



Ancient Lines in the Sand

Article

NAZCA, Peru (Achieve3000, January 3, 2020). One quality common to the greatest wonders of the ancient world is their magnificent conspicuousness. It's impossible to walk past the pyramids in Egypt and Mexico, for example, or Stonehenge in Great Britain without noticing them—they're right in your face, commanding your attention. And then there are the Nazca Lines in southern Peru.

These ancient drawings of flora, fauna, humanoids, imaginary beings, straight and squiggly lines, and geometric shapes don't rise before you on enormous slabs of stone. They're geoglyphs (literally, "ground drawings") etched into the desert sands of the region. And they're impossible to discern at close range because there are hundreds of them, some as large as the Statue of Liberty and Empire State Building, spread out over nearly 190 square miles (492 square kilometers). Indeed, the best way to see the geoglyphs in their entirety is from the window of an airplane, which is how thousands of tourists view them annually.

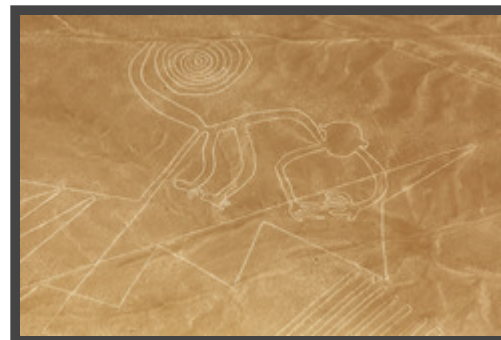


Photo credit: Daniel Prudek/Shutterstock

This is an aerial view of a monkey geoglyph, one of the many ground drawings in southern Peru known as the Nazca Lines.

Small wonder, then, that these big wonders went unnoticed for nearly 1,500 years, until a Peruvian archaeologist happened upon them in 1927. But it took the advent of commercial air travel in the 1930s to bring them to the fore. And even then, nearly 150 geoglyphs eluded discovery for many years, until 21st-century technology like satellite imagery, drones, and artificial intelligence found them.

And therein lies some of the wonderment of the Nazca Lines: Why did the artisans of a civilization that most likely couldn't have foreseen air travel create etchings that required an airborne perspective? More fundamentally, you might also ask why the geoglyphs were crafted in the first place and what they represent. Researchers certainly have been pondering these questions for about a century, but the answers remain largely a mystery. More readily answered, however, are how and when the geoglyphs were made, and by whom, and how something as fleeting as lines in desert sand could've remained intact for so long.

So here's what we *do* know: Between approximately 500 BCE and 500 CE, the pre-Incan civilization that flourished in the region created the geoglyphs. How? By selectively removing some of the dark, reddish surface rocks that cover the terrain and exposing the lighter-colored desert sand underneath them. The rocks were either removed from the border of the figures (creating a kind of outline) or from the interior, and the contrast of light sand against dark rock is responsible for the furrowed lines and shapes that emerge. Some scientists believe that the geoglyph designers first created scaled-down models to guide them. Others speculate that the designers used ropes attached to wooden posts to maintain the lines' full-scale proportions and geometric precision.

The geoglyphs' astonishing longevity is attributable to the negligible amounts of rain, wind, and erosion in the region, but many of the lines have, understandably, experienced some fading over the years. Beyond this, the only significant existential threat to these ancient masterpieces is posed by human activity, whether by mining, illegal agriculture, or vehicular mishaps.

Many of the geoglyphs are derived from the natural world, with highly stylized depictions of a hummingbird, dog, monkey, llama, spider, and lizard, to name just a few of the animals represented, as well as cactus plants, flowers, and trees. And then there are the geoglyphs that completely defy nature, like the strange anthropoid figure uncovered in 2019, with its multiple sets of eyes, mouths, and appendages. Researchers note that the implication of such oddities is that the Nazca people had a taste for the surreal and the magical as well as the natural.

So what purpose did the geoglyphs serve? The most recent research suggests that the geoglyphs figured into specific rituals for rain and crop fertility. Certain geoglyphs may have denoted where the rituals were being conducted, while others were more like signposts directing travelers to those ceremonial places.

Then again, all of this is speculative, and only one thing remains demonstrably true: The Nazca civilization found a way to draw lines in the ever-shifting sands of time that would last an eternity.

Video credit: Achieve3000 from footage by maxuser/Creatas Video+/Getty Images

Dictionary

advent (*noun*) the time when something begins or arrives : the first appearance of something

anthropoid (*adjective*) resembling a human being

denote (*verb*) to show, mark, or be a sign of (something)

Activity

PART 1

Question 1

What is this Article mainly about?

- Ⓐ The true meaning of the Nazca Lines, which are found in southern Peru and form images of plants, animals, humanoids, imaginary beings, and straight and squiggly lines etched onto the desert floor, remains open to speculation to this day.
- Ⓑ Some of the Nazca Lines defy anything found in nature, such as a geoglyph discovered in 2019 that features multiple sets of eyes, mouths, and appendages, suggesting that its creators had a taste for the surreal and the magical.
- Ⓒ There are a number of possible explanations for the Nazca Lines, but the most recent research suggests that some of the geoglyphs were used in specific rituals for rain and crop fertility, while others were used as signposts directing travelers to ceremonial places.
- Ⓓ Interest in the Nazca Lines grew with the advent of commercial aviation in the 1930s, but nearly 150 of the geoglyphs managed to elude detection until 21st-century technology like satellite imagery, drones, and artificial intelligence helped find them.

Question 2

Which of these is a statement of opinion?

- Ⓐ The Nazca Lines were created sometime between 500 BCE and 500 CE by a pre-Incan civilization that removed dark red surface rocks to reveal lighter-colored sand below.
- Ⓑ The Nazca Lines obviously formed a kind of ancient agricultural calendar because the people who created them would not go to such trouble for anything but very practical reasons.
- Ⓒ Some geoglyphs, which are impossible to discern at close range and cover an expanse of 190 square miles (492 square kilometers), are identifiable from the window of an airplane.
- Ⓓ Some geoglyphs represent animals found in nature, including highly stylized depictions of a hummingbird, dog, monkey, llama, spider, and lizard, to name a few.

Question 3

The Article states:

So here's what we *do* know: Between approximately 500 BCE and 500 CE, the pre-Incan civilization that flourished in the region created the geoglyphs. How? By selectively removing some of the dark, reddish surface rocks that cover the terrain and exposing the lighter-colored desert sand underneath them. The rocks were either removed from the border of the figures (creating a kind of outline) or from the interior, and the contrast of light sand against dark rock is responsible for the furrowed lines and shapes that emerge. Some scientists believe that the geoglyph designers first created scaled-down models to guide them. Others speculate that the designers used ropes attached to wooden posts to maintain the lines' full-scale proportions and geometric precision.

Why did the author include this passage?

- Ⓐ To show that the civilization that made the Nazca Lines must have possessed technology at least as advanced as that of the Incan people
- Ⓑ To point out the fact that the images formed by the Nazca Lines evolved greatly over the course of their development from 500 BCE to 500 CE
- Ⓒ To explain how a pre-Incan civilization was able to create images on the desert floor that are only discernable from a distance
- Ⓓ To describe the most recent evidence that helps to explain what the mysterious lines in the Peruvian desert were actually used for

Question 4

Which is the closest **synonym** for the word *denote*?

- Ⓐ disperse
- Ⓑ designate
- Ⓒ defile
- Ⓓ dissociate

Question 5

What is one inference the reader can make from the Article?

- Ⓐ Geoglyphs mainly served agricultural purposes, with some of the Nazca Lines pointing to the best places to grow crops in the dry region.
- Ⓑ The Nazca Lines are as conspicuous as many of the wonders of the ancient world, including the pyramids of Egypt and Mexico and Stonehenge in England.
- Ⓒ Peru's Nazca Lines remained completely forgotten until the advent of commercial air travel in the 1930s made them widely known.
- Ⓓ Some of the Nazca Lines are now so faded that they cannot even be recognized from the window of an airplane.

Question 6

According to the Article, which of these happened *last*?

This question asks about when events happened. It does not ask where in the Article the events appear. Reread the Article for clues, such as dates.

- A A series of lines in the Peruvian desert became well-known after flights passed overhead.
- B A geoglyph of a human-like being with many eyes, mouths, and limbs was discovered.
- C A civilization created drawings in the desert sand by stripping away the top layer of rocks.
- D A Peruvian archaeologist discovered groups of lines drawn on the desert floor.

Question 7

Read this passage from the Article:

The geoglyphs' astonishing *longevity* is attributable to the negligible amounts of rain, wind, and erosion in the region, but many of the lines have, understandably, experienced some fading over the years. Beyond this, the only significant existential threat to these ancient masterpieces is posed by human activity, whether by mining, illegal agriculture, or vehicular mishaps.

In this passage, the word *longevity* means _____.

- A the length of time that something lasts
- B an idea that is expressed by a symbol
- C the quality of being physically attractive
- D an area of land that receives little rain

Question 8

Which passage from the Article best supports the idea that the Nazca Lines might have served more than one purpose?

- A The most recent research suggests that the geoglyphs figured into specific rituals for rain and crop fertility. Certain geoglyphs may have denoted where the rituals were being conducted, while others were more like signposts directing travelers to those ceremonial places.
- B The geoglyphs' astonishing longevity is attributable to the negligible amounts of rain, wind, and erosion in the region, but many of the lines have, understandably, experienced some fading over the years.
- C Small wonder, then, that these big wonders went unnoticed for nearly 1,500 years, until a Peruvian archaeologist happened upon them in 1927. But it took the advent of commercial air travel in the 1930s to bring them to the fore.
- D Many of the geoglyphs are derived from the natural world, with highly stylized depictions of a hummingbird, dog, monkey, llama, spider, and lizard, to name just a few of the animals represented, as well as cactus plants, flowers, and trees.