

Anthropology G4210

The Rise of Andean Civilization T. D'Altroy

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Lecture #2: Overview of Traditional Andean Culture

1. main features to be covered
 - a. languages
 - b. environmental variability: key to understanding varied nature of Andean societies
 1. biological implications
 - c. traditional agricultural patterns
 - d. traditional pastoralism
 - e. social organization
 - f. socioeconomic bonds
 - g. ritual cycles and sacred landscapes

Languages

1. at time of Spanish conquest in 1532: general description of three main languages of the Andes
 - a. Quechua
 1. dominant in north half of the Andes
 - b. Aymara
 1. dominant in south half
 - c. Puquina
 1. focused around Lake Titicaca
 2. basically disappeared
2. situation actually much more complex
 - a. over 200 mutually unintelligible languages in indigenous South America
 - b. well over 100 in the Andes
3. several important languages have disappeared
 - a. e.g., Muchic
 1. n. coast of Peru
 2. spoken by 1 million or more people
 - b. combination of factors
 1. population decline
 2. cultural efforts to hispanicize indigenous population
4. Quechua was the language of the Inka

[Andean culture overview, 1999]

- a. maybe adopted from neighbors
 - b. became lingua franca under state rule
 - c. seems most likely that the name *Quechua* was imposed early in the Colonial period by the Spaniards
 - 1. by 1560: term was already being used in the language's first lexicon and grammar
 - 2. prepared by the cleric Domingo de Santo Tomás
 - d. Mannheim: suggests that the adoption of the term *Quechua* probably arose from the Spaniards mistaking the word *qheswa* (valley) in the phrase *qheswa simi* (valley speech) for the name of the language
 - 1. term adopted back into *runa simi* in various forms
 - 2. including the word for the mountainous ecological zone
 - e. early in colonial era: term *Quechua* broadly applied to languages as distinct as
 - 1. Inkas' tongue
 - 2. Aymara language that predominated in the Lake Titicaca basin
 - 3. Muchik language of Peru's north coast
 - f. spatially intermixed with Aymara in southern Peru
 - h. Spaniards were responsible for some dispersal of the language
5. even Quechua was internally complex
- a. 7 mutually distinct dialects
 - 1. often not mutually intelligible
 - b. from Cochabamba to Peru
6. impact of using Quechua for state business is written today in Andean toponyms from Ecuador to Chile and Argentina
- a. partly a result of a deliberate Inka policy of renaming peaks and other natural features after sacred locations in the Cuzco area
 - 1. e.g., Huanacauri applied to
 - a. peak overlooking modern Cuenca, Ecuador: where the Inkas' northern capital of Tumipampa lay
 - b. town in Salta province (Argentina) where I have been working in recent years is named *Cachi*
 - 1. Quechua word for salt
 - c. a bit farther to the south: Sanogasta – potter's town
 - 1. combines the Quechua word for clay (*sañu*)
 - 2. with the Kakano word for town (*gasta*)
 - d. today's Andes are a memory landscape for the Inka language.

Biological demands on humans: high elevation adaptation

[Andean culture overview, 1999]

1. various effects of high elevation
 - a. altitude sickness
 - b. chronic fatigue
 - c. temporary infertility
 - d. weight loss
 - e. shortness of breath

2. acclimation reduces these problems
 - a. highland native acclimation
 1. greater chest size
 2. enlarged right ventricle of the heart
 3. increased red blood cell counts
 - b. probable long-term selection for individuals who acclimate well
 - c. others can acclimate over a short period
 1. one month: 25% increase in lung capacity at 10,000'

3. coca chewing thought to ameliorate effects of high elevation
 - a. mixed with lime: slow release of cocaine over hours
 - b. dulls hunger

4. problems are reciprocal for highland societies moving to the coast
 - a. sierra populations susceptible to disease and heat
 - b. Inkas had significant difficulties in conquering coast
 1. in part because of physiological problems

5. some biological differences have also been found between highland groups of Quechua and Aymara ancestry: who occupied similar locales in the Titicaca basin
 - a. indicates that both natural selection and selective interbreeding among ethnic groups had a hand in creating the biological character of modern Andean peoples

6. studies of the bioenergetics of modern sierra peoples
 - a. show that they have a caloric intake much lower than most people living in Western society
 - b. Brooke Thomas's research in Nuñoa, Peru
 1. adult male of about 55 kg: expends on average 2,094 kcal per day
 2. adult female of 50 kg: expends 1,610 kcal per day
 3. much less than the 2,500 kcal/day typically recommended for Western adults
 - a. or 3,500 recommended for US soldiers

[Andean culture overview, 1999]

Traditional agricultural patterns

1. crops to be sown are determined largely by environmental constraints: although not solely
 - a. e.g., maize is a preferred prestige crop
 1. over tubers or quinoa
2. primary determinants of cultivation order in sierra
 - a. the types of crop sown
 - b. the location of the fields in the vertical series of environmental zones along mountain slopes
 - c. the particular agricultural cycle being sown
3. planting sequence is directly related to altitude
 - a. altitude has a major effect on
 1. temperature
 2. sunshine
 3. moisture
 4. onset of rains
 5. onset of frost
 6. cloud cover
 7. evapotranspiration
 - b. higher elevations
 1. cloudier
 2. lower evapotranspiration rates
 - c. lower elevations
 1. more sunshine
 2. greater water loss from soil and plants
4. Brush: 3 major patterns of Andean zonation and settlement
 - a. compressed: e.g., Uchucmarca
 1. steep verticality
 2. community self-sufficiency locally
 3. population concentrated in upper elevations
 4. with smaller subsidiary settlements
 - b. archipelago
 1. e.g., upper areas of Marañón and Huallaga
 2. wide separation between some of the zones that are used
 3. sometimes requires lengthy migration: 4-8 days
 4. may involve traversing different ethnic areas

[Andean culture overview, 1999]

- 5. coca: central factor
- c. extended type
 - 1. gradients are less steep
 - 2. population more evenly dispersed throughout region
 - 3. e.g., Vilcanota Valley: near Cuzco
- 4. Mitchell defines six major ecological zones for Quinoa: highest to lowest
 - a. alpine rain tundra and subalpine wet páramo (4100+m): puna
 - b. montane prairie (4000-4100 m): grazing and non-irrigated potato cultivation
 - c. montane moist forest (3400-4000 m)
 - 1. dense shrubs
 - 2. non-irrigated cultivation of tubers and frost resistant, quick-maturing crops
 - d. lower montane savannah (2850-3400 m)
 - 1. major cultivated fields
 - 2. major irrigation zone
 - e. lower montane thorn steppe (2500-2850 m)
 - 1. xerophytic vegetation
 - 2. non-irrigated cultivation of short growth plants with low water needs
 - f. valley bottom (2500 m)
 - 1. xerophytic vegetation
 - 2. double-cropping where irrigation is plentiful
- 5. Quinoa has two agricultural cycles
 - a. dry season cycle: michka
 - 1. restricted to valley bottom of thorn steppe and to a small proportion of the fields in the upper savannah
 - 2. spatially restricted: because it requires irrigation
 - a. only a small part of the region can be irrigated
 - 3. August: plants cultivated early
 - 4. two quick-maturing crops used in succession
 - 5. second crop planted Nov-April
 - b. rainy season cycle: hatun tarpuy
 - 1. found in all ecozones
 - 2. highest zones planted with onset of rains: Nov-Dec
 - 3. middle zones: planting occurs over time, slowly moving downhill
 - a. last crops planted in Dec: with onset of rains
- 6. staggered planting season has distinct advantage in work organization
 - a. people normally have fields in several ecozones
 - 1. maximizes crop production
 - b. workload spread out over time

[Andean culture overview, 1999]

- 1. planting and harvesting
 - c. risk spread out
 - 1. over ecozones
 - 2. and crops
 - d. localized climatic effects mean that agricultural failure in one ecozone or with one crop does not imply failure in nearby lands
7. this altitudinal compression of ecozones has several implications for spatial and social organization of communities
- a. location of main settlements
 - 1. frequently at ecotones: maize and tuber zones
 - 2. sometimes in valley bottoms
 - b. dispersal of social groups into several temporally occupied residential locations
 - 1. e.g., puna, field houses, main settlement
 - c. sharing of labor among households, but within community
 - 1. according to sequence of agricultural cycle
 - d. subsistence self-sufficiency of communities
 - 1. pooling of resources within households

Traditional herding

[Flannery: Flocks of the Wamani]

- 1. *punarunakuna*: people of the puna
- 2. settlement patterns
 - a. people live in widely scattered units called *kancha*
 - b. seasonal movements of herds
 - 1. higher elevations in summer
 - 2. lower in colder season
 - c. herds' daily range: about 2 km radius
 - d. coupled with cultivation of tubers
 - 1. e.g., potatoes, maca
 - 2. manufacture of chuño
- 3. 4 different camelids
 - a. domesticated: llama, alpaca
 - 1. earliest evidence from Ayacucho and Junín
 - b. wild: guanaco, vicuña

4. llama herds

[*Andean culture overview, 1999*]

- a. range: 18-35
 - b. mean: 25
5. note the importance of group assistance and ritual in herding
 - a. e.g., shared responsibilities
 - b. community participation in butchering and feasting
 6. greatest flocks of herds on altiplano
 - a. numbered in hundreds of thousands
 7. llama caravans
 - a. typically 20 animals per drover, + maybe an assistant
 - b. 20 km/day
 - c. 30 kg each
 - d. work 2 of 3 days; rest on 7th

Social organization

1. kinship sierra among Quechua speakers
 - a. ego-centered
 - b. bilaterally organized
 - c. membership reckoned with emphasis on collateral relations [i.e., members of same lineage]
 1. bifurcate-merging
 2. cross-cousins distinguished from siblings and parallel cousins
 - d. long-term evidence for ritual obligations between certain pairs of affinal relations: phrased in idiom of reciprocal obligation
 1. fathers-in-law
 2. sons-in-law
 3. daughters-in-law
2. *ayllu*: varied definitions [Flannery Wamani:28]
 - a. genealogically related group of extended families that considers itself to share
 1. common ancestor
 2. common place of origin: *pacarisqa* or *pacarina*
 - b. number of unrelated extended families living together in a restricted area
 1. which frequently corresponds to a community, village, or barrio
 - c. any groups of friends, relatives, and neighbors one can rely for reciprocal aid [*ayni*]
 - d. any group with a common leader or "head"

[*Andean culture overview, 1999*]

3. generally speaking, an *ayllu* is a corporate group
 - a. held resources in common
 1. often corresponded to agricultural, water, and herding resources within a territory
 2. but could correspond to things like fishing rights
 - b. usufruct rights allocated to members
 - b. a few to hundreds of households
 - c. principal unit of identity
 1. in early testimony to Spaniards
 2. more important than settlement name
 3. or ethnic affiliation
 - d. residence could cross-cut multiple ecological zones
 - e. could vary in scope according to context
 1. e.g., either larger or smaller for purposes of marriage
 2. generally endogamous for commoner population
4. duality
 - a. unifying and oppositional
 - b. implies complementarity and reciprocity
5. *suyu*: major division
 - a. as in *Tawantinsuyu*: “The Four Parts Together”
6. *parcialidades*
 - a. *hanan-hurin*: Quechua
 1. Ayamara: *alasia* (upper) and *maasaa* (lower)
 - b. *allauca* (right)-*chaupi* (center)-*ychoc* (left)
 - c. *qollana-payan-kayaw*
 1. *qollana* (excellent, the first): highest status
 2. *payan*: the second, middle
 3. *kayaw*: the last
7. *kuraka*
 - a. hereditary elites
 - b. generally male
 - c. hierarchical ordered
 - d. access to power comes from kinship
 - e. rights: lands worked, herds watched
 - f. obligations: various kinds of leadership [see below]

[Andean culture overview, 1999]

8. descent and access to power
 - a. often patrilineal
 1. frequently all competent adult males in a generation
 - b. sometimes bilineal
 1. selectively according to context
 - c. primogeniture not important indigenous feature
 1. emphasized by Spaniards as the only proper kind of succession to position or power

9. inheritance
 - a. different kinds of resources could be inherited ambilaterally
 - b. i.e., inheritance of female's *ayllu* rights through her maternal kin
 1. inheritance of male's *ayllu* rights through his paternal kin

10. traditional political village hierarchy: *varayoq*
 - a. native leadership has numerous civic responsibilities
 1. organize community work
 2. judge and punish wrongdoers
 3. maintain peace in the village
 4. organized and perform religious ceremonies
 5. regulate communications with the supernatural
 6. allocate land and water
 7. act as war leaders
 - b. potential to initiate and emphasize inequality

11. Isbell's study of village leadership: Chuschi, Ayacucho
 - a. two hierarchies of leadership
 1. two barrios
 2. village
 - b. individuals move up the hierarchies
 1. alternating between barrio and village positions
 2. top position: village *alcalde*
 3. finally retired out the top and as a *completed person*

12. Urton's study of *ayllu* and work groups in Pacariqtambo
 - a. *ayllu* are the principal groups for undertaking communal labor projects (*faenas*)
 1. cleaning and repairing public buildings: e.g., town hall, cemetery, church, adobe walls around the church
 - b. sectors are allocated according to *ayllu* membership: strips called *chhiutas*
 1. parallel strips of territory

[Andean culture overview, 1999]

- 2. borders between strips are ephemeral and negotiated
- c. ayllu are each responsible for celebrating a festival
 - 1. preparing food and drink
 - 2. building altars for adoration of the saint
 - 3. sweeping plazas clean of debris
- d. names of ayllus in village correspond well to names of ayllus in early Spanish documents
 - * 1. however, the ordering in the hierarchy changed over time
 - 2. and there was melding and recreation of ayllu at critical points
 - 3. as the demographics of the small units varied too much to maintain stability
- e. some archaeological remains reflect segmentation of construction that may be analogous to modern situation
 - 1. e.g., Chimu walls and canals
 - 2. Moche pyramids
 - 3. Quebrada de la Vaca plaza, Nazca
- f. not clear the degree to which we can assign dual social divisions to archaeological remains with two divisions of material remains
 - 1. see Moore 1995 article

Socioeconomic bonds

- 1. reciprocity: *ayni* and *minka*
 - a. *ayni*: delayed, symmetrical, reciprocal assistance
 - 1. e.g., work exchange that helps each family in turn
 - 2. parallel social relationship is key
 - b. *minka*: asymmetrical reciprocity
 - 1. work can be exchanged for food, drink, coca, goods, rights to use land, even money
 - 2. asymmetrical social relationship is key
- 2. redistribution
 - a. reallocation of natural resources through centralized control
 - 1. generally conceived in Service's terms
 - 2. i.e., a means of equally apportioning goods among households that do not have ready access
 - 3. broad range of goods thought to be involved
 - b. actually: implies hierarchical, unequal obligations
 - 1. exotic or prestige goods distributed by elites
 - a. e.g., coca, guano, salt, tropical or coastal products
 - 2. used to reinforce unequal statuses
 - 3. important in the political economy

[Andean culture overview, 1999]

3. *mit'a* labor: done in turn
 - a. often rendered to elites as a kind of taxation
 - b. obligations by household
 1. not by individual
 - c. so selection for larger households
 1. co-residence
 2. delay of marriage
 3. large families

4. several scholars note how social organization is manifested in irrigation systems
 - a. Sherbondy: prehispanic Cuzco
 1. irrigation ditches divide up the different social and political groups
 2. spatial integration of canals corresponds to social integration
 - b. Isbell, Mitchell: Chuschi, Quinoa
 1. Chuschi: two main canals are maintained by the two main barrios
 2. labor by each household is mandatory

5. *suñay*: apparently spontaneous gift of llama
 - a. actually serves to maintain herd viability among various members of kin groups
 - b. also provides group solidarity
 - c. Flannery et al.: cultural mechanism that helps group adaptation

Religion, ritual cycles and sacred landscapes

1. Andean religions were largely animistic
 - a. worship of natural forces and objects
 - b. many regional variations

2. *wak'a*: sacred locations and objects
 - a. often tied to water and hills
 - b. or rocks
 - c. deities are often thought to reside in peaks
 1. *apu* or *wamani*

3. Inka religion: developed as empire developed
 - a. combined Creator worship: Wiraqocha
 - b. with ancestor worship
 - c. many lesser gods
 1. Sun: Inti

[*Andean culture overview, 1999*]

- 2. Thunder: Illipa
 - d. myriad apu and waka
 - e. subsumed local religions into state religion
 - f. divination
 - 1. llama sacrifice
 - 2. occasionally human sacrifice: capacocha
 - g. fasting
 - h. long tradition of oracles
 - 1. e.g., Pachacamac
 - i. calendrical cycles of rituals
 - 1. e.g., 12 months in ritual calendar
4. radial organization: zeq'e
- a. lines that link wak'a
 - b. various implications
 - 1. cosmological
 - 2. social: ranking
 - 3. ritual cycles
 - 4. spatial organization on the ground
5. north coast religion
- a. Moon (si): greatest divinity, at least in Pacasmayo
 - b. Sun: inferior deity
 - c. Orion's belt (Patá) important
 - 1. middle one was a thief
 - 2. ones on other sides were emissaries of the Moon, sent to feed him to the buzzards
 - d. Pleiades (Fur): patron of agriculture
 - e. Sea (Ni)
 - f. variety of cult objects
 - 1. e.g., Gold Urinal
6. example of linkage between society and natural environment: tinku
- a. confluence of rivers
 - b. ritual battles

Brief History of Andean Archaeology

- 1. chroniclers commented on the legendary history of the Inka empire
 - a. provided information on aboriginal customs

[Andean culture overview, 1999]

- b. e.g., Cieza de León
 - 1. pre-Inka times: Tiwanaku and Wari
 - 2. identified sites as pertaining to Europeans and white-bearded Semites
- 2. the idea of stable human society predominated in 19th century
 - a. heavily colored perceptions of prehistoric developments
- 3. Squier (1877): said that the monuments were of differing ages
 - a. Reiss and Stubel (1880-87): carried out excavations at Ancón
 - b. Weiner: traveler throughout highlands
 - c. Hutchinson
 - d. Middendorf (1872-95): conceived idea of a pre-Inka expansion of Chavín
- 4. excavations at Tiwanaku
 - a. Bandelier (1911)
 - b. Nordenskiöld (1906)
 - c. Uhle (1892)
- 5. early part of 20th century
 - a. main interests were in buildings and temples
 - b. pre-Inka periods began to be discerned archaeologically
 - c. conceived of as megalithic empires
 - d. ignorance of methods used in Europe led to flights of imagination
 - 1. enriched by philosophy
- 6. Uhle: first modern archaeologist
 - a. systematic recording
 - b. first use of stratigraphy for dating
 - c. but his emphasis on cemetery excavation forced use of seriation
 - d. proposed six-fold subdivision of prehistory: using Mesoamerica as a model
 - 1. primitive coastal fishermen
 - 2. protoid cultures
 - 3. Tiwanaku culture
 - 4. Tiwanaku epigonal styles
 - 5. local cultures
 - 6. Inka empire
 - e. emphasized coastal origins and importance for development
 - 1. e.g., Tiwanaku derived from coastal currents
 - 2. talks about proto-this and proto-that
 - 3. Tiwanaku was the big deal for him

[Andean culture overview, 1999]

7. Tello
 - a. reacted to Uhle's coastal bias: emphasized highland origins
 - b. Chavín de Huantar was his big discovery
 - c. origins: based on Chavín and Kotosh
 1. Ucayali basin: source area
 2. or the tropical forest
 - d. main periods
 1. Civilization of Eastern Andes
 2. Civilization of Western Andes
 3. Civilization of Pacific coast
 4. Tawantinsuyu

8. Valcárcel: assumed direction of the Museo Nacional
 - a. less interested in origins than in culture history
 - b. focused through Sacsayhuaman
 - c. combined archaeology, history, ethnology

9. new generation placed less emphasis on fieldwork and more on interpretation
 - a. Kroeber, Strong, Gayton: typological method
 1. based on detailed classification of pottery form
 2. applied to Uhle's collections
 3. to construct chronological sequences
 - b. Yacovlef and Muelle: focused on art

10. Bennett: initiated study of habitation refuse

11. Institute of Andean Research: 1941-42
 - a. Strong, Willey, Corbett
 1. excavated at Chancay, Chillón, and Lurín
 - b. Tello: Paracas
 - c. Rowe: Cuzco
 - d. McCown: Huamachuco and Cajabamba
 - e. Kidder and Tschopik: boundary between Central and Southern Andes
 1. revised areal extent of Tiwanaku influence

12. Virú Valley Project: IAR
 - a. Bennett, Strong, Willey, Bird, Ford, Evans, Collier
 - b. clarified chronology
 - c. first major settlement pattern study
 1. derived from theoretical work of Julian Steward

[Andean culture overview, 1999]

- d. effort to study community-level organization
 - e. brought ecological and regional systems perspectives to archaeology
13. later studies focused on refining regional chronologies or on particular problem areas
- a. e.g., preceramic agriculturalists
 - 1. Bird: north coast
 - 2. Engel: central coast
 - b. studies of Paleoindian and preceramic societies
 - 1. Lanning, Patterson, Moseley
 - c. studies of the Formative Period
 - 1. Izumi and Sono: Kotosh and environs
 - 2. Chavín de Huantar
 - a. Lumbreras and Amat
 - d. stylistic seriation on south coast: Menzel, Rowe, and Dawson
 - e. Lathrap (1950s-present): Upper Amazon and Ecuador
14. Inka archaeology
- a. had been abandoned in favor of documentary studies
 - b. Valcárcel and Rowe: excavations in Cuzco
 - c. Huánuco: Murra, Morris, Thompson, Hadden, Fonseca
15. last two decades
- a. emerging interest in problems of anthropological archaeology
 - b. shift away from chronological focus
 - 1. toward problems of subsistence and complex society
 - 2. empire formation
 - 3. the role of ideology in forming complex society
 - c. re-emergence of Inka archaeology: last decade
16. Andean studies still tend to be non-comparative
- a. e.g., few comparisons drawn with Mesoamerica
 - 1. but this is slowly changing