

Montclair State University Department of Anthropology  
Anth 140: Non Western Contributions to the Western World  
Dr. Richard W. Franke

# Nazca

## Week 06 Lecture 02

# The Mysterious Lines and Geoglyphs in Southern Peru

This lecture was last updated on 15 March 2013 and 10 September, 2019

## The Lines at Nazca

**The learning objectives for week 06 lecture 02 are:**

- to learn a few of the achievements of the Incas and pre-Inca peoples of the Andes
- to understand how archaeologists and other scientists reconstruct the past and how they come to improved conclusions with better information

## The Lines at Nazca

Terms you should know for week 06, the topic of Nasca are:

- Nazca – also spelled Nasca

# The Lines at Nazca

## Week 06 Sources on Nazca:

- Aveni, Anthony. 2000. *Nasca: Eighth Wonder of the World?* London: British Museum Press.
- Hall, Stephen S. 2010. [Spirits in the Sand: The Ancient Nasca lines of Peru Shed their Secrets.](#) *National Geographic* March 2010.
- Lansing, J. Stephen. 1993. *Priests and Programmers: Technologies of Power in the Engineered Landscape of Bali.* Princeton: Princeton University Press.
- Moseley, Michael E. 1992. *The Incas and Their Ancestors: The Archaeology of Peru.* London. Thames and Hudson. Pages 187-190;

## Nazca

- 1. Nazca is a desert plain near the Southwestern Peruvian Ica River Valley.**

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## Nazca

- 2. Nazca is also the name of a cultural historical period of Pre-Inca Peru. The Nazca culture lasted from about 100 BC to 1,000 AD, with its height just after 500 AD.**

## Nazca

- 3. Nazca is also the name of a pottery style, famous for its intricate depictions of demons.**

## **Nazca: 2013 Update**

- 4. The Nazca lines are GEOGLYPHS, or markings on the desert floor.**
- 5. The Nazca lines were made by brushing away the upper, dark, oxidized desert dust to expose lower, lighter-colored surfaces.**

Source: Moseley, Michael E. 1992. *The Incas and Their Ancestors: The Archaeology of Peru*. London. Thames and Hudson. Pages 187-190; Aveni, Anthony. 2000. *Nasca: Eighth Wonder of the World?* London: British Museum Press.

## Nazca

**6. There are two main kinds of Nazca glyphs:**

**6.1 Enormous drawings depicting humans, llamas, or other life forms as well as geometric or abstract symbols, and**

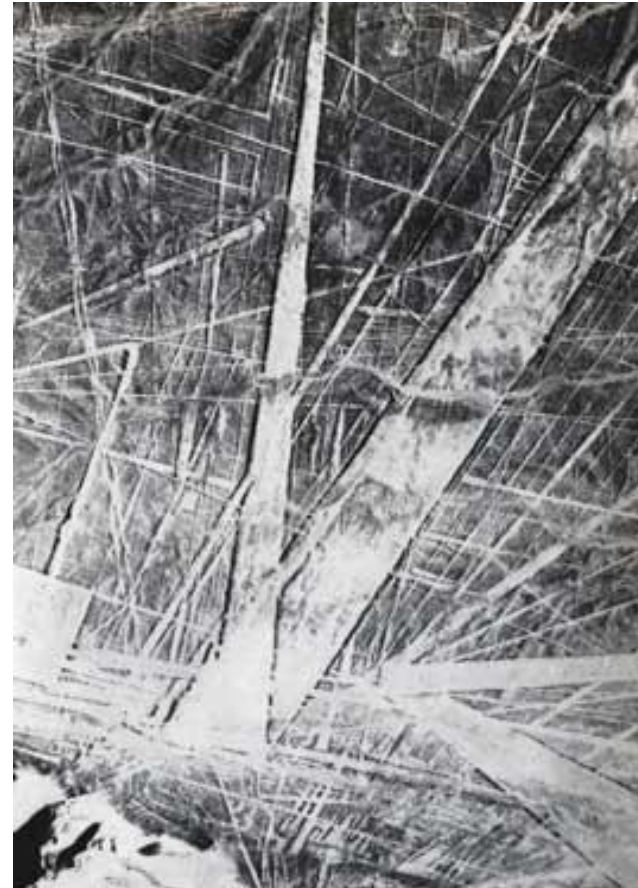
**6.2 Straight lines.**

## Nazca

- 7. Individual Nazca lines reach 20 km (12.5 miles) and cover an overall area of 3.6 million square meters. There are 762 such lines totaling 1,600 km or 1,000 miles. Some lines are narrow while others are several feet wide.**

## Nazca

**8. The Nazca Lines  
Were Re-Discovered  
in the 1920s When  
Airplanes First Flew  
Over the Region**



# Nazca

## Theories of the Nazca

### **8.1 The Nazca lines have been used to support a number of Western theories:**

## Nazca

**8.2 The Nazca flew in hot air balloons over their desert floor to view the glyphs and lines much as a church spire in the Middle Ages was used to show God where the Christians were.**

## Nazca

**8.3 The lines were part of an ancient Andean Olympics where naked men ran along them to capture naked Andean women who then had to have sex with them.**

## Nazca

**8.4 In his 1968 book *Chariots of the Gods*, Swiss Playboy Club manager turned archaeologist Erich von Däniken suggested the Nazca lines were landing strips for ancient astronauts from outer space. These astronauts have not yet returned.**

## Nazca

**8.5 Von Däniken may have been inspired by the film *2001: A Space Odyssey*, and by the *panspermia* theory that humans arose from life-giving spores that are drifting thru the universe. The parents of these spores are called “the Initiators.”**

## Nazca

**8.6 Astronomer Gerald Hawkins thought the lines would make Nazca an Andean Stonehenge, an astronomical siting device.**

# Nazca

## Recent Discoveries

**9. The “Queen” of Nazca research is Maria Reiche, a German woman who came to Nazca in 1932 to escape the Nazis. Knowledgeable in math and astronomy, she lived the rest of her life at Nazca until her death in 1998 at the age of 95.**

## Nazca

10. For decades Reiche walked and mapped the lines and figures, coming to the conclusion that the lines were part of a sophisticated calendar system and that the animal figures represented the implementation of a basic mathematical unit of about one yard, based itself on the distance from a human nose to the fingertips.

## Nazca

**11. More recent archaeological and historical research suggests that Reiche was partially correct but there is more to the story of the lines.**

## Nazca

**12. Colgate University astronomer Anthony Aveni and archaeologists Gary Urton, Persis Clarkson, and Helaine Silverman have been studying the lines for the past 30 years.**

## Nazca

**13. Their combined research suggests that:**

**14. The lines radiate outwards from several centers, just like the Inca *ceques* from Cuzco, built hundreds of years later.**

## Nazca

**15. From the center of the spokes, several of the lines stretch perfectly straight to the horizon where they line up with the rising and setting of star constellations known to the Incas (and therefore probably to pre-Inca peoples of the Andes). Among these are the Pleiades:**

## Known to us as the 7 Sisters



## Nazca

**16. The rising of the Pleiades – known in Pre-Columbian Peru as “Collca,” and “Oncoy,” coincided for the Inca with the onset of certain agricultural practices.**

## **Nazca: 2013 Update**

16a. The researchers came up with a surprising new interpretation of the Nazca lines, based on the idea that they ultimately connect to access and control of water for irrigation – this control was implemented through both religion and a kind of ancient science of landscaping.



## Nazca

**17. At Nazca, the appearance of the Pleiades at the end of certain lines to the horizon heralded the coming of the rainwater down from the mountains.**

**18. On closer examination, other lines turn out to be trapezoids, the favorite architectural shape of the Incas**



## Nazca

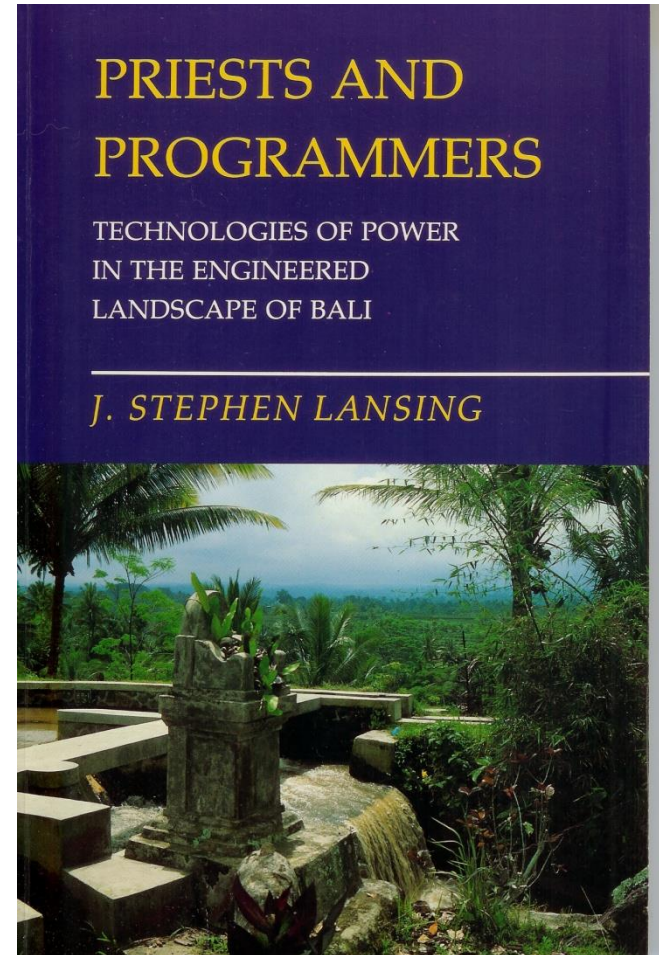
- 19. The trapezoids show evidence of having once been cultivated fields, and...**
- 20. Underground water canals run from the rivers at each side of the Nazca plain to these trapezoidal fields.**

## Nazca

**21. The lines may also have been part of a giant ceremonial system in which kinship groups maintained canals and pathways according to a ritual plan.**

## Nazca

**22. This has been found among the Inca and among pre-Inca Peruvian peoples. The irrigation system on the island of Bali in Southeast Asia is also maintained in this way.**



## Nazca

**23. Along the lines, archaeologists have found the remains of small buildings that may have functioned as shrines and/or travelers inns. This feature is also known from the Inca roads. [This was explained last week for the Inca.]**

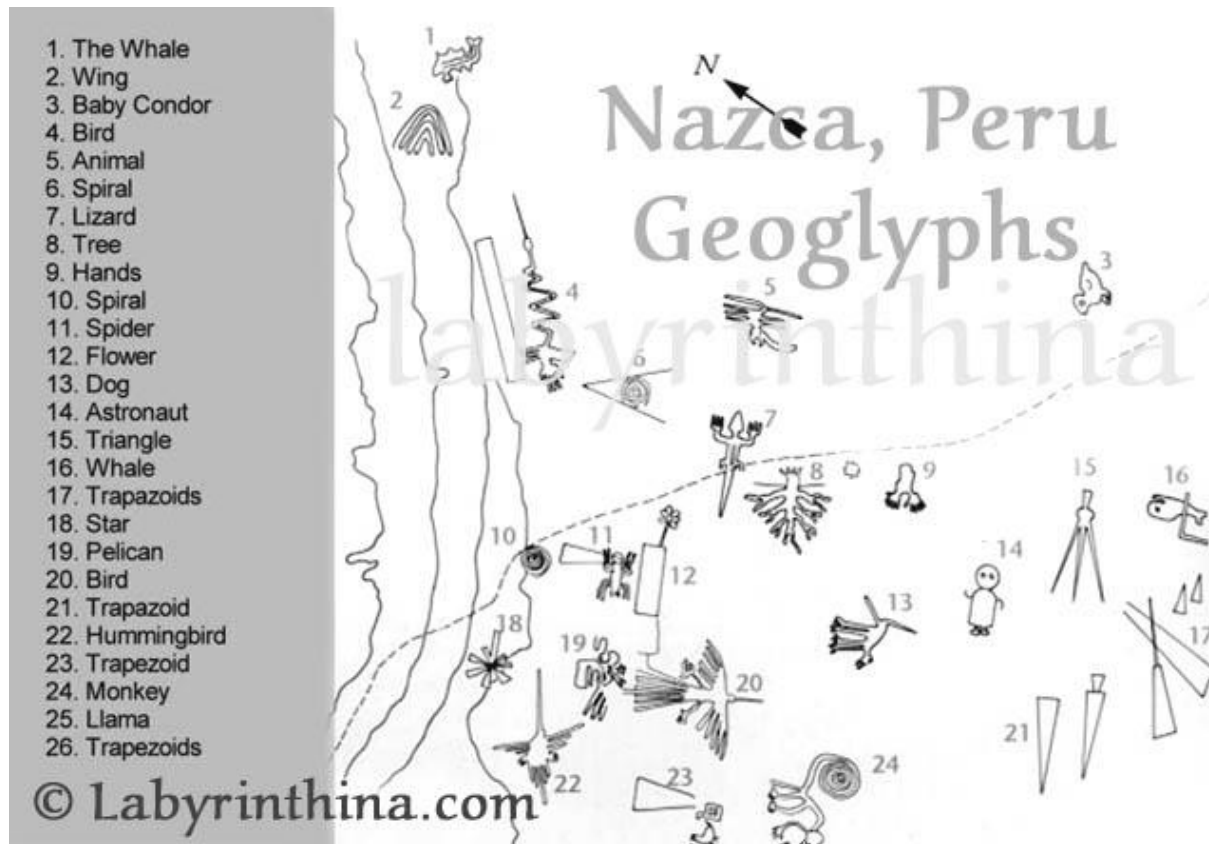
## Nazca

**24. In other words, the lines of Nazca may have served agricultural, sociopolitical, and religious purposes combined into a single worldview similar to that of the Inca ceques and their organization of the empire, but developed at Nazca by 500 AD.**

## Nazca

**25. The Nazca lines were constructed about 200 years *after* the giant animal drawings and were superimposed on them.**

## Nazca



## Nazca

26. The purpose of these giant drawings remains a mystery.



## Nazca

**27. Based on rituals still practiced in the Andes, Aveni and colleagues speculate that the forms were used as pathways for ritual dances.**

## Nazca

**28. The massive Nazca spirals suggest mazes similar to those found in religious sites around the world,**

**...including in the famous 12th century cathedral in Chartres, France.**

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## **Nazca: Spiral 1**

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## Nazca: Spiral 2

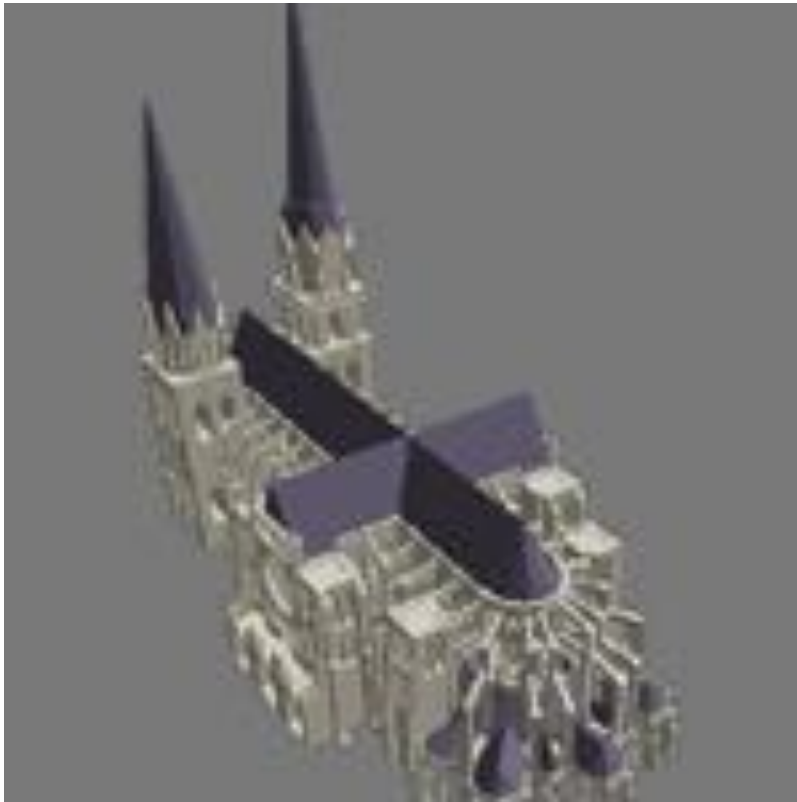


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## **The Chartres Cathedral Southwest of Paris**



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**Showing the  
Cross as basis of  
the architectural  
design**

**...and the  
famous  
labyrinth  
which has no  
specific  
Christian  
heritage**



**...but a ritual walk  
within the labyrinth  
seems to hold some  
meaning for pilgrims  
who come to Chartres  
for this purpose.**



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**...and may originate  
in some pre-Christian  
ritual similar to that  
of the Nazca**

# **Nazca: 2013 Update**

**In Week 08 of the course we will discuss how the stonemasons who built the great medieval cathedrals of Europe...**

## **Nazca**

**...led to the rise of the Masonic Order (the Masons) and its adoration of the knowledge of the ancient Egyptians.**

**Other famous Nazca geoglyphs  
include the condor...**



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The  
humming  
bird

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## **Nazca**

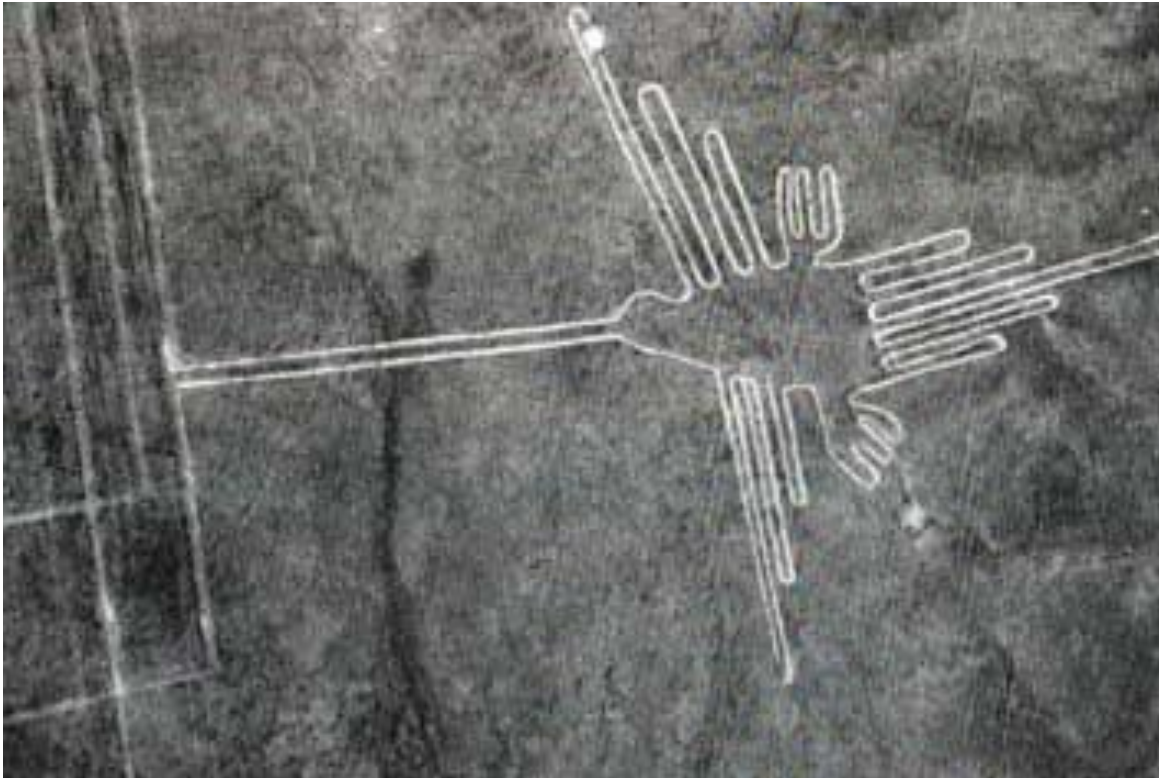
**Hummingbird sucking nectar  
(next two slides)**

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# Nazca

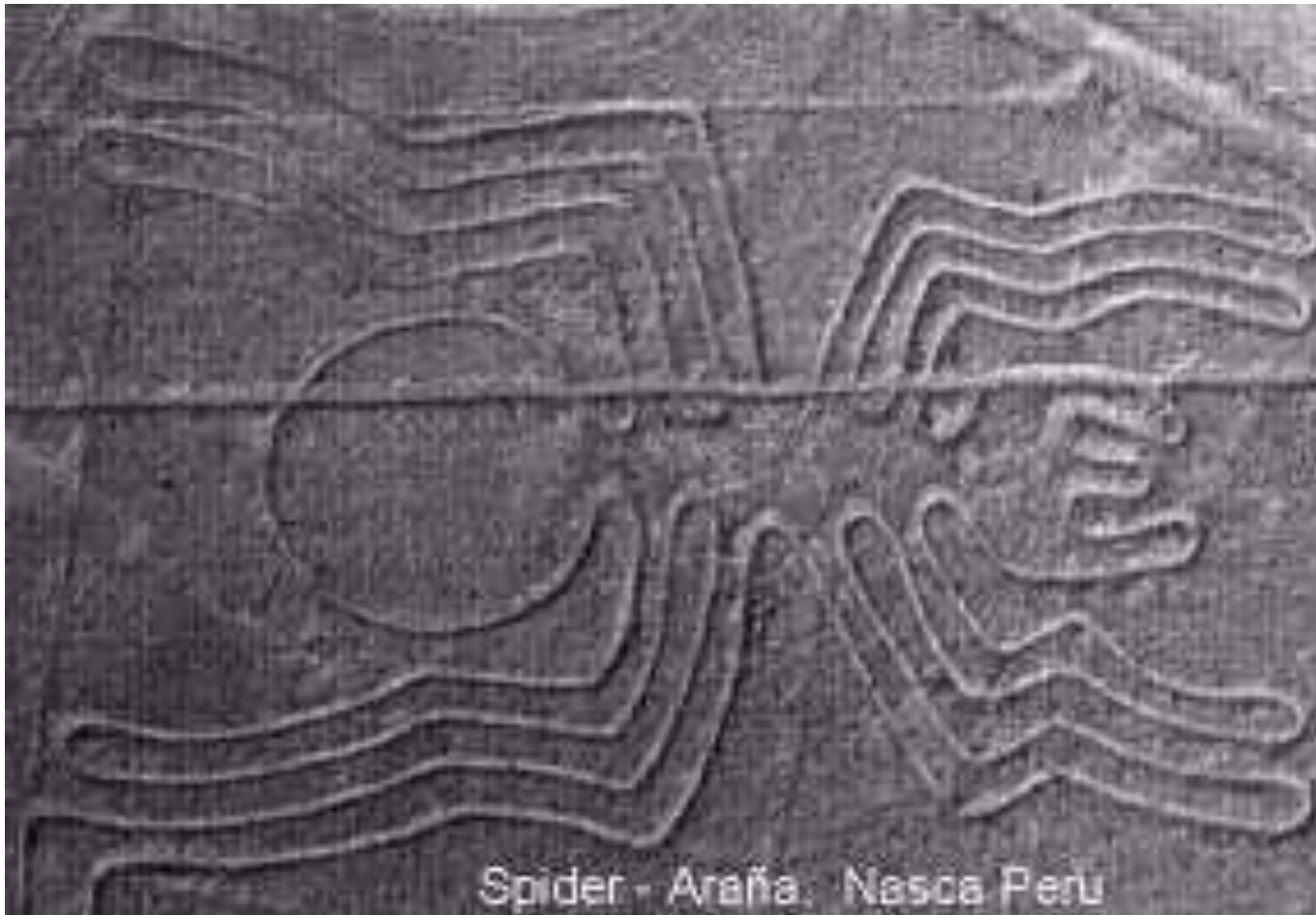


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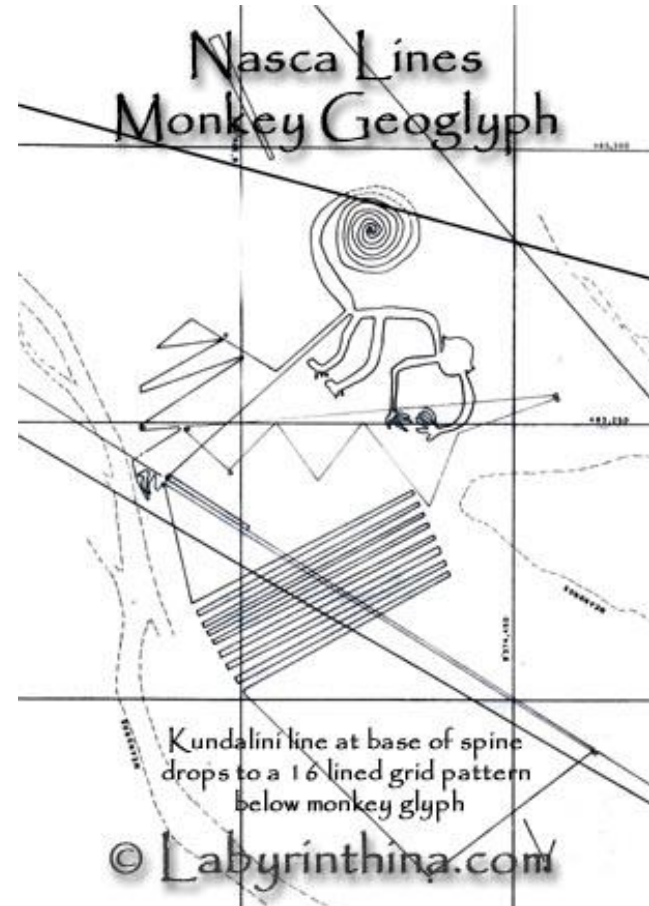
**The spider**

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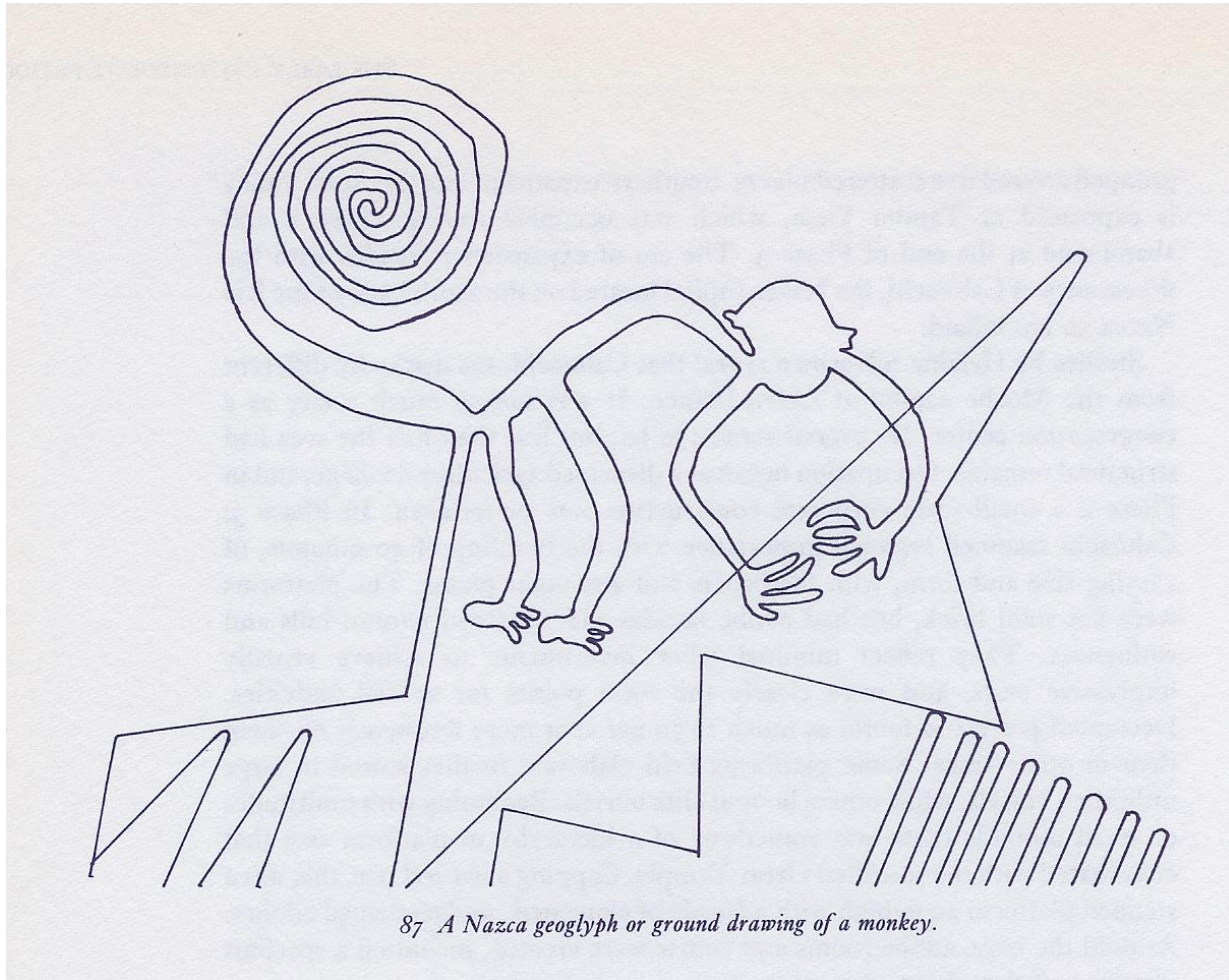


## Nazca

...and the most famous, the monkey glyph with a double spiral tail and connections to a ritual walk



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87 *A Nazca geoglyph or ground drawing of a monkey.*

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## Nazca

**29. Nazca potters were highly skilled in the techniques of drawing and in using colors – as well as in fashioning ceramic shapes.**



## Nazca

- 30. So perhaps it is not surprising that they could create designs on the desert floor.**
- 31. Because the Nazca did not develop writing, the reason for the giant animal geoglyphs might never be known.**

# Nazca: 2013 Update

**32. An article in the March 2010 issue of National Geographic summarizes the more recent findings about the lines, but emphasizes the ritual aspect over the likely water control element. Still, the problem of water is acknowledged:**

<https://www.nationalgeographic.com/magazine/2010/03/nasca-lines-peru/>

# Nazca: 2013 Update

The link to the National Geographic article was sent in by Spring 2013 student Sara Wolf. She wrote that ...

“It made me appreciate the Nazca people as having been real humans, like me, as opposed to distant figures in a history I could never relate to.”

<https://www.nationalgeographic.com/magazine/2010/03/nasca-lines-peru/>

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## End of Week 06 Lecture 02 Nazca Slide Show