

Research Related to Pre-Columbian Native American Societies

Traditional Thinking on the Peopling of the Americas

The Americas were first populated by fully developed *Homo sapiens*. The New World has no extinct species of fossil humans or higher primates from which humans might have evolved. For many years it has been widely accepted that Asians came to the Americas through the Bering Strait about 13,000 years ago at the tail end of the last ice age when sea levels were probably 300 feet lower than they are today. It was postulated that about this time two ice sheets in NW Canada parted leaving a comparatively warm ice-free corridor between them. This combination of land bridge and ice-free corridor occurs very infrequently and probably only lasted a few hundred years. Under this theory several groups may have independently walked across the Bering Land Bridge at different times. Conveniently, this timing fit with finds of arrow points at Clovis, New Mexico, which was for many years the earliest known culture in the Americas.

Pleistocene Overkill

This traditional view of the peopling of the Americas is often combined with the notion of “Pleistocene Overkill”, put forward by paleontologist Paul Martin in the 1970s. A huge die-off of large mammals occurred in the Americas between about 11,500 and 10,900 BC, notably in the period just after people were first supposed to have arrived in the Americas. Some suggest that overhunting took its toll; others suggest climate change may have been responsible. This is still widely debated.

New Research

This traditional view of the peopling of the Americas has been challenged, even since the 1960s when archeologists began turning up sites that they claimed to be older than Clovis. In particular:

- 1) An archaeological dig in southern Chile turned up compelling evidence of human habitation at least 12,800 years ago. Some artifacts were suggested to be 30,000 years old.
- 2) Doubt was cast on the idea of the ice-free corridor by geologists and no evidence was found of paleo-Indians in the corridor at the right time, leading some to turn to the idea that humans must have arrived at least 20,000 years ago when the ice pack was smaller.
- 3) Meanwhile, some paleontologists suggested that approx 2/3 of the Pleistocene overkill species disappeared before Clovis people appear in the archeological record.
- 4) Research on language shows such diversity that some scholars have suggested that tens of millennia would be needed to produce such divergence.

Increasingly, it is believed that the Americas may have been populated 30,000 years or more ago. People may have arrived during an earlier period when the ice pack was smaller (at least 20,000 years ago); some may even have come across the Pacific by boat. Many people believe that Indians may at least have traveled southwards along coastal routes by boat rather than across land, potentially making their peopling of the continent much faster. However, many coastal sites are now submerged making investigation difficult. Some have suggested that there may have been a pre-paleo Indian population existing in the Americas and then paleo-Indians arrived across the Bering Strait.

This issue is a great one for teaching as it shows students that experts themselves often cannot agree, which is an excellent introduction to undergrad-level work for high-school students. Another thing to note: the ice age in Europe made much of northern Europe uninhabitable until about 18,000 years ago, and Britain was probably empty of people until about 12,500BC as it was still covered by glaciers. As such, people may have been thriving in the Americas long before people even arrived in much of Europe.

Native American Perspectives

Native American groups do not necessarily accept these ideas. Vine Deloria, Jr., a Native American political scientist, has written a book that attempts to debunk what Deloria sees as the scientific myths of Indian immigrations. It is an objection to the “we’re all immigrants here” line of reasoning. Many Native American groups also reject the Pleistocene Overhill hypothesis as designed to undermine their image as living lightly on the land.

Pre-contact Societies

Regardless of all this controversy, the first inhabitants of America came during the Stone Age of the Old World, so they already had simple tools, domesticated dogs, belief in nature spirits, and social relations based on kinship. This was before the invention of farming, which occurred in both the New and Old Worlds.

By the time of European contact, Native American cultures varied tremendously, ranging from small bands of nomadic hunters and gatherers to fully-fledged, state-level societies. At conquest there may have been as many as 500 distinct Indian groups.

At contact, two-thirds of Latin America was inhabited by agriculturalists. Many of these farmers also hunted and gathered – some up to 50% of their food.

Hunter-Gatherers

By the time of European contact, nomadic hunters and gatherers remained in areas that larger, more dominant groups had not claimed (i.e., peripheral, isolated refuge areas). For instance, in the West Indies, a shellfish-gathering group, the Ciboney, who once occupied all of Greater Antilles, had already been pushed out by agriculturalists by time of conquest.

The Pampean Indians lived in the Pampas and hunted guanacos and rheas and several small mammals. Spears and bolas were the main weapons. After contact with Europeans they started using the horse and became more mobile. The Mapuche Indians of the Pampas were not defeated by Argentinians until 1870s and '80s, which finally assisted in opening up the Pampas to agricultural devp.

In cold and rainy southernmost Chile, the Europeans encountered only small, nomadic groups that subsisted mainly by gathering shellfish.

In parts of Amazonia, small bands of hunter-gatherers lived. Remember though that hunter-gatherers were not the majority in the rainforest, despite people’s images of rainforest peoples. Instead, at contact, the region was actually probably mostly farmed.

Agriculturalists

Agriculturalists made up two-thirds of the population of Latin America at European contact. They lived at higher population densities and often had other technologies, such as knowledge of metalworking or basketweaving. Many different types, adapted to different environments.

Desert farm villages

At the time of European contact, Native American farmers lived in villages and used small-scale irrigation to grow their crops in the deserts of Northern Mexico and Chile. Main crops: beans, maize and squash. Maize domesticated in Mexico. Root crops secondary. Well-balanced diet meant little need for hunting and fishing, which were of limited importance.

Tropical forest farm villages

The second major change in thinking I want to talk about is our understanding of tropical rainforest cultures, e.g. Guarani of Eastern Paraguay. It is now generally believed that much of the rainforest was used by forest agriculturalists. How does this confuse images of pristine nature as put forward by environmentalists?

Main crop was probably manioc (also known as cassava or yucca). Also, sweet potatoes grown. Manioc provides lots of calories, but very little protein, vitamin or minerals. Many rainforest groups therefore probably supplemented their diet with hunting, fishing, and gathering. Peanuts may have been grown as protein crop. Most protein comes from hunting/fishing. Corn largely absent. Papaya and Guava and other tree fruits supplemented the diet.

Another theory is that forest farmers performed a form of orchard farming where they selected favorable tree species and cultivated them in forest orchards, probably still supplemented with manioc. Instead of clearing the forest completely (very difficult with stone tools), it is thought that people perhaps manipulated the species in the forest for easier gathering. In this context the peach palm may have been one of the staple crops of the Amazon, probably grown in combination with manioc. People used the most fertile lands along river beds to grow favorable tree crops.

It has even been suggested that slash-and-burn agriculture may have been a response to Spanish invasion, as Indians were moved off the fertile river-bed land into the denser jungle for safety where the soils were poorer. In slash-and-burn farming, many of the nutrients from the burned vegetation are in the ash and thus available to newly planted crops. Yields quickly decline though due to lack of nutrients and weed invasion. Cultivation must be shifted to another field. A typical cycle is two years of cropping for every eighteen years of fallow before replanting a field.

Confederations and Chiefdoms

The remaining societies all have some sort of labor specialization and stratification in society. Anthropologists consider confederations and chiefdoms an intermediate stage between village-based and state-level societies. Chiefdoms incorporated numerous villages, and had some social stratification with recognized political leaders and religious specialists. When necessary, chiefdoms could raise an army. However, chiefdoms did not maintain a standing army and had no large urban centers.

State-level societies

At European contact, at least $\frac{3}{4}$ of Native Americans lived in territory controlled by state-level societies: the Maya, Aztec (or Triple Alliance), and Inca.

State-level societies are characterized by:

- Large population
- Well-defined territory
- City or cities
- Pronounced social stratification
- Full-time labor specialists, including a standing army, professional priesthood, and skilled artisans
- A political elite that attempts to administer the whole territory and population.

In various parts of the world, the rise of state-level societies has been linked to large-scale irrigation.

Effective political administration was necessary to build and maintain irrigation works and to regulate the distribution of water. The irrigation works, in turn, allowed surplus food production that supported labor specialization and population growth.

Many commoners supported a few artisans, soldiers and religious priests. At the top of the pile were a very few elite members of society who governed.

Maya

It is believed that the Mayan civilization began to function as a state in the highlands of what is now Guatemala around 3,000 B.C. and then to have expanded northward into the lowlands of the Petén, or Yucatán Peninsula. The Mayan Empire reached its height during the fourth century B.C. It consisted of quasi-independent states, encompassing millions of people and perhaps 100,000 square miles. There were numerous cities with 40,000 or more residents. In terms of scholarship, the Mayan civilization was the most sophisticated native American society. The Maya had hieroglyphic writing, an accurate calendar, mathematics, formal artistic and architectural styles, and complex astronomical understandings.

Maize, beans and squash supported the Mayan Empire. The Maya had permanent fields (cf shifting agriculture), which were fallowed every 2-3 years. They also used terraces and irrigation. In some cases, multiple crops could be grown per year.

Beginning around 800AD the Maya began leaving cities and the government structures began to collapse. No one knows exactly why. May have been environmental degradation (esp. soil exhaustion or depletion of water supplies), political turmoil, natural disaster, etc. In any case, after flourishing as a state for over a thousand years, Mayan society again functioned at the village level.

The Spaniards encountered a large and relatively densely-settled, indigenous population in southern Mexico and Guatemala. They discovered massive evidence of the earlier state-level society. They did not encounter the fully functioning state-level society of the Maya that had once existed. Mayan dialects are still spoken by the native peoples of the Yucatán Peninsula in Mexico and in the western highlands of Guatemala. A relatively cohesive Mayan culture still remains today including religion, agricultural practices, and social relations.

Aztecs

Subsisted through farming on raised fields in water (*chinampas*) supplemented especially by fish and ducks that lived in the surrounding water courses. These animals in turn fertilized the fields with their waste. The Aztecs grew mainly maize, beans and squash.

When the Spanish arrived, the Aztec had functioned as a state-level society for only a century or so. The Spanish found it relatively easy to unbalance the Aztec Empire as many of its subjects did not like the Empire. The Aztecs were extremely militaristic and exacted annual tribute (goods) from the subject populations throughout the empire. Aztec tribute included humans for sacrifice. The Aztecs were hated by many of the peoples they subjugated, and many had become Aztec subjects not long before the arrival of the Spanish.

Incas

The other place where the Spaniards encountered a functioning, powerful state-level society was the Central Andes: the Incas. In this case, too, the Empire had only been in place for about a hundred years. The Inca Empire was the largest state in the New World at the time of contact. Within 90 years

of the start of the Inca Empire, Inca armies had conquered an area extending 2800 miles from Southern Columbia to central Chile.

Inca Empire was a true empire: all natural resources theoretically belonged to the state. There was a state language (Quechua), a state religion (sun worship), and these were imposed on all conquered peoples. One of the main ways in which the Inca differed from the Aztecs was the way in which they incorporated neighboring peoples into their realm. As the Inca Empire expanded from its hearth around Cuzco, it rarely engaged in military conflict. Local temples were maintained, and residents were free to continue their religious practices, as long as they acknowledged the superiority of Inti, the Incan sun god. If rulers were cooperative they were allowed to continue to rule their peoples and their sons were often taken to the Inca capital, Cuzco, to be educated. If the rulers were not cooperative, they and their subjects were forced to migrate en masse to distant, less hospitable places, and their former territory was awarded to loyal Inca subjects.

Food in villages was produced on a tripartite system. Food was produced for local people, the Inca nobility, and the state priesthood. Surpluses were stored and redistributed in times of need. There was reportedly no hunger in the empire. Victims of crop shortages or failure in any part of the empire were fed from public granaries. The Inca state was particularly effective in providing for the sick, disabled, orphaned, widowed, and aged. The Inca built roads, bridges and temples. Good road distribution allowed for food distribution and military control. Communication within the vast empire was possible because of an extensive road network, including suspension bridges up to 200 feet long, and imperial relay runners.

Some have called the Inca the first 'socialist state':

- Everything was owned and controlled by the government.
- There was no private property, no currency, and no possibility of capital accumulation.

Potatoes were the staple food in highlands. Chunyu (dried potato) allowed easy storage and carrying of potatoes. Also the local grain: quinoa (protein rich). Maize was of secondary importance – used mainly for chicha (corn beer). As the Empire was so large, regional differences in food stuffs did, of course, exist. In the lowlands, sweet manioc and sweet potatoes, maize/beans/squash were staples.

Similarities and differences between state-level and other societies in Latin America

In most ways the native American state-level societies were different from groups with other kinds of social organization.

- 1) However, all native Americans were similar in having no concept of private ownership of land.
- 2) Furthermore, although the state-level societies had large cities, most of their people lived in rural areas.
- 3) Reciprocal labor exchange common
- 4) Little grazing of stock
- 5) Slavery and warfare appear to have been common across many groups.

Population Decline

A final area of great debate recently has been the number of people living in the Americas at the time of Spanish arrival. Traditionally, it was widely believed that populations were relatively sparse across much of the Americas. It is now believed by many, however, that where populations were found to be

sparse by the conquistadors, in many cases this may have been because of disease coming before them, wiping out much of the Indian population.

Initial estimates at the turn of the twentieth century suggested that perhaps as few as less than 10 million people had lived in the Americas at the time of conquest. By the 1960s, some estimates had reached over 100 million, and some scholars have suggested that more people lived in the Americas than in Europe at this time. The numbers are always going to be contentious, but recent estimates suggest that after initial European contact the Native American population declined by 90-95% during the first years after initial European contact.

Further Reading

1491 by Charles Mann, published 2005