“From Palpa to Nasca – New Speculation Regarding the Migration of the People of Ancient Paracas”

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Research into the ancient culture of Nasca known as the World Heritage Site “The Nasca Geoglyphs” is taking on even more interesting dimensions. Significant progress has been made in the excavation and analysis of new ruins by the Nasca-Palpa project, which is centered around Dr. Markus Reindel of the *Deutsche Archäologische Institut*. Due to this, theories put forth as recent as the 1990’s are already being discounted and deemed as necessitating revision. Nasca-Palpa research is moving on to the next stage.

That the people of Paracas, who resided in Palpa before the birth of Christianity, were forced to migrate to the Nasca plains for several reasons where they consequently developed Nasca culture is as reported in last year’s bulletin. I also spoke therein of this leading to a growing focus on research into the Paracas culture, which serves as the headstream for Nasca cultural products such as “The Nasca Geoglyphs”.

Why were the people of Paracas forced to migrate to Nasca? Several reasons can be envisioned.

It is known that an intensification of arid conditions developed in this entire area and became a severe problem, and that conversely destruction due to unexpected flooding was also causing problems. Also, the necessity for people to depart from their place of birth due to a need for an expansion in living space due to an increase in population or because of epidemic conditions that existed due to large fluctuations in weather is also possible.

However, in September 2006, while traveling through Nasca and Palpa, I became aware of one more large factor which had not been referenced up until now – earthquakes.

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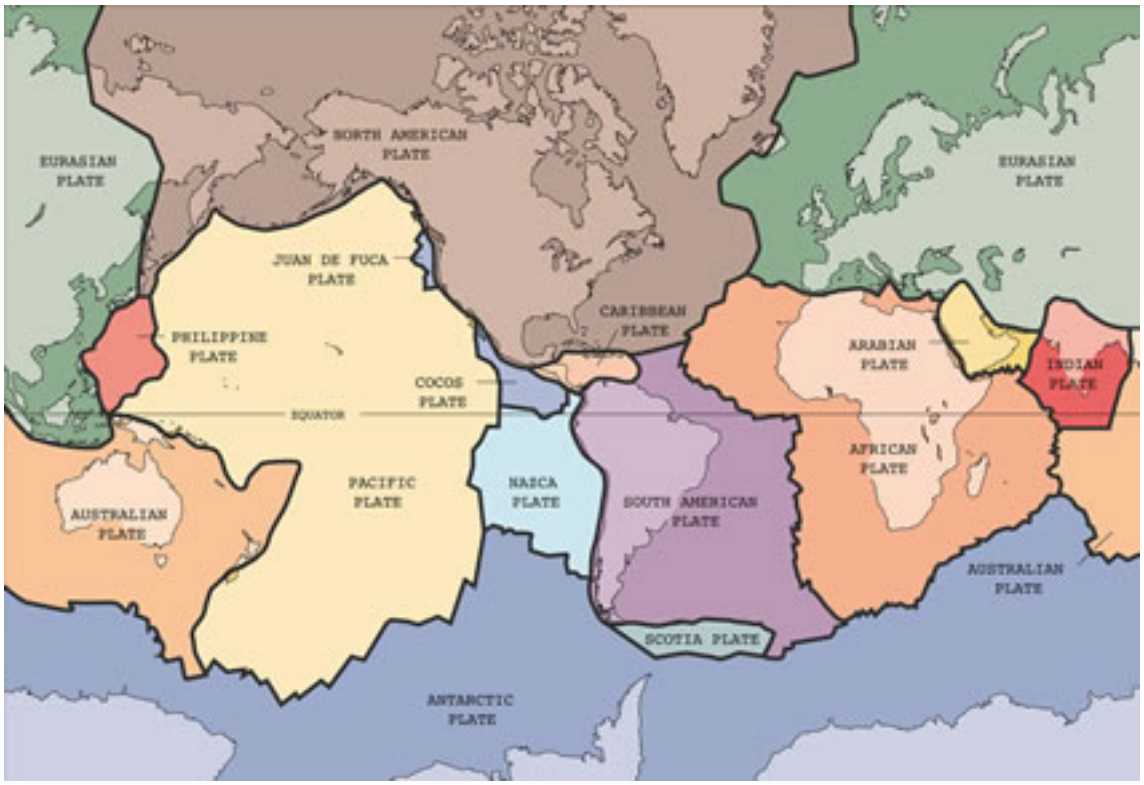
According to plate tectonics (the plate theory), the crust of the earth is made up some ten odd plates. The plates are hard rock shelves with an average thickness of 100 km. These plates ride atop a slow mantle convection, and are thus in transition. The border portions of the plates that collide with each other and overlay each other cause crustal disturbances such as volcanoes and geological faults, and also generate earthquakes.



(Fig. 1) Global Plate Map

As seen in “Fig. 1”, the plate covering the Pacific Ocean area is the Pacific Plate. Because the Philippine Plate located to the west of the Pacific Plate is surrounded in a complex fashion by the North American Plate to the north and the Eurasian Plate to the west, our country of Japan, which is located right on that border, is a country of earthquakes. Just as in Japan, earthquakes are frequent as well in Peru, which is one of the countries that belong to the circum-Pacific seismic zone. The Nasca Plate, which juts up against the east side of the Pacific Plate along the Pacific Ocean coast line, is moving under the South American Plate, which covers the South American Continent.

Active faults run along the border line, and earthquakes occur centered in this area. Even according to recent records, 101 earthquakes were recorded in Peru in the year 2000 (of which 9 had a magnitude of 5 or over), 118 were recorded in 2001 (of which 21 had a magnitude of 5 or over), 102 were recorded in 2002 (of which 10 had a magnitude of 5 or over), and 129 were recorded in 2003 (of which 11 had a magnitude of 5 or over).

For recent earthquakes, the Southern Peru Earthquake on June 23, 2001 can be given as an example. This earthquake with a magnitude of 8.3 hit hard in the 4 provinces of Arequipa, Moquegua, Tacna, and Ayacucho.

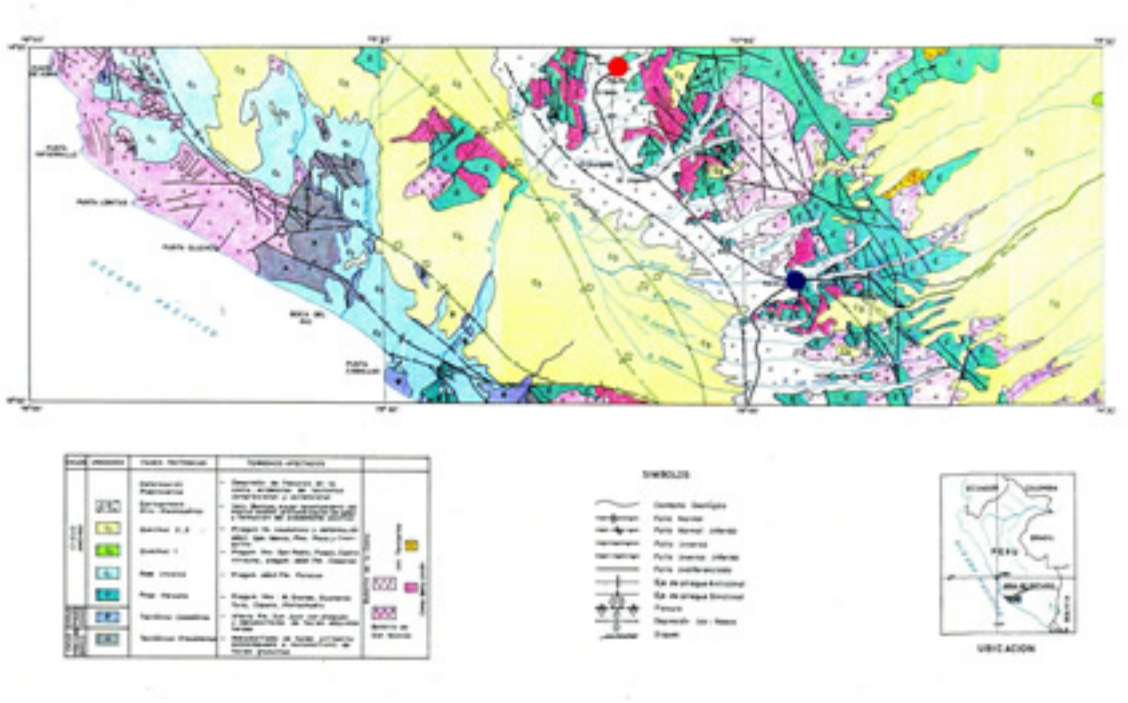
As many as 77 people died, 68 people went missing (presumed dead), 2,713 people were injured, and 213,430 people were victimized by the earthquake. Damaged properties numbered up to 33,570 and completely demolished

properties numbered at 25,399. Historical buildings were not spared. The tsunami which followed in the footsteps of the earthquake also caused severe damages to coastal towns.

However, this is not the first time the Arequipa region has been visited by earthquake devastation. This area is intricately lined with active geological faults, and there are numerous records of earthquake attacks in the past as well.

And Nasca is also part of this active earthquake region.

I obtained a detailed geological fault map of the Nasca area. As is clear in “Fig. 2”, multiple geological faults can be seen running from the west side of Palpa (marked by the red dot) to Nasca (marked by the blue dot). It is easy to assume that many earthquakes occurred along the strip following this line.



(Fig. 2) Palpa to Nasca Geological Fault Map

Casting our minds back to the Nasca Earthquake of 1996, this was an earthquake of 7.3 magnitude on 11:59 am of November 12. It was recorded as a 7 on the Mercalli scale (reaching 8 in some places) and caused damage over an area of 5,000 km^2. This area is basically a severely arid zone that does not feature large buildings outside major cities. Most of the housing for residents are shacks made from vegetation or simple adobe brick houses. Even still, as many as 15 people died, 585 injured, and 66,420 people were affected. 3,868 residences were totally demolished, and 9,891 were damaged. It is said that 76 schools and 7 healthcare centers could not escape damage. Damages from the earthquake to the museum facing the Nasca city concourse have gone without repair, with the museum being torn down and not rebuilt as of January 2007.

However, just as in the example of Arequipa, this is not the only time

earthquakes have attacked Nasca.

Previous to this, records exist of a major earthquake on September 27, 1942. The magnitude was 8.2. Shaking continued for 3 minutes in the evening and electricity, telephones, and telegraphs are said to have all been disconnected. 15 strong aftershocks continued from night to morning. By 4:00 in the morning, most of the buildings in the worst states had crumbled down. Noticias, a newspaper from that time, recorded that not one building was able to withstand this major disaster.

There are records from 1868 as well. The town of Ica was almost completely leveled on August 13, just as Nasca.

Looking at records even farther back in time, major earthquakes recorded as being 9 on the Mercalli scale are said to have attacked Nasca in 1716 and 1664. From these incidents, it can be seen that Nasca met with major earthquake disaster in a period of roughly 50 to 70 years. This is a time frame where one could possibly experience an earthquake in one's lifetime. It is a time frame in which the incidents are not clouded in memory through several generations, and yet at the same time it is also not a time frame wherein people can learn from successive earthquake experiences within the span of one lifetime. It must have been a terrifying cloud hanging over people's shoulders with the threat of erupting once in a lifetime.

Because people of ancient Nasca did not create a written language, records for that time period are not available.

However, it is probable that people of ancient Paracas lived in that same fear of earthquake outbreak.

The terror of damage caused by earthquakes probably increases to levels we cannot imagine as one looks farther into the past. And people of those times had no other recourse than to assume they were facing the anger of the gods. Imagine that without any sort of previous warning, this disaster visits, and your humble home, your fields and crops, and even worse the lives of your family and yourself are laid asunder in the span of a single moment. Imagine a fear of the earth splitting open and your house and everything familiar to you in the world being changed forever. Is there any threat worse than this?

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The theory most commonly accepted regarding the reasons for the people of ancient Paracas to migrate from Palpa to Nasca is a migration to look for water due to an intensification of arid conditions.

However, it cannot be discounted that an escape of the disaster of earthquakes that led them to the great plains of Nasca is equally probable as a reason or perhaps even more probable. After loosing everything one owns, one can either start all over again in a land that has been devastated once or search out a life in a new area. There must have been people of Paracas who, out of fear for the dismal situation surrounding them chose to take their chances with the later choice. I feel that the fact that not everyone of the people of ancient

Paracas migrated, but that some remained in Palpa, and that these people built up and passed down culture to the next generation, is proof of this theory.

However, the people of Paracas who migrated southeast were still plagued by earthquakes. As can be seen in “Fig. 2”, the geological faults continue on perpetually towards Nasca.

And, even more surprisingly, the west side and southeast area of Palpa (red dot) and the halfway point of the Pampas linking Palpa and Nasca (blue dot) are areas wherein Nasca geoglyphs were intensively drawn, and these regions juxtapose exactly over the area where the active geological faults run extensively in “Fig. 2”.

And therein, I cannot help but wonder if perhaps the “Nasca Geoglyphs,” which were used as a means of prayer, contain prayers against earthquakes and requiems for the dead as well.

People prayed to the heavens in assembly places shaped in geometrical patterns such as large triangles and trapezoids. They prayed for things like the delivery of water necessary for life, and they also voiced their fear of earthquakes. The priests (shamans) traversed with great care a long straight line continuing from the assembly place, reciting spells and putting on a demonstration along the way. And this eventually linked to the symbolic plant and animal shapes for the people of Nasca, with prayer reaching the ultimate level.

For example, let’s look at the monkey geoglyph in “Fig. 3”. It is the figure of a monkey trying to grab something in his hands. Monkeys represent the living creatures of the Andes, which is a source of water. There is a zig-zag pattern directly below that starts with the monkey. And under this, there is a long pleated pattern. The pleated line is said to express the flow of water, but what is the zig-zag? Lines folded in a clockwork stair shape are seen often in fabrics and baked pottery. However, the line that appears beneath the monkey is different in that it is not strictly ordered. It is possible to read this as the tsunami following an earthquake. Or perhaps it could express the catastrophe of an earthquake itself. And actually, earthquakes in and of themselves are nothing more than waves (seismic waves).

(Fig. 3) Nasca Geoglyph “monkey”

Looking from this viewpoint, speculation that lines represent earthquakes in other geoglyphs as well in addition to the monkey geoglyph is certainly an interesting proposition. It is not difficult to imagine that lines of prayer to quiet the anger of the heavens were carved in the turbulent earth itself.

Relationships with earthquakes can be observed as well in Cahuachi, the largest temple in Nasca. Cahuachi is not one building, but instead made up of over 10 buildings of the same style coming together. Renovation efforts by various generations are visible. This can be seen as another example of people giving up on the adverse past of a temple that has fallen down due to earthquakes, starting over by rebuilding on new ground, and attempting to curry favor with the heavens.

I expect that the grand trial of an earthquake sent from nature undergone by the people of Paracas who spread a unique culture on route of a migration from Palpa to Nasca will become an interesting research topic in a variety of methodologies.