

The origins of mummies

By Stephen Ornes / August 27, 2012

Though ancient Egyptians are famous for their [mummies](#), Americans — South Americans — practiced the preservation method first. In a desert coastal region of what is now northern Chile and southern Peru, the Chinchorro people began mummifying their dead about 7,000 years ago. Now scientists have proposed an explanation for how this practice got its start: The Chinchorro were just copying nature.

The ancient South Americans buried corpses in shallow graves in the desert. There, the arid climate would have dried out the dead bodies,

preventing their decay. When the Chinchorro population grew, more villagers probably started to see these bodies in the desert. They were inspired to mimic the natural process and start mummifying the dead, scientists report in a new study published in August.



South America's Chinchorro people mummified their dead long before the ancient Egyptians. One of the Chinchorro methods used human-hair wigs and red dye made from ochre. Credit: Bernardo Arriaza

Seven millennia ago, the Chinchorro population was booming. The growth was probably fueled by readily available water and food. According to climate records, rainfall had been increasing, giving more people access to freshwater. Scientists have also unearthed fishing tools, including hooks and harpoons, from the same time period. Those suggest the Chinchorro were eating plenty of fish and seafood then.

In the new study, scientists propose that this population boom led the ancient people to develop complicated customs, such as mummification. More people would have meant more permanent settlements and more corpses — and more frequent sightings of naturally preserved bodies sticking out of shallow graves. At some point, a light bulb went off and a new tradition of preserving the dead began.

“Environmental changes are usually associated with the collapse of complex societies,” Pablo Marquet told *Science News*. “But if resources are abundant, environmental change can provide fertile ground for cultural evolution,” or change. Marquet, the study’s leader, is an ecologist at Pontificia Universidad Católica de Chile in Santiago. He studies the interaction between societies and their environments.

The Chinchorro may have viewed mummification as a religious practice. Other researchers have found that some ancient tribes believed that if a body were not fully decomposed, then the person would never completely disappear. So mummification may have been seen as a way to keep the dead among the living. The Chinchorro mummified their dead for about 2,600 years. The practice appears to have stopped after rainfalls diminished greatly and the tribe’s population dropped.

Although Marquet’s team’s explanation for mummification might be accurate, scientists will need to find more supporting evidence for the idea, says anthropologist Daniel Sandweiss of the University of Maine in Orono.

“Perhaps someone who encounters Marquet’s article will be inspired to innovate a new way to test his hypothesis, just as encountering natural mummies in the Atacama Desert may have led Chinchorro people to create artificial mummification,” Sandweiss told *Science News*.

Power Words

mummification Preservation of a dead body to prevent all of the tissues from disappearing due to decay.

anthropology The study of humankind.

arid Dry, as in a desert landscape, where the air and ground lack much moisture.

culture The customs, arts, social institutions and achievements of a particular nation, people or

other social group.

population All the inhabitants of a particular region.