

Anthropology G4210 The Rise of Andean Civilization

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September 8, 1999

Lecture #1: Introduction

1. purposes of the course
 - a. examination of the nature and development of societies in the Andes
 1. from the earliest occupations: perhaps 14,000 yrs ago
 2. to the Spanish conquest: A.D. 1532
 - b. multiple perspectives
 1. anthropological archaeology
 2. culture history
 - c. look at the sequence of development as we currently understand it
 - d. class will also provide a forum for examining differing ideas concerning how and why complex society develops
 1. raise questions concerning the role of economic, politics, and ideology in social change
 - e. data base for the region is inconsistent
 1. despite several decades of intense interest
 2. reasons: greater emphasis on Mesoamerica
 - a. logistical difficulties: terrain and climate
 - b. lack of funding within the countries
 - c. political unrest
2. go over syllabus
 - a. intent of course
 - b. requirements: no incompletes
 - c. text
 1. Moseley
 2. reading packet
3. instructor
 - a. fieldwork in Missouri, California, Mexico, Peru, Argentina
 - b. interested primarily in politics and economics of complex societies
 - c. focus on Inkas
 1. imperial organization
 2. Upper Mantaro
 3. Valle Calchaquí

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Environment and Cultural Development in the Prehistoric Andes

1. western South America: region of striking environmental contrast
 - a. long posited that environment was key element in formation of Andean civilization
 1. challenges
 - a. desert, mts, forest
 - b. rugged topography
 - c. no navigable rivers
 2. opportunities
 - a. irrigable valleys
 - b. compact microenvironments
2. what are the Big Questions of environment and cultural development?
 - a. initial human adaptation to varied and often hostile environment
 - b. advent of domestication
 1. plants
 2. animals
 - c. effects of interaction between environment and social formation in development of complex society
 1. e.g., maritime foraging vs. irrigation as basis of first complex social formations
 - b. constraints of environment on formation of empires
 1. e.g., population limitations: restricted urbanism
 2. problems with transportation and communication

The Andean Environment

1. Andes
 - a. dominant geographical feature
 - b. two parallel ranges
 1. Cordilleras Oriental (east)
 2. Occidental (west)
 - c. narrowest point in central Ecuador: ranges lie 130 km (81 mi) apart
 1. chain widens: 750 km (469 mi) in Bolivia and south
 - d. mountains ascend rapidly
 1. continental divide near Lima: about 100 km (62 mi) inland
 2. transverse ranges (nudos): divide the landscape
 - a. many small valleys
 - b. occasional large drainages
 - e. Bolivia and far NW Argentina

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1. main ranges are separated by the altiplano
 2. windswept plain that encloses Lake Titicaca
 - a. 3,800 m (12,467'): world's highest navigable lake
 - f. Andes' highest peaks in the south: border between Chile and Argentina
 1. Aconcagua: 22,835' [6,960 m]
2. causes of coastal climate
 - a. atmosphere dominated by the Pacific anticyclone
 - b. constant atmospheric pressure
 - c. humid air
 - d. uniform temperature
 - e. cold or temperate ocean
 - f. regular water runoff
 - g. exceptional heavy rains and runoff
 3. Andean climate
 - a. gradients:
 1. dry and cool in the south; warm and wet in the north
 2. arid on the west to moister on the east
 - b. coastal desert
 1. produced by
 - a. Peruvian Current: frigid, north-flowing waters
 - b. prevailing winds
 - c. mountains
 2. from central Chile to Ecuador's Santa Elena Peninsula
 3. parts of the Atacama: centuries without measurable rainfall
 4. entire coast: punctuated by drainages
 - a. narrow swaths of green
 - b. lush croplands: esp. productive north Peruvian coast
 - c. upper Amazonian jungles: east side of the Andes, from Bolivia north
 1. montaña: eastern Peruvian slopes
 2. ceja de la selva: upper edge of the Amazonian forest
 - a. "eyebrow of the jungle"
 - d. yunga (up to 2,300 m; 7,500'): warm valleys
 1. above the coastal plain and jungles
 2. produce coca and fruits: chirimoya, guayabo, avocado, lúcuma
 - e. queshwa zone (to 3,500 m; 11,400')
 1. sharply cut zone in Peru: above the warm valleys
 2. supports varied crops
 - a. indigenous: maize and beans

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- b. European: wheat and barley
 - f. suní zone (up to 4,000 m; 13,100')
 - 1. cold hills, ridges, and deep valleys
 - 2. rainfall and irrigation agriculture produce
 - a. native grain: quinoa
 - b. legume: talwi
 - b. tubers: potato, mashwa, ulluco, oca
 - g. puna (up to 4,800 m; 15,748')
 - 1. cold and damp rolling grassland
 - 2. volatile weather
 - 3. natural habitat of Andean camelids
 - a. herding: llamas and alpacas
 - b. hunting: guanacos, vicuñas
 - 1. also deer
 - h. janca
 - 1. jagged snowcaps and glacial lakes
 - 2. exploited for abundant mineral wealth
4. variations
 - a. in the north
 - 1. low latitudes ameliorate the climatic effects of the high elevations
 - 2. reduces impact of frosts: which threaten crops farther south
 - b. in Bolivia and south
 - 1. trend is reversed
 - 2. climatic zones found at lower altitudes
5. El Niño
 - a. trade winds unpredictably slacken: every few years
 - 1. equatorial waters flow south
 - 2. surface waters reach tropical temperatures
 - 3. torrential rains fall on the coast
 - b. marine and bird life: die or migrate
 - c. croplands and canals: can be badly damaged
 - d. some archaeologists propose: this phenomenon triggered past social upheavals, by disrupting food production
 - 1. other possible disruptions
 - a. geologic uplift
 - b. migration of wind-blown sand

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6. domestication: by 3000 BC, all the major cultigens and animals used to support human life in the Andes had been domesticated
 - a. plants
 1. mostly domesticated in the varied environments of South America
 2. domesticated potatoes: 8,000 BC in northern Bolivia
 3. maize: in the north Andes 6-5,000 BC
 4. beans and peppers: highland Peruvian valleys 8,500 BC
 5. coastal and lowland cultivars: cotton, squash, and lúcuma
 - a. appear in central sierra sites: 4,200 and 2,500 BC
 - b. animals:
 1. llamas, alpacas, and the guinea pig: all domesticated in the Andes
 - a. earliest known domesticated camelids: caves in central Peru dating to 4,500 BC
 - b. guinea pigs: important in highland diet by 7,000 BC
 1. may not have become fully domesticated until 4,200-2,500 BC
 2. dog: arrived domesticated
7. Andean populations: concentrated in certain environments
 - a. coastal valleys
 - b. highland valleys: 3,000-3,900 m (11,155-12,795')
 - c. Bolivian altiplano
8. complementary strategies
 - a. agricultural
 - b. pastoral strategies were successful complementary adaptations to the variegated