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EXPLANATION OF THE MAP CREATED BY MUHAMMET IBN NEJIP BEKRAN

Alyyev Charyyar
Lecturer, Magtymguly Turkmen State University
Ashgabat, Turkmenistan

Matiyev Nurmyrat
Student, Magtymguly Turkmen State University
Ashgabat, Turkmenistan

Muhammet ibn Nejip Bekran drew his map on a large-scale, thick fabric called "jäme," in a circular shape. The surface of the map is filled with a vast number of geographical names, including cities, villages, mountains, rivers, seas, islands, roads, countries, and provinces. However, due to the map's incompleteness, we cannot know exactly how many place names were depicted. In his work Jahannama, more than 600 names of locations are listed.

It is clear that the map's size was large and that it was drawn with great precision, as it was specifically intended for Muhammad II, the most famous ruler of that time. The map's surface is grid-like, divided by meridians and parallels, similar to modern maps, and different colors and shades were used to represent the terrain more clearly and understandably.

In creating the map, Bekran also consulted the tables (or jadwals) of ancient and medieval astronomers. To eliminate inaccuracies that could arise when drawing the map, he meticulously studied the tables, frequently cross-checking the information provided. Once he was sure the data was accurate, he transferred the results onto the map.

A particularly notable feature of Bekran's map is its inclusion of a degree grid. Another surprising aspect is the depiction of borders between countries, a rare occurrence on medieval maps. Bekran's map also records the names of the four cardinal points of the Earth's sphere, as well as the names of numerous islands.

Thus, the map created by Muhammet ibn Nejip Bekran is the oldest known medieval map with a degree grid, and it is the earliest example of such a map we know. To put it into context, the first European world map with a degree grid was created in 1427, 219 years after Bekran's map.

In Eastern countries, the development of cartography was greatly influenced by Ptolemy. However, from the 9th century onwards, this influence began to diminish, especially in the Turkic lands, where geographical knowledge advanced with new scientific discoveries that replaced the outdated views of Roman scholars. While Bekran's map does follow Ptolemy's ideas to some extent, it represents an important step forward in the science of cartography. Unlike Ptolemy's half-circle maps, Bekran's map is a full circle, a major breakthrough in cartography for that time. This structure, resembling modern maps, became the foundation for future mapmaking.

In the development of Ptolemy's views on the world's structure, the contributions of Eastern scholars, especially Al-Biruni, were substantial. Al-Biruni's discoveries, which combined ancient Greek knowledge with new findings, had a decisive influence on the creation of Bekran's advanced map. The method of positioning seas on a spherical Earth was also fully adopted from Al-Biruni's work. Bekran must have extensively used the circular maps of the seas from Al-Biruni's Kitab al-Tafhim ("Book of Explanation"). Furthermore, Bekran utilized Al-Biruni's astronomical calculations of distances and latitudes, as well as the placement of cities according to their climates.

In his work, Bekran provides detailed explanations of many geographical names. His explanation of the name Amederya(likely referring to the Amu Darya River) is particularly interesting. He often refers to large rivers or water bodies as "Jeyhun," explaining that ordinary people called large rivers by this name. However, he clarifies that Arabs use the name Jeyhun specifically for the large river flowing near Termez.