## **ABSTRACT**

to the dissertation work of Seidali Umirtayevich Bilalov for the degree of Doctor of Philosophy(PhD) in the specialty "6D020800-Archeology and ethnology" on they topic "Typology and fortification of medieval hillforts of the lower Syrdarya"

**Description of the dissertation.** The dissertation contains and systematizes scientific data on fortified medieval (V–XIV centuries) cities and settlements of the lower Syrdarya and, obtained in different years during complex archaeological research. Through the analysis of data selected from the current database of sources, the formation of urban culture in the lower reaches of the ancient Syrdarya river, the development of fortifications formed during the urbanization of the region are considered, and typological classification of these monuments is carried out on the basis of various characteristics

Relevance of the topic. Problems of typological classification of medieval fortified settlements in the lower reaches of the Syrdariya, formation of their defensive systems and ways of development are topical problems of modern Kazakh archeology. Medieval cities from the 19th century are of interest to scientists, and as a result, a lot of valuable information has been obtained. Since the mid-twentieth century в ходе проведения, complex archaeological research has collected a lot of materials about fortified settlements and towns in theax region.

To date, there are no large-scale works oforo comparative analysisa of available materials, typology, defensive systems, functions and external features of medieval cities of the lower Syrdarya. All this requires systematization and πoreinterpretation of existing sources, with subsequent introduction of their scientific use. Quit it is important to unify and group various historical data on the location of medieval cities in the lower reaches of the Syrdariya and give them a scientific justification.

The object of the study is the topography of medieval cities in the lower reaches of the Syrdarya river and the military-defense architectural structures and typology of cities based on their external form and function.

The subject of this research is typology, fortification of medieval cities in the lower reaches of the Syrdarya river, methods of their construction and construction materials.

**Purpose and objectives of the research.** Through an integrated approach to studying the results of archaeological research conducted in medieval cities in the lower reaches of the Syrdarya, identify their features and typology, determine the origin and development of their fortification. To achieve this goal of the dissertation, several tasks are defined:

- collection, systematization and analysis of archival and bibliographic material on the study of fortified monuments in the lower Syrdarya and periodization of the history of their research;
- having described the features and process of changes in settlement placement from antiquity to the Middle Ages, depending on the watercourse in the ancient

Syrdarya canals and considering the nature of such watercourses, prepare a map of the river system and show the influence of the natural environment on the formation of the economic type;

- based on a comparative analysis of materials from stratigraphic layers of monuments obtained as a result of archaeological excavations, show the evolution of settlements;
- analyze the topography of medieval cities and settlements in the region, identify their main characteristic elements and determine the role of the latter in the planning of monuments, systematize and introduce into scientific circulation archaeological sources related to the defensive structures of medieval settlements;
- based on the similarities and differences of medieval fortified settlements, describe their functions, depending on the chronology of the monument, location and individual features consider their typology;
- determine the patterns of development of fortifications of medieval monuments, give a description of their individual elements;
- describe the features of building materials and technical methods used in the construction of defensive structures, considering the tactical and strategic plan of ancient engineering structures and construction methods, and characterize the impact of the development of military assault equipment on the nature of defensive structures;

The territorial scope of the dissertation work. The historical and geographical region is the south-west of Kazakhstan, since ancient times it has been called the Turan lowland. The lower reaches of the Syrdarya are bordered to the north by the Aral Sea, the Karakum Desert, to the east by the Torgai steppes, the Sarysu and Shu rivers, to the West and south by the Kyzylkum sands, and to the southeast by one of the Karatau - Aktau ranges. Administratively, the study area covers the Syrdarya, Zhalagash, Karmakshi, Kazaly and partially Aral districts of the Kyzylorda region.

Chronological framework of the dissertation work. I millennium BC middle - II millennium BC. The developments of fortified settlements in the V-XIV centuries can be considered in three stages. These are the periods: ZhetyAsar (II-VIII centuries), Turk-Guz, Kipchak, Karakhanid (IX-XI centuries), XII-XIV centuries the periods of the Khorezmshahs and the addition of the cities of the Golden Horde.

Methodology and methods. And the research work is based on the principle of historicism. In view of the fact that the main objects of research are archaeological sites, the methods of archaeological exploration and excavation combined with general scientific methods (analysis, synthesis, accumulation, etc.) are widely used the methods of chronological identification, comparative typology and analysis were used in the processing, analysis and interpretation of materials. Along with the traditional methods, the methods of natural science disciplines (magnetic exploration, electrical exploration, paleo-soil exploration, radiocarbon analysis of organic waste) were widely used.

## Scientific novelty of the work.

- cultural and book data collected in the course of studies of medieval Syrdarya cities from the XVIII century to today, depending on the time of study and ideological nature are systematized and divided into periods;
- the existence of ancient Syrdarya settlements was directly related to the process of changes in water flows in ancient channels. V-XIV centuries periods of life of monuments, indicating the presence of water flows in the ancient channels of the Syrdarya, which made it possible to draw up maps of changes in ancient channels and migration of settlements. In the V-XIV centuries, the temperate climate of the region influenced the formation of a mixed type of economy;
- the study of written sources and comparative analysis of data obtained from defensive structures during archaeological research, using methods of natural sciences, allowed us to trace the stages of formation, development and decline of individual cities;
- the internal topography of settlements with medieval defensive structures has been studied, the importance of various components in their layout has been determined, new archaeological materials on the history of medieval defensive structures of the Eastern Aral Sea region have been introduced into scientific circulation;
- compiled a typology of medieval cities and settlements based on their internal and external features, territory and structure;
- the evolution of fortification of medieval cities, their local specific features, ways of gradual development of defense elements are determined, their individual elements are analyzed and described in detail;
- the building materials and methods of construction of defensive structures are scientifically described, their tactical and strategic plan is analyzed, and the reasons for the changes caused by the development of military assault equipment in the nature of the development of defensive structures are identified;

## **Conclusions recommended for defense:**

- 1. Materials of local lore (XVIII XX centuries) on medieval cities in the lower reaches of the Syrdarya River and archival and bibliographic information collected during archaeological research 1946-2023 in 1946-2023, depending on the history of regional research and political and ideological periodization they are analyzed and divided into periods.
- 2. It is established that in the V-XIV centuries, the life of cities and settlements along the ancient channels of the Syrdarya, their emergence, development and decline completely depended on regional natural phenomena. Depending on the influence of the water mass in the ancient channels, a map of changes in the Syrdarya canal system in each historical period is compiled at the specified time;
- 3. As a result of a comparative analysis of historical sources, the results of archaeological research and radiocarbon analyses taken in the course of archaeological research in recent years is clearly dated in the Zhetyasar tract the existence of separate settlements along the Kuandarya and Eskidarya channels, which were formed in the IV-V centuries and lasted until the X-XI centuries

- 4. Based on written sources, cartographic materials and the results of archaeological research, an analysis of the historical topography of the archaeologically studied medieval settlements of the region under study was carried out. Information about the history of defensive structures of the Middle Ages and the importance of taking into account the relief of the surrounding area when planning a settlement are introduced into scientific circulation.
- 5. In the planography of medieval cities of the lower Syrdarya, internal (presence, location and significance of the citadel, street layout) and external (area and shape of the city, integrity of defensive walls, towers and their forms) features and their functions are defined. A typological classification of cities is developed based on the topography of cities, their placement, individual elements, similarities and continuity.
- 7. The similarities and differences of construction materials and methods of construction of fortifications of medieval cities with neighboring regions are noted. It is revealed that medieval engineering structures were built on the territory of strategically important cities and strongholds of state significance, and ancient tribes used the terrain, adapting natural barriers to protect such settlements. It is specified that the influence of military policy on the development of transformation and local defense systems was high.

The data base of the study. The main source for studying the historical processes that took place in the Aral Sea region, especially in its south-eastern part, is archaeological materials. The dissertation is based on materials collected in the course of archaeological research conducted on early medieval monuments of the lower course of the Syrdarya River.

The degree of knowledge of the topic. Primary information about medieval cities in the lower reaches of the Syrdarya is contained in the records of travelers who visited the region with embassies. Information about the history of the region is described in the works of various officials of the Russian Empire: P.I.Rychkov, M.Meyer, A.Levshin, A.I.Maksheev, V.V.Grigoriev, S.Remezov. The next stage of historical and geographical study of the region is associated with the activities of the first scientific society in Central Asia -TALC, established in 1895. V.V.Barthold, V.V.Radlov, V.Smirnov, V.A.Kallaur, and A.Castanier worked as members of the only local history research society specializing in the study of the material culture of Central Asia for more than 20 years.

Modern studies of archaeological sites in the lower reaches of the Syrdarya River began in 1946 with the work of the KHAEE reconnaissance group under the leadership of S.P.Tolstov. Researchers who worked as part of the expedition, such as L.M.Levina, B.I.Vainberg, B.V.Andrianov, M.A.Itina, T. A. Zhdanko, gave a scientific description of the monuments and carried out a complex work on their periodization.

Among the domestic researchers, we should mention K.M.Baipakov, S.Zholdasbayev, Zh.Kurmankulov, M.Eleuova, D.Taleev, T.Mami, Zh.R.Utubaev, R.T.Darmenov, who in 2000-2023 conducted large-scalee archaeologicale research on the Middle-Eastern monuments of the Syrdarya, studied individuale ancient settlements by defining their location and meaning.

At the same time, it should be noted the results of joint research conducted by the staff of им. Korkyt Ata University (A. A. Tazhekeev et al.), RSA IAE. N.N.Miklukho-Maklay (E. D. Zilivinskaya, I. A. Arzhantseva) and Eberhard and Karl Tyubigen University (H.Harke).

Scientific and practice of study. The results of the study can be used for writing scientific papers on the archeology and history of the ancient states of the Amu Darya and Syrdarya. It can also be used when writing textbooks on the history of Kazakhstan and when writing works and scientific articles related to the medieval archeology of the Syrdarya. The developments contained in the dissertation can be used in planning archaeological excavations of early medieval monuments in the lower reaches of the Syrdarya river, scientific reconstructions, organization of openair museums and creation of museum expositions.

**Publication and approbation of research work.** The main problems and results of the dissertation research are published in 26 joint author's scientific articles. Among them, 3 articles were published in the Web of Science and Scopus scientific and metric databases, 7-in scientific publications recommended by the Committee for Control in the Field of Education and Science of the Ministry of Education and Science of the Republic of Kazakhstan, 16 - in collections of materials of the international scientific conference.

**Structure of the dissertation.** The dissertation consists of an introduction, three chapters, a conclusion, and five illustrative appendices. Applications are grouped according to their tasks.