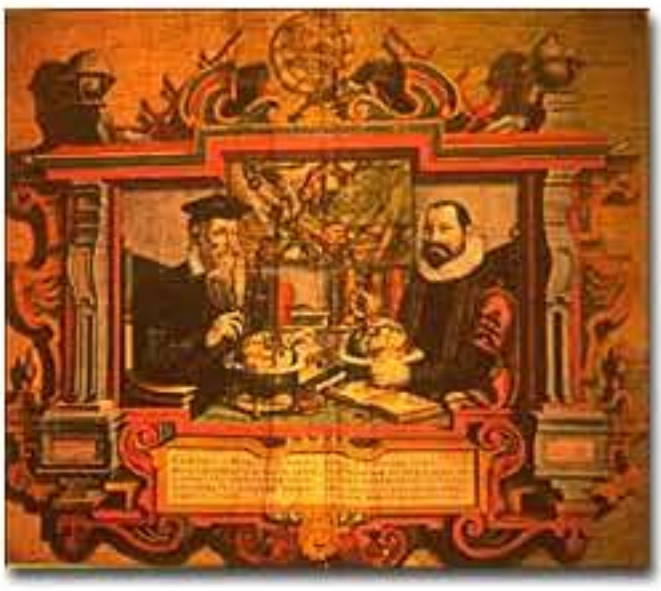


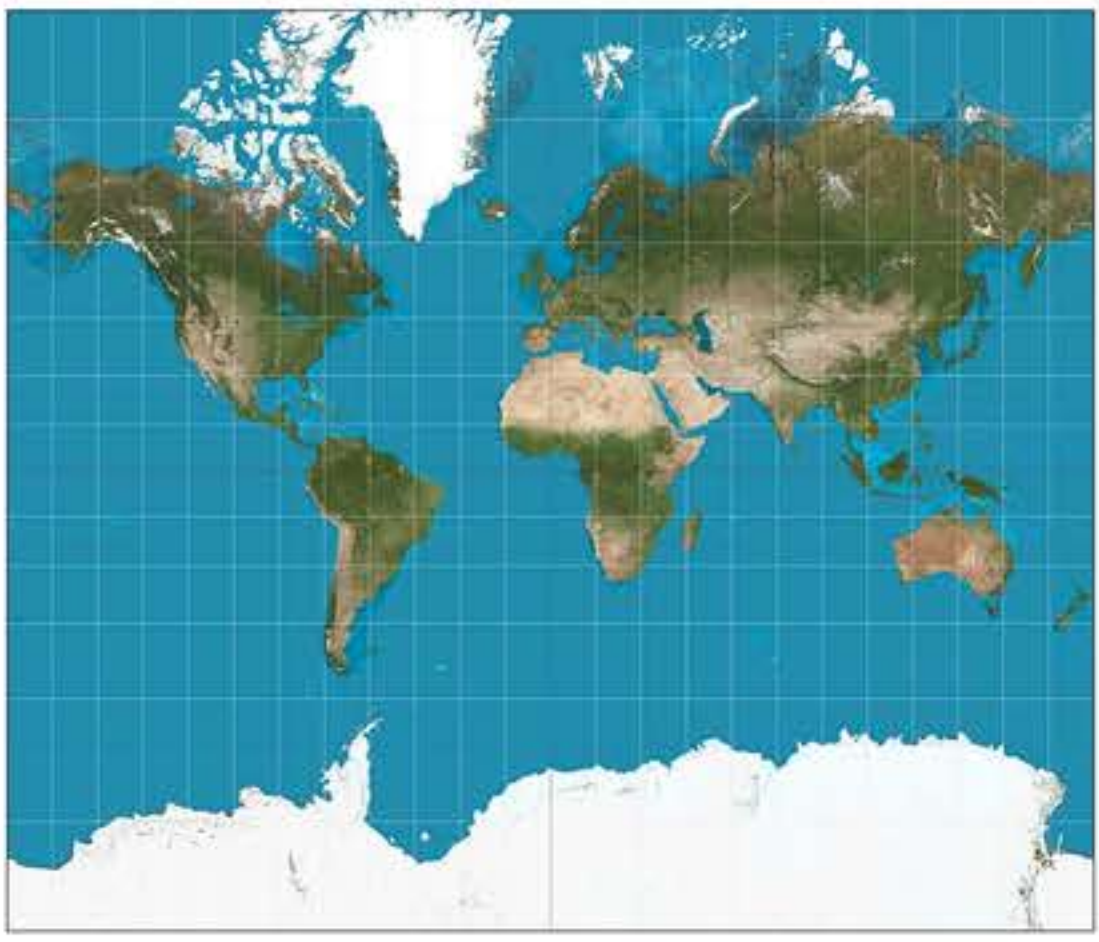
Mapping the World

The desire to know how people in distant cultures live is an ancient one. Before photography, the internet, and airline travel, how did people learn about far off lands? During the Renaissance, mapmaking was the answer! An explorer would chart his path, bring home the information and hire a mapmaker to bring his memories to life. The geographer's most important tool is the map. Mapmaking went through a revolution in 15th and 16th centuries when a marvelous age of exploration dawned. In 1519, Ferdinand Magellan set out on his ambitious voyage to circumnavigate, or sail around the world.

Magellan's trip was not a happy one. Approaching the tip of South America, his crew mutinied, terrified by ferocious weather. Magellan executed some of his crew, imprisoned others, and marooned one sailor on a remote shore of South America. Rounding Tierra del Fuego — the southern tip of South America — Magellan headed into the Pacific.

He trusted his maps and thought it would take only a few days to cross. But his trip took four months. Drinking water became putrid and turned yellow. The crew almost starved.They were reduced to eating sawdust, leather strips, and rats.

As sailors returned and more information came in, more of the earth needed to be mapped. Cartographers — or mapmakers — faced a fascinating problem. How could the three-dimensional surface of the earth be represented on a two-dimensional page? They learned it could not be done without sacrificing shape, direction, or size.



Mercator Plots the Course

In 1569, Gerardus Mercator, a Flemish mapmaker, devised a brilliant solution and produced the earth's most famous map. On a globe, lines of longitude meet at the poles. Mercator opened them up to make them parallel, intersecting at right angles with lines of latitude. In another adjustment, he placed latitude lines farther part as they approached north and south.

In 1585, Mercator began to publish his maps in book form. Engraved on the title page appeared the Greek god, Atlas, carrying the earth upon his back. Ever since, a book of maps has been known as an atlas.

The map had certain drawbacks. Regions near the poles suffered gross distortions. Greenland is the size of Africa, Alaska is bigger than Brazil, and Antarctica is a massive frozen mass. In reality, these regions are much, much smaller. But sailors didn't care. What mattered to them was that the map offered a simple and accurate way to plot a course since carrying around a globe wasn't a reasonable option. Source: https://www.ushistory.org/