



The Skeptics SA guide to The Nazca Lines

A collection of about 70 geoglyphs, (characters or drawings which are drawn on the ground), which include figures of anthropomorphic beings, animals and birds, flowers, plants, household implements: looms and ‘tupus’ (ornamental clasps), geometric patterns, concentric circles, spirals, triangles trapezoids and rectangles, ‘abstract’ drawings, spirals and straight lines, drawn atop several desert mesas, including San Jose (Jumana), Socos, El Ingenio and others in the Nazca (or Nasca) Valley, some 400 km south of Lima. The region, the desolate western regions of the Peruvian coast, covering some 4502 kilometers, the terrain, principally ‘dry pampa’ ranges from sandy desert to arid grass lands.

Although there are geoglyphs in Egypt, Malta, United States, Chile, Bolivia and elsewhere, the Nazca Lines, because of their large numbers and characteristics, are considered to be the most outstanding collection of geoglyphs in the world.

Their complexity and numbers suggest they were required a great deal of planning and physical labour to construct. Their close proximity and apparent changing cultural styles shown in the drawings suggests that they were created over a lengthy period of time by succeeding generations.

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They were created by removing a surface crust of brown sand and pebbles which has weathered to a dark colour. When this layer is removed it uncovers a yellowish-white layer of soil below.

Their appearance is further accentuated by continuous ridges which run alongside the drawings. These ridges are the result of the top soil being heaped alongside the figures. The extremely dry climate and the remoteness of the area has enabled the lines to remain relatively unscathed until the present century. Unfortunately, with the Pan American Highway now running through the figures, tourists have caused damage to some of the lines.

Although many of the figures represented by the drawings have only been identified, some only after restoration, there remains some degree of uncertainty as to what some of the figures are meant to represent. One, which appears unlike most of the drawings in that it has no ‘entry’ looks rather like a misshapen chicken with two enormous hands (or feet?): one has five digits, while the other has only four.

The sizes of these figures varies quite considerably. Smaller ones, such as an unidentified cat like creature are about 15 m in length. Most are larger, a spider (46 m), Humming Bird (50 m),

Monkey (55 m), Killer Whale (65 m), and an Iguana (195 m). The largest are the Guano Bird (280 m) and the Pelican (285 m).

Despite their size they are small in comparison to the straight lines. This large collection of lines and geometric figures, angles, triangles, spirals, rectangles, wavy lines, runs in all directions across the plains and over hills, some of them several kilometers in length.

Discovered by Toribio Mejia Xespe in 1939, American Paul Kosok, who heard of them in 1940, was the first to study them. He spent many years at the site and during one winter solstice he noticed the sun setting exactly at the end of one of the thousands of lines. Given the large number of lines this was not surprising, however, he concluded that the lines might be astronomically aligned, and called Nazca “the largest astronomy book in the world”.

In 1946 the German mathematician and astronomer Maria Reiche joined him to pursue this theory, and after Kosok died in 1959 she remained, devoting her life to the study, preservation and restoration of the figures and lines.

A number of theories have been put forward as to why the figures were created:

1. They were used for astronomical observations
2. They were created as markers for extra-terrestrials. Originally birds were drawn, representative of flight, but later other creatures were added
3. They were sacred sites where religious ceremonies were performed
4. They were totem beings, each figure being used by a particular tribal clan to confirm their position within the larger population
5. They were religious drawings aimed at showing the gods in the heavens the devotion of their followers below

In 1968, American astronomer Gerald S Hawkins disproved the astronomy theory, when he used a computer to determine whether or not the Nazca lines corresponded to any specific locations on the horizon where the rising and setting of the sun, moon, and major stars were located. He found that 39 lines out of a total of 186 corresponded to these points on the horizon. This number was not considered statistically significant, it was about what one would expect by chance alone.

He then compared these alignments to a catalogue of star positions dating to 10 001 BCE: again there was no significant correspondence.

The incredible statements by 'experts' such as Von Daniken, who claims that aliens had once landed on these pampas, cutting a straight

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runway on the surface, and that later generations of Indians drew these figures as cargo-cult type markers are farcical. Indicative of his general lack of knowledge he says in his book *In Search of Ancient Gods* that for some strange reason the natives call it pampa, i.e. grassy plain, although there is not a trace of vegetation on the plain of Nazca. He appears to be ignorant of the fact that there are two types of pampas, wet and dry. The dry type, as found at Nazca, commonly has little or no vegetation whatsoever.

Likewise, claims by Jim Woodman that the Indians used hot-air balloons to lay out these figures are also nonsense. Ignoring the fact that the knowledge of hot-air ballooning did not exist in ancient times, Woodman's 1975 flight in a hot-air balloon built of local materials showed that apart from it being extremely dangerous, such a balloon would not remain aloft for long enough for it to be useful.

Researchers are satisfied that they were drawn by conventional methods, using a scale figure drawn on skins, and extending cords out to points which were multiples of the small figure. These points were marked with pegs and like a huge 'join-the-dots' puzzle the points were joined.

British explorer and film maker, Tony Morrison, who has visited Nazca more than twenty times, and spent much time in South America believes that the lines are a form of religious icons. His studies revealed a tradition amongst the Indians of building small wayside shrines, wak'as, often no more than a pile of stones

linked by straight pathways, siq'is. He believes that the Nazca lines are similarly sacred paths connecting desert shrines, and there is evidence of piles of stones which may be shrines.

The great figures may have delineated sacred areas of ground where the people gathered for religious ceremonies. Interestingly most of the figures appear to be designed for this purpose. All of the figures appear to have an unbroken outline, except at one point. Each has what appears to be a definite entry pathway, two parallel lines, in most instances commencing at an angle to the actual figures, and it is at the end of these two lines that there is a small opening, as if it was intended that people enter.

It seems quite likely that their origins were related to the theories 3, 4 and 5 above, that is, they were totemic symbols in which symbols in which individual clans met to perform religious rites representative of their family and ancestors. Finally, it seems likely that they were designed to be seen from the heavens, not by ETs but by their own deities who lived in the sky.

The actual Indian culture which created these figures is unknown, but it appears that it could have been the Nazca. Several Indian cultures existed in that area of Peru long before the Incas. The Nazca occupied the Nazca Valley from approximately 200 BCE to 600 CE. Samples of the pottery from this culture reveal that on much of their pottery they drew animals, birds, flowers and plants, subjects very similar to those of the much larger markings inscribed on the desert surface.

References

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