Abstract: The village of Makhel in the northeastern state of Manipur, India, is considered as the place of origin or a transit point during the migration of a few Naga communities. Colonial records, stone monuments, and oral stories collectively support the origin and migration narrative. However, a more systematic investigation of the archaeological remains has yet to be done in this area. In this paper, I present the results of an archaeological survey conducted in Makhel and surrounding areas, covering an area of approximately 36 km². The survey documented 313 stone monuments, comprising menhirs, fallen menhirs, slab graves, rectangle stone platforms, sacred stones, and a destroyed site. Mapping has revealed that they are concentrated in the habitation areas and the forest, particularly areas on the hilltop that are readily accessible, such as roadsides and footpaths. A detailed analysis of monuments shows the variability in size, indicating differential labour involvement during construction and choices of building monuments. The survey also revealed structural similarities of monuments in Makhel and other areas/villages in the Naga Hills, which will be useful for researchers engaging in the archaeological remains.

Keywords: Archaeological survey, Mao Nagas, Megaliths, Makhel, Manipur, Oral history

Introduction
The Naga communities in Northeast India, particularly those in the Tenyimi group like the Mao, Maram, Poumai, Chakhesang, Angami, Liangmai, Tangkhul, among others, trace their origin to Makhel, a Mao Naga village located in the Indian state of Manipur. The origin narrative is derived from the stories of settlements and migrations, stone monuments, and ancestral trees, mainly pear and
banyan trees in Makhel and the surrounding areas (Shimray 1985; Wettstein 2012; Longkumer 2019). Several theories about the origin of the Nagas have been proposed, including the claim of indigenous origin and migration from places such as Mongolia, China, and Southeast Asia, using oral stories and theories put forth by colonial officials and ethnographers (Hutton 1921: 6-9; Mills 1922: xvi-xxi; Wettstein 2012: 213-238). There is also a discussion over whether the Nagas originated in Makhel or came from elsewhere and settled in Makhel before dispersing to form various communities in the Naga Hills (Shimray 1985; Wettstein 2012; Nepuni 2012).

Despite the historical importance of this area among the Nagas, not much archaeological survey has been undertaken yet. A few ethnohistorical studies offer passing remarks of a standing stone and oral stories that the three brothers erected it before they departed in various directions, and the pear tree planted by the Nagas before they migrated to various areas (Nepuni 2010; ManiBabu 2019; Irene 2020). However, the general lack of archaeological research in Northeast India remains a challenge to addressing such issues, and the need for field-based research has been underscored in recent scholarship (Hazarika 2017; Jamir 2022). Against this backdrop, an archaeological survey was conducted in 2020-2021 in Makhel village and the surrounding areas with the active support of residents. The survey had two objectives: a) to document and bring to light the nature of archaeological remains and b) to map and examine the spatial configuration of archaeological remains. The first phase of the survey was conducted in 2020, and a more comprehensive phase took place in 2021.

**Archaeological Survey in the Indian Subcontinent**

Although the Indian subcontinent has a long history of archaeological research, the application of systematic surveys is a relatively new concept (Sinopoli and Morrison 2007: 23). Previous surveys were referred to as “village-to-village” surveys, wherein archaeologists explored or surveyed known to unknown villages/areas (Shaw 2007: 64-66; Barman 2017: 2). While cost-effective and convenient, such surveys are, by nature, limited in scope, failing to detect material remains systematically in the survey areas and address issues beyond the research questions (Sinopoli and Morrison 2007: 23-24). Given these limitations, positive criticism has been raised by many to apply systematic data collection methods and new technologies to archaeological surveys in India (Hawkes et al. 2020: 4). Therefore, archaeologists have adopted systematic survey methods in the past two decades by defining and dividing the survey area into grids based on feasibility, the nature of the research questions at hand, and the topography of the survey area (Sinopoli and Morrison 2007; Arjun et al. 2019; Bauer and Johansen 2019). The survey areas are then systematically covered by transect walking, which ensures maximum detection of archaeological remains (Morrison 2009; Kadambi 2011).

These methods allow systematic documentation of archaeological records, including even the smallest features that may go unnoticed in traditional survey methods, while also providing a sense of the coverage and areas left out by the survey, such as hilly terrain, cultivation, and habitation areas (Bauer 2015; Bauer and Johansen 2019; Hawkes et al. 2020). Archaeologists have also applied such survey methods over large areas in the form of multi-period regional surveys, covering several square kilometers in South and Central India, to address complex issues, including the interaction of humans with the surrounding environments (e.g., Morrison 2009; Arjun et al. 2019; Hawkes et al. 2020; Casile 2021). While such regional surface surveys are useful and generate superior datasets of a region, they are not feasible for all, as they require extraordinary funding and a long period of commitment in the field. However, such surveys also inspired low-budget and short-duration surveys in recent studies covering relatively small areas that adopt the approaches of systematic surveys (Sugandhi 2008; Kadambi 2011; Arjun 2016).
Turning to the situation of survey archaeology in Northeast India, only a few studies have adopted the approach of systematic surveys (e.g., Barman 2017). Therefore, it is a new concept in this region. That said, recent scholarship has recognized and advocated the need for integrating innovative survey methods and new technologies into archaeological surveys in this least-explored region in India (Jamir and Hazarika 2014). In the Naga Hills of Manipur, despite several decades of research, survey archaeology has not seen significant development. The surveyors usually go from a known village/area to an unknown village/area, using local knowledge for archaeological and ethnographic explorations (Devi 2011; Philip 2017). Such methods, however, have merits in this region, where thick vegetation and difficult terrain have posed significant obstacles to adapting systematic survey methods. Furthermore, in the absence of extraordinary funding and considering the regional challenges mentioned above, the integration of local knowledge into archaeological surveys has recently proven exceptionally useful in recent studies for identifying and documenting archaeological remains (e.g., Jamir 2014; Singh 2023).

The Survey Area

The village of Makhel is located in the Senapati district of Manipur (Fig. 1 and Fig. 2). The Mao Nagas inhabit the village that belongs to the Tibeto-Burman group. The surrounding villages, namely Shajouba, Kaibi, and Tobumai, and the town of Tadubi are also inhabited by the Mao Nagas. The settlement pattern in these villages and Tadubi town is compact and primarily concentrated on the hilltop ridges. The Mao Nagas in the surveyed areas speak a dialect known as Maola, which belongs to the Tibeto-Burman language family. Makhel is divided into three wards/sectors (khel) settled by three major clans: Ozhuomai, Choroshumai, and Kapemai. The village chief remains the nominal head of the village. The immediate surrounding villages of Makhel also have chiefs as nominal heads, and the villages too are divided into wards. Apart from the people in Tadubi town, which serves as a
small marketplace in the region, most of the people in the survey area rely on farming as their source of livelihood.

**Previous Studies**

Hodson (1911) may be the first to record the origin stories of Nagas in Makhel and also a monolith. For instance, he recorded a standing stone at Makhel (he noted as “Maikel”) that was considered by the Nagas as “the place from which the common ancestors emerged from the earth” and “the centre from which migration took place” (Hodson 1911: 13, 189). After a century, Philip (2017) conducted an archaeological survey documenting the monuments in Makhel and surrounding areas. He claims to have documented 17 menhirs (monoliths), 19 small menhirs, and 8 dolmens in locality 1 and 2 alignments (comprising 8 menhirs), 4 avenues (comprising 29 menhirs), and 2 stone seats in locality 2 (Philip 2017: 126-127). Though these previous works documented megaliths in this area, a more systematic and regionally applicable survey was expected to lead to better documentation and mapping of the monuments overlooked by the previous surveys.

**The Survey Methods**

The survey covered about 6×6 km² (Table 1). Makhel was made the center, and about 2.9-3.1 km were expanded in all cardinal directions (i.e., north, south, east, and west) as the extent of the survey area based on the feasibility and local knowledge. It includes the villages of Shajouba, Kaibi, Tobumai, and Tadubi town, and a large portion of forest (Fig. 3). The employed methods are also similar to
the survey methods adapted in surveying megaliths in the Naga Hills of Manipur (e.g., Singh 2023). Some concepts of the systematic survey discussed above, such as defining the extent of the survey area (Sinopoli and Morrison 2007; Kadambi 2011; Hawkes et al. 2020), were adapted although gridding and transect walking were not feasible considering the thick vegetation and steep slopes in the survey area.

The semi-structured and open-ended interviews with residents were conducted in the *Meitei* language, the lingua franca among the Nagas in Manipur. The rationale for conducting interviews was to gain knowledge of archaeological remains in the survey area. In recent studies, such methods have also proven fruitful in detecting archaeological remains in the Naga Hills (Jamir 2014; Singh 2021). Field-walking was conducted with the support of locals to manage time and resources better. In so doing, thick forests were walked following the footpaths. The survey team surveyed the habitation areas, terraced fields, plain hilltops, and areas around forest footpaths. The dimension and GPS location of each archaeological feature were recorded and assigned codes (Table 2). An isolated monument or cluster of monuments were recorded as individual sites, and the shape, size, and orientation (in the case of menhirs) of monuments were recorded. The volumes of menhirs and rectangle stone platforms were also recorded.

**Documentation**

The survey documented 313 monuments comprising menhirs, menhirs (raised), fallen menhirs, slab graves, slab graves (raised), rectangle stone platforms, and sacred stones (Table 3). A banyan tree, and a pear tree, considered sacred trees by residents, and a destroyed monument site were also recorded. The majority of the recorded monuments are menhirs (n=249 or 79.5 % of the monuments). The detailed documentation of each monument and site can be found in the supplementary file. However, a general overview of the monuments is provided below.

**Menhirs**

Most of the menhirs documented by the survey are in good erect condition (Fig. 4a). They are quarried stones. Those located in the habitation area are also in good condition, despite disturbances caused by

<table>
<thead>
<tr>
<th>Stone monuments</th>
<th>Descriptions</th>
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</thead>
<tbody>
<tr>
<td>Menhir</td>
<td>A single stone block erected vertically on the ground (Fig. 4a).</td>
</tr>
<tr>
<td>Menhir (raised)</td>
<td>A single stone block erected on a stone platform (Fig. 4b).</td>
</tr>
<tr>
<td>Fallen menhir</td>
<td>A standing stone block or menhir, which has fallen on the ground (Fig. 4c).</td>
</tr>
<tr>
<td>Slab grave</td>
<td>A stone slab placed either on the ground over a burial or ground (Fig. 4d).</td>
</tr>
<tr>
<td>Slab grave (raised)</td>
<td>A stone slab placed above small boulders over a burial (Fig. 4e).</td>
</tr>
<tr>
<td>Rectangle stone platform</td>
<td>A rectangular-shaped stone structure raised over the ground (Fig. 4f).</td>
</tr>
<tr>
<td>Sacred stone</td>
<td>A stone that is considered sacred by the residents (Fig. 4g) and Fig. 4i).</td>
</tr>
</tbody>
</table>
habitation activities such as road construction and housing. It appears that residents may have taken care in preserving the monuments; otherwise, they would not have survived. Most menhirs show moderate signs of weathering and exposure to the atmosphere, while a few (n=26) are covered with lichen and grass. Therefore, the ones with more weathering may have been erected earlier than those with little or no weathering. Based on the observation of the monuments, it can be inferred that the menhirs (n=180) showing extensive weathering on the stone surfaces may be the oldest surviving monuments. Additionally, a few menhirs (n=20) have smooth stone surfaces resembling naturally occurring stone boulders and exhibit little or no weathering. They may have been selected from naturally occurring stones, particularly rock outcrops and river basins.

**Menhirs Erected on the Stone Platforms**

The survey documented a specific type of menhirs erected on rectangular stone platforms (Fig. 4b). At a few sites, they are clustered together on a large stone platform, while in other instances, each menhir is erected on its separate stone platform. All of these menhirs, placed on stone platforms, are made

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**Table 3: The Monuments documented by the survey.**

<table>
<thead>
<tr>
<th>Stone monument</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Menhir</td>
<td>155</td>
</tr>
<tr>
<td>Menhir (raised)</td>
<td>94</td>
</tr>
<tr>
<td>Fallen menhir</td>
<td>15</td>
</tr>
<tr>
<td>Slab grave</td>
<td>21</td>
</tr>
<tr>
<td>Slab grave (raised)</td>
<td>8</td>
</tr>
<tr>
<td>Slab grave (raised)</td>
<td>8</td>
</tr>
<tr>
<td>Rectangle stone platform</td>
<td>8</td>
</tr>
<tr>
<td>Sacred stone</td>
<td>12</td>
</tr>
</tbody>
</table>

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**Figure 3: The extent of the survey area. (Illustration: The author)**
of quarried stones and have a blackish appearance. In most cases, the stone platforms are elevated a few centimeters above the ground and constructed by arranging small stone boulders in a rectangular shape. Since the menhirs are raised above these stone platforms, they are more prominently visible than those erected directly on the ground. Therefore, constructing such menhirs on stone platforms would have required more labour than those erected on the ground. Despite some partial disturbances to the stone platforms, all the menhirs raised on stone platforms remain in a sturdy erect condition.

**Fallen Menhirs**

The survey documented fallen menhirs near the roadsides and in the forest (Fig. 4c). Some (n=4) are partially buried in the ground, indicating that they may have been in that position for an extended period. The presence of fallen menhirs near recently cut roads suggests that some might have been dismantled during road cutting and expansion. It is also possible that natural factors, such as earthquakes, may have caused a few of these menhirs to topple onto the ground, as Northeast India is well known for frequent seismic activities.

**Slab Graves**

The slab graves are located both in the habitation areas and near a recently constructed roadside in the forest. The slab graves are made of unquarried stones, as no signs of quarrying are visible on the
stone surfaces (Fig. 4d). Most slab graves display minimal weathering, indicating they have not been exposed to the atmosphere for a long time. Therefore, they may have been constructed only recently. Although they are observed to be in their original context, habitation and road construction activities may have caused disturbances around the monuments.

**Slab Graves Raised on the Stone Platforms**

The slab graves consist of unquarried stones and are in good preservation (Fig. 4e). They may have been selected from the naturally occurring stone at the river bed. This is evident from their smooth surfaces, similar to the naturally occurring stones, and their limited signs of weathering. However, upon examining the stone platforms, some raised slab graves seem older. It is noticeable that a few of them have been renovated or reconstructed recently by the residents, as they are located near recently cut roadways.

**Rectangle Stone Platforms**

The rectangle stone platforms are made of quarried and unquarried stones that form an enclosed rectangular space filled with soil and raised a few inches or meters above the ground (Fig. 4f). They are the largest monuments recorded by the survey and are still in their original contexts. Considering their large size, a large workforce would have been required to build them. Each rectangle stone platform has stone stairs that lead to the top. During the survey, it was noticed that residents often sit on these structures in the morning and evening. The residents may regularly maintain and renovate the monuments within the habitation areas, as fresh, un-weathered stone boulders are placed atop the weathered stone boulders. On the other hand, the rectangle stone platforms in the forest show signs of partial damage and have been left unused for a considerable period.

**Sacred Stones**

The sacred stones comprise of various structural forms, such as menhirs and slab graves (Fig. 4g-4h). Residents in the survey area prohibited people from touching such stones as they were considered sacred. They are unquarried stones and exhibit weathering marks on the stone surfaces. This gives the impression that they were erected a long time ago. A few oral stories associated with stone monuments, among others recorded by the survey, are as follows. There is a sacred stone in the habitation area of Makhel known as Pinoumau Ksii Tamara Tu (the departure stone of three brothers). According to local legend, three brothers resided together in Makhel in the past. Due to overpopulation in Makhel, the brothers decided to disperse and establish their homes in different locations. Before their departure, they agreed to hold farewell feasts at their respective homes and invite each other. The eldest brother, Asupfualapha, cooked a rooster for his siblings; the middle brother, Tuttowo, cooked fish, and the youngest brother, Khephio, slaughtered a small *mithun* (*Bos frontalis*). After the feasts, the three brothers erected a monolith to commemorate their departure from Makhel. Informants report that the monolith fell to the ground during World War II. However, residents claim that they reinstated it to its original location. It was said that the monolith bore engravings of a bull, a cock, a fish, a *mithun*, a shield, and a tiger, as well as some footprints and inscriptions. Unfortunately, these markings were not visible during the survey.

There is also another sacred stone located near a recently constructed roadside in the forest south of Makhel known as Okho Mate Tu. Residents assert that after engaging in community fishing events, the fish caught would be placed on top of this monument, doubling the quantity with its supernatural power. It was believed that when fish were placed on this stone slab, each member of the fishing group would return home with their containers filled with fish.


**Destroyed Site**

A destroyed site where broken pieces of menhirs are piled up is located near the Church construction site in Shajouba (Fig. 4i). The expansion of the Church compound and road cutting at the site may have destroyed menhirs originally located near footpaths. Based on the observation of menhirs, it is unclear how many have been destroyed. The clustering of large pieces of destroyed menhirs suggests that many have been demolished.

**Other Results**

Out of 249 menhirs documented by the survey, the majority of them are oriented in the east-west (n=168) followed by north-south (n=50), northeast-southwest (n=23), and northwest-southeast (n=1) directions. Therefore, people preferred to erect menhirs in the east-west direction, while erecting them northwest-southwest direction was the least preferred. These inferences suggest that monoliths were not oriented randomly but, in particular, in directions based on the early belief system and how they should be oriented. This result was also confirmed by the informants during interviews, stating that traditionally, monoliths were erected in east-west and north-south directions.

The representation of the volumes of menhirs (n=249) shows an asymmetric or right-skewed distribution (Fig. 5). Most menhirs have a volume between 0.35 m³ and 1 m³; however, a size of 1.3 m³ is not uncommon. A volume of 1.85 m³ and less than 0.2 m³ is also rare. Overall the volumes of menhirs are not distributed normally. This implies that the shapes and sizes of menhirs are unique, and smaller and larger menhirs are not preferred. Furthermore, the size variations of menhirs are a pointer to the differential labor involved in a monumental building and the choices to build different sizes of the menhirs.

![Figure 5: Histogram showing the volumes of menhirs. (Illustration: The author)](image_url)
Ancient Asia

The dataset of the rectangle stone platforms (n=8) shows variability in volumes (Fig. 6). The largest rectangle stone platform (S Site 6(1)) measures a volume of 66.1 m$^3$. The smallest one (Site 14(5)) measures a volume of 0.59 m$^3$. But most rectangle stone platforms (n=6) have between 0.59 m$^3$ and 13.8 m$^3$ volumes. Therefore, there is variability in the sizes and volumes. No two rectangular stone platforms have similar shapes and volumes. This inference suggests that differential labor efforts were involved in constructing rectangle stone platforms and the choice to build different forms of rectangle stone platforms.

Spatial Distribution of Stone Monuments

Although the exact number of monuments that may have been destroyed due to habitation expansion, growth of Tadubi town, and road construction activities remain unclear, the mapping of surviving monuments across the hilly landscape has revealed remarkable patterns. First, the monuments are primarily concentrated within habitation areas and the surrounding forest, with the majority located in the forest (Fig. 7-9). Within the forest, the concentration is particularly noticeable in the southern areas of Makhel, indicating active human activity in this area. Mapping also revealed that clusters of monuments are found on the lower slopes, near footpaths and recently built roads. Residents state that roads in the survey area have been constructed relatively recently, often following existing footpaths, destroying some of these footpaths.

The distribution pattern suggests that the monuments are predominantly situated on hilltop ridges near footpaths that are frequently used for commuting. This implies that the location selection for constructing monuments considered both the elevation of the hills and the proximity to footpaths. The clustering of monuments suggests designated areas specifically for the construction of monuments. Among the monuments, the highest concentration of menhirs, including those erected on stone platforms, are found in the forest (Fig. 7). The general distribution pattern of these menhirs reveals a clustering pattern near footpaths and early roadsides. In some cases (n=8), they are arranged in rows and columns, while isolated menhirs are relatively rare. This indicates that the desired arrangement for menhirs was either in rows or columns near footpaths. Unlike other monuments, the standing menhirs are visible while walking along footpaths or roads, suggesting deliberate placement to ensure visibility by passersby.

The sacred stones exhibit a concentration within the habitation area and the adjacent forest (Fig. 8). Upon closer examination of the distribution pattern, it is evident that only a few sacred stones (n=4) are situated within the habitation area. In contrast, most sacred stones are found in the forest, particularly near footpaths (Fig. 9). In Shajouba, the monuments and the pear tree are situated within the habitation area near roadsides. The monuments display a clustered arrangement, with no isolated monuments documented. There are no recorded instances of slab graves in or around Shajouba (Fig. 9). According to residents, the villages of Shajouba and Kaibi were established by individuals who migrated from Makhel, and the sacred stones and a few menhirs are the oldest stone structures in and around the survey area. However, it is difficult to verify such claims based on the available archaeological information.

The rectangular stone platforms are distributed across the habitation and forested areas (Fig. 9). However, most (n=5) are within the habitation area. They are utilized by residents as sitting platforms, suggesting that they may have been used similarly in the past. It is worth noting that they are constructed in locations that offer panoramic views of the surrounding landscape, including the cultivation areas, and therefore, no rectangle stone platforms could be documented on the lower slopes. It appears that those stone monuments, which are considered sacred by residents and associated with legends
Figure 6: Histogram showing the volumes of rectangle stone platforms. (Illustration: The author)

Figure 7: The distribution pattern of menhirs. (Illustration: The author)
Figure 8: The distribution pattern of sacred stones. (Illustration: The author)

Figure 9: The distribution pattern of slab graves and rectangle stone platforms. (Illustration: The author)
and supernatural powers, appear among the monuments erected in the early period as compared to
the others. Nevertheless, there is a possibility to identify some of the monuments erected in the
recent period with the support of residents — an endeavor my survey did not undertake due to time
constraints.

Discussion

While Makhel and the surrounding areas are considered the place of origin or transit point during
the migration of a few Naga communities, the available archaeological data, coupled with the survey
dataset, does not provide conclusive evidence about the origin and migration stories of the Nagas.
However, the monuments that exhibit extraordinary weathering marks on the stone surfaces indicate
that this area has been inhabited for a significant period, similar to other Naga villages where megalith
remains have been reported (Devi 2011; Philip 2017). Residents whom I interviewed claim that
this area has been settled for thousands of years. However, these claims are yet to be verified with
excavations and radiometric data.

One of the interesting results of the survey is that the structural forms of monuments such as
menhirs, slab graves, and rectangle stone platforms in Makhel also resemble those found in villages
inhabited by the Mao Nagas and various other ethnic Naga groups (Devi 2011; Wunderlich 2019),
although some variability is expressed in the shape and size of the monuments. Therefore, it is tenable
that there may have been some similarities in megalith-building traditions among the Nagas settled
in Makhel and other areas in the Naga Hills, suggesting some form of connections or affinities. This
again raises the question of whether Nagas who constructed the monuments migrated from Makhel
or if they (not all, but some) were erected by people who migrated from other areas. Based on the
survey results, it appears that in the future, conducting archaeological excavations at sites away
from the habitation areas, which are relatively less disturbed, would considerably substantiate our
archaeological understanding of Makhel and adjoining areas.

Conclusion

Based on the documentation of surviving monuments and an analysis of their spatial distribution, it
becomes evident that monuments are predominantly clustered along roadsides and footpaths within
the habitation area and nearby forest. Most of these monuments are situated on the lower slopes of
hills, away from the habitation area. They are found within and close to habitation areas, particularly
near footpaths that lead to the paddy fields. There is also variability in the shapes and sizes of these
monuments, suggesting differential labor involvement and resource expenditure in such undertakings.
As the construction of monuments among Naga communities has persisted until recent times and
continues as a living tradition (Devi 2019; Philip 2017), conducting ethnographic and ethnohistorical
investigations in Makhel and other Naga villages will also enhance our understanding of the dynamics
involved in the creation of monuments, as well as the narratives of the origin and migration of the
Nagas.

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Preliminary Results of an Archaeological Survey in Makhel Village and Surrounding Areas...


