

THE STUDY OF ROCK ART: SCIENTIFIC RESEARCH, METHODOLOGICAL APPROACHES, AND INTERPRETATION CHALLENGES

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ABSTRACT: This article explores the scientific study of rock art as a significant component of the cultural and spiritual heritage of ancient communities. It examines the symbolic and practical dimensions of petroglyphs and pictographs found in Uzbekistan and evaluates their chronological and semantic interpretations. The paper provides a critical overview of the history of research, beginning with early discoveries in the 19th century and continuing through modern archaeological efforts. Methodological issues related to dating rock art, the limitations of stratigraphic excavations, and the challenges of interpretation are analyzed in depth. Special attention is given to the disconnect between technological typologies and cultural identities in archaeological classification. Ultimately, the study emphasizes the need for a more nuanced and interdisciplinary approach to understanding rock art within the broader context of prehistoric cognition and cultural expression.

Keywords: Rock art, petroglyphs, pictograms, archaeological research, cultural heritage, semantic analysis, chronological issues, methodological approaches, prehistoric art, archaeology of Uzbekistan

INTRODUCTION

Rock art is a creative heritage of ancient people and plays an unparalleled role in the formation of their spiritual culture. These images encapsulate ancient lifestyles, worldviews, national values, and beliefs. In antiquity, places where rock art was created for specific purposes were often recognized as sacred by the groups who made them and by subsequent people—regardless of whether they had direct contact with the original creators or not. Conversely, some places were deemed sacred beforehand due to significant events or rites of passage occurring there, and were later marked through rock art, thereby reinforcing their sacred status.

For many cultural groups, non-religious activities may also have been carried out at these sacred sites.

However, special rituals or purification rites likely had to be performed before entering such areas, whether for spiritual or administrative purposes. The link between sacred sites and both religious expression and everyday activities (like hunting or gathering) undoubtedly existed in ancient times and continues to this day. The term “rock art” refers to signs and images created by humans on natural rock surfaces without any utilitarian purpose. These signs are made through two main processes: additive (such as pictograms formed by applying materials) or reductive (petroglyphs created by removing parts of the rock). The first category includes painted images, pigment drawings, stencil representations, and wax figures (e.g., from beeswax). The second category includes engraved drawings, pecked petroglyphs, and finger-drawn traces. Rock art is found in almost every country. Its uneven distribution is attributed to cultural traditions and taphonomic characteristics (i.e., differences in preservation).

LITERATURE REVIEW AND METHODOLOGY

Petroglyphs—millions of rock carvings—have been discovered on all continents in over a hundred countries. They serve as vital sources of information about the lives of ancient ancestors for both present and future generations. In Uzbekistan's mountainous and foothill regions, approximately 150 rock art sites have been recorded, dating from the Mesolithic period to the late Middle Ages. Although the study of rock art in Uzbekistan is relatively shorter than in regions like Siberia or Karelia, it still boasts a history of over 150 years¹.

The first scholar to identify and record these monuments was P. I. Demaison, who, in 1834, while serving in the Russian army in the Bukantau Mountains (Inner Kyzylkum region), provided the earliest scientific notes about pictograms in the area². In 1912, rock art was discovered in Zarautsoy by military topographer Fedorov—an exciting discovery for the entire world. By the late 19th century, Central Asian pictograms attracted the interest of enthusiasts from the Turkestan Archaeological Society such as N. A. Nasledov, N. S. Lykoshin, N. I. Veselovsky, D. M. Gramenitsky, I. A. Kastanye, V. V. Barthold, and others. Their studies were generally limited to brief descriptions of the images, with little focus on chronology or semantics. Detailed tracing or replication on-site was rare. Nonetheless, these researchers played a crucial role by taking the initial steps in the academic study of these unique archaeological sites.

Later, rock art was also found in the Mogoltov Mountains and Namangan district. Authors like I. S. Levitsky³, E. E. Kuzmina⁴, M. E. Masson⁵, and others briefly mentioned these newly discovered inscriptions and rock images in their works.

RESULTS

Unfortunately, there is insufficient scientific data for reliably dating rock art, and the literature contains many incorrect assumptions. For instance, some archaeologists have mistakenly dated recently made rock art to the Pleistocene era. Conversely, earlier claims about art supposedly from the Pleistocene have later been revealed as modern or fake. Many dating attempts by archaeologists rely on stylistic analyses and unproven hypotheses, rather than excavated samples of the rock art itself.

Furthermore, in classifying prehistoric cultures, archaeology has traditionally prioritized technological tools over cultural factors. In the Pleistocene, specific stone tool assemblages were referred to as

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² Оськин А.В. Петроглифы Букантау. Фирода . 1976 .—С. 83-89.

³ Левицкий С.И. Кугитангское каменноугольное месторождение. В кн: Геология юго-западных отрогов Гиссарского хребта. Тр. ТПЭ, 1937. Вып. 66. — С. 201-249.

⁴ Кузьмина Е. Е. Этапы развития колесного транспорта Средней Азии в эпоху энеолита и бронзы // ВДИ 1980 № 4. — С. 30.

⁵ Массон М. Е. Изучение энеолита и бронзового века Средней Азии — СА, №4 1957. — С. 44-48

“cultures,” yet tools alone are insufficient to define culture. These tool categories are conceptual constructs created by specialists—not actual objects—and have been assigned to invented cultural groups. As a result, rock art has often been sidelined in the cultural history of hominids, leading to numerous misinterpretations of human history. In archaeology, the traditional approach has focused on describing and interpreting rock art, and integrating it into archaeological events and chronologies. One of archaeology's main methods is excavation. Over the past hundred years, thousands of rock art sites have been excavated. The goal has been to either find rock art beneath stratified layers or identify fallen rock fragments containing art within datable layers. In the former, the minimum age of the art can be established; in the latter, the time of exfoliation (layer detachment) may be inferred if the age of the layer is known.

However, such methods have only rarely been successful worldwide. In most of these rare cases, the subject of study was petroglyphs, not painted rock images. Often, attempts to determine petroglyph age during excavations led to the destruction of archaeological evidence. Another major issue is that, although certain hypotheses about the meaning of the art have an archaeological foundation, they have not undergone scientific scrutiny and are difficult to revise due to their deep entrenchment in archaeological thought. Therefore, it is essential to critically evaluate the role and usefulness of archaeology in studying rock art.

DISCUSSION

The works of the aforementioned researchers mainly include only brief descriptions of discovered images. Their studies did not address the chronology or semantics of the drawings and patterns. Tracing or replicating petroglyphs on-site was rarely done. The meanings and purposes of these images were only superficially addressed, if at all. Nevertheless, their contributions are noteworthy, as they laid the foundations for the academic study of this unique cultural and spiritual heritage.

Ancient artworks are mostly located on the upper parts of the northern and western cave walls and are created using dark red ochre paint on yellowish-beige limestone surfaces. These paintings are monochrome silhouettes, with only three having contour forms—some of which are filled in with internal paint. Earlier excavations revealed no cultural layers inside these caves, likely due to their small size and difficult access, rendering them unsuitable for permanent habitation.

Y. A. Sher emphasized that in comparing the patina (weathered or darkened surface layer) of ancient paintings, their orientation relative to sunlight must be consistent. A similar view was proposed by M. M. Khujanazarov, who identified four patina levels in the Qoraqiyasoy petroglyphs. However, palimpsest cases (images from different periods drawn over one another) observed at the Qoratosh site contradict these rules and serve as clear counterexamples to existing theories, retaining relevance in contemporary science.

CONCLUSION

In short, most studies on rock art are based on the assumption that the cognitive abilities of the art creators were advanced enough to justify the production of such art, marking a crucial stage in human evolution. That is, people created rock art because they had developed the necessary mental capacity to do so. They were able to transition from three-dimensional to two-dimensional representation.

While this idea is valid, it is often considered both necessary and sufficient in studies that are overly focused on the modernity of symbolic actions. This approach has led to the lumping together of various types of rock art and presenting them as part of a single tradition.

References:

1. Khozhanazarov M. Sarmisoy (the history and literature). - Tashkent: Nurfayz nashriyoti, 2018. - 175 p.
2. Sher Ya.A. Petroglyphs of Central and Middle Asia. - Moscow, 1980. - P. 180-182
3. Masson M.E. Study of the Eneolithic and Bronze Age of Central Asia - SA, No. 4 1957. - P. 44-48
4. Okladnikov A.P., Frolov B.A. To the origins of creativity // Okladnikov A.P. Archeology of Northern, Central and Eastern Asia. - Novosibirsk, 2003. - P. 445.
5. Oskin A.V. New Finds of Petroglyphs in Kyzylkum. P I v IE 1976 g. M., 1978. – P.166
6. Oskin AV Petroglyphs of Bukantau. Firoda, 1976. – P.83-89.
7. Kuzmina EE Stages of Development of Wheeled Transport in Central Asia in the Eneolithic and Bronze Ages // VDI 1980 No. 4. – P. 30.
8. Levitsky SI Kugitang Coal Deposit. In the book: Geology of the Southwestern Spurs of the Gissar Range. Tr. TPE, 1937. Issue. 66. – P. 201-249.