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## MODERN MANAGEMENT OF ORGANIZATIONS: CONCEPTS AND DIGITAL TRANSFORMATIONS

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## FRA MAURO'S CARTOGRAPHIC VIEW OF THE 15TH CENTURY WORLD

#### Semehen Oksana,

Ph. D., Associate Professor, Associate Professor of Department of Geography and Methods of its Teaching, Ternopil Volodymyr Hnatiuk National Pedagogical University, Ternopil, Ukraine

#### Zastavetska Lesia,

Dr. Sc., Professor, Head of Department of Geography and Methods of its Teaching, Ternopil Volodymyr Hnatiuk National Pedagogical University, Ternopil, Ukraine

## Zastavetskyi Taras,

Ph. D., Associate Professor, Associate Professor of Department of Geography of Ukraine and Tourism, Ternopil Volodymyr Hnatiuk National Pedagogical University, Ternopil, Ukraine

### Nadvodskyi Andrii,

Bachelor's Degree Student, Student of Department of Geography and Methods of its Teaching, Ternopil Volodymyr Hnatiuk National Pedagogical University, Ternopil, Ukraine

### Budzinskyi Pawlo,

Bachelor's Degree Student, Student of Department of Geography and Methods of its Teaching, Ternopil Volodymyr Hnatiuk National Pedagogical University, Ternopil, Ukraine

In the field of cartography, the Middle Ages gave humanity unique monuments, among which the Fra Mauro's world map occupies a special place. Created in Venice by the educated monk-cartographer Fra Mauro, this monumental work is not only an impressive work of art, but also a valuable historical document that reflects the level of geographical ideas of Europeans on the eve of the Age of Great Geographical Discoveries.

The study of the Fra Mauro's map is extremely relevant for several reasons. First, it is a key artifact in understanding the evolution of cartographic science and reflects the transition from predominantly theological views of the world to more empirical approaches. Second, the map is a valuable source of information about the geography, culture, history, and even mythological ideas of different peoples of the world in the 15th century. Its detail and numerous inscriptions provide a unique opportunity to look into the worldview of a medieval person. Third, the study of the Fra Mauro's map is of great importance for historical geography, allowing us to reconstruct contemporary

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knowledge about the continents, trade routes, and the location of settlements. Finally, this monument can serve as an excellent didactic material for studying the history of geographical discoveries, the geography of the Middle Ages, and the development of critical thinking in the modern educational process.

Fra Mauro's world map is a large round parchment about two meters in diameter, painted with bright pigments, including precious gold and lapis lazuli. A characteristic feature of the map is its orientation to the south, which was a common practice of medieval cartographers. The detail of the map is impressive, containing over 3,000 inscriptions commenting on geographical features, historical events, customs of peoples, flora and fauna of various regions. The map depicts over 1,000 cities, rivers, mountain ranges and other important geographical elements of the then known world: Europe, Asia and Africa.

Fra Mauro relied on a wide range of sources when creating his work. Among them are the works of ancient geographers, descriptions of medieval travelers, as well as maps created by his predecessors and contemporaries. The contribution of Fra Mauro's own observations and knowledge, who was an educated person interested in geography and history, is important.

The depictions of the continents on the Fra Mauro's map have varying degrees of detail. Europe, especially its Mediterranean coast, is depicted quite accurately. Africa is presented in less detail, but with a noticeable understanding of its general outlines and dimensions. The cartographer also depicted characteristic African animals. Asia, especially India and China, is reproduced with high accuracy, which indicates the use of descriptions by travelers.

In addition to real geographical objects, the map also contains elements of medieval ideas about the world, including images of mythological creatures such as sea serpents and dragons. These images reflect the beliefs and fears of the time associated with unknown sea spaces. An interesting fact is also the presence of an inscription on the map that the Earth is flat, which may indicate the preservation of certain archaic ideas along with progressive knowledge.

Fra Mauro's map was commissioned by the Portuguese King Afonso V. This fact emphasizes the importance of cartography for the political and economic ambitions of the European states at that time.

The original of Fra Mauro's map is carefully preserved in the largest library in Venice – the National Library of St. Mark, the Marcian Library (Italian: Biblioteca Nazionale Marciana, Libreria Marciana), where it can be viewed by researchers and fans of the history of cartography [1-3].

Further research on the Fra Mauro's map could be interesting in many directions: 1. In-depth study and detailed analysis of the thousands of inscriptions on the map could reveal new information about the geographical names of the time, descriptions of regions, historical events and cultural features. 2. A more careful comparison of the Fra Mauro's map with well-known ancient and medieval geographical works and maps could clarify the sources of its information and reveal the features of its cartographic method. 3. The study of how the Fra Mauro's map influenced the ideas of subsequent generations of cartographers and navigators could shed light on its role in the Great

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Geographic Discoveries. 4. The application of modern digital methods of analysis and visualization could help in a more detailed study of the map, revealing hidden details and creating interactive educational resources based on it. 5. Interdisciplinary research involving historians, geographers, cultural scientists and art historians in the study of the Fra Mauro's map could contribute to a deeper and more comprehensive understanding of its meaning.

The Fra Mauro's World Map is a unique monument of medieval cartography, combining the scientific accuracy of its time, artistic skill and reflection of the contemporary worldview. Its detail, numerous inscriptions and illustrations make it an invaluable source of information about geographical knowledge, culture and history of the 15th century. The map testifies to the significant progress in European cartography on the eve of the Age of Great Geographical Discoveries and its important role in preparing for them. The preservation and study of this outstanding monument is important for understanding the evolution of human knowledge about the world and the cultural heritage of the Middle Ages.

The Fra Mauro's World Map remains an inexhaustible source of knowledge and inspiration for researchers in various fields and an excellent tool for expanding the worldview of the modern generation.

#### **References:**

- 1. https://www.jnsm.com.ua/h/MP15/
- 2. https://www.bbc.com/ukrainian/articles/cw4m8dvvee0o
- 3. https://violity.com/ua/new/5341-vrazhayucha-detalizaciya-karta-fra-mauro

#### Modern management of organizations: concepts and digital transformations

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