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## **CARTOGRAPHY THROUGH THE TIME**

### **ИСТОРИЯ КАРТОГРАФИИ**

Map production has long been a core practice of cartography, so the purpose and subjects of the article is the History of Cartography. The article will point out cartography through Ancient Times, the Middle Ages and Modern Times.

Ancient cartography was born in Greece and the Roman Empire. But cartography also traces its roots back to the earliest Mesopotamian societies. They mapped towns and cities for internal use, as well as exploratory maps that depicted modern Germany, Spain and Saudi Arabia. Most of the maps were diagrams of farmland, trade routes, or city layouts. Later on, the Romans used their maps to plan military endeavors by a grid system that Eratosthenes<sup>1</sup>

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<sup>1</sup> Eratosthenes (276 B.C. – 194 B.C.) – a Greek mathematician, geographer and poet. The first scientist who proved that the Earth is round.

invented. It's interesting to note that this grid system is similar to the modern global positioning system.

Moreover, they used this invention in wars to attack opponents according to their strategy and in designing the cities. As a result, the Romans accumulated many maps in ancient times. All their maps were catalogued and organized in the Library of Alexandria, which was the largest library in the ancient world.

Not so long time ago, each change was really time-consuming and expensive. Firstly, they used the cardinal system. Secondly, they invented almost the same grid system as the Romans. For the last purpose they used nearly 500 000 soldiers that had to walk twenty steps apart in a horizontal line, carrying a rope. They walked straight forward and marked every twentieth step. At the end the surveying territory was measured by a royal surveying team.

The second point relates to the cartography in the Middle Ages. There was a sharp jump in cartography. With a huge experience European cartographers were making a lot of maps based on previous attempts. The maps were usually made in the monastery libraries. Between the 1400's and the 1700's, the better part of cartography focused on coastline and oceanographic mapping. However, in the early 1700's, the world-mapping endeavors slowly died, and the purpose of mapping began to shift to the creation of different maps according to the theme. The examples of themes are topography, trade routes or density, relief , and weather.

The third point is about modern technology in cartography. Map production technology is a rapidly developing field, however, as in Ancient Times, making a map requires similar steps.

Modern systems directly depend on satellite technologies, for example, one of them is GPS (Global Positioning System). This is a group of 24 satellites, launched by the National Aeronautics and Space Agency (NASA, the USA) that orbits in a definite constellation through the Earth's atmosphere. A person

standing anywhere on the Earth is always able to find at least three of those satellites at any given time. By using the readings from the three satellites, a person can know his coordinates in three dimensions. The major ones used today are latitude, which is the distance from the equator towards the north or south, and longitude, which is the east or west orientation around the globe based on the prime meridian. With this information, as well as the person's altitude, satellites can find their exact position on a printed map in seconds.

To sum up, it should be said, that our enormous world isn't fully discovered. So, in that way, people need to carry out researches to get more knowledge about our planet. Thus, there were investigated 3 ideas in the article: cartography in Ancient Times, cartography in the Middle Ages and cartography in Modern Times.

#### REFERENCES

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