

Batuh Narit Arur Bilit of Pa' Umor: A Visual Analysis onto a Carved Stone from the Megalithic Monuments of the Kelabit Highlands

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Abstract: *This paper seeks to investigate on the Kelabit's material culture based on a visual archaeological study of the megalithic stone, particularly the carved stone known as Batuh Narit Arur Bilit, from the district of Pa' Umor in Bario, Sarawak, Malaysia. The primary focus of this paper is to advance knowledge within the practice, especially in the visual art research, and how it can be used as a digital content to promote eco-tourism in the rural area. Previously, there were lack of techniques that can be used as an example on how visual art can be used to explore other disciplines such as anthropology. Thus, this study will highlight several issues pertaining to the visual documentation process of the megalith, notably on the relation of the symbol and drawing carved on the surface of the stone. By using empirical research, the biography of the monument will be explored via experiential learning and visual analysis, especially in considering our sensory with practical experience. These findings are the result of visual recording practices such as drawing, photography and video as well as site observations, with the highlight of the discovery of the long-lost stone carvings. What started as an unintentional discovery has evolved into a rich visual study of the cultural narratives and has developed as an identity that also has a historical impact and cultural content for the eco-tourism sector in the Kelabit society.*

Index Terms: *Material Culture, Practice-led, Megalith, Kelabit Highlands, Visual Analysis.*

I. INTRODUCTION

Tourism plays an important role in the Sarawak economy as it is one of the cornerstones of the state's economy. Current tourism initiatives focus only on popular tourism destinations and neglecting other sites, particularly in the rural areas. Tourism helps local communities in improving their standard of living by creating more employment opportunities and

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contributing to the development of better infrastructure and facilities. Promoting any tourism-related event in rural areas is a challenging job, unlike in urban areas where all the infrastructures are already in place. Tourism products and services, especially in fulfilling the needs of cultural content for tourism have indirectly pushed rural folks to the digital economy's path. Thus, promoting eco-tourism content by exploring the potential of the digital approach in rural tourism or eco-tourism based on visual representation of art, culture, and heritage such as megalithic monument is an opportunity to assist the development of the eco-tourism sector in the rural community in Sarawak.

Megalithic cultures refer to ancient societies that used very large engraved or shaped stones to build monuments and has a potential to be exploited as a material culture for tourist attraction. This research is a fundamental study of exploring onto the megalithic structure of the Kelabit Highlands based on practice-led research and will investigate the potential of engaging the visual arts approach in an anthropological study. At a same time, this research will be a platform to provide a digital content for the eco-tourism sector in the rural area of Sarawak. Bario, one of the popular destinations for rural tourism is a remote village located on the Kelabit Highlands in the northeast of Sarawak and close to the Sarawak-Kalimantan border. Although most of the megalithic stones associated with the Kelabit tradition can be found here and have been destroyed or extinct, there are still some dolmens, urns, stone carvings and ossuaries that have been used in custom such as funerals to be found today [1].

The researcher had an opportunity to study one of the megaliths in the Kelabit Highlands known as Batuh Narit Arur Bilit at Pa' Umor. Bario, Sarawak. This study has investigated the biography of the stone and interpret the drawing that has been carved before looking at its connection with the folklore tales that has been handed down by their forefathers. In line with this, one of the other purposes of the research is to reinforce the suggested time appearance, and to suggest the purpose of the stone and the possible nature of the persons commemorated on it as explained by Clancy [2]. It is hoped that the findings from this research can be used to enhance the implementation of digital and multimedia technology with innovative and creative visual art approaches in assisting the development of tourism sector in the rural community.



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A. Batuh Narit Arur Bilit

Batuh Narit which means 'stone carving' in Kelabit language is a common sight found in the Kelabit Highlands. In Kelabit, the word Batuh means 'rock or stone', while Narit means 'carved.' While, Arur Bilit is a small stream located on the east of Pa' Umor village. Batuh Narit Arur Bilit therefore means, 'the carved stone of the Bilit stream'. This stone, which is 15 minutes' walk from the Pa' Umor village is one of the prominent carved stones found in the Kelabit Highlands. It is located in an uncultivated paddy field, along the Bilit stream. The stone monument is approximately 4.5 meters high and is carved with a sunken relief (incised drawing) on the surface with its bearing facing north. The carver of this mysterious figurine is unknown, but the local story suggests it was incised by a well-known hunter and the drawing is of himself and his dog with 26 notches. Possibly the lines represent the number of heads of defeated enemies or the number of animals he has hunted during his hunting trip.



Fig. 1. Batuh Narit Arur Bilit: Carved drawing depicted a human figure in spread-eagle position

The carved drawing represented a common design found in the Kelabit Highlands monuments, an anthropomorphic human figure in spread-eagle position with a little bodily characteristic. The head is more detailed with elongated earlobes that used to be a Kelabit identity [3]. However, instead of the belief that this drawing made by a carver depicting the past warrior, generally it is agreed that all carvings on the megalith were made with metal tools; therefore, this drawing could have been made as early as 500 A.D or later (Harrison, 1973). It is unknown exactly why the rocks are built, but there may be some reasonable reasons, such as a symbol of remembrance of a significant person, mark of a memorable event or territories, and to show the powers or physical strength of prominent warriors [4]. Based on observation, the drawing and the lines are in an awkward position to be carved by an ordinary person. Thus, there are a myths or fairy tales by the community that the carver must be a person of extraordinary height; befitting the body size and length of past time warriors such as Toked Rini, Agan Tadun and Balang Lipang told in local legends, tales and traditional

songs, although somewhat hard to believe.

II. LITERATURE REVIEW

The Kelabit Highlands are land plateau above 1,000m in the interior of Sarawak in Malaysia. It is located between Tama Abu Range and Apo Duat Range on the Sarawak-Kalimantan border. Most of the valleys in this area are filled with settlements and surrounded by paddy fields. Given that it is a highland area, it has many high peaks, including the highest mountain in Sarawak, Mount Murud with 2,423 meters height above the sea level. The settlements are located in the Heart of Borneo and are home to indigenous ethnic communities, especially from the Kelabit and Lun Bawang tribes, also known as the 'Highlanders'. Their daily lives are based on traditional practices based on paddy rice farming systems using water from rivers and streams surrounding them to irrigate their agricultural lands. Although these ethnicities are separated by the international boundaries between Indonesia and Malaysia, which were originally segregated areas dominated by the two colonial authorities, their linguistic and cultural language was from the same root and shared the same ancestors [4].

Megalithic culture refers to the culture of ancient societies that use engraving as a mark on a very large stone or arranging the rock to build a monument formation. Stonehenge in the United Kingdom as an example, has become one of the most popular megalithic monuments and is often used as a case study in archaeological research. Megaliths are roughly cut stones or natural boulders which have been erected or arranged in formations by human endeavor. A wide range of megalith types in Malaysia is found in the form of stone cist graves, menhirs, petroglyphs, dolmens, stone jars, stone seats and stone tables. Taha, Nik Abdul Rahman, and Saidin [5] with Abdul Rahman [6], suggested that the reasons for the erection and the arrangement of the various megaliths probably differed from region to region. A study on the Kelabit have shown that these structures, particularly menhirs were constructed at the end of an 'irau', a festival connected with the burial rites of the rich or the aristocracy. After the distribution of the deceased's property, a monument was constructed to commemorate the dead, such as menhir, a dolmen, a stone vault or even a ditch cut in the ground. This memorial served as a symbol of status for the host family. Most of the Kelabit megalith stones have been destroyed or extinct, either by human deeds or have been lost in the jungle. Nevertheless, there are still some of the rocks that still stand strong today, thereby pushing many archaeologists into the region.

Sarawak has the greatest variety of megaliths in Malaysia, although megalithic activity seems to have been focused only on two areas, which are the Sarawak delta area and the Kelabit Highlands. The latter area was a major area for these activities, as not only menhirs, cist graves and petroglyphs occur, but also other types of megaliths which have never been recorded in other parts of Malaysia such as dolmens, stone tables, stone seats, stone urns, stone walls, stone dams and grottoes cut in cliff let.

Material culture provides primary data before archaeologists can further study and formulate social organizations and ritual practices for selected communities. Therefore, the analysis and interpretation of material culture are important to the methodology in an archaeological study, to understand the material cultural relationship with society and human behavior [7], [8]. Thus, as ethnography is one of the main research methods in sociology, anthropology and other similar disciplines in the social sciences [9], this paper tried to draw upon methods derived from the ethnographic and anthropology approach and collaborate it with visual art techniques to explore these relationships.

A monument of a megalith from Kelabit Highlands can be one of the material sides of Kelabit culture and play a significant role in linking the macro and micro contexts between cultural interaction among the people [10]. Linking the findings in material culture can enhance the understanding of complications in intercultural relations, as this megalith is a combined result of a complex process and the development of communication in Kelabit's practices and cultural knowledge. As argued by Roth [10], the megalith will stimulate and influence the process of learning as they can distribute relevance arguments of intercultural communication or turn things into certain symbols as they correspond via objects in a manner that has been placed by their culture. Hence, the meaning can be explored later by translating the messages that have been made into these monuments. Thus, intercultural learning should also include the ability to consider this material culture, or the megalith to be exact as a mirror to explore further about the values and culture of Kelabit Highlands community.

The most exhaustive survey of Kelabit megaliths was done by Tom Harrison from 1949 to the 1970s. During this time, he participated in large-scale megalithic rituals with the Kelabit who attributed the building of the dolmens to unknown ancestral folk figures. Hitchner [3], Mashman [11] and Bala [12] also did an intensive research relating to the Kelabit Highlands, their megaliths and its cultural sites except for Aman Leong et al. [13] who discussing the relationship between anthropological and visual art studies through the experiential learning model. Another example is from the 'Cultured Rainforest Project' which was executed in 2007, an interdisciplinary project including anthropologists, archaeologists and palaeoecologists, with the objective to investigate the relation between people and the rainforest in the Kelabit Highlands [14]. However, most of this research only focused on the documentation and social discussion based on ethnographic observation and eco-tourism. In contrary, this research will look into different perspectives, particularly in engaging visual arts theory and practice-led research to represent these unique megaliths of the Kelabit Highlands as a subject in digital content for eco-tourism and also in anthropological research point of view.

As indicated by Banks and Zeitlyn [15], MacDougall (1997:276) stated that anthropology had no lack of interest in the visual, except its problem has always been what to do with it. Here, practice-led research could be identified as an alternative method to manipulate visual art in social science research. Furthermore, Tchalenko [16] believes that unifying the various documentation methods throughout the research is extremely important in visual observation. According to him, by examining the situation and the environment, even by using the latest tool in the observation process, the basis for

any truth can be found. In almost all areas of research involving those around us, these truths are easily identified if our observational skills are quite advanced. In addition, Sullivan [17], also argued the right research objective can be achieved by selecting alternative methods other than those offered by social science. In previous research methodology, the explanation-related social sciences were apparently focused on writing text formats, and images such as photography, drawings and so forth are not used effectively in supporting the understanding of the anthropological study, even though anthropology is rich in culture and heritage that can be shared through the visual presentation. This idea is also supported by Rafee, Awang Arshad, Dim, Siri, & Samaroon [18], which indicate that the use of photos, videos and sketches as visual data in social science research can contribute and improve the delivery of information compared to text-based data that is seen more complicated to be extracted and understood.

Ball and Smith [19] also argued that numerous anthropological studies that use visual materials are under analyzed and the visual generally serving as little more than illustrative devices. This tendency has been described as the standard use of any other visual forms, and it is most clearly seen in those anthropology in which usually an extensive written report is accompanied by several photographs or illustrations. Here, the purpose of the visuals is apparently only to verify the serious work of anthropological analysis accomplished by the written text. Most of the research in social science assumes that taking photographs or image is only occasionally a way of doing anthropology and commonly not entertained the possibility of doing serious analysis of the images.

Practice-led research can contribute to a new knowledge, especially those that have operational significance of the practice as applied in this study. The is one of the development process between creative actions and research knowledge gained from both informal experiences and planned research [20]. The focus of this research is to extend the knowledge on the practice, or to improve knowledge in a practical context. Such research encompasses practice as part of its method and is often said to be within an action research environment [21]. However, practice-led research is still in debate and it is seen as something general because there are no specific techniques which can be used as an example of a methodology in researches related to visual art or how it can be used to explore other disciplines such as anthropology [22]. While the nature of practice is a major research topic and is often done by research experts rather than visual art practitioners, its emphasis is more to achieve new knowledge of the nature of practice and seeking way to improve rather than create or reflect on material culture. On the other hand, in visual art, the emphasis is on creative processes and works produced through the process. Here, material culture plays an important role in understanding the practices that has been employed earlier.

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Therefore, in the need to contribute to research progress in the area of practice and the fact that practice studies still need more methodological discussions as stated by Gherardi [23] and Nicolini [24], this research is crucial to seek possible alternatives or other methods for empirical research of social science in connection with visual art practice-led research.

III. METHODOLOGY/MATERIALS

This paper will focus on the megalithic structure of the Kelabit Highlands in the area around of Pa' Umor in Bario known as Batuh Narit Arur Bilit and has employed the visual ethnography and practice-led method together with the implementation of the latest technology of digital visual documentation. The process of documentation is structured, and the data are divided and collected based on categories as below:

Data collection – sketches, notes, observation and interview

Video and photography - digital documentation

Editorial – digital audio and visual

Exhibition – digital and interactive multimedia presentation

As suggested by Maying et al. [25], the process involved in the practice-led documentation has determined the effectiveness of visual research based on the three main factors named as internal, external and context. These factors are also divided according to the characteristics of the subject, tools or methods and the collection of data as shown in table I:

Table I: Factors in practice-led visual research

Internal (Case Study)	External (Tools)	Context (Visual Data)
Megalithic structure or monument (<i>Batuh Narit Arur Bilit</i>)	Unmanned Aerial Vehicle (UAV)	Aerial view of the megaliths with varied angles
	360° Camera	Artistic shots and 360° side view of the megalith
	DSLR Camera	Digital image- overall view of megalith structure
	Tracing	Retrace and digitalized the carved image of <i>Batuh Narit Arur Bilit</i>

The megalith is a material culture refers to the Kelabit people in defining their culture. The study of this material culture focuses on the appearance of the object, nature, material, and means in which material aspects are essential to understanding the culture and its relation to social relations [26]. In addition, Freed [27] explained that ‘things or objects’ can present a method or theories, and material culture can reconstruct and interpret the life of the past. Thus, to explore this material culture of Kelabit Highlands, a systematic methodology, stage by stage process of recording visual images, observation and transferring images of the stone into a digital format has been implemented as shown in figure 2 (a, b, c, d, e and f).



A. Measuring - The size of the stone including height, width and diameter have been measured and recorded as a reference. Uneven stone surface, slippery and covered by moss makes it difficult to measure the rock.

B. Identifying - The process begins by identifying the carving grooves of the stone. Due to the relatively high position of the stone, it has made it difficult for the process to be executed.



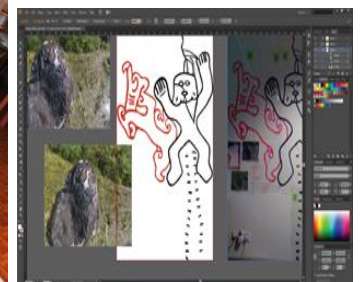
C. Sketches - Stone sketches from various angles are also produced as part of the documentation process.



D. Tracing - The surface of the rock was covered with plastic and the carved image be redrawn using the marker.



E. Deconstruction - The next process is to transfer the drawing that has been traced from *Batuh Narit Arur Bilit* onto drawing paper according to 1:1 scale.



F. Digital tracing – The drawing has been converted into digital vector by tracing it back in Adobe Illustrator according to scale. The images of the anthropomorphic and animal figures are then separated with different colors.

Fig. 2. (a, b, c, d, e and f). Stage by stage of documentation process.

At prior observation, the original carvings seemed unclear to human sight due to the natural color, height, structure, and the position of the carved images, where they can be found on top of the stone. Therefore, researchers had to climb up on top of the stone to get a clearer view of the carved images. However, from this view, the carved images were still barely visible, and one had to look closely for the incised lines and touch them to mentally 'draw' an image of the figure.

Still images and video recordings of the stone in its original state are taken in various ways: close-up details such as thickness of the carved lines capture with a DSLR camera, and Unmanned Aerial Vehicle (UAV) drone camera which enabled researchers to record visuals beyond the eye-level to observe the stone in its natural surroundings as well as to capture images of the anthropomorphic figure in its full shape. These were done to give an overview on the condition of the rock carving, also as a preparation for the next required action that should be taken before carrying out research on the carved images.

IV. RESULTS AND FINDINGS

In archaeological endeavors to see material culture more meaningfully, it often uses the analogy with language as a structured markup system separated from practical and useful activities (Hodder, 1989). However, this study approved that visual also can play the same role, even maybe better to understand the relation between material culture and biography of the community. Separation of meaning from the context of this action has distinguished formal behavior and processual archaeology. This approach, which include the learning experience as an effort to popularize and educate the local community on the significance of the material culture in eco-tourism has been presented via

1. Virtual Reality with a 360-degree experience
2. 3-D and Aerial Visual Mapping
3. Digital print poster with Augmented Reality
4. 360-degree interior and exterior view

This research has teamed up with the Rurum Kelabit Sarawak (RKS) and other agencies to showcase the findings at the Teripun Community Museum in the form of visuals utilizing advanced technology. The main results obtained through this study are the re-discovery of a long-lost carving and almost forgotten by most local people. At the same time, *Batuh Narit Arur Bilit's* drawing with an original scale have also been recorded for future reference. Additionally, by using digital documentation, this stone image has been presented through 360-degree technology and accessible through YouTube channel and presented in an exhibition so that the public can take a closer look at this megalith stone.

A. Long Lost Carved Image Discovery

The carved image on the stone was known to be an anthropomorphic figure in a famous spread-eagle position with 26 notches extended down between its legs. The locals believed the image represent a past warrior or a hunter, and the 26 notches represent the number of heads of enemies or the number of animals he has hunted. The research team also discovered another carving and revived long lost carved image which resembling an animal. It was appeared due to the shadow that visible between the engraved lines and the carving is found on a right slope, next to the carved anthropomorphic figure. According to the initial information

provided by the locals, this animal was believed to be a dog or a spirit tiger of the anthropomorphic figure. Since no one of the villagers ever clearly remembered the exact form of the carved animal, in whole, the incised lines have been traced back carefully using the same method as the anthropomorphic figure (Fig. 3). Engaging sense of touch to search for the less visible carvings on the surface of the stone according to the consistency of thickness and continuity of the incised lines.

The findings were first presented to the community through the 'Megalith Cultures of The Kelabit Highlands Through Time and Space' exhibition at the Teripun Community Museum, Bario from 27th until 29th July 2017. This exhibition was held to share the findings of the study and get feedback from the local communities and visitors. The exhibition has also established a dialogue between researchers and the public, and at the same time enabling researchers to expose what may not be seen and understood by the community before.

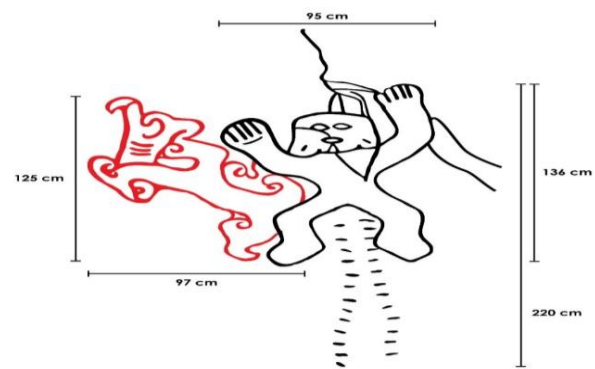


Fig. 3. A scale drawing of the rediscovered carved drawing (assembled as a dog or a tiger) located on the right-hand side of the hunter figurine in eagle-spread position.

B. 360-Degree Presentations

360-degree presentations are another result from this study, which was made using images of *Batuh Narit Arur Bilit* from different view and angles to make a 360-degree documentation (fig. 4). This technique opens opportunities for viewers to enjoy the unique stone trenches of various viewpoints using innovative approaches. The video of this finding can be viewed via <https://www.youtube.com/watch?v=pT45mJrkpAQ>.

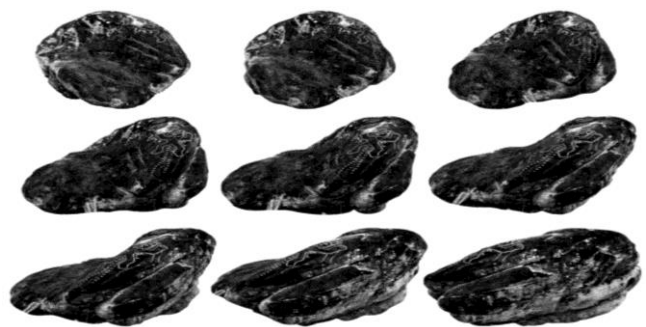


Fig. 4. *Batuh Narit Arur Bilit* images from various angles.

V. CONCLUSION

Today, megalithic sites have been mapped by researchers and villagers in Bario, but this study has successfully incorporated practical and visual analysis methods as an alternative in documenting the megalith. This study has digitally recorded the engraving of the megalith which has been long lost and never disclosed to the public. This is not only to ensure the protection of Kelabit's cultural and historical heritage but also a way to prove that this is their homeland and has been preserved for centuries. Additionally, these cultural sites became an important eco-tourism site in the Highlands. Tourist guides often bring visitors to view the sites and tell stories of past heroes such as the legend of Toked Rini, Agan Tadun and Balang Lipang. The people of this area respect and protect this site because they believe it is sacred and is a proof of their existence and cultural heritage. Furthermore, instead of being compared to language and texts, material culture, such as megalithic monument can also be regarded as a visual form. The visuals are specific and concrete evidence and built to have an impact on research. Visual image, which is an aspect that can be universal, but also can be interpreted through historical meaning and manipulated its meaning in relation to the social and practical context in which it has been visualized. However, this achievement is still in its early stages and there are more megalith stones that need to be recorded and yet to be explored. Cooperation from all parties is also necessary as from the Department of Museums or Ministry of Tourism so that this study can be further developed. As a conclusion, material culture can be recognized primarily as a material of form and shape, and the methods discussed previously in this paper have implications and views that archaeological studies of the meaning and practice in material culture are closely related to visual arts.

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