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An Investigation into the Megaliths and Petroglyphs of Western Manipur, India

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Abstract: In this paper, we present the archaeological findings from the western region of Manipur, specifically the Tamenglong and Noney districts, which are characterised by hilly terrain and are inhabited mainly by the Rongmei, Liangmai, Zeme, Inpui, and some other tribes like Hmars, Thadous, Gangte and Chirus. Fieldwork was conducted during the dry winter seasons of 2021 and 2022. The findings highlight the strong connection between the megaliths and the traditional religious and social practices of “headhunting”. The presence of flat stones for placing decapitated heads and fortified village gates in every Naga village indicates the prevalence of these practices across different tribes. The exploration documents (n=145) megaliths (mostly standing stones and sitting platforms) along with the engravings. Engravings found on the megaliths and the natural rock surfaces encompass symbols, including footprints, counting symbols, animal depictions, human figures, etc. However, many of these megaliths are in poor condition, with weathering and human vandalism contributing to losing their original meanings. The study also proves the preservation of these megalithic localities by educating the local population about their cultural heritage and encouraging community engagement to ensure their protection for future generations.

Keywords: Naga Tribes, Manipur, Megaliths, Petroglyphs, Headhunting, Cultural Heritage

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Introduction

Megaliths are large stones that have been prominently placed in the landscape for constructing monuments or structures for various purposes. They are not restricted to a specific time or place but have been found in many different periods and parts of the world. Megaliths are considered an integral cultural legacy of the later prehistoric period. The construction of these structures in the landscape primarily took place during the Neolithic era and continues to this day among ethnic communities as a living tradition. ‘Petroglyphs’ refers to carvings or engravings made on rocks, often created by removing the outer layer of dark rock varnish to reveal the lighter rock beneath (Bednarik 1998). These art forms were produced using hard hammers struck against the rough granite surface, resulting in white figures against the rock’s brown background. In Northeast India, rock art occurred in the form of petroglyphs, mainly consisting of engravings and carved figures (Sonawane 2017). Megaliths and petroglyphs hold immense significance in studying Western Manipur’s cultural heritage. These structures and rock engravings provide valuable insights into past communities’ beliefs, practices, and artistic expressions. The importance of studying megaliths lies in their typological variation and their ideological and socio-cultural significance (Bezbaruah 2004). With their extensive spatio-temporal distribution, these monuments serve as tangible links to the past, dominating the landscape and impacting the consciousness of the communities that created and interacted with them (Mitri 2016).

The megalith remains, and the practice of building megaliths can be observed in Northeast India, where the Khasis, Nagas, Garos, Karbis, Tiwas, and Kuki-Chin-Mizo groups are settled. Among these communities, the menhir (standing stone), which varies in size, stands out as the most common form of megalithic structure. Menhirs serve as commemorative markers for social events or as memorials for the deceased (Wunderlich et al., 2021). The specific tribal communities of this region have distinct variations in megalithic practices. For instance, among the Khasi and Jaintia tribes, dolmens are associated with ancestral figures or are erected as memorials above burial sites (Marak 2012b;). Among the Mizo tribe, the Stone Seat (*Sikpui Lung*) was erected during the Sikpui Roui festival, which was celebrated by the Hmar clans (Malsawmliana 2016, 2019). The Khasis and the Jaintias also utilise cist burials as ossuary internment facilities for families or clans, while the Angami and Chakhesang Naga communities employ them as primary inhumation structures for their deceased members (Mitri 2016; Jamir 2004; Jamir 2015; Mepusangba & Changkiri 2019). The concentration of megaliths is particularly prominent in the Khasi-Jaintia Hills of Meghalaya, where sites are located in Cherrapunjee (presently Sohra), Mawphlang, Lailynkot, Laitkor, Jowai, and Nartiang (Godwin-Austen 1872; Gurdon 1914; Mawlong 2004, 2009; Marak & Jangkhomang 2012; Marak 2012b; Meitei & Marak 2013; Mitri 2016; Sharma 2017). Megaliths are also found in the North Cachar Hills of Assam (presently Dima Hasao) at sites such as Nenglo, Bolosam, Kobak, Derebora, and Kartong (Mills and Hutton 1929). Furthermore, megalithic sites can be found in the Hamren sub-division of Karbi Anglong in Assam (Bezbaruah 2004) and Nagaland’s Kohima and Phek districts (Jamir 1998). In Arunachal Pradesh, megalithic practices are observed among the Wancho, Nocte, Hrusso/Aka, and Sherdukpen communities (Gogoi 2019).

The study of megalithic tradition in Northeast India has also encompassed rock engravings. Bezbaruah and Devi (2016) examined rock engravings in North Guwahati at sites like Dirgheswari and Kanai Boroshi Bowa. Lalhminghlua and Sarkar (2017) reported on megaliths and petroglyphs in Farkawn and Khankawn villages of Champhai district in Mizoram. These studies have identified cultural and symbolic connections between the depicted symbols and the beliefs of present-day communities. Additionally, new petroglyph sites have been discovered in Vangchhia village, Champhai district, Mizoram, suggesting their significance as memorial stones for chiefs or warriors who possessed certain

skills such as killing enemies, animals, birds or offered feasts of merit to fellow men (Singh 2019). The Feast of Merit is a series of progressive feasts, each more prestigious than the last, often spanning a lifetime. It honours the donor during their life and after death. The Naga way of erecting a stone is done by duly organising ‘feasts’ by an aspirant donor in whose name the stone is to be implanted (Manibabu 2019).

Megaliths in the Manipur were first reported in Robert Brown’s (1874) ‘Statistical Account of Manipur’, and after that, several scholars explored this region and documented megalithic remains of the different Naga tribes (Watts 1887; Hodson 1911; ManiBabu 1990; Devi 1993; Singh 1993; Devi 2011). Philip (2017) has shed light on the megalithic culture of Manipur, particularly in the Senapati district. The study attempted to present the megalithic cultural traditions of the Naga communities of the Senapati District from an ethnoarchaeological perspective. The study reveals the megalithic monuments’ socio-economic and political significance, showing how people could utilise natural stone blocks to fulfil these myriad functions within the larger perspective of Naga megalithism. Additionally, Manipur is known for its rich collection of petroglyphs, with rock engravings found in various locations across the state. Devi (1988) discovered and documented 50 engraved stones at Khoupum featuring symbols like footprints, gongs, game boards, wine jars, guns, and swords. Devi (1993) documented rock art found at the Salangthel megalithic site and its surrounding areas of Churachandpur district, including footprints, line drawings, and other engravings. She also explored the Tharon area in the Tamenglong district and found diverse rock art forms, including line drawings, carvings, and engravings (Devi 2017). Haokip (2021) explored the Indo-Myanmar Frontier and uncovered engravings, including beads, gongs, and zoomorphic and anthropomorphic figures at sites like Chassa Kholui, Singat, and Hiangtam Kul. These findings reflect the rich petroglyph heritage in Manipur and the need for further research to understand their cultural significance. Against this backdrop, this paper aims to provide a deeper understanding of the megaliths and petroglyphs of Western Manipur by conducting comprehensive documentation and interpretation.

Material and Method

The survey focused on Manipur’s western region, specifically the Tamenglong and Noney districts (Figure 1&2). These districts are largely characterised by hilly terrain. Most of the population comprises the Zelianrong Naga community, including the Rongmei, Liangmai, Zeme, and Inpui tribes. Other tribes, such as Hmars, Thadous, Gangte, Chirus, and Khasis, also inhabit the district. For the survey, five villages (Table 1), viz. Khoupum, Makhum, Tharon, Oktan, and Haochong were extensively explored due to many megalithic findings and petroglyphs. The survey employed archaeological and ethnographic methods. An archaeological resource documentation schedule was prepared based on the documentation schedule of the Indira Gandhi National Centre for the Arts (IGNCA), Government of India. Fieldwork was conducted during the dry winter seasons of 2021 and 2022. The exploration focused on the foothills, *jhum* (shifting) cultivation fields, and other potential localities within these villages to record the physical environment and archaeological remains. A handheld GPS (Global Positioning System) was employed during the exploration. Interviews were conducted in the local language among villagers (n=31) and village headmen (n=5) who knew about the megalithic tradition and related rituals and practices. Among the locals, seven males and three females were aged between 40 and 60, while 15 males and six females were over 60. All village headmen interviewed were also above the age of 60. They involved small groups of three to four people who shared their responses and engaged in discussions regarding the megaliths and petroglyphs. These interviews aimed to gather insights about the traditional practices and beliefs associated with megaliths and the meaning of petroglyphs.

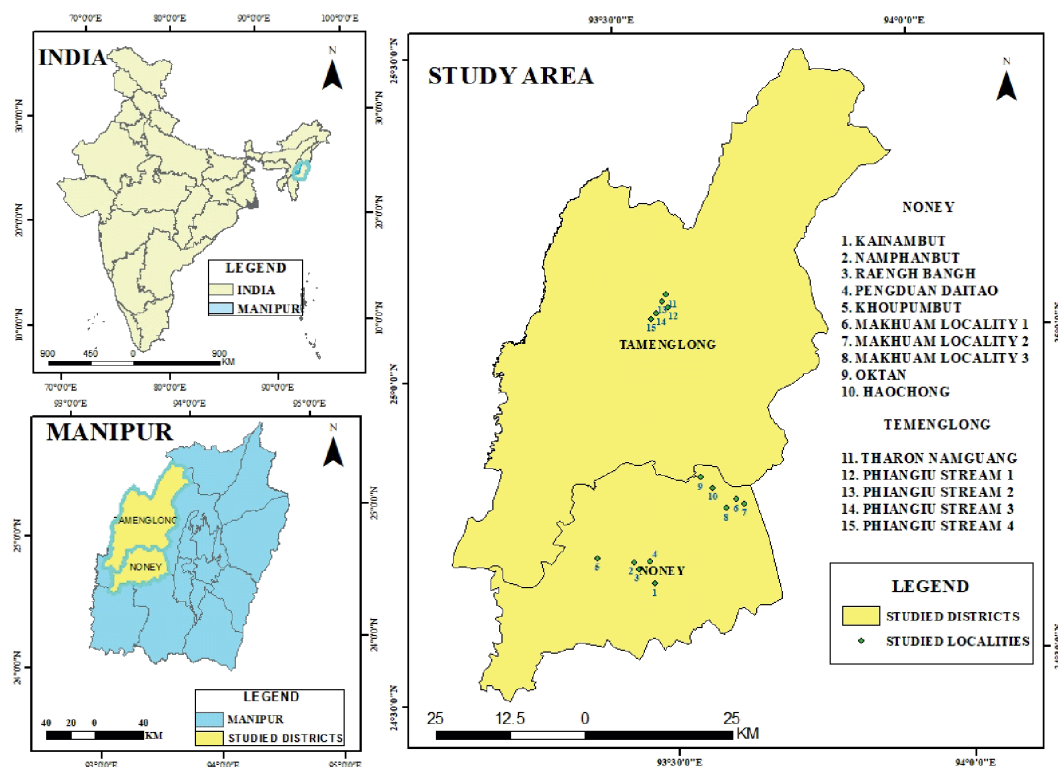


Figure 1: The study areas and localities (Illustration: Authors)

Table 1: Details of the study areas and localities ('-' =Not available)

Village	Locality	District	Coordinates	Altitude	Findspot of megaliths and petroglyphs	Inhabiting community
Khoupum (Satudai)	Kainambut	Noney	24.6544 N, 93.4844 E	872m	Old pathway	Rongmei Naga
Khoupum (Lubanglong)	Namphanbut	Noney	24.6906 N, 93.5426 E	1335m	Hilltop	Rongmei Naga
Khoupum (Chingkao)	Raengh Bangh	Noney	24.6788 N, 93.4810 E	1254 m	Near village gate	Rongmei Naga
Khoupum (Chingkao)	Pengduan Daitao	Noney	24.6793 N, 93.4788 E	1349m	Recreational place for the villagers	Rongmei Naga
Khoupum (Chingkao)	Khoupumbut	Noney	24.6925 N, 93.4910 E	1466m	Pathway to the <i>jhum</i> field	Rongmei Naga
Makhuam	Locality 1	Noney	24.823618 N, 93.676153 E	1352m	Pathway, courtyard, open space in the centre of the deserted village	Rongmei Naga
Makhuam	Locality 2	Noney	24.817564 N, 93.678241 E	1085m	Pathway to terrace field	Rongmei Naga
Makhuam	Locality 3	Noney	24.826791 N, 93.66555 E	1072m	Pathway of the village	Rongmei Naga
Tharon	Tharon Namguang	Tamenglong	25.052 N, 93.537 E	994m	Dormitory courtyard, village pathway, courtyard of the village chief, centre of the village	Liangmai Naga
Tharon	Phiangiu Stream	Tamenglong	25.058 N, 93.539 E	906m	Stream bed	Liangmai Naga
Oktan	-	Noney	24.93 N, 93.67 E	1371m	Near the village gate, slope of the old village, village pathway, centre of the village	Inpui Naga
Haochong	-	Noney	24.88 N, 93.686 E	1312m	Centre of the village, open space in the old village	Inpui Naga

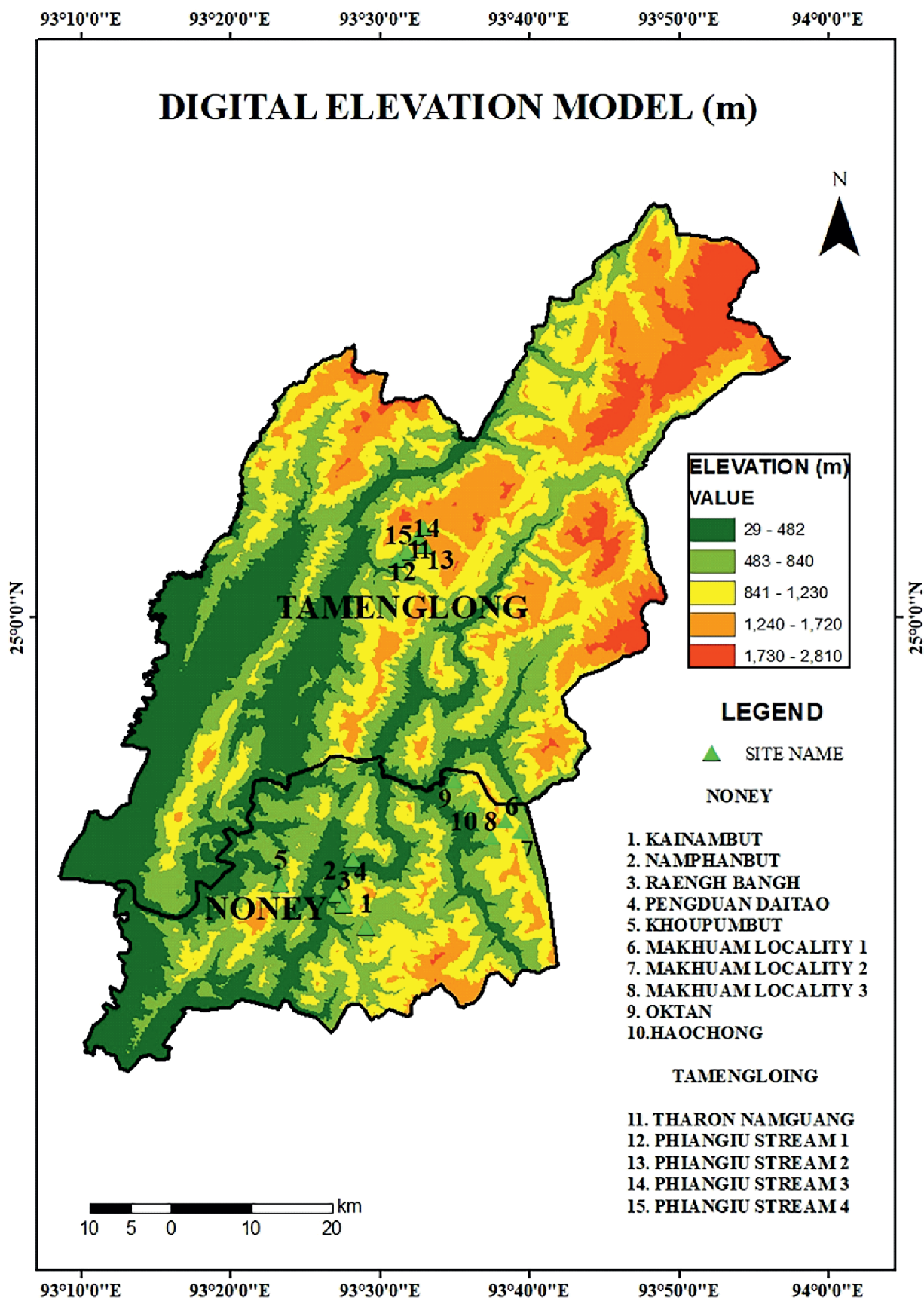


Figure 2: Digital Elevation Model (DEM) Map of the studied Area. (Illustration: Authors)

Results

Khoupum

Khoupum is located in the Noney district of Manipur, India. It is a small valley surrounded by hills on all sides, and the population belongs to the Kabui/Rongmei tribe. The hills surrounding Khoupum hold cultural and historical significance for the local people. Four notable localities within Khoupum are Kainambut, Namphanbut, Raengh Bangh, Pengduan Daitao, and Khoupumbut.

Kainambut: This locality is located on the eastern slope of Kainambut hill in Satudai village. In this locality, there is a flat stone (Figure 3) with petroglyphs depicting footprints (n=7), gongs (n=2), ornaments (n=2), swords (n=1), wine jars (n=2), brass plate (n=4), gameboard (n=1), counting symbol (n=1) and buffalo horns (n=1). This stone is linked with the Rongmei Naga folk tale of Meiriang and Lubuannei. According to the informant,

“This engraved flat stone serves as a memorial for Lubuannei (legendary woman), who hailed from Kainamdai Khoupum and was engaged to Mulianga (legendary man) from Gangluan village. However, tragedy struck when Lubuannei passed away on the day of their planned marriage. Distressed by the news, Mulianga composed a song in memory of Lubuannei, and the groom’s family engraved all the items they had brought for her on the stone before returning home. Years later, Mulianga heard rumours of a girl named Lubuannei in the village of Buanruangh who resembled the deceased Lubuannei. Intrigued, Mulianga visited Buanruangh to meet Lubuannei, only to discover that she had already fallen in love with Meiriang (legendary man), a childhood friend and orphan. Despite his wealthy background, Mulianga pursued Lubuannei’s hand in marriage, but she initially refused. However, due to her mother’s threat of suicide, Lubuannei reluctantly agreed to marry Mulianga”.



Figure 3: Engraved stone from Kainambut. (Photo credit: Authors) (Scale-30.48 cm)

Namphanbut: It is located on the eastern side of Lubanglong village. This place is known as *Ringsuannei Pheidak Pui Bam*, meaning the weaving site of Ringsuannei. This site has a flat stone with footprints, as well as two upright and accompanying flat stones. This stone holds the Rongmei Naga folk tale of Nakamh-Ringsuannei. According to the Informant,

“Nakamh, an orphan from Makuai village (located in Tamenglong district), was blessed with a beautiful wife named Ringsuannei, who is known for her long hair and exceptional weaving skills. Their peaceful existence was disrupted

when the warriors of Baenguang, the Kachari king, discovered a strand of Ringsuannei's hair floating in a river. Intrigued by its beauty, the king ordered his warriors to locate the woman to whom the hair belonged and bring her to him. Upon learning of the king's pursuit, Nakamh and Ringsuannei sought refuge in various hiding places within the forest. During this period of concealment, they welcomed the birth of their child, whom they named Kachana. This site served as one of the secret hideouts for Nakamh and Ringsuannei during their time in seclusion. The two upright stones and the accompanying flat stones at the location symbolise the back strap loom used by Ringsuannei to weave cloths. Additionally, the pair of footprints carved into the stone surface represents the presence of their beloved son, Kachana. These engravings stand as a testament to the resilience and determination of this courageous family as they evaded capture and protected their cherished bond”.

Raengh Bangh: It is situated near the village gate of Khoupum Chingkao. It features engravings of footprints (n=2), buffalo horns (n=2), gongs (n=2), ornaments (n=2) and a wine jar on a large natural flat stone (Figure 4). As told by the informant, these engravings were primarily made by youth dormitory members during the *Matui Ngai* (Matui festival), a competitive and challenging festival. Each village typically has two to three dormitories (*thianh*) that compete in various socio-cultural activities, and *Matui Ngai* is one such event. They used to engrave the killed animals and other material cultures on the sitting platform and naturally occurring flat stones during this festival. The engravings commemorate the festival's activities, showcase the dormitory's resources, and document the animals hunted and sacrificed during the feast. But this feast is hardly organised in modern days, and its practice has gradually lost its importance.

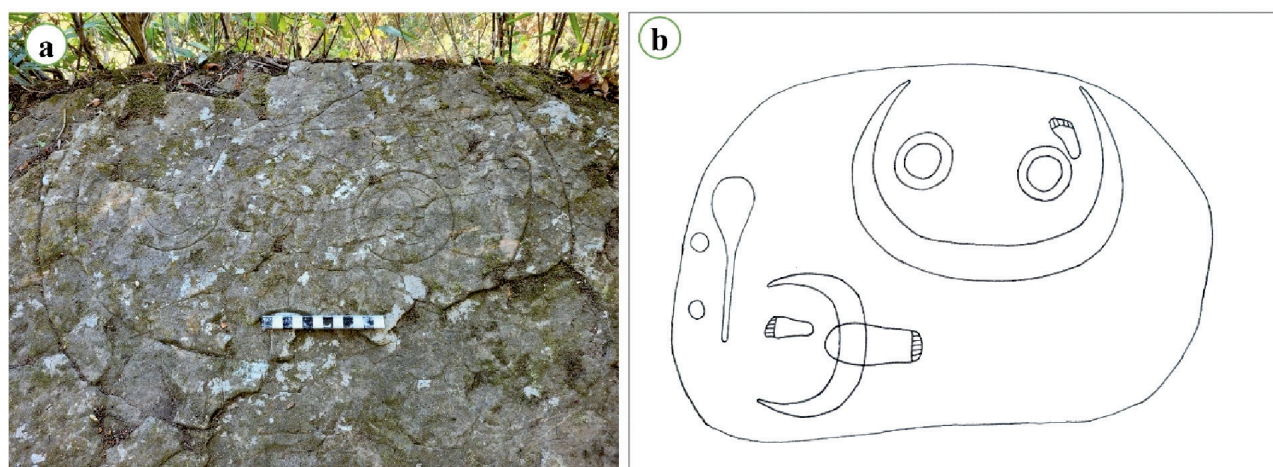


Figure 4: (a) Engravings at Raeng bangh (Scale-30.48 cm) (b) Illustration (not to scale) of the engravings (Figure 4a). (Photo & Illustration credit: Authors)

Pengduan Daitao: It is situated on the outskirts of Khoupum Chingkao village. It served as a recreational spot and a central spot for communicating significant announcements to the villagers, such as meeting calls or urgent news like deaths or accidents. It consists of clusters of stones, including two upright stones and various-sized flat stones (Figure 5) with engravings of gongs (n=2), buffalo horns (n=3), footprints (n=5), flowers (n=2), gameboard (n=2), stars symbol (n=2), ornaments (n=3), a sword, and a concentric circle.

Khoupumbut: It is located about 3 km from Khoupum Chingkao; this locality marks the western boundary of the Khoupum Valley. To its left, the Irang River flows. The area is notable for its natural flat stones with engravings, including images of buffalo horns, circles, vertical lines, and a spear. Additionally, the site contains engravings of footprints (n=6), a gameboard, a gong (Figure 6a), a deeply carved footprint (Figure 6b) and English alphabet inscriptions—likely left by visitors who marked the year and their group's name, unintentionally overshadowing the original meanings of the engravings.

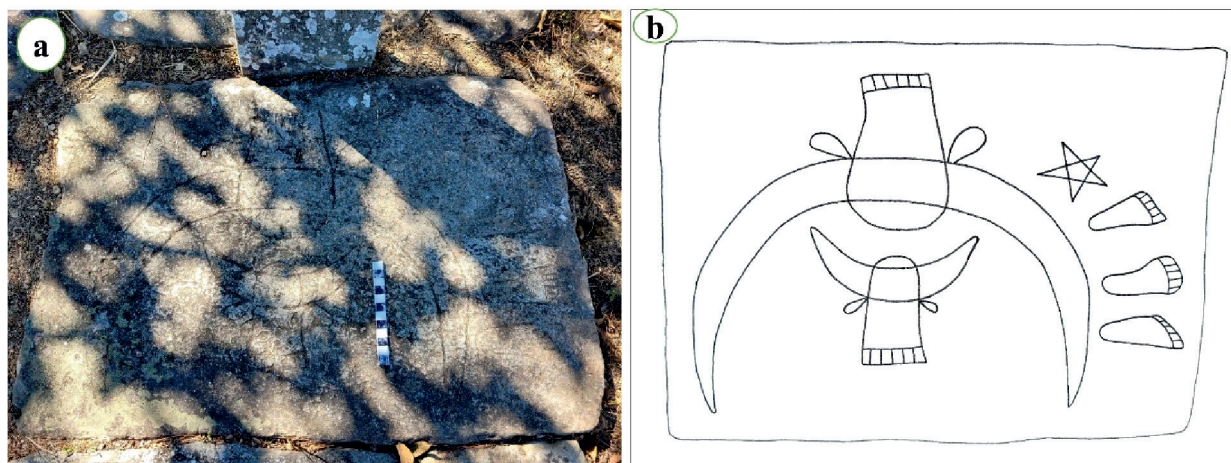


Figure 5: (a) Engravings at Pengduan Daitao (Scale-30.48 cm) (b) Illustration (not to scale) of the engravings (Figure 5a). (Photo & Illustration credit: Authors)

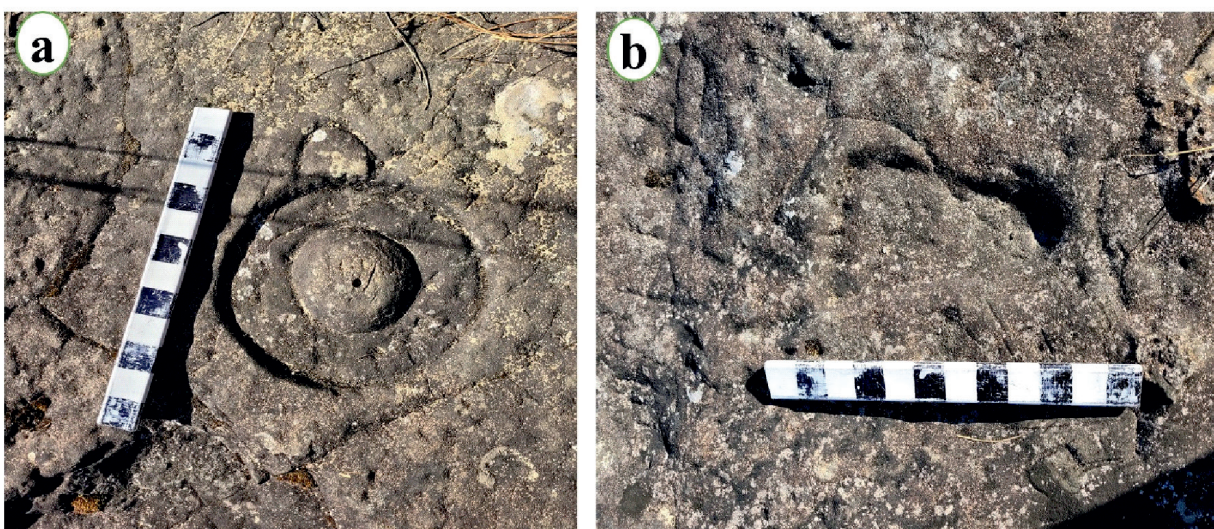


Figure 6: (a) Engravings of gong (musical instrument) at Khoupumbut (b) A deeply carved footprint at Khoupumbut (Scale-30.48 cm) (Photo credit: Authors)

Throughout the area of Khoupum Chingkao, sitting platforms (*bamduan*) (Figure 7) were found. These platforms are often accompanied by flat stones adorned with carvings depicting various symbols like spears (n=6), bracelets (n=11), swords (n=8), footprints (n=12), buffalo horns (n=9), and other material (wine jar, carrying basket, musical instrument (*Gong*)) belonging to the deceased. These can be found both within the village settlement and outside the settlement area. The purpose of these platforms located outside the village settlement is to commemorate individuals who have died under unnatural circumstances.

Makhuam

Makhuam is a village in the Noney District of Manipur, home to the Rongmei Naga tribe. An exploration conducted two kilometres northeast of the current village revealed a deserted area. According to a local informant, their ancestors once inhabited this area before they moved to the present village where the current generation resides. Megaliths were found and categorised into three distinct localities in this former settlement area for ease of study.



Figure 7: A sitting platform (a *bamduan*) nearby footpath (Photo credit: Authors)

Locality 1: It contains various megaliths such as village gates (It was constructed using stone slabs of different sizes piled up one after another), standing stones, a dolmen, a traditional long jump field, a sitting platform, and a traditional shot-put field (*Taopung siau pui bam*). The gates, known as *Kaipi Raengh* (Northern Gate, Figure 8a) and *Kaiba Raengh* (Southern Gate, Figure 8b), acted as fortified walls during headhunting (Headhunting was a cultural and social practice among the Naga tribes, which carried religious and social significance in their communities. The main concept of headhunting was to keep an enemy's head after slaying him) and it was also used for rituals and worship ceremonies. In the southern part of the locality, there are two standing stones, one fallen and one still standing, which were once part of the courtyard of the boy's dormitory. This site is called *Guailing Tao* (a place for



Figure 8: (a) The northern gate of Makhum village (b) The southern gate of Makhum village (Photo credit: Authors)

cutting beef). In the heart of the village, there is a designated area for games and sports featuring sitting platforms on the periphery for spectators to watch. For instance, a traditional long jump field consists of four flat stones with a vertical stone at the end, serving as the last step before jumping. A stone was placed at 853.44 cm from the stepping stone to mark the longest jump achieved during competitions.

Locality 2: This locality features a flat stone locally believed to have been brought by a giant from a river bed to the hilltop. The stone bears visible marks of two large vertical lines and several horizontal lines, which villagers believe were caused by the giant using bamboo to carry the stone. Nearby, a sitting platform serves as a resting place.

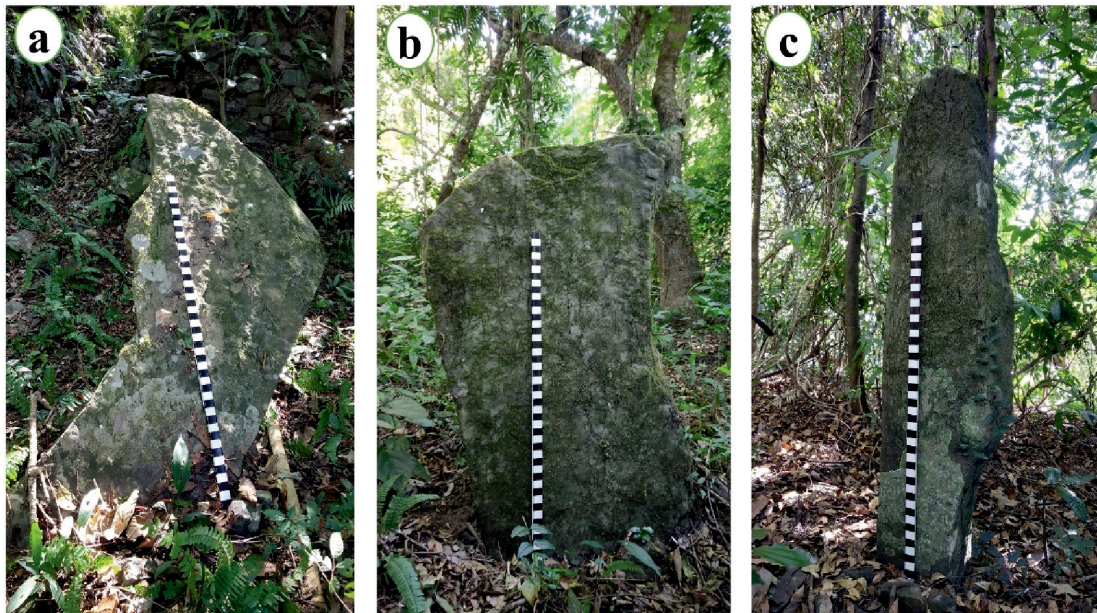


Figure 9: (a) Standing stone near the northern village gate (b) Standing stone near the footpath (c) standing stone on the courtyard of the boys' dormitory. (Scale-121.92 cm) (Photo credit: Authors)

Locality 3: It is located approximately two kilometres west of Makhuam 1. This locality includes two standing stones called *Raliak Tao* (a stone licked by God). Around 50 m west of the two menhirs mentioned above, an alignment of two rows of small upright stones can be found. This area, known as *Lan phu bam*, belonged to the village's Gonmei clan. The stones, ranging in size from 5.08 cm in height and 10.16 cm in breadth to 39.62 cm in height and 17.78 cm in breadth, were used by the wealthy Gonmei clan to measure and display their wealth. There are 65 stones in this row arrangement.

Tharon

The village has four dormitories, each having its courtyard with a cluster of dolmens and a standing stone in the middle adorned with various engravings. However, only two dormitories (Kabonkhangna and Alangkhangna) remain intact, as the other two were destroyed due to road construction. Many engravings have been found from the natural stone slabs on the stream (Phiangu stream).

Kabonkhangna Dormitory showcases a standing stone (Figure 10) surrounded by dolmen and flat stones arranged like steps for playing traditional games. These stones are adorned with engravings of star symbols, crossed spears, and English script in the Liangmai dialect. The standing stone at the centre displays Mithun (*Bos frontalis*) engravings, while the lower part features geometric figures. The dolmen and flat stones also bear engravings of game patterns, footprints, labyrinths, buffalo horns, straight lines, and counting symbols (Figure 11).

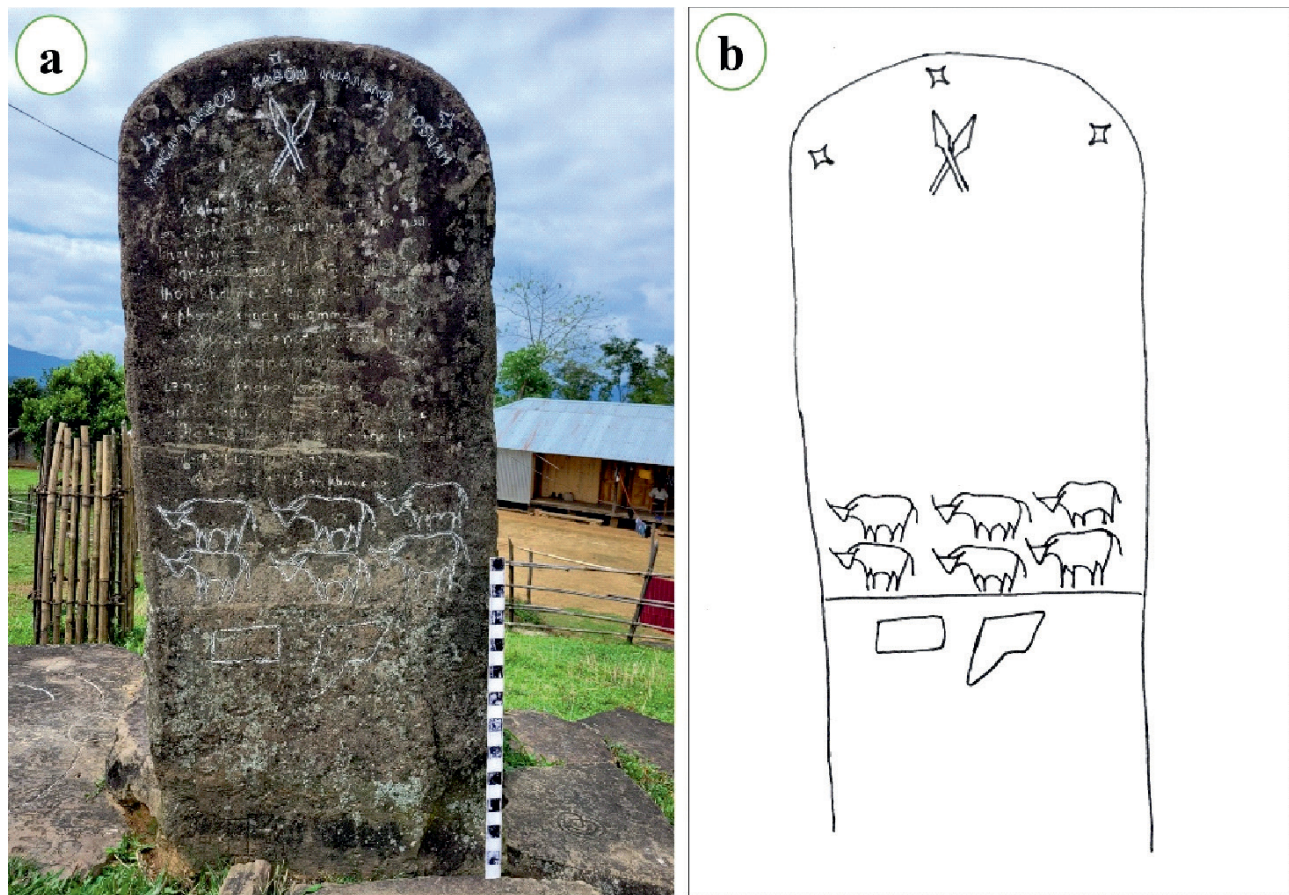


Figure 10: (a) Standing Stone of Kabonkhangna dormitory. (Scale-60.96 cm) (b) Illustration (not to scale) of the engravings (Figure 10a). (Photo & Illustration credit: Authors)

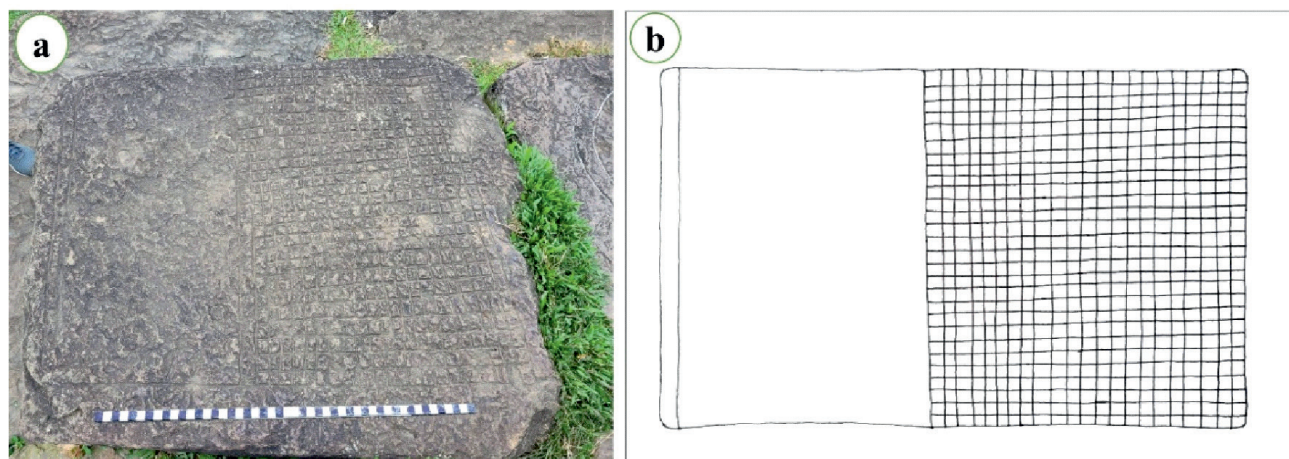


Figure 11: (a) Counting symbols (Scale-121.92 cm) (b) Illustration (not to scale) of the engravings (Figure 11a). (Photo & Illustration credit: Authors)

In Alangkhangna Dormitory, one of the two standing stones has engravings (Figure 12), similar to Kabonkhangna Dormitory. The engravings are divided into rows, including rectangles, human figurines, traditional clothing, spears and geometric shapes, and buffalo horn. The kitchen in Alangkhangna Dormitory remains intact, with a buffalo horn display outside its back wall. The dolmen and flat stones also bear engravings of buffalo horns, straight lines, and square symbols.

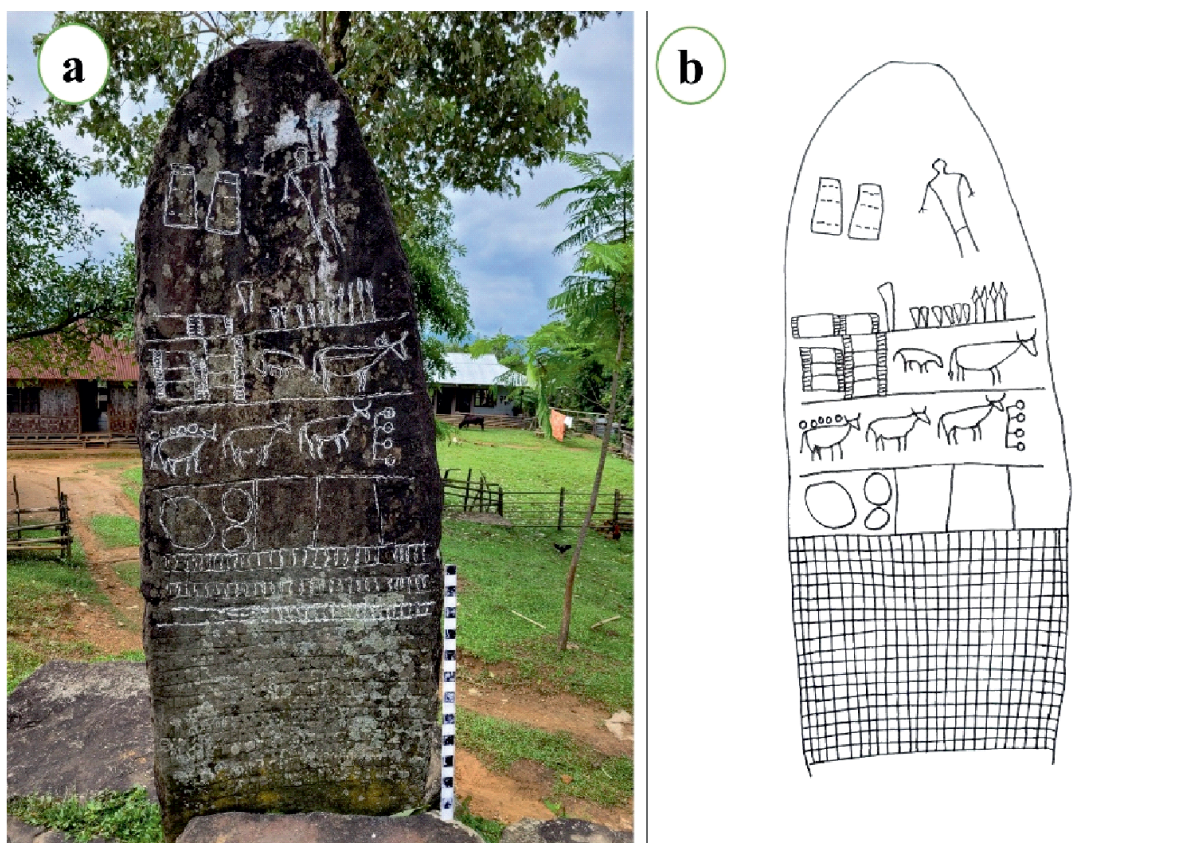


Figure 12: (a) Standing Stone of Alangkhanga dormitory. (Scale-60.96 cm) (b) Illustration (not to scale) of the engravings (Figure 12a). (Photo & Illustration credit: Authors)

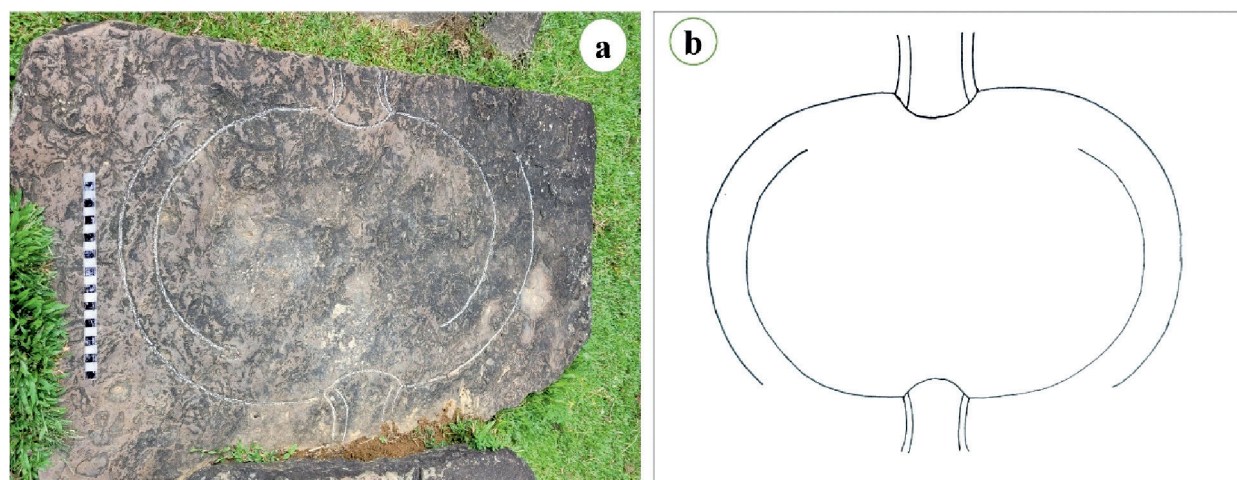


Figure 13: (a) Engraving of two Buffalo heads with horns placed in the opposite directions. (Scale-60.96 cm) (b) Illustration (not to scale) of the engravings (Figure 13a). (Photo & Illustration credit: Authors)

The Phiangu stream, situated two kilometres west of Tharon Namguang in Manipur, holds significant engravings on its stream bed (Figure 14). The stream is divided into four localities. In Locality 1, notable engravings include a human figurine, four pig engravings, and a straight line. Above them, a line of 31 triangle-like figures represents pig heads, accompanied by a mithun engraving on the right side. Another line features ten mithun heads hanging downward, with a full mithun engraving on the left. Additionally, two traditional houses with inverted trapezoid engravings and a buffalo skull with a horn can be found.

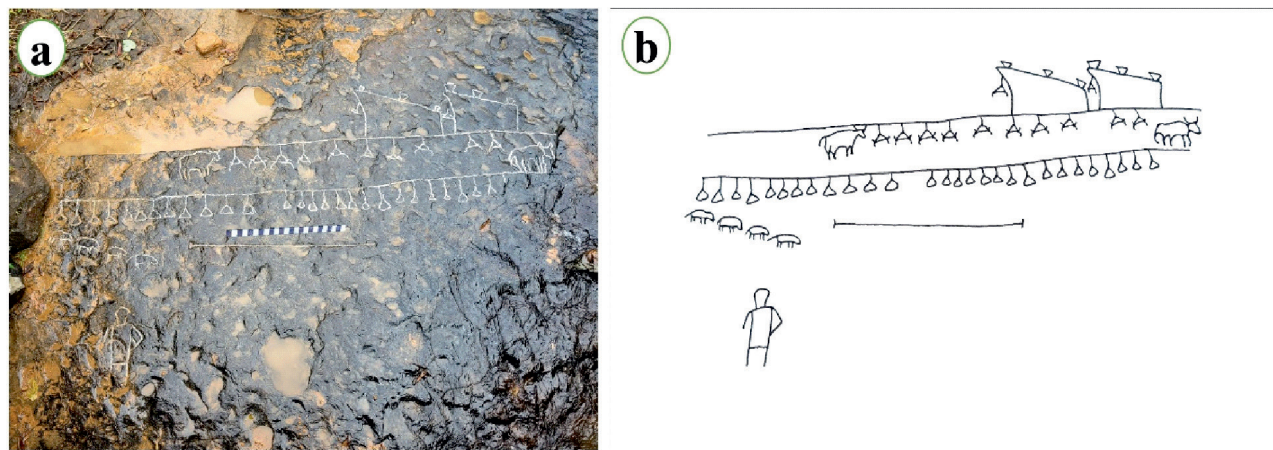


Figure 14: (a) Engravings from Phiangiu Stream L-1. (Scale-60.96 cm) (b) Illustration (not to scale) of the engravings (Figure 14a). (Photo & Illustration credit: Authors)

Locality 2 features 29 human figures connected by two long, straight, engraved lines. One line crosses at the shoulder area, while the other runs below the junction of the trunk and lower limbs. Each figure consists of a head depicted as an oval, a neck shown as a single vertical line, a body outlined by two concave lateral lines connecting the upper and lower long lines, and legs represented by two vertical lines. Above these engravings is an engraved figure of a trumpet-like musical instrument.



Figure 15: Engravings from Phiangiu Stream L-2. (30.48cm) (Photo credit: Authors)

Locality 3 features a large circle with three human figures inside. The left and right figures contain a human genital symbol, and the circle bears the engraved word “Francis.” In Locality 4, a long line intersects a series of small vertical lines, totalling six engravings. Additionally, aligned depressed marks can be observed on the rock surface.

Tharon village has a cluster of dolmen and flat stones (Figure 17) in the dormitory courtyard and the village centre. These clusters consist of raised flat stones and dolmen platforms, serving as sitting areas. According to the informant,



Figure 16: Engravings from Phiangiu Stream L-4. (60.96cm) (Photo credit: Authors)

“They were erected in memory of individuals who have accomplished significant feats during their lifetime. They symbolise homes for the deceased in the afterlife. Raising these megaliths involves seeking approval from the village council and collectively transporting stones from nearby sources like streams or quarries. The stones are then placed in the respective dormitory associated with the departed individuals”.



Figure 17: (a) Cluster of dolmen place near the footpath (b) Cluster of flat stones place near the footpath (Photo credit: Authors)

At the heart of Tharon village stands a remarkable standing stone known as *Buijun taosuan*, which means “Mithun stone” in the local dialect. According to local folklore, the mithun guided the people to this auspicious location while searching for a new settlement. The village was established, honouring

this event. Adjacent to the chief house, there is a flat stone that had a traditional purpose during the headhunting era, as decapitated heads would be placed on it before being taken home. Another flat stone is also located near the chief house. In the past, when someone committed a mistake like causing a wildfire during *jhum* cultivation, they were required to pay a fine to the village council in the form of pigs or cattle. These animals would then be butchered on this stone.

Oktan (Puichi)

Oktan (Puichi) is an Inpui Naga village located in Noney district, Manipur. The village is divided into an old and a new settlement area. It is surrounded by Khundong village in the north, Ijeirong and Haochong villages in the south, and Bakuwa and Kabuikhullen villages in the west. Megaliths have been found in Oktan, including standing stones, sitting platforms, stone clusters, and a male genital figurine.

The standing stones (Figure 18 a&b), locally known as *Nungsom*, are the most common megaliths in Oktan. According to informants, these stones were erected by the villagers' ancestors, though their exact age remains unknown. These stones serve as memorials and markers, symbolising the villagers' connection to the land and their desire for prosperity and longevity for future generations.

Sitting platforms called *Louno* were common in Oktan but have diminished in number due to human activities. These platforms, located both within and outside the village, were constructed to commemorate individuals who held significant feasts or to honour the deceased. Additionally, if a death occurred outside the village, a platform would be erected near the village gate to mitigate disturbances from the spirits of the departed and to facilitate their passage to the ancestral realm. Another significant megalith in Oktan is a phallic stone structure (Figure 18c) in the old settlement area. This structure, symbolising male genitalia, was created to enhance fertility and augment the village population. It is considered taboo to touch or strike this stone, as local belief holds that doing so can bring rain during drought.

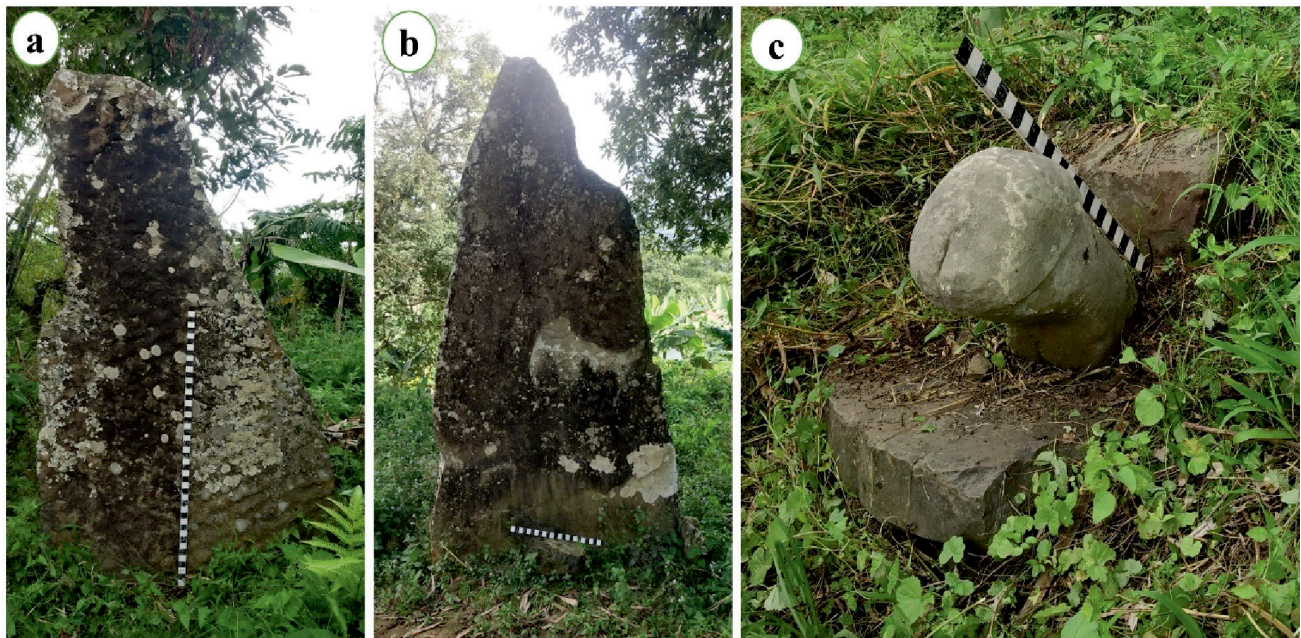


Figure 18: (a) Standing stone near the footpath (Scale-121.92 cm) (b) Standing stone near the footpath (Scale-60.96 cm) (c) Phallic stone structure (Scale-33.02 cm) (Photo credit: Authors)

Furthermore, a historical Capstone used for the burial of decapitated enemy heads still exists. It remains taboo to stand on this stone today. The village gate, *Kapan*, located at Oktan's boundary, functioned as both a defensive barrier and a ritual site during the headhunting era. This gate was used for rituals and worship aimed at averting epidemics and predicting agricultural yields, with ritual seed sowing and divination conducted under the village priest's supervision. Additionally, a village foundation stone marks a significant historical event recounted by the village headman. The village headman explained that two individuals, who had been searching for a mithun intended for a significant ceremonial sacrifice, found the animal at this location after several days of searching. They chose not to return to their original village, believing the mithun had guided them to a new place. Consequently, this led to the establishment of the present village.

Haochong

Haochong is a village situated in the eastern part of Noney district in Manipur, inhabited by the Inpui Naga tribe. Currently, the village is divided into two wards: Inmwan, the old settlement area, and Pungkalok, the new settlement area. In the centre of the old settlement area, there used to be a small playground where various festive and sports activities took place in the past, including shotput (*Lungtun kadai*), long jump (*Inn-jwang*), traditional dances, and rituals. Just below the playground was a sitting platform (*Louno*) (Figure 19) where important meetings were held, and additional stone seats were placed along the edge of the ground for spectators to sit and watch the activities.



Figure 19: Sitting platform (Photo credit: Authors)

Adjacent to the ground is one standing stone (*Nungsom*) measuring 31.1 cm in height. This stone is associated with headhunting, as it was customary to bring any decapitated human or animal head and place it above this stone before taking it home. Inside the Assam Rifles camp in the village is one standing stone that holds cultural and historical significance within the local community. Based on the information gathered during our fieldwork, this stone has historically functioned as a revered location for performing various sacrificial rituals. It symbolises a significant religious and ceremonial centre, where offerings were presented to seek the gods' favour or honour ancestral spirits.

Typology

[illegible]

The above table 2 shows the different dimensional attributes of megalithic monuments found in the study area. At Khoupum, five (n=5) types of megalithic monuments have been found. Among these monuments, the highest length range has been found in Bamduan (sitting platform associated with standing stone) (176-579 cm), and the highest breadth and thickness range have been found in Bamduan (sitting platform) (60-210 cm; 60-152 cm) with a mean value of 131 cm and 45 cm. At Makhuam, six (n = 6) types of megalithic monuments have been found. Among these monuments, the highest length range has been found in the sitting platform (243–914 cm), and the highest breadth and thickness range has been found in the village gate (3048–6096 cm; 304-457 cm), with a mean value of 4572 cm and 381 cm. At Tharon, four (n=4) types of megalithic monuments have been found. Among these monuments, the highest length range has been found in the village gate (822-1219 cm), with a mean value of 1021 cm. At Oktan, five (n=5) types of megalithic monuments have been found. Among these monuments, the highest range in length and breadth has been found in standing stone (103-335 cm), (45-121 cm), and the highest thickness range has been found in sitting platform (45-106 cm) with a mean value of 70 cm. At Haochong, four (n=4) types of megalithic monuments have been found. Among these monuments, the highest range in length has been found in the village gate (304-1524 cm), and the highest breadth and thickness range has been found in sitting standing stone (21-146 cm) and stone cluster (45-106 cm) with a mean value of (96 cm) and (10 cm) respectively.

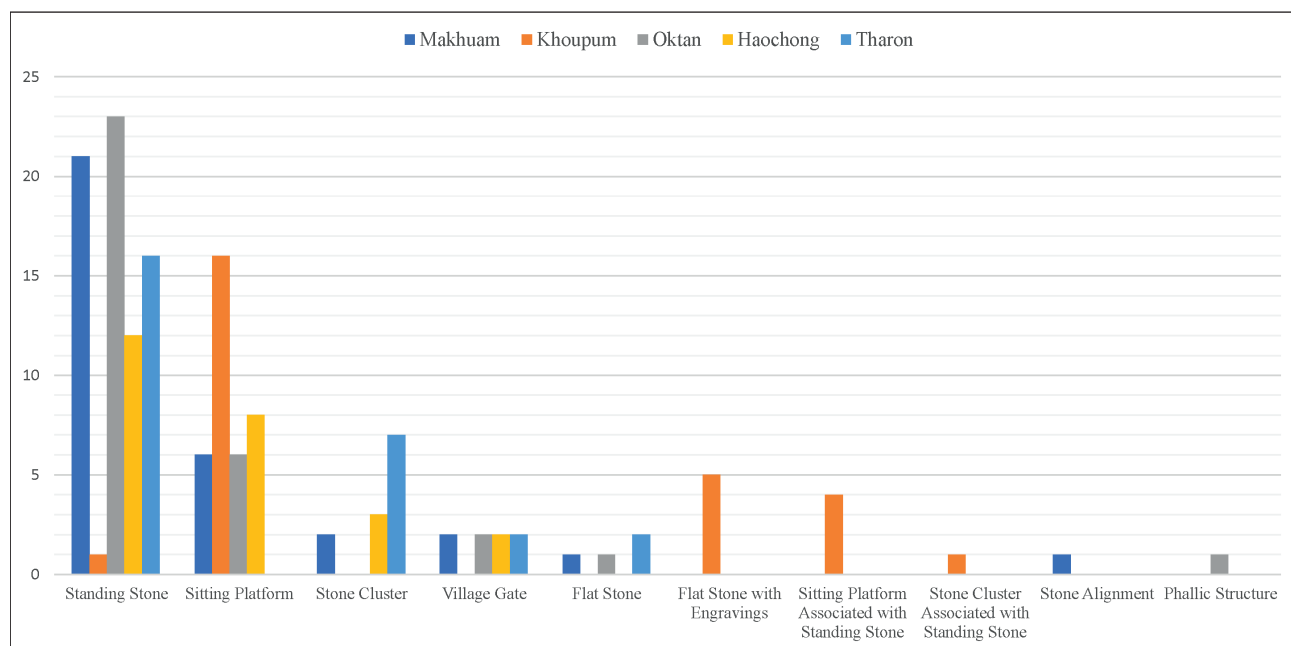


Figure 20: Graphical representation of megalithic types in the study area. (Illustration credit: Authors)

Petroglyphs

In the study area, various petroglyphs have been recorded on the stone surfaces of both megaliths and naturally occurring rocks (Table 3). In the Khoupum area, the most common petroglyphs are footprints, with buffalo horns and geometric shapes such as circles and vertical lines also frequently observed. The footprints on the megaliths represent the individuals commemorated by these structures, whereas the buffalo horns symbolise the animals sacrificed during their erection. The geometric figures, including circles and vertical lines, generally represent items associated with the deceased, such as gongs, brass plates, and swords. According to the informant,

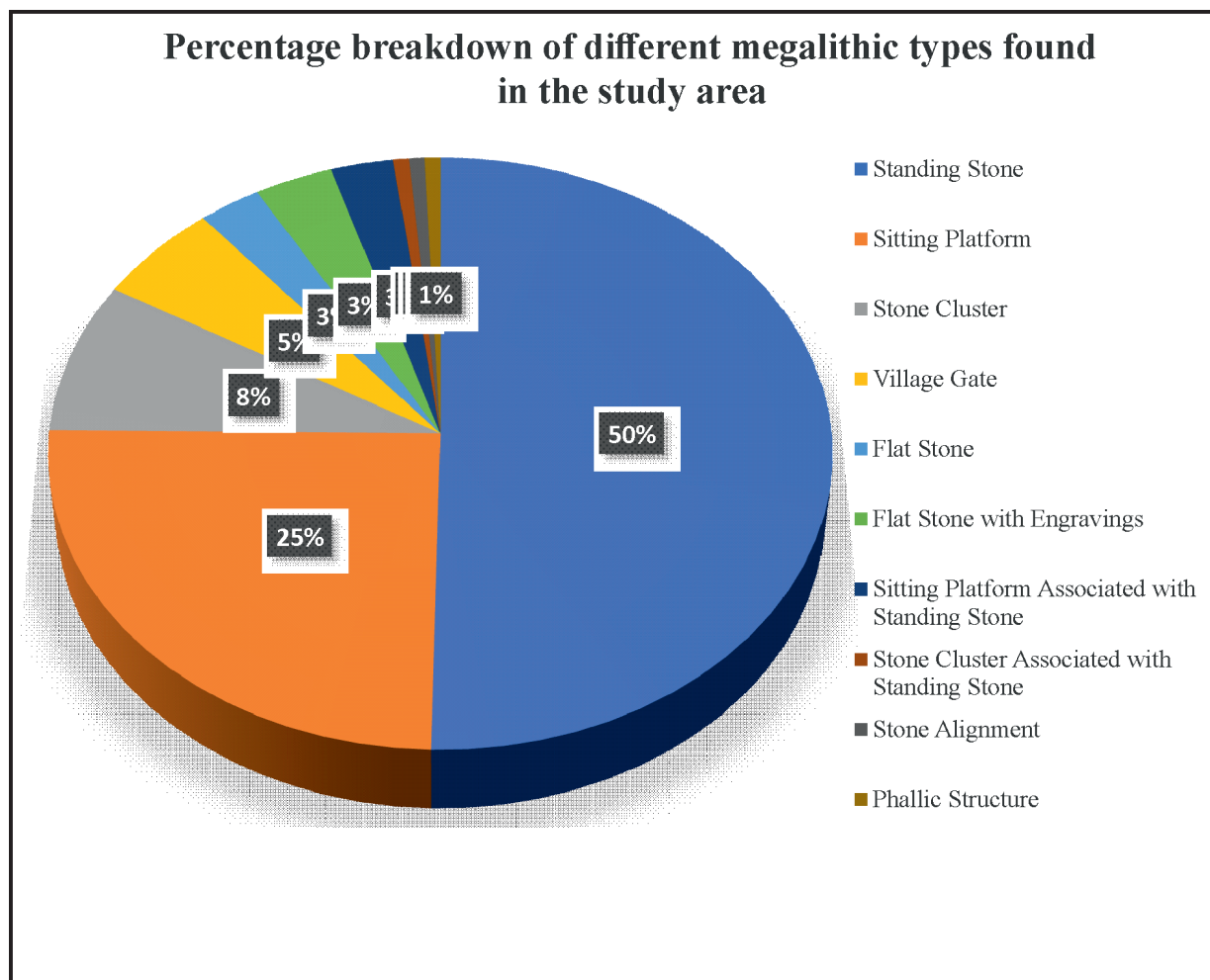


Figure 21: Pie chart showing percentage of different megalithic types found in the studied area.
(Illustration credit: Authors)

“If a person died of unnatural death, a bamduan (sitting platform) associated with a standing stone is constructed outside the village gate. The construction is done within a year of the person’s passing, and the platform is engraved with footprints and other materials related to the deceased and animals killed during the construction ceremony. According to their belief, the soul of a person who dies unnaturally loses its way and not be able to follow its ancestors to heaven. By constructing the platform, the family members aim to guide the soul back to the right path so that the deceased can receive blessings and follow their ancestors to the afterlife”.

A similar type of engraving was also found by Devi (2020) in the Rongmei of Salangthel area in Churachandpur district, Manipur, where a pair of footprints were normally drawn by the friends of the expected bride and bridegroom, while they organised a compulsory picnic party, which was held one day ahead of the actual marriage. On the other hand, a single footprint, along with a circle, is drawn if a woman dies while giving birth to her child.

At Tharon, most petroglyphs consist of geometric figures such as vertical lines, squares, and rectangles, alongside zoomorphic figures of mithun, pigs, and buffalos. Many anthropomorphic figures representing humans are also documented across the study area. According to village elders,

“The standing stones at Alangkhangna and Kabonkhangna dormitory have engravings that serve as records of the materials contributed by the dormitory to the village. The human figure engraved on the Alangkhangna dormitory standing stone could represent the dormitory’s caretaker. Similarly, the youth dormitory members created engravings on the clusters of dolmens and flat stones at the dormitory and on natural rock surfaces at Phiangiu River during

the Matui Ngai to commemorate the festival and showcase their possessions and activities. For instance, the vertical lines symbolise the height that youths reach while attempting to catch a mithun horn during festivals. The squares function as counting symbols, reflecting the distribution of meat portions to villagers. Zoomorphic figures represent the animals traditionally sacrificed during festivals and megalithic building ceremonies, while the anthropomorphic figures depict members of the youth dormitory”.



Figure 22: An interview session with the elders of Tharon. (Photo credit: Pouthuan Kamei)

Table 3: Types of Petroglyphs Found in the Studied Area

Engravings on Natural Rock Surfaces (Khoupum)				
Natural Rock Surface No.	Zoomorphic	Anthropomorphic	Geometric	Others
1	Buffalo horns (n=2)	footprint (n=2)	Circle (n=4)	wine jar (n=1)
2	-	pair of footprints (n=1)	Circle (n=2)	unidentified
3	-	-	Circle (n=2)	-
4	-	-	-	gong (musical instrument) (n=1)
5	-	Footprint (n=4)	vertical lines, circle (n=1)	unidentified
6	-	Footprint (n=1), pair of footprints (n=1)	vertical lines, circle (n=2), Gameboard (n=2)	unidentified
Engravings on Natural Rock Surface (Tharon)				
1	Buffalo (n=2), Mithun heads (n=10), pig heads (n=31), pigs (n=4)	Human body (n=2)	Trapezoid (n=2), lines (n=4), circles	-
2	-	Human figures in row (n=29), human figure (n=2)	-	Trumpet? (n=1)
3	-	Human body (n=5)	Circle (n=1)	-
4	-	-	parallel and vertical lines	-
Engravings on Megaliths (Khoupum)				

Sl. No.	Megaliths typology	Zoomorphic	Anthropomorphic	Geometric	Others
1	Flat stone (n=1)	Buffalo horn (n=1)	Footprint (n=1), pair of footprints	Circles (n=4), gameboard (n=1)	Wine Jar (n=2), gong (n=2), counting symbol (n=1)
2	Stone cluster (n=1)	Buffalo horn (n=3)	Footprint (n=1), pair of footprints (n=2)	Concentric circles (n=1)	Sword (n=1), ornaments (n=3), flowers (n=2), star symbols (n=2)
3	Flat stone (n=1)		Pair of footprints (n=2)		
4	Sitting Platform (n=6)	Buffalo horn (n=9)	Pair of footprints (n=7)	Concentric circles (n=1)	Spear (n=6), Swords (n=4), Wine Jar (n=3), Carrying Basket (n=2), ornaments (n=7), star symbols (n=2), flower (n=2)
Engravings on Megaliths (Tharon)					
Sl. No.	Megaliths typology	Zoomorphic	Anthropomorphic	Geometric	Others
1	Standing Stone (n=1)	Mithun (n=6)		Star (n=3), Rectangle figure (n=1), trapezoid (n=1)	Spears (n=2), English Script
2	Dolmen (n=3) and Flat Stone (n=5)	Buffalo horn (n=7)	Footprint (n=1)	Vertical line (n=2), Squares figure (n=650 appx.)	Labyrinth (n=1)
3	Standing Stone (n=1)	Mithun (n=4), Pig (n=1)	Human Figure (n=1)	Vertical line (n=4), Square figure (n=600 appx.), Circle (n=7), Rectangle figure (n=11)	Spears (n=11)
4	Dolmen (n=2) and Flat Stone (n=4)	Buffalo horn (n=5)	-	Vertical line (n=4), square figure (n=240 appx.)	-

(* - ' =Not available)

Discussion

The fieldwork conducted in the western region of Manipur, specifically in the Tamenglong and Noney districts, has highlighted the enduring significance of megalithic structures within the local communities. These megaliths, primarily consisting of standing stones, sitting platforms, dolmens and stone clusters, serve as historical artefacts and integral components of the community and cultural identity of the tribes inhabiting these areas. Most megaliths tend to be distributed along the footpaths that connect villages to fields and forests, which community members regularly use. These megaliths, mainly standing stones and sitting platforms, are often placed in prominent locations and serve as resting places for travellers. They are mostly oriented towards a path or road so people can easily see them. Additionally, their placement serves to help people remember the names and accomplishments of those who gave feasts.

The connection of megaliths to the region's historical practice of headhunting is particularly notable. Once prevalent across different Naga villages, these practices have imprinted the community's cultural landscape. Megaliths in this context are not just commemorative; they are deeply intertwined with the social fabric, serving as symbols of courage, victory, and community prestige. The placement of flat stones for placing decapitated heads and the fortified structures of the village gates speak to a complex socio-religious structure that valued the spiritual benefits and social status accrued from headhunting. Moreover, the various petroglyphs documented on these megaliths and natural rock surfaces—ranging from animal depictions to geometric shapes—provide insights into the community's artistic expressions and the symbolic meanings ascribed to these engravings. For example, the footprints and buffalo horns

carved on these stones are not merely decorative but symbolic representations of the deceased and the animals that were killed during the megalithic building ceremony. These engravings thus bridge the present to the past, allowing current and future generations to understand and appreciate their heritage. However, preserving these megalithic sites faces challenges due to environmental factors and human activities, leading to the deterioration and sometimes the vandalism of these culturally significant structures. This degradation threatens the megaliths' physical integrity and risks the loss of historical and cultural knowledge embedded within these stones. Therefore, efforts must be intensified to educate the local communities about the value of their megalithic heritage and actively engage them in its preservation.

The petroglyphs examined in this study illustrate a significant cognitive sophistication by their creators, crafted for diverse purposes. To draw comparisons between the petroglyph types found in the study area and other regions in North East India, the authors analysed their data against findings from various localities including Kasomari-Jamuguri, North Guwahati, and Dima Hasao in Assam (Hutton 1923; Choudhury 1959; Bezbaruah & Devi 2016; Deori & Hassan 2019; Singh, Jamir & Thakuria 2022), East Jaintia Hills in Meghalaya (Mitri et al., 2022), Churachandpur in Manipur (Devi 2020; Haokip 2021), Champhai and Serchhip districts in Mizoram (Malsawmliana 2016; Lalhminghlua & Sarkar 2017), and Kohima, Phek, and Peren districts in Nagaland (Hutton 1926; Vasa & Jamir 2020) (Table 4). The current study area provides essential insights into the petroglyphs of North East India, revealing distinct typologies compared to other regional sites. The researchers noted similarities between the petroglyphs in the current study area and those in Mizoram and other parts of Manipur, characterised by symbols like gongs and bead necklaces, geometric figures such as circles and triangles, anthropomorphic figures depicting humans holding shoulders, and zoomorphic figures representing Mithun and buffalo (Singh 2019; Singh 2020). Despite these similarities, progressive variations were evident between the studied localities and previously reported areas. For instance, petroglyphs in Mizoram commonly depict human figures holding spears and standing or squatting (Singh 2022), which were absent in the current study area. Similarly, the Nagaland petroglyphs are distinguished by human faces and dancing figures, along with patterns like lozenges and spirals (Vasa & Jamir 2020), not found in the present study area. Likewise, the petroglyphs in Assam display a variety of symbols like mason marks, Dharmachakra and wedge marks (Sanathana & Hazarika 2019), none of which were observed in the present study area. The authors suggest that the variations in petroglyph types across North East India reflect differences in the socio-cultural backgrounds, cognitive abilities of the ethnic communities, and the influence of local ecology, myths, beliefs, and folklore on the creation of these petroglyphs.

Table 4: Petroglyph types reported from different localities of North East India (* = present study)

Site Name	State	Geo Coordinates	Anthropomorphic	Zoomorphic	Geometric	Others	Reference
Dirgheswari	Assam	26° 14' 37.0" N; 91° 44' 57.8" E	Human foot impression with of flower encircling, God and Goddesses	Elephant (<i>Elephas maximus indicus</i>)	Chess board	Temple like structure with a shrine at the centre, dot marks in linear pattern	(Bezbaruah & Devi 2016)
Kanai Boroshi Bowa	Assam	26° 12' 36.5" N; 91° 44' 31.4" E	Female figurine	-	Labyrinth, chess board, Square with a circle inside, bow	Dot marks in linear pattern, inscription,	
Kasosila	Assam	26°16'13.83" N; 92° 03'1.95" E	-	-	-	Dharma chakra (eight spoked wheel), lotus pedestal, Trishula, Vajra, inscription	(Hazarika et al. 2022)
Chapa-idong	Assam	26°12'49.18" N; 91°50'41.15" E	-	-	-	Mason marks	
Tatimara	Assam	26°14'46.83" N; 91°55'11.16" E	-	-	-	Dharma chakra	

<i>Site Name</i>	<i>State</i>	<i>Geo Coordinates</i>	<i>Anthropomorphic</i>	<i>Zoomorphic</i>	<i>Geometric</i>	<i>Others</i>	<i>Reference</i>
Rajaduar Chowk	Assam	26°12'461" N; 91°44'546" E	-	-	-	Various mason marks, Wedge marks, labyrinths, sword, mask, dancing image, running image with a shield and a boat	Sanathana, & Hazarika, (2019)
Dubungling	Assam	25°21.421' N; 092°56.926' E	Human figure depicted in various positions, they exhibit adornments like necklaces and earrings, with some figures featuring intricate motifs.	-	Double line, square double line, square with intersecting lines, small circles on corners, ring-like motifs, double line square with semi-circular motifs, oblique lines, and circular or oblong motifs on corners, constricted square with depictions resembling closed human fists at outer corners.	-	Singh et al., (2022)
Kobak	Assam	25°17'06.6" N; 092°49'24.5" E	Female figure, human figure in squatting position	Birds, elephant	Concentric circles with intersecting lines,	Celestial bodies, swords, floral motifs	(Deori & Hassan 2019)
Kasomari-Jamuguri	Assam	-	Human figure	Lion (<i>Panthera leo</i>), elephant	-	Swords, daggers, rosettes, lotus	(Choudhury 1959)
Mualsei Neng Seng	Meghalaya	25°15' 14.08" N; 92°44' 32.38" E	Human face, human figure in squatting position	Pig (<i>Sus domesticus</i>), Bos species depicted with horns, a bird	-	Pot or a gourd	(Mitri et al. 2022)
Kigwema Village	Nagaland	-	Human figure	Mithun	-	Spear heads and rows of incised tooth-like structure above and below the spears. Double indentation on the edge.	(Hutton 1926)
Wakching Village	Nagaland	-	-	-	-	Various design symbolising nature and religious beliefs	(Vasa & Jamir 2020)
Mokokchung Village	Nagaland	26.3255602'N 94.53232443' E	Human face carved on stone	-	-	-	
Zhavame Village	Nagaland	-	Human head carved out of sandstone	-	-	a lozenges pattern and a spiral	
Khonoma	Nagaland	-	Human figure	-	-	-	

Site Name	State	Geo Coordinates	Anthropomorphic	Zoomorphic	Geometric	Others	Reference
Farkawn village	Mizoram	23°04.939' N, 93°18.264' E	Human faces	Bovine heads of animals, mithun/gayal, unknown animal, animal horn, horseshoe shape figure	Circle, semi-circle, double circle, circle with dots in the centre, circles in sequential line	Blade, spearhead, bead necklace, Smoking pipe, Headgear, Bangles, Copper string belt, unknown figure,	(Lalhmingh-lua & Sarkar 2017)
Khankawn village	Mizoram	23°03.998' N, 93°16.380' E	Human faces	Bovine head	Circle, Triangle like figure, Circle inside circle with stand and a baseline, small circle	Bead necklace, Tool like figure, Cupules, Spear-head, Carved blade, Cherry shape figure, Boat like figure, Ladder? Shield? Unknown figure	
Vangchhia (Menhir site no -1)	Mizoram	23°12'11.94" N, 93°19'58.64" E	Rows of humans, one main figure holding spear and wearing a head dress	Horn of Mithun, deer (<i>Cervus axis</i>), bird, fish, monkey (<i>Cercopithecidae</i>), other animals	Circle	Spear, gun, smoking pipe, necklaces	(Nayan & Singh 2022)
Vangchhia Menhir Site no. 2	Mizoram	23°12'15.9" N 93°19'43.1" E	Human figure	Mithun, bird	Circle with a cut through the radius	Shield, spear	
Vangchhia Menhir Site no. 3	Mizoram	23°12'0.7" N 93°20'30.8" E	Human figure	Mithun, fish, turtle, moorhen (?), giant squirrel (?), deer, and lizard (?)	-	Spear, shield	
Vangchhia Petro-glyph I	Mizoram	23°11.8" N 93°20.847" E	Rows of human figures	Mithun head, rows of animal	-	Ladder, necklace, bows	
Sazep Village	Mizoram	23°16'00.66" N; 93°18'01.44" E	Human figure in standing and squatting position	mithun heads, birds, deer, elephant, tiger (<i>Panthera tigris</i>), snake (<i>Serpentes</i>)	Circular disc	Ladder like figures, shield	(Singh 2022)
Lianpui	Mizoram	-	Decapitated human head	Mithun heads, birds, horn-bill (<i>Buceros bicornis</i>), tortoise (<i>Testudo graeca</i>), big fish, deer	-	Spear, necklace, smoking pipe, beer pot, roman script, shield, celt type weapons, ladle, gongs, sword, a forked post	
Lung Ziak Tlang	Mizoram	-	Rows of human figures, prominent human figure hold weapon in his hand	Fish, birds, animals,	-	Sword, gun powder cover/horns, shields, necklaces, gong, cupules	(Jenla 2017)
(Churra Lung) Sailulak village	Mizoram	23°07.436' N; 93°08.71' E	Two rows of human heads, human figure holding a spear in the right hand and left-hand rest on the head of another smaller human figure	Seven Mithun heads, snake, lizards, monkey, unidentified animals, two horses	Circle	Gong	
(Ui Lung) Cherhlun Village	Mizoram	22°59.523" N; 93°05.594" E	Human head, human figure holding spear in the right hand and left hand in 'akimbo' position, rows of human figure	Rows of Mithun head, horse	Earrings, necklace, gongs, two spouted jars	-	

<i>Site Name</i>	<i>State</i>	<i>Geo Coordinates</i>	<i>Anthropomorphic</i>	<i>Zoomorphic</i>	<i>Geometric</i>	<i>Others</i>	<i>Reference</i>
Salangthel	Manipur	93°31'40.05" N; 24°23'09.33" E	Pair of footprints, female genital organ	-	-	Circular depressed marks	(Singh 2021; Devi 2020)
Chassad Kholui	Manipur	24°11'53" N; 93°44'3" E	Human figure holding a jar, human figure	Mithun, elephant, tiger, wild boar, bear	-	-	(Haokip 2021)
Singat	Manipur	24°08'55" N; 93°34'50" E	Human figure holding a piece of stone, weapons, male figure riding a horse and buffalo, male figure, in the standing position and holding a weapon along with female and children.	Deer, dog, pregnant buffalo, ele- phant, wild boar, birds, scorpion, dinosaur like creature, tiger, skull of Mithun and or wild buffalo	-	Roman scripts, gun, gong	
Pallong	Manipur	-	Pair of footprints	-	-	-	(Singh, 2020)
Tameng- long Khunjao	Manipur	-	-	Buffalo heads along with the horn	-	Counting symbols, gong	
Phalong Namkao	Manipur	-	Human figurines, human head/skull	Birds, snake	Line drawing	Bengali script with numbers	
Khoupum (*)	Manipur	-	Footprint	Buffalo horn	Circle, concen- tric circle vertical line; game board	wine jar, gong, count- ing symbol, Sword, ornament, flower, Spear, sword, carrying basket	Present study
Tharon (*)		-	Human figure, human figures in row	Buffalo, pig and Mithun head	Star, trapezoid, parallel and vertical line, circle, rectangu- lar figure, square figure	Spears, English script, labyrinth,	

(' - ' =Not available)

Conclusion

The comprehensive fieldwork undertaken in the western region of Manipur provides invaluable insights into the cultural and historical significance of megaliths in the lives of the local communities. Beyond their role as historical markers, these megaliths are deeply embedded within the social and cultural fabric of the region, serving as symbols of community identity, historical memory, and socio-religious practices. The petroglyphs on these megaliths offer a unique window into their creators' artistic expression and cognitive sophistication, reflecting a rich tapestry of local myths, beliefs, and historical narratives. The comparative analysis of petroglyphs across North East India reveals similarities and distinctive variations, underscoring the diverse cultural landscapes and historical experiences of the ethnic communities in this region. Such variations highlight the influence of local ecological conditions, social structures, and cultural interactions over time.

However, the ongoing challenges of environmental degradation and human interference pose significant threats to these megalithic sites, jeopardising their physical integrity and the cultural and historical knowledge they hold. Therefore, it is crucial to enhance local engagement and education concerning the value and preservation of these megalithic structures to ensure they continue to serve as a bridge between past and future generations, fostering a deeper appreciation and understanding of the region's rich heritage. This preservation effort is about saving stones and maintaining the continuity of cultural memory and identity that these megaliths embody.

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Competing Interest

The authors have no competing interest to declare

References

- Bednarik, R. 1998. The technology of petroglyphs. *Rock Art Research*, 15, 23–35.
- Bezbaruah, D. & Devi, G. 2016. Rock Engravings and Sculptures of North Guwahati, Assam. *Ancient Asia*, 7.
- Bezbaruah, D. 2004. *Megalithic Remains in Karbi Anglong District: A study in the context of Karbi Culture*. Unpublished PhD Thesis, Gauhati University.
- Brown, R. 1874. *Statistical Account Of Manipur*. K.M. Mittal, Delhi.
- Choudhury, P. 1959. *The History of Civilisation of the people of Assam to the 12th century A.D.* Guwahati: Spectrum publications.
- Deori, N., Hassan, C., 2019. An investigation on the decorative monolith vestiges of Dima Hasao with special reference to Khobak. In: Kouli, D.R., Das, P. (Eds.), *Archaeological Heritage of South Asia*. Directorate of Archaeology, Government of Assam, Guwahati, pp. 166–172.
- Devi, L. K. 1988. *A study of archaeology in Manipur since prehistoric times* Unpublished PhD Thesis, Manipur University.
- Devi, P. B. 1993. *Studies on the Megalithic Remains of Manipur* Unpublished PhD Thesis, Gauhati University.
- Devi, P. B. 2011. *The Megalithic Culture of Manipur*, Agam Kala Prakashan.
- Devi, P. B. 2017. Concept of Megalithism in the 21st Century Archaeology of India. *Sociology and Anthropology*, 5, 719–731.
- Devi, P. B. 2020. Rock Art in Manipur: With Reference to Ruangmei Tribe In: Malla, B. L. & Thakuria, T. (eds.) *Rock Art Heritage of North East India* New Delhi: IGNCA.
- Godwin-Austen, H. H. 1872. On the Stone Monuments of Khasi Hills Tribes. *Journal of the Royal Anthropological Institute*, 1, 122–143.
- Gogoi, S. 2019. *Megalithic traditions in Arunachal Pradesh* Unpublished PhD Thesis, Rajiv Gandhi University.
- Gurdon, P. R. T. 1914. *The Khasis*, Macmillan.
- Haokip, D. 2021. The Petroglyphs of Indo-Myanmar Frontier. *Ancient Asia*, 12.
- Hodson, T. C. 1911. *The Nāga Tribes of Manipur*, Macmillan and Company, limited.
- Hutton, J. 1923. Carved Monoliths at Jamuguri in Assam. *Journal of Royal Anthropological Institute of Great Britain and Ireland*, 53, 150–159.
- Hutton, J.H. 1926, 'A Carved Stone at Kigwema in the Naga Hills', *Man*, vol.26, p.74.

- Jameel Hassan Al-Najjar (2022). The Impact of Concentrated Ownership on Market Value Indicators and Agency Costs in Financial Institutions listed on the Palestine Stock Exchange. *International Journal of Auditing and Accounting Studies*. 4 (1), 21-45.
- Jamir, T. 2004. Megalithic Burial Tradition Of The Nagas (With Special Rference To The Angami And The Chakhesang Nagas): An Ethnoarchaeological Perspective. *Bulletin of the Deccan College Research Institute*, 64, 411-414.
- Jamir, T. 2015. Death Memory and Society: An Ethnoarchaeological study of Angami Mortuary Practices. In: Basa, K. K., Mohanty, R. K. & Ota, S. S. (eds.) *Megalithic Traditions in India: Archaeology and Ethnography* Aryan International.
- Jamir, W. 1998. Megaliths in Nagaland. *Purattatva*, 28, 104-111.
- Jayasuriya, K.S. (2023). Tracing the Ancient Trade route from Rājagriha to Tamralipti during the period of 3rd Century BCE to 6th Century CE. *Journal of History, Archaeology and Architecture*, 2: (2), pp. 121-138.
- Jenla, A. 2017. The Memorial Stones or Monoliths of Mizoram as Rock Art and its Stipulation. In Mala B. L. and Bezbaruah D. (Eds.), *Cultural Ecology Prehistory and Ethno-Archaeological Context of Indian Rock Art* (pp. 69-81). Indira Gandhi National Centre for the Arts and Aryan Books International.
- Kamei, G. 2004. *The History of Zeliangrong Nagas: From Makhel to Rani Gaidinliu*, Guwahati: Spectrum Publication.
- Lalhminghlua & Sarkar, A. 2017. A Short Report on Megaliths and Petroglyphs on Natural Rock Surfaces from Farkawn and Khankawn Villages, Champhai District, Mizoram, India. *Ancient Asia*, 8, 1-13.
- Malsawmliana. 2016. *Megalithic Monuments of Mizoram*: New Delhi: Research India Press.
- Malsawmliana. 2019. A Typological Classification of Megaliths of Mizoram. *Journal of Neolithic Archaeology*, 5, 125–134. <https://doi.org/10.12766/jna.2019S.8>.
- Malsawmliana. 2020. Engravings on Megaliths in Mizoram . In B. Malla & Thakuria (Eds.), *Rock Art Heritage of North East India* (pp. 97–106). IGNC.
- Manibabu, M. 1990. Megalithic monuments of Manipur. *Paper presented in the Second Manipur Science Congress, Manipur University*.
- Manibabu, M. 2019. Megaliths, Materiality and Meaning. In Q. Marak (Ed.), *Megalithic Traditions of North East India* (pp. 91–120). Concept Publishing Company Pvt. Ltd.
- Marak, Q. 2012a. Megaliths of North-East India. In: Subba, T. B. (ed.) *North-East India: A Handbook of Anthropology*. Orient Blackswan.
- Marak, Q. 2012b. Megaliths, types and its living traditions among the Jaintias of Meghalaya, India. *Bulletin of the Indo-Pacific Prehistory Association*, 32, 45-53.
- Marak, Q. and Jangkhomang 2012. The “Sacred Stones” of Nangbah: A post-processual cultural interpretation of megaliths. *Journal of Social Sciences, Humanities & Literature*, 2: 62-77.
- Mawlong, C. A. 2004. Megaliths and social formation in KhasiJaintia Hills. In: M. Momin and C. A. Mawlong (eds.), *Society and Economy in North-east India*, pp. 35-57. vol. 1. Regency Publications: New Delhi.
- Mawlong, C.A. 2009. Christianity and megalithic tradition in the Khasi-Jaintia Hills: A preliminary study of the processes of deculturation and enculturation. In: T. B. Subba, J. Puthenpurakal and S. J. Puykunnel (eds.), *Christianity and Change in Northeast India*, pp. 194-202. Concept Publishing Company: New Delhi.
- Meitei, A.K. and Marak, Q. 2013. A Study on Megalithic Burial from Jaintias Hills, Meghalaya. *South Asian Anthropologist*. 13(2): 157-166.
- Mepusangba & Changkiri, Y. 2019. Megalithic Monuments of Nagas: An Ethnographic Study. *Journal of Neolithic Archaeology*, 73–92.
- Mills, J. P. & Hutton, J. H. 1929. Ancient monoliths of north Cachar. *Journal of Asiatic Society of Bengal*, 25, 185-300.
- Mitri, M. 2016. *The Living Megalithic culture of Khasi-Jaintia Hills, Meghalaya*, Don Bosco Publications, Don Bosco Centre for Indigenous Cultures.
- Mitri, M., Jamir, T., Mepusangba, Syiemlieh, H. J., Darnei, L., Thakuria, T., & Kharpuri, L. 2022. Recent research on the stone jars of Northeast India: Evidence from East Jaintia Hills of Meghalaya. *Archaeological Research in Asia*, 31, 100393. <https://doi.org/10.1016/j.ara.2022.100393>.
- Mohammed, B., & Isiksal, A. (2022). The Relationship between Capital Structure and Bank Performance of listed Banks of Turkey under IFRS Adoption. *Asian Journal of Economics and Finance*. 4(1), 1-18.

- Murugan, K. (2021). Goods and Service Tax and Micro, Small, Medium Enterprises in Tamil Nadu. *Indian Journal of Applied Economics and Business*, Vol. 3, No. 2, pp. 211-219.
- Nayan, S., & Singh, M. J. 2022. IJA. *Indian Journal of Archaeology*, 7(1), 53-84.
- Philip, M. 2017. *A Study on the Megalithic Monuments of the Senapati District of Manipur*. Unpublished PhD Thesis, Manipur University.
- Piku, T., & Meitei, A.M. (2022). Archaeological Works of Arunachal Pradesh, India. *South Asian History, Culture and Archaeology*, 2: 2, pp. 219-227.
- Pranjit Nath & Jhimli Bhattacharjee (2023). Urbanisation and Slum Growth in Assam. *SAARC Journal of Social Science*, 1: 1, pp. 31-46.
- Rim Bahloul (2021). Inflation and Unemployment Relationship within Phillips Curve in Tunisia. *Indian Journal of Economics and Financial Issues*, Vol. 2, Nos. 1-2, pp. 23-29.
- Sanathana, Y. S., & Hazarika, M. 2019. Archaeological Remains of Rajaduar Area in North Guwahati, Assam. *Ancient Asia*, 10.
- Sharma, S. 2017. The People, the Megaliths of Cherrapunjee. *Journal of Heritage Management*, 2(1), 76–88.
- Singh, H. 2020. Research on Petroglyphic Evidences on Megaliths of Manipur. *International Journal of Research and Analytical Reviews*, 7(3), 437–453.
- Singh, O. K. 1993. *Stone Age Culture of Manipur*. Unpublished PhD Thesis, Manipur University.
- Singh, O.P. 2021. Preliminary Archaeological Survey in the Salangthel Hill in Manipur, India. *Ancient Asia*, 12: 17, pp. 1–10. DOI: <https://doi.org/10.5334/aa.220>.
- Singh, S. S. 2019. New Discoveries of Petroglyphs in Vangchhia: A Preliminary Study. *Journal of Neolithic Archaeology*, 135–144.
- Singh, S. S. 2022. Hero stones and other archaeological remains of Lianpui Mizoram. *Journal of History, Art and Archaeology*, 2(1), 53-62.
- Singh, S. S., Jamir, T., & Thakuria, T. 2022. Preliminary investigation on the stone Jar site at Dubungling, Dima-hasao District, Assam.
- Sk Mashudur Rahman (2021). Protection of Natural Resources and Knowledge of Indigenous Fishermen Communities in Bangladesh: Adopting Saemaul Development Model. *Asian Journal of Economics and Business*, Vol. 2, No. 2, pp. 145-166.
- Sonawane, V. H. 2017. Rock Art of Northeast India: Some Observations. In: Mala, B. L. & Bezbaruah, D. (eds.) *Cultural Ecology Prehistory and Ethno-Archaeological Context of Indian Rock Art*. Indira Gandhi National Centre for the Arts and Aryan Books International.
- Vasa D and Jamir T. 2020. Observations on Some Unique Rock Art Features of Nagaland. In Mala, B. L. and Thakuria, T. (Eds.), *Rock Art Heritage of North East India* (pp. 37-43). IGNCA, New Delhi.
- Vikas K. Verma (2023). Mediterranean Trade in Early Tamil Region – A Study of the Archaeological Evidence, *Journal of South Asian Research*, 1: 2, pp. 111-134.
- Watt, G., 1887. The Aboriginal Tribes of Manipur. *The Journal of the Anthropological Institute of Great Britain and Ireland*, 16, pp.346-370.
- Wunderlich, M., Jamir, T., Müller, J., Rassman, K. & Vasa, D. 2021. Societies in balance: Monumentality and feasting activities among southern Naga communities, Northeast India. *Plos one*, 16, e0246966.