from Huacapongo particularly well-fortified
- e. political cohesion implied
 - 1. valley-wide irrigation network
 - 2. concentration of population near site of Gallinazo
- 3. Santa Valley: Vinzos Period [aka Puerto Moorin / Beginning Early Intermediate Period, EIP]
 - a. clear shifting of sites down valley
 - 1. 45 sites: roughly same configuration as Cayhuamarca
 - 2. 25 settlements are new
 - b. 6 settlement clusters: most contain
 - 1. habitation sites
 - 2. citadels
 - 3. sites with public architecture
 - c. total population: 7850
 - 1. 1800 per site
 - 2. 1000 per cluster
- 3. Early Suchimancillo: Early-Middle Gallinazo; Early EIP
 - a. 130 sites
 - b. total population: 20,000
 - c. three clusters
 - e. major changes in Clusters 2 and 3
 - 1. increase in number of site types: now 6
 - a. habitation sites
 - major citadel structures smaller defensive sites local centers ceremonial-civic sites cemeteries
 - b. but no evidence of monumental construction
 - 2. widespread presence of defensive structures
 - a. 40 citadels and minor fortresses
 - b. very few habitation sites are far from a defensive site
 - f. organization at local level for defense against raids

- g. interregional contacts suggested
 - 1. ceramics shared with Virú
 - 2. kaolin bowls: probably from Callejón de Huaylas
 - 3. desert drawings similar to those in Nasca: 12 llamas and several birds, probably condors
- 4. Late Suchimancillo: Late Gallinazo / Middle EIP
 - a. total sites: 153
 - b. population: 30,000
 - 1. up by 50%
 - c. upper valley now has nearly continuous distribution of sites on both desert margins
 - d. three clusters
 - 1. Cluster 1: largest population of 19,000
 - a. least irrigable land: 380 ha
 - b. Wilson interprets distribution of citadels as defense against coastal valleys, not sierra
 - a. concentrated in lower sections of cluster
 - 2. Clusters 2 and 3
 - a. citadels distributed throughout
 - e. most extensive peaceful contact with sierra
 - 1. lot of kaolin pottery in lower valley: 12.7%
 - 2. strongest contacts in lowest part of valley
 - a. suggests that contacts did not go up Santa, but along more southerly passage
 - 3. pattern similar in Nepeña
 - 4. not in Virú and Casma

Evidence for Moche Sociopolitical Formation

- 1. several models have been proposed for the nature of Moche polity/polities
 - a. conventional view
 - 1. centralized state emerged with first major constructions at site of Moche
 - 2. AD 100-600
 - 3. articulated by Moseley
 - b. complex chiefdoms until Moche V: post AD 600
 - 1. i.e., no state until late urban formations in Lambayeque Valley
 - 2. chief proponents: Schaedel, Shimada
 - c. multiple states active at the same time: Moche III and after (AD 200-600)
 - 1. generally conceived as northern and southern Moche polities
 - 2. first presented about 30 years ago: Kutscher
 - 3. recently elaborated by Donnan and Castillo

- 2. evidence for a multivalley Moche III-IV polity: three lines of evidence generally used
 - a. sudden and widespread presence of Moche pottery style: conventionally associated with Moche III style (i.e., post-AD 200)
 - 1. all or most of valleys: from Lambayeque to Nepeña
 - 2. following Late Gallinazo
 - 3. militarism important in iconography
 - a. e.g., modeled warrior vessels
 - b. processions of naked prisoners
 - c. Combat Theme: often interpreted as ceremonial combat, not conquest
 - b. construction of monumental architecture: in all or most valleys presumably incorporated into the Moche state
 - Sipán: Lambayeque Valley Mocollope: Chicama Valley pyramids at Moche: Moche Valley Huancaco: Virú Pampa de los Incas and/or Huaca Chimbote: Santa Valley Pañamarca: Nepeña Valley
 - 2. many murals
 - a. warriors in hand-to-hand combat
 - b. ceremonial-civic activities: Sacrifice Ceremony (formerly called Presentation Theme)
 - c. major settlement disruptions: esp. in Virú and Santa Valleys (see below)
- 3. the center: the site of Moche
 - a. dominated by two features
 - b. Huaca del Sol: 40m high x 340 m long x 160 m
 - 1. largest adobe structure in prehispanic America
 - 2. exact dimensions unknown
 - a. because colonial treasure-seekers diverted a watercourse to erode the pyramid
 - b. recovered 2,788 kg (6,134 lb) of precious metal [Lothrop]
 - 3. 143 million adobe bricks laid up in discrete columns
 - 4. more than 100 makers' marks found
 - 5. Moseley: labor tax [see below]
 - c. Huaca de la Luna
 - 1. complex of platforms, walls, and courtyards of adobe
 - 2. multi-hued murals
 - d. two major constructions bracketed a 500 m wide plain
 - 1. most densely occupied part of the site
 - 2. organic material poorly preserved

- 3. plain scoured by drainage
 - a. ergo: called empty ceremonial center [Schaedel]
- e. actually, there was a substantial residential population adjoining the ceremonial complex
 - 1. buried under drifting sands
- f. sequence of occupation at Moche
 - 1. began in Gallinazo: probably two contemporary settlements
 - a. one underneath Huaca del Sol
 - b. one a few hundred meters NE on the banks of the river
 - 2. Moche I: site still small
 - 3. Moche II: riverbank settlement probably abandoned
 - a. small sample
 - b. evidently no monumental construction
 - 4. Moche III: turning point
 - a. remains of period found in every excavation
 - b. first stages of huaca construction
 - c. influx of population
 - 5. Moche III-IV: florescence of site
 - a. stratified, expansionist state
 - b. wide-flung trade networks
 - c. high degree of economic specialization
 - d. economic sophistication
 - e. centrally coordinated public projects
- 5. Santa Valley: Guadalupito [a.k.a. Huancaco; Late EIP]
 - a. 205 sites: Wilson's survey
 - b. total population: 22,000
 - 1. 260 persons/habitation site: down from 270
 - 2. population down 8,000
 - c. massive shift in subsistence-settlement focus
 - 1. over 80% of population in Lower Valley
 - a. 5_ greater than estimate for preceding Late Suchimancillo Period
 - 2. still substantial population in Middle Valley
 - 3. north and south desert margins of Quebrada de Lacramarca occupied for only time
 - a. served by canal over 40 km long
 - 4. other long canals served both north and south margins of mouth of Santa River
 - d. series of at least six major platform structures built in survey region during Moche occupation
 - e. demographics

- a. Fig. 15: population curve shown
- b. rapid growth before Moche III
- c. falloff under Moche conquest
 - 1. deaths from warfare: unlikely
 - 2. demographic adjustments to disruptions brought about by a force change in subsistence-settlement focus
 - 3. Wilson: demographic adjustments to a state-imposed system of tribute payments
 - a. in form of foodstuffs sent outside the valley
 - 4. population resettlement outside the valley along lines of <u>mitmaqkuna</u> a. i.e., colonists forcibly resettled by the state
- d. later further growth
- 6. Moche V transformations
 - a. shift of power north to Lambayeque Valley
 - 1. largest irrigation complex in Americas
 - a. linked 5 valleys together
 - 2. emergence of true urban centers: esp. Pampa Grande
 - 3. probable effort to revitalize collapsed Moche polity from the south
 - b. Shimada's (1994b) volume on Pampa Grande
 - 1. first major work to describe the nature of a Moche city
 - 2. breaks the trend from a century's focus on ceremonial, mortuary, and craft studies
 - 3. provides the most comprehensive overview of the nature of Moche society in the English literature
 - 4. suggests that no Moche polity had attained a state-level organization until Moche V
 - a. will probably be disputed by a fair portion of Andean archaeologists
 - c. Pampa Grande
 - 1. complex urban formation: apparently planned layout
 - 2. development of series of enclosed adobe compounds
 - a. Shimada argues that the standardization of small-scale compounds reflects creation of secular administration
 - 3. massive monumental architecture: esp. adobe pyramids
 - a. e.g., Huaca Fortaleza
 - 4. possible separation of secular and religious authorities
 - 5. craft production of at least three kinds
 - a. elite-associated workshops: ceremonial and sumptuary goods 1. e.g., Spondylus shell
 - b. dispersed workshops: valued utilitarian items

- 1. fancy pottery, certain copper objects (e.g., *tumi* knives), maybe cotton cloth
- c. dispersed production of mundane utilitarian goods
 - 1. copper needles, fishhooks, and tweezers; plain cotton cloth; cooking and storage vessels

Social Stratification and Leadership

- 1. long history to view that an elaborate elite ideology underwrote Moche leadership and expansion
 - a. and provided the social glue that held the culture together
 - b. new physical remains are now allowing archaeologists to examine how different sources of power may have been linked in Moche leadership
 - 1. political, ideological, social, economic, and military
 - 2. see Sipán, below
 - c. substantial evidence that militarism was both
 - 1. the means of Moche expansion: e.g., Bawden
 - 2. and directed toward capture of prisoners for sacrifice: e.g., Donnan, Castillo
- 2. evidence is spotty
 - a. best materials come from mortuary contexts and iconography
 - b. little residential evidence so far
- 3. evidence from burials
 - a. conforms to pattern predictable for class-structured society: variety of burial treatments
 - 1. concentration of wealth in limited number of tombs by Moche I
 - a. e.g., La Mina
 - 2. most tombs are single, extended, primary
 - a. no particular orientation favored
 - b. considerable variation in grave location and quantities of goods
 - 3. burials with few or no goods: in middens
 - 1. but some midden burials with fair number of goods
 - 2. e.g., infant burial with shell necklace and fabric-wrapped copper ingot
 - b. high status burial grounds in several locations
 - 1. between two huacas: at Moche
 - a. majority of burials found at Moche: evidently high rank
 - 1. copper, pots, beads, pendants
 - 2. biased sample: excavation of high status burials to exhaustion

- 2. north coast: Sipán and San José de Moro (see below)
- 3. Virú: Tomb of the Warrior Priest
 - a. sacrificed man and boy
 - b. two sacrificed women
 - c. two sacrificed headless camelids
 - d. numerous gourd bowls, some still containing maize, beans, and cotton bolls
 - e. 28 ceramic vessels
 - f. numerous metal objects: e.g., gilt copper fox head, 2 fiber and cloth bird heads covered with feathers
 - g. 3 elaborately carved wooden staves: owl, war mace, and tusked "warriorgod" effigy

Tombs of Sipán

- recently defined region of significant development

 N. coast: focused around Lambayeque Valley
- 2. best known from Royal Tombs of Sipán
 - a. discovered in February 1987
 - b. excavated by Walter Alva
 - c. reported by Alva and Donnan
 - d. one of most spectacular archaeological finds of all time in the Americas
- 3. extraordinary array of mortuary materials recovered
 - a. from 3 tombs in a complex of moderately sized, superimposed adobe mounds: Huaca Rajada
 - b. region recognized as the source of some of the world's finest artisanry
 - 1. in metals: esp. Lechtman
 - 2. stone, and shell
 - c. Tombs 1 and 2: ca AD 300
- 4. Alva and Donnan interpret the principal individuals in two of the three large Sipán tombs as figures represented in a scene in Moche iconography
 - a. called the Sacrifice Ceremony
 - 1. apparently related to sacrifice of human prisoners
 - 2. previously called the Presentation Theme
 - b. 4 key figures: and some key features
 - 1. Warrior Priest: holds goblet; conical hat with crescent ornament; large circular ear ornaments; warrior backflap

- 2. Bird Priest: part bird and part human; wears either conical helmet or headdress with an owl
- 3. Priestess: wears dress and headdress with two prominent plumes
- 4. priest: special headdress and sash-like garment with fringe of disks
- 5. the main Sipán tombs
 - a. Tomb 1
 - 1. male, 35-40 yrs old: identified as Warrior Priest
 - a. 166 cm (5'5") high: i.e., at the upper size range for Moche people
 - b. in good health
 - 2. placed in wood plank coffin in prepared tomb in small pyramid
 - 3. elaborate array of burial goods: e.g., gold banner, gold tunic, 4 shell pectorals, gold and silver peanut necklace, gold *tumi* headgear, feathered fans, turquoise and gold ear spools, gold and silver tumi knives on chest, gold and silver scepter in right hand, gilded copper bells, hundreds of ceramic vessels
 - 4. fanged figure on several items: holds human head and tumi knife
 - 5. additional skeletons: 9-10 yr old child, 2 sacrificed llamas, 2 adult males, 3 adult females in cane coffins 15-20 yrs old (died before main figure, as determined by disarticulated skeletons)
 - b. Tomb 2
 - another healthy adult male, 35-45: identified as Bird Priest
 a. in plank coffin in prepared tomb in south platform
 - 2. additional array of elaborate offerings: e.g., gold nose ornaments, 2 gilded necklaces in shape of human heads, copper bells, gold and silver backflap, copper owl headdress
 - 3. accompanying child and adult burials
 - 4. overall, much smaller and less elaborate than Tomb 1
 - 5. 10 m west: sealed rooms with 100s of ceramics, and human and llama bones a. including articulated human body parts
 - b. may imply that Sacrifice Ceremony took place there
 - c. Tomb 3
 - 1. adult male, 40-45 yrs old: not clearly identifiable as figure in Sacrifice Ceremony
 - a. although some features associated with Warrior Priest
 - 2. simple pit in earliest layer of pyramid
 - a. mat and textile shroud covering
 - 3. more extraordinary burial goods: 10 golden spider beads on necklace, covering of gilded copper sheets, gilded copper feline head, gilded copper scepter, gold scepter, anthropomorphized crab and feline, octopus pectoral, gold human-head and feline-head necklaces, golden warrior nose ornament, bells and gold

backflap showing Decapitor, 20 other silver and copper backflaps, shell pectorals

- 4. accompanying female, 16-18 yrs old
- 6. other luxurious interments
 - a. rich set of burials at San José de Moro, in the nearby Jequetepeque Valley: Castillo and Donnan
 - 1. two tombs: adult females figured as the central individual
 - 2. each dressed as Figure C: identified as a priestess in the same Sacrifice Ceremony
 - 3. ca. AD 550: i.e., 250 years after Sipán tombs
 - b. Loma Negra, Piura Valley: array of materials similar to those of Sipán looted
 - c. splendid murals unearthed
 - 1. at the Huaca de la Luna at Moche: Uceda et al., 1994
 - 2. and Huaca Cao Viejo: Franco et al., 1994
- 6. collectively, these materials provide evidence for a widespread melding of ideological and social leadership
 - a. in a set of elite individuals of both sexes
 - b. apparently linked to militarism and human sacrifice
 - c. also evidence for concentration of extraordinary wealth at the disposal of a small elite sector of society
- 7. important chronological note: earliest Sipán materials date to AD 100
 - a. i.e., there was an important Moche presence in the north during Moche I times
 - b. lending credence to the notion of at least two Moche polities
 - 1. one centered at Moche: south
 - 2. one in Jequetepeque: north
 - c. issue remains to be resolved

Economic Organization

Subsistence

- 1. irrigation-based staple crop agriculture
 - a. wide range of cultivars
 - b. probably maize-complex diet
 - c. most of the populace probably lived among fields: in late Moche
 - 1. in dispersed settlements

- 2. considerable use of maritime resources
 - a. inshore fishing
 - b. shellfish collecting
 - c. maritime motifs: important on craft items
- 3. some concentrations of llama skeletons recovered from Moche IV-V contexts a. may imply trade with highlands

Craft Production

- 1. specialized production
 - a. reflect both superior artisanry and industrial-scale manufacturing
 - b. specialists produced both for
 - 1. elite patrons
 - 2. large consuming populace
 - c. evidence
 - 1. scale
 - 2. nature
 - 3. distribution of production
- 2. metallurgy: "New World metallurgy means Andean metallurgy" (Lechtman 1980:267)
 - a. Moche craftsmen and their successors: masters of the Andes
 - b. used sheet metals
 - c. created copper-gold and copper-silver alloys
 - d. innovated gilding and surface-enrichment techniques
 - e. products
 - 1. primarily symbolic, status-related, and decorative
 - 2. rather than utilitarian
 - a. although many copper tools were produced
- 3. ceramics
 - a. finely decorated and modeled
 - b. mass produced: Russell et al. 1994a,b
 - 1. e.g., at Cerro Mayal: at Mocollope, in Chicama Valley
 - 2. often through use of molds
 - 3. duplicate vessels
 - 4. wide range of ceramic objects produced
 - a. from utilitarian pots to figurines and ceremonial forms

- 5. authors argue that the location and character of production are what would be expected from independent specialists
 - a. not artisans working directly for the elite sector of society
- 4. textile production
 - a. possibly in workshops: inferred from illustration on flared-rim bowl
 - 1. few in number
 - 2. no apparent patterning
 - b. needles and spindle whorls in domestic contexts
 - 1. implies simple weaving and spinning in households
 - 2. specialized weaving: florero
- 5. lapidary production
 - a. recovered from the site of Moche
 - 1. concentrations of turquoise beads, blanks, and unworked fragments
 - 2. stone tools similar to those found in metalworking shops in Chan Chan
 - b. turquoise and shell inlay: high-status items

Labor mobilization for public/corporate projects

- 1. political economy
 - a. probable labor tax: Moseley
 - 1. segmentation and patterning of makers' marks on adobes at Huaca del Sol
 - 2. likely a result of labor performed by discrete labor parties
 - a. drawn from different communities or kin groups
 - b. alternative: Shimada
 - 1. sponsorship of construction by patrons
 - 2. comparable to building churches in medieval Europe
 - c. taxation of labor possible in other areas
 - 1. e.g., construction of Huaca Brujo in Chicama
 - 2. Huancaco and Tomaval in Virú

Exchange

- 1. impressive array of objects from other societies has been recovered from Moche contexts
 - a. Spondylus beads or pendants found in many graves
 - b. Cerro Blanco: fragments of worked Spondylus and mother of pearl on top [Feldman]
 - c. copper, silver, and gold in burials

- 1. copper outcrops are local
- 2. gold and silver from highlands
- d. Cajamarca pottery
 - 1. frequently found in Moche IV contexts
 - 2. Cajamarca II-III sherds

Moche: Conclusions

- 1. development of state in Moche III-IV seems probable
 - a. settlement hierarchies
 - 1. within valleys
 - 2. between valleys
 - b. political integration across broad areas
 - 1. large populations
 - c. social differentiation
 - 1. burial treatments
 - d. economic specialization
 - 1. pottery manufacture
 - 2. metals
- 2. public works
 - a. irrigation systems
 - b. pyramids
- 3. explanations for emergence of Moche state are still extremely sketchy
 - a. Carneiro's argument
 - 1. internal conflict: seems to have played little role within valleys
 - 2. between valleys
 - a. conflict seems to have been a significant integrating force
 - 3. but no evidence for pressure on resources, as required by his model
 - b. ideological impetus
 - 1. possible, but no reasonable mechanism yet proposed
 - 2. search for human sacrifice victims not sufficient
 - c. quest for wealth and human resources
 - 1. again possible, but we do not yet understand the nature of Moche organization well enough to attribute specific economic motivations

Demise of Moche

- 1. demise of Moche society remains puzzling
 - a. Moseley, Shimada: agricultural failure
 - 1. tectonic uplift
 - 2. drifting sands
 - 3. drought: AD 562-594
 - a. led to collapse of Moche power in core valley
 - b. traditionally posited external conquest
 - 1. evidence is scant
 - 2. but fortifications exist
 - a. like those at Galindo
 - b. imply conflict with societies of western Andean slopes
- 2. populace resettled
 - a. some going inland: to fortified settlements like Galindo
 - b. principal shift: about 150 km north into the Lambayeque region
 - 1. where Sicán culture developed

Central Coast

- 1. Pachacamac: during Moche's heyday
 - a. hub of complex Lima-culture society
 - b. may have been nascent state
 - c. oracle of great antiquity
 - 1. renowned in late prehistory
 - d. Pachacamac boasted an immense pyramid
 - 1. extensive residential areas
 - e. maintained unusual place among Andean cultures1. housed foreign enclaves: in discrete sectors
 - f. enjoyed two uninterrupted millennia of occupation
 - 1. until the Spanish arrival

South Coast

- 1. societies of Paracas and Nasca culture flourished
- 2. Paracas
 - a. best known from Cavernas and Necropolis sites
 - 1. excavated by Tello and Mejía Xesspe in 1920s
 - b. spectacular textiles
 - c. resin-painted ceramics
 - d. little evidence for
 - 1. monumental architecture
 - 2. defensive concerns
 - 3. sociopolitical stratification
- 3. Nasca culture: two principal sites of Nasca Valley
 - a. Cahuachi
 - 1. consists mostly of 150 ha monumental architecture
 - a. and open plazas
 - b. built on and among natural hills
 - 2. relative scarcity of residential architecture and refuse
 - a. suggests to some archaeologists that settlement was more a focus of periodic rituals than an urban center
 - b. Tambo Viejo: contrasts markedly
 - 1. one sector alone contains 8,800 densely packed rooms
 - 2. nucleated settlement provides first real evidence of Andean urbanism a. in eyes of many scholars
- 3. crafts
 - a. like Moche: Nasca peoples made exquisite pottery
 - 1. but pieces were manufactured individually
 - 2. not mass-produced
- 4. Nasca culture may be best known for its extraordinary geoglyphs
 - a. on the elevated Nazca pampa
 - b. figures and lines etched into the earth's face
 - 1. through removal of rocks and topsoil
 - c. first recognized archaeologically in 1926 by Alfred Kroeber
 - 1. images have stimulated public wonder and fanciful publications

- 2. serious studies: Paul Kosok, María Reiche, Gerald Hawkins, and Anthony Aveni
- d. hundreds of glyphs
 - 1. animals: mostly birds and fish
 - a. e.g., hummingbird, spider, killer whale or shark, fox, monkey, lizard, condor, frigate bird
 - 2. plant forms: flowers most easily recognized
 - 3. geometric figures
 - a. more numerous and larger
 - b. include trapezoids, triangles, rectangles, spirals, and zig-zags
 - 4. almost 1,000 straight lines
 - a. hundreds radiate out from scores of central points
- e. scale truly impressive
 - 1. beak of cormorant extends about 300 m
 - 2. hummingbird 90 m long
 - 3. some straight lines: several kilometers long
- f. chronology
 - 1. biomorphic figures: probably constructed ca. 200 BC-AD 600
 - a. concentrated on west
 - 2. linear motifs
 - a. sometimes cut across plants and animals
 - b. probably began a little earlier
 - c. pertained mostly to Middle Horizon and Late Intermediate Period
- g. interpretations: varied and hard to confirm
 - 1. illusory tales of extraterrestrials
 - 2. some groups of lines: astronomically oriented
 - a. mark passage of sun across zenith
 - 3. popular idea: entire array formed an enormous calendar
 - a. not supported by meticulous work by astronomers
 - 4. another popular idea: figures were representations of images envisioned in constellations
 - a. plausible, although problematical, explanation
 - b. constellations suggested are often N. hemisphere Greek in origin
 - 5. most likely: creation and maintenance of images defined sacred space
 - a. where ceremonies were conducted
 - b. perhaps to reinforce bonds of kinship or mutual responsibility
 - 6. Aveni: lines marked natural cycles, especially water flow
 - a. in part because the line centers lie near watercourses
 - b. Schreiber: may be coincidence, because that's where flat areas lie