Greek Views of the World

Greek Frame of the World

Homer

Anaximander

Hecataeus
Above, a fascinating 1867 map by William Hughes featuring the world according to ancient Greek astronomers, poets, historians and geographers. This map includes nine
maps on a single sheet, each illustrating the geographical views entertained at different periods and as expressed by prominent authorities of the time. Of course, the world of the ancient Greeks centered in the Mediterranean and the Americas were yet to be discovered. Europe Asia and Africa (Libya) however were known, leading prominent geographers of the ancient world to adopt the three-part world model – a system that would remain in use until the era of Martin Waldseemüller in the early 16th century (*Book IV, #310*).

The first map features the world according the Greek poet Homer in 900 B.C. He believed the world to be circular, with the river Oceanus flowing around it. Beyond *Oceanus* in the north, are the *Cimmerii*, an ancient people of the far north of Europe, described by Homer as the people living in perpetual darkness. He also notes *Elysium*, the place of the afterlife for the gods and the heroic. Homer in his *Odyssey* describes it as paradise:

> to the Elysian plain...where life is easiest for men. No snow is there, nor heavy storm, nor ever rain, but ever does Ocean send up blasts of the shrill-blowing West Wind that they may give cooling to men.

The map of the world according to Hecataeus (a Greek historian) of Miletus in 500 B.C., was inspired by Anaximander. Here we see that the world is divided into three continents, Europe, Asia and *Libya* [Africa], and that the western countries of the Mediterranean have gained some form and proportion. The three important seas, the Mediterranean Sea, the Red Sea and the Black Sea divide the three continents and the Caspian Sea is noted. Herodotus, the “Father of History”, in 440 B.C. made significant additions geographical knowledge. Having travelled over a great part of the eastern world, he writes in his fourth *Book of The Histories*, “I wonder then at those who have parted off and divided the world into Libya, Asia, and Europe, since the difference between these is not small; for in length Europe extends along by both, while in breadth it is clear to me that it is beyond comparison larger; for Libya furnishes proofs about itself that it is surrounded by sea, except so much of it as borders upon Asia....”. Herodotus also shows the landlocked Caspian Sea.

The map of the world in 300 B.C. by Democritus, considered to be the father of modern science and popularly known as the “Laughing Philosopher”, shows an increase of geographical information, mainly in the easternmost parts. This comes from the information from the conquests of Alexander the Great in the east.

So far, maps were mainly based on an aggregation of facts, without any scientific treatment of geography. Hipparchus of Nice, in about 230 B.C., was the first to combine geography and astronomy. He determined latitudes and longitudes based on astronomical observations and developed trigonometry. We see this scientific influence in the maps following this period. The map of the world according to Eratosthenes and Strabo from about 200 B.C. to AD 20, show a much wider Asia. It identifies counties including India, Britannia and Italy. Eratosthenes also calculated the circumference of the Earth using simple geometric relationships. His calculations, made by primitive means, were unusually accurate. Calculations made by modern satellites come very close to his results. Strabo based his map on the knowledge of the Roman expeditions in many parts of the known world.

Ptolemy, the Greek mathematician, astronomer, geographer and astrologer, gathered new information and corrected old errors and gave ancient geography its final shape, until the explorations of Columbus and Vasco De Gama. It is worth noting the
superiority of the Ptolemaic system which would come to dominate European cartographic presentation until the discovery of America. His map of the World in about AD 160, as well as his two maps of Asia and Europe may be somewhat difficult to understand at first glance, but upon closer examination, correspond to many actual locations and yield some of their secrets. The Ganges River Valley is readily identifiable as is the island of Tabrobane – an ancient reference to Ceylon/Sri Lanka. The Indian subcontinent itself is barely discernible. This map’s most intriguing element is the southward extension of land running along the eastern edge of the map and extending beyond the border. This landmass reflects speculation, inspired by Ptolemy, that the Indian Ocean was landlocked. It was believed that this landmass extended far southwards before turning westward and connecting with eastern Africa. Though the exploits of Vasco de Gama and Magellan had proven that the Indian Ocean was not fully land locked, it was believed that a large tract of land, possibly even America, attached to Asia west of Malaya. Thus the Great Promontory or Dragon’s Tail that appeared on many maps of this region well into the 16th century.

The city of Cattigara, located here in the bottom right corner of the map, is cited by Ptolemy as the southernmost known point. There has been considerable debate about the true location of Cattigara, certainly Magellan and the other great navigators failed to identify it, with some attaching the name to Hanoi or South China and others placing it on the shores of South America. Be as it may, the Ptolemaic model retained a great deal of influence well into the 16th century until Portuguese and Dutch navigators more fully explored the region. This map was created by William Hughes, printed by J. Bien and engraved by G.E. Sherman, for issued as plate 26 in Sheldon and Company’s An Atlas of Classical Geography in 1867. Size: Printed area measures 10 x 13 inches.

The credit of being the first scientific cartographer has generally assigned to the Greek Anaximander of Miletus (610-547 B.C.). While there is not a detailed description extant of the maps he is reputed to have made, we know that he accepted the so-called Homeric idea, that the earth has the form of a circular disc, and is surrounded by the Ocean Stream, an idea generally approved by the Ionic School of Philosophers. It is not improbable that we have an allusion to the work of Anaximander in the History of Herodotus (484-400? B.C.), wherein we are told that Aristagoras, the tyrant of Miletus, when on a mission to Cleomenes, the King of Sparta, carried with him “a copper plate on which was engraved the whole circuit of the earth, and likewise all the Seas and Rivers.” In another passage, Herodotus takes occasion to criticize maps of this circular character. “I laugh,” he says, “when I see that, though many before this have drawn maps of the Earth, yet no one has set the matter forth in an intelligent way; seeing that they draw the Ocean flowing round the Earth, which is circular as if drawn with compasses, and they make Asia equal in size to Europe. In a few words I shall declare the size of each division and of what nature it is as regards outline.” It is, however, interesting to observe that the father of historical geography and of history nowhere records his idea of a properly constructed map, and further that the circular form, which he condemned, is one that found wide acceptance even to the close of the middle ages.

We are not definitely informed as to just the course of improvement or advancement in early scientific map making among the Greeks, yet not a few names are known to us of those who made it a matter of special endeavor, as they specifically stated, to improve the work of their predecessors. We, for example, are told that Hecataeus (550-480 B.C.), likewise a native of Miletus, improved the maps of Anaximander, and that scientists of his day were astonished at his results; that
Dicaearchus of Massina (350-290 B.C.) was the first to employ a central line of orientation on a map, one passing through the Mediterranean east and west, and that he represented on his map all the lands known since the expedition of Alexander the Great into the Far East; and further, that Eratosthenes, the librarian of Alexandria 176-196 B.C., was the first to attempt a representation of the curved surface of the earth on a plane in accord with geometrical rules. The scientific cartographical ideas of Eratosthenes were further developed by Hipparchus (180-125 B.C.), who is generally referred to as the greatest astronomer of antiquity, and by Marinus of Tyre (fl. ca. 100 A.D.) who introduced the idea of inscribing lines of latitude and longitude on a map, crossing the same at right angles, which lines could be made to serve the useful purpose of orientation and be of assistance in giving proper location to all known places on the earth’s surface.

The Greeks developed another idea: the distinction between civilized people and barbarians. Originally, barbaros simply meant ‘babbler’ and was used to indicate everybody who did not speak Greek. After the Greek victory in the Persian wars (492-479), the word became pejorative: a barbarian was not only unable to speak Greek, but was inferior as well. At that moment, the two ideas had already been combined: the center of the world was inhabited by civilized Greeks, the periphery by barbarians.

Until the late sixth century BCE, the Greeks conceptualized the world as a series of concentric circles. Greece was surrounded by the Mediterranean Sea (with large islands like Sicily, Italy, and Cyprus); the Mediterranean was surrounded by the three continents, and behind the continents was the Ocean, which surrounded the world disk. Here, one could encounter strange monsters: Homer’s *Odyssey* mentions a great variety of them. The edges of the continents were inhabited by savage, monstrous barbarians, the opposites of the civilized Greeks in the middle of the earth.

As previously mentioned, many early maps, especially those prior to the advent of mass production printing techniques, are known only through descriptions or references in the literature (having either perished or disappeared). Obviously these present a problem to historians of cartography. In the present work, reconstruction of maps no longer extant are used in place of originals or assumed originals. The
reconstructions of such maps appear in the correct chronology of the originals, irrespective of the date of the reconstruction. All reconstructions are, to a greater or lesser degree, the product of the compiler and the technology of his times. Therefore, reconstructions are used here only to illustrate the general geographic concepts of the period in which the lost original map was made. Nevertheless, reconstructions of maps which are known to have existed, and which have been made a long time after the missing originals, can be of great interest and utility to scholars. The possibilities include those for which specific information is available to the compiler and those that are described or merely referred to in the literature. Of a different order, but also of interest, are those maps made in comparatively recent times that are designed to illustrate the geographical ideas of a particular person or group in the past but are suggested by no known maps.

All this is also evident in the history of cartography (a modern term created via a combination of Greek chartes, ‘chart’, and graphein, ‘write’ or ‘draw’), that is, the study of maps as a special form of communicating geographic knowledge. Maps are generally two-dimensional representations, often to scale, of portions of the earth's surface. What do we know about ancient cartography?

It must be said at the outset that we have little contemporary evidence for Greco-Roman maps. In the modern world, the nature of communications allows original texts and graphics to be preserved, transmitted and accessed for extended periods of time. The pre-modern world, on the other hand, had only a series of copies to work with, made over the centuries on organic material. The process was almost manageable for texts, multiple copies of which could be created by copyist teams working from dictation. But it was not feasible for graphics, the copying of which inevitably led to increasing distortion. Copies of copies of copies must generally have been very different from the vanished original, hence the scarcity of scholarly illustrations transmitted from the ancient world.

It is nonetheless the case that many modern school atlases could not (and cannot) resist the temptation to reconstruct ancient maps by combining modern knowledge about the shape of the earth’s landmass with data from ancient texts. As displayed in this volume, the 19th century in particular saw many such reconstructions, but even the most recent grand atlas of the ancient world, which accompanies the Neue Pauly encyclopedia, and in the illustrious History of Cartography (Volume One) presents reconstructions/interpretations of the world maps of Homer, Hecataeus, Herodotus, Eratosthenes, Strabo and Ptolemy. According to researcher Daniela Dueck such reconstructions introduce a host of unwanted modern concepts into the ancient data: north is on top, for example; the shape of coastlines for which no ancient descriptions are available is the familiar modern one (e.g., Italy reconstructed in the shape of a boot — a modern idea unknown in the ancient world); or color is used to mark the continents and the sea. There is no evidence for the use of such forms of representation in ancient maps, and this book deliberately presents no such reconstructions. There is even a temptation to go beyond reconstructions and invent — that is, falsify — maps from the ancient world. Every generation or so, a new ‘discovery’ of such a map is announced, only to be exposed as either a hoax designed to embarrass an individual scholar or scholars in general, or an attempt to make money from an unsuspecting public. That said, it is only natural that modern or later historians, in reading geographical writings by ancient philosophers, would attempt to “visualize” these terrestrial descriptions and world concepts. These later-day “graphical translations” would always be influenced by their superior knowledge of the known
world, thus giving the shapes of landmasses a rather “modern” look. There is no way we can truly graphically translate or capture the real ancient contemporary mind’s eye of what they were envisioning when they wrote their geographical descriptions any more than a blind person imagine what a sighted person sees.

References:
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