The History of Cartography
Cartography is the science and art of making maps. Maps convey geographic information about a place and can be useful in understanding topography, weather and culture depending upon the type of map.
Some of the earliest known maps date back to 16,500 B.C. and show the night sky instead of the Earth. Maps were also created in ancient Babylonia (mostly on clay tablets). The Babylonian World Map is considered the earliest map of the world, it is unique because it is a symbolic representation of the Earth. It dates back to 600 B.C.
The earliest paper maps were those created by the early Greeks. Anaximander was the first of the ancient Greeks to draw a map of the known world and as such he is considered to be one of the first cartographers.
Hecataeus, Herodotus, Eratosthenes, Ptolemy were other well-known Greek map makers. The Greek maps often showed Greece as being at the center of the world and surrounded by an ocean. Early Greek maps show the world being divided into two continents – Asia and Europe. Ptolemy created maps by using a coordinate system with parallels of latitude and meridians of longitude. This became the basis for today’s maps.
Early examples of cartography also came out of China. These maps date to the 4th century B.C. and were drawn on wooden blocks. Other early Chinese maps were produced on silk.
We also know early representations of maps and routes by the old Egyptians on papyrus, but due to the short life of this type of surface, little evidence has lasted to our time.
During Roman times, cartographers focused on practical uses: military and administrative needs. Their need to control the Empire in the financial, economic, political, and military aspects, made evident the need to have maps of administrative boundaries, physical features, or road networks. Roman maps were more or less restricted to the area comprised by what they called “Mare Nostrum”.

Rome
Medieval maps

In the Middle Ages, scholars continued and advanced on mapmaking traditions of earlier cultures, mostly following Ptolemy's methods but they also started using the knowledge, notes and writings of the explorers and merchants during their travels across the world. There were also numerous studies and methodologies to draw a system of meridians and parallels that helped greatly to the evolution of the science of Cartography, like those created by Ibn Batutta or Al-Idrisi.
The “Tabula Rogeriana” (1154) by Al Idrisi, isn’t just a map of the world- it’s an extensively researched geographical text that covers natural features, ethnic and cultural groups, socioeconomic features, and other characteristics of every area he mapped.
At the beginning of the 13th century the “Majorcan Cartographic School” was developed, it consisted of a Jewish collaboration of cartographers, cosmographers and navigators, instrument makers. The “Majorcan Cartographic School” invented the Normal Portolan Chart, a nautical chart.

The “Mappa mundi” is a generic term for medieval European world maps. The Hereford Mappa Mundi is notable for being the largest medieval map still in existence, as well as one of the most elaborately drawn and colored. The illustration of the map itself is circular, with Jerusalem placed at the center of the map, the garden of Eden in a ring of fire near the top of the map.
The Fra Mauro Map was created by the monk Fra Mauro around 1450 AD. It’s considered one of the finest pieces of medieval cartography in existence. It’s a large round map, around two meters in diameter, painted on vellum and stretched in a wooden frame.
The age of exploration

Printing, plus the big impulse in the developing of
different methods of surveying and new instruments of
measurement that took place especially during the
15th century, were responsible for the rise of
cartographers as influential people in the most powerful
countries of the world. The commercial expansion, the
colonization of new parts of the world, and the search
for military superiority over other countries, brought the
realization of the need to accurate maps to control as
much as the world as possible. Cartography developed
further in Europe during the Age of exploration as
cartographers, merchants and explorers created maps
showing the new areas of the world that they visited.
They also developed detailed nautical charts and maps
that were used for navigation. In the 15th century
Nicholas Germanus invented the Donis map projection
with the equidistant parallels and meridian that
converged toward the poles.
Donis Map projection
In 1527 Diogo Ribeiro, a Portuguese cartographer, designed the first scientific world map called the “Padron Real”. This map was important because it very accurately showed the coasts of central and south America and showed the extent of the Pacific Ocean.
In the mid-1500s Gerardus Mercator, a Flemish cartographer, invented the Mercator map projection, one of the most accurate for world-wide navigation that was available at the time.

Throughout the rest of the 1500s and into the 1600’s and 1700’s further European exploration resulted in the creation of maps showing various parts of the world that had not been mapped before. In addition cartographic techniques continued to grow in their accuracy.
After the Industrial Revolution, trading and commerce, increased enormously throughout the world. Travel for pleasure became a big interest for the burgesses while travel for business was a matter of big importance for merchants. Geographers and cartographers had to respond to the increasing demand of the middle class, and therefore, another impulse was given to cartography and the mapmaking professionals.
Modern cartography began as various technological advancements were made. The invention of tools like the compass, telescope, sextant, quadrant and printing press all allowed for maps to be made more easily and accurately. In the 20th century the use of planes to take aerial photographs changed the types of data that could be used to create maps.

Satellite imagery has since been added to the list of data and can aid in showing large areas in great detail.
Modern age inventions
Finally, the Geographic Information Systems or GIS is changing cartography today. It allows for many different types of maps using various types of data to be easily created and manipulated with computers.

GIS has become global, and GIS Analysts and Specialists, have emerged as the new gurus of cartographic science. Almost anything can be studied now from a geographic point of view. Also, some technologies that previously were restricted to military uses, like GPS, the globalization of data, the use of internet, web mapping services, new software applications, contributed greatly to the use of GIS and Cartography for more and more applications every day. No doubt, though, that computer technology was the new big revolution in the history of cartography and the start of a new era in the art and science of map making.
Passignano sul Trasimeno
Le Pouzin