

Geographers and later travellers

One of the best-known modern historians of science, Benjamin Farrington, remarks in his Greek Science (Vol. 2, pg. 144) that all four branches into which we commonly divide geography (mathematical, physical, descriptive and political, and historical) "were implicit in the work of the earliest Greek pioneers." Geographers such as Anaximander, Hecataeus or Eratosthenes had produced both maps of the oikoumené or inhabited world and also made tremendous strides in the mathematical description of the globe. It was in fact Eratosthenes who was the first to divide his map with the ancestors of our meridians of longitude and parallels of latitude. Physical geography also had been a subject of interest to many Greeks from Herodotus to Aristotle, with their speculations on such things as the source of the river Nile, the annual flooding it caused, the reasons for fossils of sea creatures being found inland, or the causes of seasonal winds and currents. Herodotus showed a real interest in human geography as well, describing in detail what he had learned about faraway places and peoples.

There were other sources of information for those interested in geography and travel besides historical records, such as those of Egyptian priests which Herodotus must have used, or the mathematical work of Greek philosopher-scientists such as Eratosthenes. Itineraries were a kind of map, for example, which had a very specific purpose. Instead of attempting a full visual description of an area, an itinerary would list the places that a traveller must move between to accomplish a particular journey, giving distances and sometimes useful additional details about inns or local tourist sights. The late Peutinger Table is an itinerary which resembles a very long and narrow strip-map. It is in fact a sort of combination of the itinerary and the conventional map, in that roads and towns are shown against a recognisable (just!) 'boot' of Italy, but one so thin and narrow (to fit onto a parchment hardly more than a foot wide, but over twenty-two feet long) that we can easily understand Lionel Casson's remark that this mapmaker's "sole aim was to give a schematic picture of the Roman road system in a form suitable for ready reference." (Travel in the Ancient World, pg. 187)

The sailor's version of an itinerary was the periplous or 'voyage round' the seacoast of a particular area. These were either reports compiled by or from those who had travelled in the area, or actual navigators' manuals intended presumably for ship's-captains or pilots. Quite a number are still extant from the ancient world, including the one written by Hanno the Carthaginian mentioned in an earlier article in this series. Another periplous, of the Hellespont and Black Sea area, was written by Arrian. He was a friend of the 2nd century emperor Hadrian, who made him governor of the near-eastern province of Cappadocia. Arrian must

have been very interested in geography, because he also wrote what is now his best-known work, a History of Alexander, which contains a lot of geographical detail about Asia, and an On India, which he compiled partly from a work by Alexander's sea-captain Nearchus who sailed from the Indus to the Tigris along the northern shores of the Arabian Sea.

Now let's move back in time for a moment to a man who lived more than a century earlier than Arrian, was born in one of the lands just to the south of the Black Sea and was perhaps the greatest literary and scientific geographer of the ancient world, Strabo. He lived in the last half of the 1st century B.C. (he may have gone to Rome at the age of twenty for post-graduate studies in the very year of Julius Caesar's assassination, 44 B.C.). He was a Greek from Pontus (modern N.E. Turkey), a Stoic (unlike Arrian who was an enthusiastic Epicurean!) and a traveller as well as the author of the Geography, which George Sarton calls "one of the great monuments of antiquity" (History of Science, Vol. 2, pg. 419). Strabo's masterwork is the descendant of what we may call the Greek human and physical geographers, however, rather than the mathematical ones, for his intention was apparently to write a survey of the whole known world in terms which would be of greater interest and value to intelligent administrators and businessmen, perhaps, rather than to mathematicians and scientists. His Geography covers the ancient world, country by country, describing mountains and rivers, tribes and customs, cities and landmarks. Surprisingly enough, although his work was obviously written during the first emperor Augustus' reign, and would have been of great use to Roman provincial officials, no use was made of it, for it seems to have remained virtually unknown until Byzantine times.

We can't leave the ancient geographers without mentioning the man who is so often called the 'Baedeker of the ancient world', Pausanias. Another Greek, a slightly later contemporary of Arrian (mid-2nd c. A.D.), he wrote a Description of Greece which is a sort of traveller's guidebook. He wasn't the first to have written such a guidebook, though his is the most ambitious and the best by far from what we know about his predecessors. He too may have been born in Asia Minor, perhaps in Lydia; he travelled from Rome to Syria, Greece to Egypt, although he never went as far as fabled Babylon (he tells us he never even met a man who had visited Babylon!). We might call Pausanias' work as much a cultural geography as anything else, for he painstakingly describes for the tourist all the Greek monuments of beauty and grandeur, man-made even more than natural. Moreover, Pausanias was neither Stoic nor Epicurean, but a more conventionally religious man; consequently he enjoys describing the temples, shrines or altars in lavish detail. Casson remarks that whenever Pausanias mentions some attractive feature of the landscape, "it is almost always to point out some religious or mythological association, hardly ever its natural beauty" (pg. 296). So careful and detailed are Pausanias' descriptions, in fact, that archaeologists and visitors to the ancient Greek sites still find his book both interesting and useful.