



EDUCATION KIT

Ptolemy's *Geography* and Renaissance Mapmakers

A Newberry Library Exhibition Nov. 3, 2007—Feb. 16, 2008

PTOLEMY TRANSPARENCY #1

Ptolemaic World Map

Ptolemy, Claudius. *Geographia*. Ulm: Lienhart Holle, 1482.
Newberry Library (Gift of Edward E. Ayer): Ayer *6 P9 1482a

EXHIBIT TEXT:

This world map from 1482 was drawn using Ptolemy's second, or *homeotheric*, projection. This projection had the advantage of more closely representing the curvature of the earth and preserved the relative sizes of the lands and seas shown on the map. A distinctive feature of Ptolemaic world maps is that the Indian Ocean is shown as an enclosed sea, the Indian subcontinent is a barely noticeable peninsula, and the island of Sri Lanka (south of India) is shown much larger than its actual size.

Because of the difficulty of determining longitude, the west-to-east dimension of the world represented here was exaggerated by almost 25%, and Ptolemy underestimated the size of the entire earth by approximately 17%. In this context, it should be noted that Christopher Columbus possessed a copy of the *Geography* published in Rome in 1490, and that his grossly inaccurate estimate of the distance between the west coast of Europe and the east coast of Asia was influenced by Ptolemy's calculations.

TEACHER NOTES:

- This was an attempt to map the known world, or *oikumene*, using Ptolemy's coordinates. Note that the equator is located in the bottom third of the map, yet the name ("equal circle") clearly indicates Ptolemy's belief that additional land lay further south.
- The landmass at the bottom of the map is not intended to represent what is now known as Antarctica. Rather, Ptolemy mapped this area because he believed something must exist as a balance to the North Pole; he indicates as much by labeling the mass *terra incognita*, or "land unknown"
- Since no European had yet rounded the Cape of Good Hope in southern Africa, the continent is drawn with coastlines that we now know to be distorted, resulting in the Indian Ocean being an enclosed body of water.
- The brown, caterpillar-like masses are indicative of mountain ranges.
- Ptolemy, as well as all ancient Greek scholars, knew the world to be round. The projection used for this map indicates as much with its use of rounded edges, with the widest point near the equator.
- The writing on the left side of the map describes the latitudinal coordinates.
- Some important translations [NOTE: this map is printed in Latin]:
 - Circulus Equinoctialis = Equator
 - Mare = Sea/Ocean
 - Mare Indicum = Indian Ocean



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- The faces painted around the map represent different directional winds; each are named after a Roman and/or Greek god that was thought to possess characteristics similar to the winds:
 - North Wind (*Aquilo* or *Boreas*): Aquilo is the Roman name, Boreas the Greek, for the northern wind, who is frequently depicted on maps as an old and sinister fellow who brought death with his cold breath.
 - Northeast Wind (*Kaikias* or *Caecius*): Kaikias is the Greek name, Caecius the Roman, for the northeast wind, which is often depicted as a bearded man with a shield full of hailstones; literally translated, the name means “badness” or “evil” in Greek.
 - Northwest Wind (*Skiron* or *Caurus*): Skiron is the Greek name, Caurus the Roman, of the wind that represents the onset of winter.
 - South Wind (*Notus* or *Auster*): Notus is the Greek, and Auster the Roman, name for the wind that brings storms of later summer and autumn and was often feared as a destroyer of crops.
 - Southeast Wind (*Apeliotes* or *Subsolanus*): This wind, Apeliotes in Greek and Subsolanus in Roman, was thought to cause a refreshing rain which was especially beneficial to farmers; he is often depicted with a friendly, pleasant expression.
 - Southwest Wind (*Africus* or *Libs*): Libs in Greek, and Africus in Roman, the southwest wind was noted by Virgil to bring storms to the Italian coast.
 - East Wind (*Euros* or *Vulturnus*): Euros is the Greek name for the Roman Vulturnus, who is considered to bring warmth and rain.
 - West Wind (*Favonius* or *Zephyrus*): Favonus is the Roman name, Zephyrus the Greek, for the west wind, which brought fresh spring air and life.

DISCUSSION PROMPTS/SUGGESTED CLASS ACTIVITIES:

- Why do you think the most detailed area of the map is the Middle East and Europe? Why aren't African and Asia equally detailed?
- What do the presence of the wind directions indicate about the purpose of this map?
- Identify as many places as possible through *absolute location*, *relative location*, shape, symbol, or written identifications.
- Identify beliefs or geographic understandings of the time that have since been modified or changed.