The Peopling of South America

ANT325

Three questions

- Where did the people come?
- When did they get there?
- Were the high cultures of South America autochthonous?
  - Drawn from local cultural norms and practices
  - By way of non-South Americans
    - Transcontinental
    - Transoceanic

When did they leave the Old World?

- Skeletal analysis indicates without doubt that fully modern humans populated the Americas, and fully modern humans arrived in Asia no earlier than 40,000 years ago.
- Why is this important?

Main Theory

- Beringia Land Bridge
  - During the Wisconsin glaciation at the last stage of the Pleistocene
  - Key time frame possible for migration
  - 50,000 - 10,000 ya
  - Ocean levels 200ft lower
- Problems
  - When did humans colonize Asia?
  - Evidence hard to find
    - Coastlines are today underwater
    - Low level of material culture present at that time
European Arrivals Theory

- Visitors came by sea along the lowered coastlines
  - From N. Europe past Greenland

Multiple waves or only one?

- J. Greenberg hypothesis – three waves from Siberia
  - Linguistic evidence
  - Dental evidence
  - Most archaeological research tends to support Siberian origins

- Single wave from Mongolia based on mtDNA
  - Mitochondrial DNA is inherited directly from mother to child, with no paternal contribution and no recombination. This makes it traceable through the generations.
  - Highly prone to mutations, which are then passed to the next generation. The resulting slight differences between individual DNA sequences help geneticists group relatives.

Genetic data says

- Four haplogroups, labeled A, B, C, and D,
- Four specific mtDNA types brought into the New World from Asian peoples
- Varied progressively through mutations accumulated over generations of offspring with more of each farther south.
- More “A” in North A. and “D” in S America
- Not much evidence of mixing NA w/ SA

- Molecular evidence implies a single population left Siberia and headed into the Americas between 30 and 13 ka.
- Were there two or more streams of migrants?
- Why is this important?
- Kennewick Man
- NAGPRA, Native American Graves Protection and Repatriation Act
When did they get here?

- Based on these standing assumptions in the record, some archaeologists argue
  - colonization of the Americas occurred first about 15,000 years ago, immediately after the Pacific coast became deglaciated.
  - Only one migration?
  - How early could they have arrived?
  - How long would it take to travel the length of the Western Hemisphere?

The brunt of migration

- Bering Strait
- Which were the N – S routes of peopling?
- Were there multiple migrations?
- Diverse genetic populations?
- How fast did the whole continent become populated?

Take a journey thru time


Who were the First Americans?

- The first Americans were diversified hunter-fishers and used boats, dispersing along the coasts for at least 1,000 years.
- Clovis, the big-game hunters of horses and mastodons until 8500BC; also, giant sloths, other elephant types, saber-tooth tigers, deer, paleo-llamas
- May be descended from these original Americans, or may represent a second dispersal from Beringia.
- Evidence of transhumance (coast and highlands and/or valleys)
- Rock paintings around 7500BC
Pre-projectile Point Era

- Date of Monte Verde and Fell’s Caves suggests strongly there was a pre-Clovis/pre-projectile point era
- What did they live from?
- Who were they?
- How did they get to southern S.A. so fast?
- Or did they arrive earlier than 15,000 ya?

South American Sites

- Monte Verde, Chile 14,600 ya/ pre-Clovis - wiped out by a tsunami?

Fell’s Cave, Patagonia, 11,000 ya
El Inga Cave, Quito, 9033 ya
Many others illustrating
  - Coastal migration importance
  - Earlier cultures than Clovis
How long to get from Bering strait to tip of South America?
How many migration waves? – 4?

Clovis culture

- Big game hunters - mastodons
- First identified at Clovis, NM
- Fluted projectile points are its characteristic
- Widespread after 13000 ya
- Folsom - 9500-8000 ya
  - Bifacial
  - Big game gone 10,000 ya
Where did the South American high cultures come from?

- Two theories
  - Diffusionists (thru people from other continents)
    - Is there clear evidence of contact?
    - Is there clear evidence of sustained contact?
    - Is there clear evidence of transferral?
  - Isolationists (inventionists)
    - independent development of cultural practices
    - Outside contact was not significant enough

Diffusionists: Contact Theories

- Ancient Astronauts
  - Ancient art and architecture
    - Reflects alien culture and needs
    - Constructed for aliens
  - Nazca lines is an example he used

Intercontinental Contacts

- Trans-Pacific contacts
  - Kon Tiki raft (1947)
    - Thor Heyerdahl
      - To prove that there was contact from S. A. to Polynesia by using only the materials and technologies available to those people at the time, that there were no technical reasons to prevent them from having done so
    - Ecuador to Tuamato Is.
      - 101 days
      - 4300 mi.
    - Currents- probably no reverse trip

- Mu, a separate, sunken continent
  - Augustus Le Plongeon popularized name “Mu” from Charles Étienne Brasseur de Bourbourg (1864) mistranslated what was then called the Troano Codex thinking the word ‘Mu’ referred to a land submerged by a catastrophe. Le Plongeon then turned this into a sunken continent whose Queen Moo fled to Egypt. Other refugees supposedly fled to Central America and became the Mayans
  - Later James Churchward d. 1936) connects Egypt, Greece, Central America, India, Burma and Easter Island, all known for megalithic art and architecture. Churchward and others made comparisons of these
  - Claims origin is the lost continent of Mu that flourished in the mid-Pacific and then was completely obliterated in almost a single night. Symbols from throughout the world are used as proof.
  - Largely discredited today.
Jomon Culture - Japan

- Japan’s Neolithic Era - ca 10500-300BC
- Jomon people produced ceramics by
  - Could have brought ceramic techniques to West Coast of the Americas
  - Valdivia, Ecuador seems to have specific relatedness in ceramic pot design and technique

China

- 1st Emperor Sui-jon, 3000 BC invented art of knot writing - similar to Inca quipu writing
- 2nd Emperor, Shon-nung (2737-2705) sculpture is similar to human head/animal sculpture in Chavin de Huantar, Peru
- Cult of serpent in China also found in S.A.
- Other contacts through the 1st millennium AD

Trans-Atlantic Contacts

- Vikings/Danes/Scandinavians
  - Leif Ericsson, ca. 1000AD arrives to Beothuk, Newfoundland from Greenland
  - Kensington runestone in R.I.,
  - “oldest building in America?”
  - ca. 1050AD

Lost Tribes of Israel

- Native Americans are one of the lost tribes of Israel, around 600BC
- LDS Church beliefs suggested in Book of Mormon
- Sailed to the New World led by the previously unknown prophet Lehi
- Mormon belief, until recently, suggests Lehi's children eventually became two warring factions, which included the good, white Nephites and the bad, brown Lamanites. The Lamanites, eventually killed all the Nephites by 500 A.D. But the bad, brown Laminates continued to live on and are now called Native Americans
Atlantis
- Plato - located somewhere in the Atlantic Ocean
- Beyond the pillars of Hercules (which are now called the Straits of Gibraltar and are between Spain and Libya)
- Today- the Bermuda Triangle?

Egypt
- Ra I and Ra II expeditions
- Thor Heyerdahl, 1970, Ra II
- Morocco to the Barbados in 57 days
- Use raft boats with styles and materials from Lake Chad and Lake Titicaca based on drawings of ancient boats in Egypt and Peru and Bolivia

Inventionists: Theory Two
- Most anthropologists believe that high civilizational cultures are autochthonous
- Most believe that high cultures centered in the Central Andean region
- They need to find reasons why
Why the Central Andes?

- Extensive marine resources
- Concentration of people around coastal rivers
- Variety of ecological niches
  - Archipelagoes
  - Verticality
- More...

Competition for resources

- Erratic rainfall
- Mountains compress ecological zones that elsewhere might be spread out of 1000’s of miles
- Verticality vs horizontality
  - At diff. elevations diff. crops harvested
  - The higher the elevation the shorter the growing season

Circumscription Theory

- Resources are closely circumscribed geographically
  - Irrigation invented very early
  - Andenes (terraced fields)
  - 20% of crops are above 3000m.
  - 90% of crops do better below 1000m
  - More people living at lower elevations
- Technology responds to circumscription, eg., ceramics

Origins of Ceramics

- Asia
- Ecuador - Valdivia
- Norte Chico - Peru’s Coast
- Tutishcainyo Culture - Amazon Basin - 2000-1150BC
- Marajó Is.
Central Andes: Ecuador to Bolivia

- North coast
  - Far North
  - North central
- Central coast
  - Central
  - South central
- South coast
  - South
  - Far South
- North Sierra
- South central Sierra
- South Sierra