



RESEARCH PAPER

Natural Rock Art designs in Balochistan: A case study of Princes of Hopes, Makran Coastal Highway

Zil-e-Huma

Assistant Professor, Department of Fine Arts, Sardar Bahadur Khan Women's University Quetta, Balochistan, Pakistan

***Corresponding Author**

Lecturersbk@gmail.com

ABSTRACT

Balochistan's natural rock formations, especially those seen along the Makran Coastal Highway, provide interesting new perspectives on the geological past, aesthetic appeal, and cultural importance of the area. Among these formations, the Princess of Hope, which is found in Hingol National Park, is a remarkable illustration of naturally occurring rock art that has been shaped over ages by weather and wind erosion. In order to comprehend the phenomenon of natural rock art in the area more broadly, this study looks into the Princess of Hope. The Princess of Hope is an example of how natural forces may combine artistry and geology to create structures that mimic works of human-made art, thanks to its anthropomorphic traits. This rock formation was sculpted over millions of years, mostly from sedimentary sandstone and limestone. The study also highlights how crucial it is to preserve these kinds of natural formations because they are fragile byproducts of the past that are susceptible to alterations in the environment and human interference. The Princess of Hope is a natural landmark that also adds to Balochistan's cultural and ecological story by fusing the artistic interpretation of nature with human thought. The Princess of Hope and other natural rock art formations are priceless geological and cultural assets, and this article suggests that in order to maintain their aesthetic, ecological, and cultural significance for future generations, integrated management approaches are necessary.

KEYWORDS Balochistan, Hingol National Park, Princes of Hope, Rock Art

Introduction

The first visual expression is seen in rock art. It is the expression that is contingent upon being cognizant of one's encounters with nature. It is sometimes known as the "idle aesthetic urge to decorate one's living rooms," though. According to the field's experts, rock art had to have been created for magical, religious, artistic, legendary, totemic, etc. purposes. It is also possible that the painted rock art locations served as "places for aggregation, for rekindling friendships, fortifying political alliances, and arranging marriages, like they do in the tribal societies today (Mehrab, et al, 2017). An interesting part of Balochistan's prehistoric past is its natural rock art, which illustrates the relationship between the area's first settlers and their surroundings. The majority of these rock drawings and carvings are located in isolated, untamed locations, and they frequently provide crucial archeological proof of prehistoric Balochistani life. There are important examples of rock art along the Bolan Pass, an ancient path through the Balochistani mountains (Muzaffar, et. al. 2021). The carvings in this area are said to be thousands of years old and feature a variety of themes, such as hunting scenes, people, animals, and symbols that probably had religious or cultural significance. The ancient peoples' nomadic lifestyles and their interactions with the local fauna are shown in these carvings. Khan, (2010). Chaukhandi tombs: a peculiar funerary memorial architecture in Sindh and

Baluchistan (Pakistan). In general, there are a lot of unrecorded pictographic and petroglyphic rock art sites in Balochistan. The province's rock art has received little attention from researchers and needs further attention. Furthermore, Balochistani rock art has a lot of potential and can bridge significant cultural and historical gaps. The documented rock art sites from Khuzdar and Gandava in Jhal Magsi are scarce. There aren't many accounts of rock art sites in Washuk and the surrounding surroundings, though. Additionally, rock art sites have been found in the Balochistani districts of Loralai, Zhob, Quetta, Ziarat, and Chaghi. In addition, it is possible that throughout the Indus Period, individuals who were neither farmer or pastoralists coexisted with the residents of Balochistan and the Indus region (Khan, 2010).

There is also rock art in the Las Bela region, especially along the Makran Coastal Highway. Here, animals and human beings engaged in ritualistic or hunting activities are frequently portrayed in the carvings. Given this area's closeness to the Arabian Sea, it's possible that some of the patterns were inspired by it; some carvings may even show primitive marine life. There are lesser-known rock art sites in the Chiltan Range, which is close to Quetta, the province capital. Usually depicting ibexes, wild sheep, and other local wildlife, the carvings here highlight the significance of these creatures in the lives of the people who formerly called this place home. Despite their frequent simplicity, the sculptures have profound cultural and environmental significance. Known for its old juniper trees, Ziarat is home to a few locations with rock art that shows early human life. These carvings feature both human and animal characters, frequently associated with hunting scenes or ceremonial pursuits. These engravings honor the region's longstanding role as a center of spirituality and culture (Usman, 1996).

In addition to its animals and natural beauty, the southern region of Balochistan's Hingol National Park is renowned for its prehistoric rock art. Numerous petroglyphs, or rock carvings, may be seen in this area. They are carved into sizable boulders and rock faces. Many of these carvings include abstract symbols that are believed to have spiritual meaning in addition to animals like camels, ibex, and other native creatures. In addition to their breathtaking natural beauty, the mountains of Pakistan's Balochistan National Park are significant for their ecological, geological, and cultural significance (Muzaffar, et. al., 2018; Baloch, 2013). These mountains are essential to maintaining the park's unique ecosystem and sculpting its terrain. A prominent element of Hingol National Park's geography are the mountains, which provide breath-taking vistas of the park's untamed scenery, cliffs, and valleys. Nature enthusiasts, photographers, and visitors are drawn to the stunningly magnificent setting created by the striking contrast between the towering, eroded mountains and the parched desert plains (Malkani, et al, 2017).

The Baloch people have a rich cultural legacy that includes exquisite weaving, detailed needlework, and distinctive painting techniques. Baloch rugs and carpets are well known for their longevity and beauty, while Baloch embroidery is distinguished by its intricate patterns and vivid colors. It is well-known for its prehistoric artwork. Situated near the southernmost point of the central Indian plateau, the foothills of the Vindhyan Mountains are home to the Bhimbetka rock shelters. The paintings seem to be from the Mesolithic era and extend all the way into the historical era. The rock paintings found in Washuk, Khuzdar, and Gandava, Jhal Magsi, showcase the artwork of the area's prehistoric settlers and are a valuable component of Balochistan's cultural legacy. Understanding their cultures can be aided by this inheritance. The paintings and sculptures that make up the rock arts typically feature geometric shapes in particular combinations along with popular human and animal depictions. Animals that have been painted or carved the most frequently are ibexes. Locals claim that several petroglyphs and pictographs may be found throughout various (Kakar, 2005).

Literature Review

On aesthetics and natural rock art a number of books and articles have been produced which shows the importance of the rock art in Balochistan. Some of the peer reviewed articles are reviewed to understand the basic notion of rock art in Balochistan. Art historians have long contributed to the construction of a Eurocentric understanding of the history of humanity and have established a narrow perspective on the phenomena of art. In essence, art history started to mirror the larger context of colonial exploitation, appropriation, and European cultural domination. For instance, the concept of "primitive art" is crucial in this regard. It may be argued that because similar arrangements are still common in art history, comparative social science fields like social anthropology, rock art studies, and archaeology view the latter as having little relevance. But more and more recently, fresh insights from both inside and beyond the subject have called into question and criticized art history's prevailing viewpoint. Following the discovery of Levantine rock art sites in the late 19th and early 20th centuries, the scientific community and heritage managers have faced significant challenges in preserving this fragile prehistoric legacy. The natural deterioration of most of the sites has been facilitated by the great fragility of this art, the natural bedrock used as the substrate, their outdoor location, the fact that most of them are distributed over a broad area and lack physical protection (fence), and other considerations. Over the past century, human activity has also hastened this decline. An important turning point in terms of protection, conservation, and management—with incentives from governmental authorities—was the international recognition as World Heritage, which took place in Kyoto in 1998 (Domingo & Barreda-Usó, 2023).

The development of architecture was one of the Neolithic period's other key features. Since the dawn of time, men have been living in shelters that were either created by themselves or by nature, such as caves and rock shelters. The fact that they would construct homes or store rooms for habitation or grain storage provides archeological evidence for the architecture of Mehrgarh. The strata of several dwellings from the First Occupation have been discovered by the French Archaeological expedition (Baloch & Mengal, 2016).

Material and Methods

With an emphasis on the Princess of Hope, this study uses an interdisciplinary method to investigate the geological, artistic, and cultural relevance of natural rock art designs in Balochistan. In order to provide a thorough understanding of the formation, the study combines fieldwork, literature evaluation, photography analysis, and cultural surveys (Hennink, Hutter & Bailey, 2020). In order to document the rock formation and its geological context, field expeditions were undertaken to the Princess of Hope and the neighboring locations along the Makran Coastal Highway. In order to examine the composition, structure, and erosional processes that led to the development of the rock, direct observations and measurements were taken throughout these visits. To precisely identify the amount of sandstone and limestone in the formation a site observation has been done by author as part of the field work, this experiment is undertaken twice to understand the changing features of the natural rock art Scientific journals, official records, and travel guides were among the sources used to offer background information on the region's geological processes and historical evolution (Busetto, Wick & Gumbinger, 2020). In order to better understand how light and shadow interact with the building to enhance its human-like appearance, photographs taken at various times of the day were studied. This made it easier to see why both locals and tourists find the Princess of Hope to be visually and aesthetically pleasing. In order to replicate the formation's erosion throughout time and forecast future structural changes, 3D imaging was utilized to generate detailed

models of the formation. To get qualitative information on the cultural and symbolic importance of the Princess of Hope, interviews with locals, visitors, and cultural specialists were undertaken. This made it easier to comprehend the significance of the area's natural rock art to local identity from an anthropological point of view and located 240 kilometers from Karachi and home to the enormous anomalous rock structure known as the "Baluchistan Sphinx," with its rocky terrain, mountain caverns, and gorgeous beaches (Harper, 2011).

Rock Art and Princes of Hope

Throughout the ages, the unrelenting sea winds have carved the incredible rock figure known as Princess of Hope. Located in the heart of the Makran Coastal region, this graceful figure was formed in large part by the area's distinct environment, which is marked by high winds and frequent rains. Every curve and contour in the rocky environment are a work of art created by Mother Nature, who has skillfully portrayed a regal princess wearing a crown or turban. Furthermore, the harmonic dance between nature and time is revealed by the centuries-old geological processes that created this figure (Azmat, et al, 2024). The Princess of Hope stayed silent for ages, a symbol of time's passage and the elegance of nature's sculpting. Still, this masterpiece did not receive the recognition it deserved until 2002. Starlet Angelina Jolie, a UN Goodwill Ambassador, was enthralled with the mysterious sculpture when she visited the area. She gave the statue the moniker "Princess of Hope," which aptly captures the statue's everlasting appeal, after noticing the optimistic air it radiated. From that point on, the Princess of Hope rose to prominence as a symbol of awe and inspiration, attracting tourists from all over the world with her regal presence. It belongs to a kind of structure called a "fairy chimney" or hoodoo, and it may be imagined that it looks like a woman with a skirt and crown gazing out into the distance (Khan, Khan & Malik, 2020).



Figure 1 Rock, Princes of Hopes Size: 250 cm,. Source: <https://www.brecorder.com/news/401553>

The rock has not been taken care by authorities due to which it can be vanished because of strong winds and extreme weather. The rock itself is not very strong and this type of rocks are considered as mixed rocks. The Pakistani region of Balochistan is home to Hingol National Park, which is renowned for its unusual geological formations in addition to its animals and natural beauty. The park's remarkable landscape is a result of the variety of rock types it contains. a typical sedimentary rock created by the buildup of marine life (Schaflechner, 2018). Large areas of limestone may be found in Hingol, which

helps to construct the cliffs and mountains there. a sedimentary rock with thin grains that frequently forms in maritime areas. There are shale beds throughout the park. This rock, which is made of compressed sand grains, is frequently seen in the park's rock formations, contributing to the varied and textured terrain. In the park, this volcanic rock is occasionally encountered, particularly in regions that have experienced past volcanic activity. Often, basalt rocks have a thick, black appearance. Marble, which is less prevalent but still exists in some areas of the region, is produced by heating and pressing limestone. Mud volcanoes, unusual geological formations created by gas and mud emission, are another well-known feature of Hingol National Park. Across several sections of the park, these mud volcanoes produce fascinating mounds and flows. The park's distinctive formations, including the well-known "Princess of Hope" and other natural sculptures, were made possible by the combination of volcanic and sedimentary rock types. This combination also lends the park its harsh beauty. (Brighenti, 2016).

Two of the main types of rocks on Earth are sedimentary and volcanic rocks, which were created by different geological processes. Understanding the creation, possible risks, and conservation requirements of these rock types is essential for the proper management of regions containing them, particularly in delicate ecosystems like national parks. As molten lava or magma cools and solidifies, volcanic rocks are created. The three most prevalent kinds are rhyolite, andesite, and basalt. Volcanic rocks are found in places where there has been or is volcanic activity, such as hotspots and tectonic plate borders. For example, the mud volcanoes in Hingol National Park are examples of volcanic activity that is still active. In order to anticipate future eruptions and reduce hazards, regular monitoring is required. This covers remote sensing, gas emission analysis, and tracking seismic activity. Mud volcanoes are uncommon geological formations found in Hingol National Park in many numbers. Mud volcanoes release mud, water, and gas instead of molten lava like other volcanoes do. Mud rises to the surface as a result of subterranean gasses, primarily methane, moving through the earth. The park's most well-known example is the Chandragup Mud Volcano. This is a sacred place, particularly for pilgrims who are Hindu (Holdich & Siemens, 1901).

Aesthetic Value and Design of Princess of Hopes

Standing tall and beautiful, the Princess of Hope has been carved over millennia by natural processes including wind erosion. With its graceful posture and delicate form, the likeness to a human figure conjures up a vision of ageless elegance, as if the rock itself is alive. The delicate intricacies of the rock formation, which have gentle curves that resemble flowing robes, are what give it its artistic appeal. Its majestic yet worn appearance adds to its air of grandeur and mystery. The Princess of Hope is surrounded by eroded rock formations and an arid desert, all set against the harsh, mountainous background of the Makran Coastal Highway. Its visual importance is enhanced by this juxtaposition, as it rises calmly out of an otherwise desolate setting. The creation exudes an air of wonder and devotion that is further enhanced by the way it catches the light, particularly at dawn or dusk. The Hollywood actress Angelina Jolie gave the formation the moniker "Princess of Hope" when she visited the area; it symbolizes not just the formation's regal aspect but also a feeling of enduring power and tenacity in the face of time and nature. As a result, the rock structure now represents optimism and tenacity and resonates with the cultural and spiritual values of both the locals and tourists (Qureshi, 2012).

Like other geological structures in Hingol National Park, the Princess of Hope was created by millions of years of natural erosion, mostly as a result of wind and water working on the sedimentary rocks in the area. The dominant winds that traverse the coastal area have sculpted the granite into its present configuration, gradually removing softer

rock particles to reveal the hard, conspicuous spires and forms that remain today. This selective erosion is what gave origin to the Princess's distinctive shape; the softer surrounding material was worn away more quickly than the more resistant rock, resulting in the Princess's thin, upright form. Sandstone and limestone, sedimentary rocks that have worn and been molded over time, make up the majority of The Princess of Hope's composition. Because these rocks are softer than volcanic rocks like granite, they are more prone to erosion but nonetheless allow for the creation of complex and finely detailed natural sculptures. Its artistic appeal stems from the fact that the natural "design" is organic, formed by the forces of nature rather than human hands. It is a genuine and unadulterated depiction of the earth's geological processes (Shahzad, 2022).

The Princess of Hope's simplicity is what makes it so lovely. The rock structure is straightforward but profound, with a clear, elongated profile that is rich in form and meaning but lacking in overbearing decoration. Its upright position and composed manner are emblematic of good design in both nature and art; they also demonstrate the charm of simplicity. The structure evokes a sense of stability and dignity as it stands straight and balanced, reminiscent of imposing monuments or statues. The Princess has an innate symmetry in its general design, despite its asymmetrical details, which enhances its aesthetic appeal and gives it an almost human appearance. Like old sculptures and ruins, the rock formation's worn surface tells of time's passage, adding to its feeling of grandeur and historical significance.

Significance and Themes of Rock Art in Balochistan

The rocks art in Balochistan are divided into four main themes like animals' figures, human figures, abstract and symbolic designs. These carvings feature both human and animal characters, frequently associated with hunting scenes or ceremonial pursuits. These engravings honor the region's longstanding role as a center of spirituality and culture. In numerous carvings, people are shown hunting animals including ibex, deer, and wild sheep. This implies that hunting was a major means of subsistence for the early settlers of Balochistan, and these images might have had ceremonial or cultural importance. One common theme in Baloch rock art is the predominance of animals, especially the ibex. The ibex might have had symbolic significance; it might have stood for fortitude, fortitude, or spiritual defense. Many sites have spiral designs, geometric shapes, and abstract symbols in addition to realistic carvings; the meanings of these carvings are yet unknown but may be connected to prehistoric religious or cosmic ideas. Due to a lack of official protection, human encroachment, and natural erosion, many of these rock art sites are in danger. These sites' remote location has made them challenging to reach, which has partially contributed to their preservation, but it also makes it more difficult to research and maintain these historic pieces of art (Mohebbali & Aliyari, 2024).

The animals that are most frequently portrayed include goats, ibex, camels, and wild sheep. These creatures were necessary for early ceremonies as symbols and as nourishment. Particularly common in Baloch rock art, the ibex may have held specific cultural or spiritual importance, maybe as a symbol of fertility, strength, or perseverance. Rock paintings from Balochistan usually include abstract designs like spirals, circles, and lines. Though their exact meaning is unknown, these symbols are thought to be connected to astronomy, cosmic beliefs, or spiritual representations. They might stand for the sun, life cycles, or other cosmic occurrences. Geometric patterns, grids, and repeating designs are features of several carvings. These could be symbolic depictions of tribal lands, boundary marks, or early mapping techniques. Some rock art features symbols that resemble the sun, stars, or other heavenly bodies. These symbols might represent how the earliest settlers perceived nature and how it affected their way of life, especially with regard to agriculture,

hunting seasons, and navigation. Their religious rituals may have included celestial observation or sun worship. A significant representation of the early occupants' relationship with their environment, animals, spiritual beliefs, and societal structure can be seen in the natural rock art of Balochistan. The prevalence of themes like hunting, combat, spiritual rites, and the universe demonstrates how profoundly these facets of daily life impacted the development of early artistic expression. In addition to serving as a means of historical communication, these paintings and carvings also leave behind an artistic legacy that binds the past and present together (Hussain, et al, 2023).

Conclusion

The Princess of Hope rock formation, which can be seen along the Makran Coastal Highway, is an incredible example of the ability of natural geological processes to produce breathtaking works of "rock art." This recognizable figure, created over millennia by wind and water erosion, represents the ageless relationship between nature and artistic expression, in which the elements carve forms that capture the imagination of people. This study results shows the aesthetic and cultural significance of the Princess of Hope and emphasizes the ways in which natural processes sculpt sedimentary formations, particularly sandstone and limestone, into unique forms. The Princess's anthropomorphic appearance serves as an example of the amazing ways in which natural settings can reflect aspects of human nature and elicit strong emotional and cultural reactions. This specific structure has grown to be recognized as a cultural monument, representing beauty, tenacity, and hope to both locals and tourists. Seen in a larger context, the Princess of Hope is not just a natural marvel but also a major force for ecotourism in Balochistan. Balochistan's natural heritage is brought to the attention of tourists, photographers, and adventurers by its distinct aesthetic value and the untamed beauty of the surrounding area. In this way, the Princess of Hope represents the area's cultural significance and natural beauty. But as awareness grows, the importance of conservation increases. The Princess of Hope and other natural rock art formations are susceptible to both anthropogenic and environmental damage. In order to conserve these fragile formations from any environmental harm and to ensure that they are not disturbed by tourism, proper management and conservation activities are crucial. To sum up, the Princess of Hope is a remarkable example of natural rock art in Balochistan that carries deep cultural and symbolic significance and provides insights into the region's geological past. Maintaining its status as a natural wonder and preserving Balochistan's ecological and cultural story depend on its preservation. The Princess of Hope is a cultural and natural symbol that embodies the eternal energy, beauty, and mystique of the area it inhabits.

Recommendations

The Princess of Hope is notable for its anthropomorphic likeness as well as serving as a representation of the unspoiled natural beauty of Balochistan. Within the broader framework of geological formations and rock art, the Princess of Hope draws attention to the possibilities for both eco-tourism and cultural preservation in this isolated area. This case study examines the Princess of Hope's significance, the function of Balochistani natural rock art creations, and provides suggestions for protecting and promoting these geological marvels for future generations. Limiting human activity and building close to the formations to reduce erosion, foot traffic, and littering harm. To stop vibrations that can cause the formations to become unstable, buffer zones containing restrictions on heavy machinery and automobiles are created. Geologists conduct routine monitoring to evaluate the effects of natural erosion and suggest mitigating measures, such as restricted tourist access areas.

References

- Azmat, K., Shafi, M. M., Fahad, S., Naushad, M., Hanan, F., & Khan, N. (2024). Effects of Eco-Tourism on Local Community in District Chitral Lower of Pakistan. *Journal of Asian Development Studies*, 13(2), 1201-1212.
- Baloch, A. H. (2013). The Ceramic Traditions in Balochistan. *Hanken*, 5(1), 58-65.
- Baloch, J., & Mengal, S. (2016). The role and place of Mehrgarh in the development of South Asian Civilizations. *Baluchistan Review*, 34, 17-24.
- Brighenti, F. (2016). A 'Sulfurous' Śakti: The Worship of Goddess Hiṅgulā in Baluchistan. *Soulless matter, seats of energy*, 28-50.
- Busetto, L., Wick, W., & Gumbinger, C. (2020). How to use and assess qualitative research methods. *Neurological Research and practice*, 2(1), 14.
- Harper, D. (2011). Choosing a qualitative research method. *Qualitative research methods in mental health and psychotherapy: A guide for students and practitioners*, 83-97.
- Hennink, M., Hutter, I., & Bailey, A. (2020). *Qualitative research methods*. Sage.
- Holdich, T. H., & Siemens, A. (1901). Journal of the Society for Arts, Vol. 49, no. 2527. *The Journal of the Society of Arts*, 49(2527), 417-444.
- Hussain, M. A., Shuai, Z., Moawwez, M. A., Umar, T., Iqbal, M. R., Kamran, M., & Muneer, M. (2023). A review of spatial variations of multiple natural hazards and risk management strategies in Pakistan. *Water*, 15(3), 407.
- Kakar, F. D. (2005). Discovery of Upper Palaeolithic Rock Art in Balochistan, Pakistan. In U. Franke & H-J Weisshaar (eds.), *South Asian Archaeology 2003* (pp. 21-25). Aachen: Linden Soft.
- Khan, A. J. (2010). *Chaukhandi tombs: a peculiar funerary memorial architecture in Sindh and Baluchistan (Pakistan)*.
- Khan, U., Khan, F., & Malik, M. F. (2020). An exploratory study of the factors that promote and delay sustainable eco-tourism development in Mansehra. *Global Regional Review*, 1, 471-478.
- Malkani, M. S., Mahmood, Z., Shaikh, S. I., & Arif, S. J. (2017). Mineral resources of Balochistan province, Pakistan. *Geological Survey of Pakistan, Information Release*, 1001, 1-43.
- Mehrab, F., Ahmed, M., Faiz, J. & Qaiser, J. (2017). *Makuran: Gateway to Middle East*. *Balochistan Review*, XXXVII (2), 277-292
- Mohebbali, M., & Aliyari, A. (2024). Semantic Analysis of Rock Art in the Villages of Moin-Abad, Darbar, Haftan, and Qaleh Gandam-Koh of Tafarsh City. *Journal of Archaeological Studies*, 16(1), 277-297.
- Muzaffar, M., Karamat, S. Saeed, K. (2018). Balochistan Insurgency: Causes and Prospects, *Orient Research Journal of Social Sciences*, 3 (I), 112-128

- Muzaffar, M., Khan, I., & Yaseen, Z. (2021). Issues and Conflicts in Balochistan: Implications for Pakistan, *Journal of Political Studies*, 28 (1), 43-54
- Qureshi, R. (2012). Medicinal flora of hingol national park, Baluchistan, Pakistan. *Pak J Bot*, 44(2), 725-732.
- Shahzad, S. M. (2022). Maritime Tourism Potential of Lasbela District (Pakistan): The Course of Sustainability. *P-JMR*, 4(1), 87-109.
- Usman Hasan, M. (1996). Treasures from the past: Rock art of the Ras-Koh Mountains and the Washuk Area, Baluchistan. *South Asian Studies*, 12(1), 63-66.