1-SHO‘BA: TABIIY GEOGRAFIYA VA GEOEKOLOGIYA: ZAMONAVIY TADQIQOTLAR, GEOEKOLOGIK MUAMMOLAR VA BARQAROR RIVOJLANISH

AN ANALYSIS OF MAHMUDKHOJA BEHBUDI’S NATURAL-SCIENTIFIC VIEWS (A CASE STUDY OF *Muntahabi Jug‘rofiyai Umumiy*)

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Abstract:This article examines the natural-scientific and geographical views of Mahmudkhoja Behbudi on the basis of his work *Muntahabi Jug‘rofiyai Umumiy*. Particular attention is given to Behbudi’s interpretation of geography as an integrative field of knowledge connected with history, ethnography, economics, education, and national development. The study analyzes his understanding of the essence, functions, and branches of geography, as well as his views on the role of geographical knowledge in shaping scientific thinking, national self-awareness, historical memory, and patriotic consciousness. The article also highlights the scientific and methodological significance of Behbudi’s textbook, especially its adaptation to the intellectual level of the people of Turkestan, its reliance on local materials, and its didactic value for Jadid schools. It is argued that Behbudi regarded geography not merely as a descriptive discipline, but as an important means of understanding the relationship between nature, society, and human activity. His works on geography, travel observations, and popular scientific writings played a crucial role in introducing secular and natural-scientific knowledge into the educational life of Turkestan. The article concludes that Behbudi’s geographical heritage remains an important scholarly and cultural phenomenon, retaining both historical significance and contemporary relevance.

Keywords: Mahmudkhoja Behbudi, Jadidism, geography, natural-scientific views, *Muntahabi Jug‘rofiyai Umumiy*, Turkestan, Jadid pedagogy, scientific enlightenment, geographical knowledge, national self-awareness

In the scientific and philosophical views of the Jadids, particular attention was given to the disciplines of history and geography. They emphasized the necessity for the nation to understand its own history and strove to revive historical memory. In the historical works produced by the Jadids, detailed information was presented about the past of Turkestan, its great scholars, and its cultural heritage. This, in turn, accelerated the process of national self-awareness and contributed to the formation of a scholarly historical consciousness.

The Jadids also carried out important work in the field of the natural sciences. They sought to explain natural phenomena on a scientific basis and struggled against superstition and unfounded beliefs. In their view, knowledge of the laws of nature transforms humanity’s relationship with the environment and serves to improve the quality of life. For this reason, they regarded the dissemination of scientific knowledge among the broader public as an important task.

Jadid journalism also became a significant factor in the development of science and learning. Newspapers and journals published popular scientific and educational articles, providing information about the achievements of modern science. Through these publications, the population became increasingly informed about scientific developments taking place around the world. Jadid intellectuals viewed the press as a platform for the exchange of scientific ideas and made a substantial contribution to the formation of an intellectual climate within society.

At the end of the nineteenth century and the beginning of the twentieth century, Turkestan was part of the colonial domain of the Russian Empire, and the level of literacy among the population was extremely low. Schools were, in most cases, oriented exclusively toward religious instruction and largely relied on the memorization of Arabic texts.

Mahmudkhoja Behbudi, regarded as the father of the Jadid movement, strongly criticized this condition. In his 1904 article entitled What Should a School Be Like?, he wrote: “Our children should be educated not through memorization, but through thinking. A school is a place for the cultivation of thought.”

As one of the most progressive intellectuals of his time, Behbudi was able to think not only in terms of his country or region, but also on a global scale. He was capable of recognizing how the positive changes taking place across the world could be effectively utilized for the development and progress of his homeland. In 1926, the orientalist scholar Laziz Azizzoda wrote of Behbudi: “If it is necessary to immortalize a third figure in the science and culture of Uzbekistan after Navoi and Ulughbek, then without doubt that figure is Mahmudkhoja Behbudi.”

Behbudi was a traveler who visited a number of countries around the world and, on the basis of his observations, became the first scholar to produce important geography textbooks for the new-method schools. In 1913, he began publishing the newspaper Samarqand and, from August of the same year, the journal Oyina. He also published the account of his eight-month journey under the title Memoirs of Travel.

These memoirs gave the people of Turkestan an opportunity to become closely acquainted with all aspects of life in foreign countries. In this regard, the German scholar I. Baldauf wrote: “While Behbudi’s journal Oyina introduced Central Asians to countries stretching from Paris to Japan, Memoirs of Travel revealed to the people of Turkestan the East, predominantly inhabited by Muslims.”

In his works, Behbudi also attached particular importance to the role of history and geography in society, emphasizing that these disciplines were among the oldest sciences in the world, having emerged in the earliest stages of human civilization.

Advancing pedagogical ideas that were highly progressive for his time, Mahmudkhoja Behbudi established the first new-method school in Samarkand in 1903. In these schools, literacy was taught through the phonetic method; such subjects as mathematics, geography, history, and natural science were included in the curriculum; printed textbooks were used; and a class-based instructional system was introduced.

His 1913 work Risolai Jadida, distinguished by its practical orientation and its adaptation to children’s age-specific characteristics, came to be widely used in schools in Samarkand, Bukhara, and Tashkent.

The usul-i jadid (“new-method”) schools established by the Jadids incorporated into their curricula not only secular subjects such as mathematics, natural science, and geography, but also moral education and knowledge related to family life.

As one of the leading enlighteners of his time, Mahmudkhoja Behbudi was active not only in the religious and spiritual sphere, but also made a significant contribution to the natural sciences. By producing a number of works on geography, he helped lay the foundations of the earliest scientific sources in the Uzbek language in this field. Among these were Risola-i Jug‘rofiya-yi Rusiy (Geography of Russia, 1904), Risola-i Jug‘rofiya-yi

Umroniy (Introduction to Human Geography, 1905), and Kitobi Muntahabi Jug‘rofiyai Umumiy, whose full title is Kitobi Muntahabi Jug‘rofiyai Umumiy va Namuna-i Jug‘rofiya (A Selected Book of General Geography and a Model of Geography, 1906). In these works, he set forth his natural-scientific and geographical views, his scientific hypotheses, and the didactic methods he developed for students.

In particular, in his articles What Is Geography? and How Many People and Nations Are There in the World?, the scholar discussed the functions of geography as a discipline, its objects of study, as well as issues related to population geography and ethnography. His popular scientific articles such as Ulughbek’s Observatory, The Earth, and The Sun, along with his translations from works published in other countries, were read with great interest in his own time.

Articles of this kind possessed a broad geographical scope, covering various regions and continents. The journal Oyina regularly published engaging accounts of the social life of the peoples of India, China, Indonesia, and Russia.

For his time, Mahmudkhoja Behbudi attached special importance to incorporating geography into the Jadid educational system and popularizing it among the people. To this end, he prepared several instructional works, among which Kitobi Muntahabi Jug‘rofiyai Umumiy—whose full title is Kitobi Muntahabi Jug‘rofiyai Umumiy va Namuna-i Jug‘rofiya (A Selected Book of General Geography and a Model of Geography, 1906)—occupies a particularly significant place.

After presenting, in one of the introductory chapters of this work, his views on the importance of the science of “geography” and on its division into such branches as “historical geography,” “political geography,” and “human (general) geography,” Behbudi writes: “In sum, in the present age the science of geography is an essential worldly discipline that makes known the world and everything that exists within it—its peoples, animals, forms of settlement, and all else found on earth.”

Through these works, Mahmudkhoja Behbudi sought to equip Uzbek students with geographical knowledge, familiarize them with the foundations of modern science, and, in particular, cultivate a scientific understanding of the natural conditions, economic potential, and cultural characteristics of the countries of the world. In these writings, he interprets geography as an inseparable component of human civilization and progress.

In Muntahabi Jug‘rofiyai Umumiy, while explaining the term “geography,” Behbudi writes: “The meaning of the word jug‘rofiya, according to the Greek lexicon and its Arabic definition, corresponds to the meaning of arz—that is, it denotes the science that describes the earth and soil.” According to Behbudi’s definition, geography is the science that studies the globe and the composition of its structure, namely, the earth and its soil.

Today, since the word geography derives from the Greek words geo (“earth”) and grapho (“I write,” “I describe in writing”) and is used in the singular form, it may appear to denote only a single discipline. In reality, however, the term refers to a particular group of both natural and social sciences. Within this framework, the natural sciences examine natural phenomena occurring on the surface of the earth, whereas the social sciences study the characteristics of the economic activities of human society in different countries.

The structural components and content of Behbudi’s textbook Kitobi Muntahabi Jug‘rofiyai Umumiy va Namuna-i Jug‘rofiya are discussed in the selected works of the author

published by the Ma’naviyat publishing house in 1999. After receiving approval from the censorship authorities in Saint Petersburg on August 24, 1905, this textbook by Mahmudkhoja Behbudi was published in Samarkand in 1906 and consisted of 106 pages.

The textbook contains highly valuable information from a scholarly perspective. One of its most important scientific and methodological features is that it was written with due consideration for the level of knowledge and intellectual preparedness of the population of Turkestan. In the explanation of each topic, examples related to the nature, economy, and population of Turkestan are provided, or knowledge about Turkestan is compared with information concerning other regions. Thus, in Mahmudkhoja Behbudi’s textbook, the use of local-history material and the cultivation in the younger generation of a sense of love for the homeland occupy a leading place. This is because the universal knowledge imparted to children is closely integrated with knowledge about their native land.

In addition, the textbook offers a clear and objective assessment of the state of secular education in Turkestan at the beginning of the twentieth century, as well as of the level of knowledge among the general public and the religious scholars. The textbook consists of the following sections: Introduction; The Meaning of the Word “Geography”; When Geography Emerged; The Wise Men of Turkestan; The Benefits of Studying Geography; Why the Study of Geography Is Necessary for Muslims; Ancient and Modern Sages; Examples from the Words of Modern Scholars; Why Those upon the Earth Do Not Fall When It Rotates; Directions; Cardinal Directions; Map; Plan; Government and Rulers; Religion and Custom; Measures and Scale; The Discovery of America; and Elaboration and Admonition.

According to Behbudi’s definition, the meaning of the word geography is “the science that describes the earth and the soil” (p. 222). In the textbook, he divides geography into the following branches: “mathematical geography” (jug‘rofiyai riyoziy), “physical geography” (jug‘rofiyai tabiiy), “historical geography” (jug‘rofiyai tarixiy), and “political geography” (jug‘rofiyai siyosiy), among others. In conclusion, the author defines geography as a jahonnoma—that is, a body of knowledge that provides an understanding of the world and of the natural, social, and economic phenomena existing within it.

In the section entitled “When Geography Emerged,” the brief history of the development of geography is explained through four major stages: the ancient period, the Middle Ages, the era of the Great Geographical Discoveries, and the modern stage. In each of these stages, the development of geographical knowledge is analyzed in considerable depth.

The development of geography in the countries of Europe and in Russia, as well as the establishment of geographical societies there, is assessed positively in the textbook. In the section entitled “The Wise Men of Turkestan,” the contributions of Turkestani scholars and intellectuals to the science of geography are highlighted. This section is particularly noteworthy because it mentions the names of certain scholars who had not previously been acknowledged in the history of Turkestan’s geographical thought.

In the section “The Benefit of Studying Geography,” the importance of geographical knowledge for everyday life and education is illustrated through concrete examples. In “The Study of Geography Is Necessary for Muslims,” relying on the works of Muslim scholars, Behbudi explains the significance of geographical knowledge for Muslims. The section “Surroundings. Cardinal Directions. Map. Plan.” presents a systematic body of knowledge

concerning the horizon, the principal and intermediate points of the compass, the qibla indicator (compass), maps, and plans.

The categories of maps distinguished by Behbudi correspond closely to modern classifications—general, thematic, and topographic maps: xaritai umumiya, xaritai xususiy, xaritai topo‘grafik (p. 242). He translated the concept of scale as o‘lchak, which accurately reflects the original meaning of the term. By contrast, the word miqyos, which is sometimes used today, does not fully convey the precise meaning of scale.

In the section “Government and Rulers,” different forms of state governance are described, and these classifications correspond almost completely to modern typologies. The section **“**Religion and Custom” provides a systematized body of knowledge related to the geography of religion and population geography.

Behbudi’s textbooks, together with geographical maps, atlases, globes, and other visual teaching aids, acquired enormous scientific and practical significance for the development of the new-method schools established in the region.

For example, Behbudi developed the curriculum and subject syllabi for Shakuri’s school system, including the first-stage usuli savtiya school (Grades 1–4) and, beginning with the 1913–1914 academic year, the second-stage rushdiya model upper school (Grades 5–6). In the upper grades, the teaching of secular subjects—such as physics, chemistry, geometry, and, in particular, geography—was introduced. In the teaching of geography, maps, globes, and other visual aids were used effectively.

In Mahmudkhoja Behbudi’s works, special attention is also given to the practical role of geographical knowledge in social life. In particular, he emphasizes such issues as the efficient use of natural resources in organizing economic activity, the protection of land and water resources, and the influence of climate and environmental factors on хозяйственная processes. At the same time, the author regards geography as an important means of fostering national self-awareness, deepening understanding of the history of the homeland, and cultivating patriotic feeling.

Recording the results of his observations in his travel diary, he later published them under the title Memoirs of Travel. These memoirs possess considerable historical significance, as they present a vivid picture of urban life in the Russian Empire and the countries of the Middle East at the beginning of the twentieth century. In particular, various aspects of the population, agricultural culture, way of life, and trade relations in these regions are described by the traveler in an engaging manner.

This scholarly legacy of Mahmudkhoja Behbudi constitutes one of the principal sources for the development of Jadid pedagogy and the natural sciences, and the ideas he advanced in his own time continue to retain their scholarly value today. In essence, the works created by this distinguished thinker represent a geographical heritage that embodies the harmony of knowledge, enlightenment, and national consciousness.

In his writings, Behbudi offered a profound analysis of the place and significance of geography in society. He regarded geography as one of the most ancient sciences in the world, a discipline that emerged alongside the development of human thought itself. According to Behbudi, from the earliest stages of human history, people sought to understand their places of habitation, natural conditions, and water and land resources; this natural need, in turn, gave rise to the formation of geographical thinking.

Behbudi also attached particular importance to the role of history and geography in society, emphasizing that geography was among the oldest sciences in the world, having taken shape in the very earliest periods of human civilization.

He articulated his scholarly views on this issue in his scientific article entitled History and Geography. In his opinion, history and geography are as essential to human beings as the sun itself. Behbudi advances the hypothesis that the principal tasks of geography are to study the harmony between nature and human beings, to comprehend the natural and social structure of the globe, and to seek rational answers to such scientific questions as population geography and the analysis of ethnographic characteristics. Through his distinctive analytical approach, he presents geography as an ancient discipline inseparably connected with economics, history, ethnography, and culture.

Mahmudkhoja Behbudi also stands out for his original conceptual approach to the scholarly description of the ancient geographical boundaries of Central Asia and the Turan region. He formulated well-grounded and systematic conclusions concerning the natural-geographical structure of these territories, their climatic features, demographic composition, and historical-political significance. The historical-geographical reconstructions produced by Behbudi continue to be recognized by the scholarly community as an important empirical and theoretical source. This is because, despite the limited scientific and technical resources of his time, he made effective use of observation, comparative analysis, and generalization, thereby elevating geography to the level of a national mode of scholarly thought.

It should be emphasized that, particularly in his works What Is Geography? and How Many People and Nations Are There in the World?, Behbudi offers a profound analysis of the ontological essence, the epistemological scope, and the social functions of geography as a discipline. He does not interpret geography as a narrowly specialized field concerned only with the study of toponymic units; rather, he conceives of it as an integrative scientific system that examines the complex interrelationships among human life, social evolution, population distribution, and the natural environment.

In conclusion, the natural-geographical legacy created by Behbudi should be regarded not only as a product of its own era, but also as an important scholarly and cultural phenomenon that continues to retain its relevance within contemporary scientific discourse. His advanced pedagogical and educational views occupy a significant place in the institutional formation and methodological development of national intellectual thought.

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