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# Identification of the megalithic tradition based on its region and the human activity in Banyuwangi

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## Identification of the megalithic tradition based on its region and the human activity in Banyuwangi

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Abstract. This study aimed to identify the megalithic tradition in Banyuwangi which is still presents until this day to preserve the heritage of the megalithic tradition in Banyuwangi. Some relics of the megalithic tradition in Banyuwangi are damaged due to the act of looting and land conversion. This study of megalithic archeology research in Banyuwangi applied historical research procedures and literature study approach. Field observation applied in order to prove the authenticity and the credibility of the literature, and the discussions with the leaders of the region, researchers and the residents was done in order to find out their conservation efforts. The results showed that many relics of the megalithic traditions were found in Banyuwangi, namely residential caves, dolmen, menhirs, megalithic statues, manic beads and daily food producing tools of Neolithic society. The state of the heritage such as the caves are still as original as before, even some of them are remained untouched by the researcher. Meanwhile, the relics that are in the form of dolmen, menhirs and megalithic statues were damaged due to the act of looting and land conversion. The results of this study can be used as a supporting source containing the information in regards of the existence of the megalithic tradition's heritage in Banyuwangi, as well as the data for the Banyuwangi government to maintain its sustainability.

## 1. Introduction

According to the results of archaeological studies, Banyuwangi has a Stone Age culture that is important for Indonesian history. Studies of the Stone Age culture that had been carried out by researchers examined the Stone Age relics are limited only in a single location [8]. The research of the object from Stone Age culture in Banyuwangi was carried out by the Yogyakarta Archaeological Center (Balar). The Stone Age culture in Banyuwangi spread over several sites, namely the neolithic Kendenglembu and Sungailembu sites [8], the residential cave site (abris sous roche) at Alas [1] and Balak Songgon village. The site of the stone coffin (sarcophagus and menhir) are located at Malangsari Kalibaru [7] and the Kitchen waste site (kjonkenmondinger) is located at Teluk Rajegwesi and Grajagan [11].

Recently, the conditions of the megalithic sites in Banyuwangi faces threats and challenges. The first threat is people doing the act of looting of the megalithic objects due to economic purposes. The second threat is the conversion of land into agricultural land, ponds, roads and mines. Some of the megalithic relics in Banyuwangi are not well maintained; they are still in their original conditions and are underexplored. The research problem was to know where the distribution of megalithic sites in Banyuwangi based on its region and the human activities is. The researcher identified and observed the megalithic sites in Banyuwangi, and the results are grouped based on on its region, condition, and the human activities.

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This study aimed to identify the Stone Age culture at several sites in Banyuwangi that still exist until today. The results of this study can be used as the source of information for the Banyuwangi society and its surrounding areas to support the preservation effort in conserving the Stone Age culture in Banyuwangi. The results of this study are also useful for teaching materials regarding its basic competencies about identifying the pre-script culture in the surrounding area (KD. 3.4) in Indonesian history subjects' curriculum books.

#### 2. Methods

## 2.1 Heuristics

At this stage the researcher collected and looked for historical sources that were relevant to the object of the research. Data collection techniques were including research through the library, documentation and observation. The researcher collected written historical sources to obtain information, theory and data that supported the study of pre-script relics that can be found in Banyuwangi.

#### 2.2 Criticism

At the stage of criticism, researcher tried to prove the authenticity and truth of historical sources through observing, interviewing and comparing it with the studies that had the same object of study, namely the results of pre-script culture in Banyuwangi. The authenticity of the literature and the results of the study was proven through tracing the official website of the Yogyakarta Archeology Center at *kemendikbud.go.id.* 

## 2.3 Interpretation

At this stage the researcher selected the results of the source criticism process. The process of interpreting historical facts that were interrelated and had similar meaning with the study of cultural results that could be found during the pre-script period in Banyuwangi.

## 2.4 Historiography

The final stage of this research was writing. Writing based on facts arranged systematically and scientifically into a series of historical stories with the theme of pre-script cultural results that could be found in Banyuwangi.

The data were collected through literature review and articles analysis, the reports of research, and books. The oral sources were obtained from the results of interviews and discussions. The sources of objects were obtained from various findings and field observations to Kendenglembu, Sungailembu, Malangsari and Alaspurwo sites. The study of megalithic cultures used ethnographic and ethnoarchaeological approaches to explain the existence of megalithic traditions that still existed in Banyuwangi. The authenticity and the credibility of the source were tested by comparing the various results of the study with direct observation in the field to produce interrelated and meaningful historical facts to be compiled into a scientific paper of the megalithic tradition in Banyuwangi.

## 3. Results and Discussion

## 3.1 Megalithic Heritage in Banyuwangi

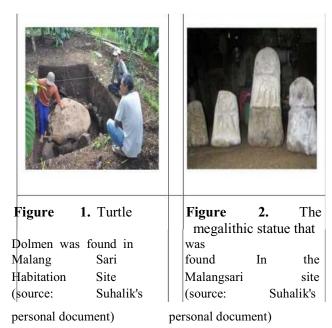
The object of some archaeological studies in Banyuwangi focused on the megalithic relics, for example, the study of the forms of dolmen, the study of residential cave, and the study of stone graves and production tools. The National Archaeological Research Center and Balar Jogajkarta conducted socialization of the findings of Kalibaru megalithic in Banyuwangi in 2018.

The Stone Age culture that was found in Banyuwangi is dolmen. The Dolmen research in Banyuwangi was conducted by the Yogyakarta Archeology Center. Based on the report of the study entitled Excavation Result of Malangsari Site, Banyuwangi "New Dolmen Data in East Java", the dolmen relic with shapes of pandhusa or stone coffins was found. Gunadi concluded that Malangsari dolmen functioned as a tomb; the conclusion was made based on the comparison of the dolmen's shape and its structure with dolmen in other regions. The discovery of dolmen in Malangsari showed the development of the community's animist belief system at that time. A dolmen is a form of public appreciation of ancestral spirits [10]. Dolmen is a tomb for people with high social status. [10]. Malangsari is a coffee plantation area owned by PT. Perkebunan Nusantara XII. The dolmen was located

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below the ground level. According to the researchers, if the presence of dolmen in Malangsari was examined thoroughly, it would become an important historical potential for Indonesian history and the Banyuwangi community as well as the identity of the Banyuwangi community.



A sarcophagus was also found at the Malangsari site. The sarcophagus was located below the surface of the Malangsari Coffee plantation (Figure 3). The sarcophagus was found opened due to the excavation by the residents. There were no skulls nor tombs found both inside the sarcophagus and the dolmen (Figure 4). There are many megalithic burial sites spread in Banyuwangi. The burial site was not only found at Malangsari, but also at Kendenglembu, Baluran Forest, and Aliyan Village, Rogojampi.



**Figure** 3. The Sarcophagus fragment on Malangsari site (source: Suhalik's personal document)



**Figure 4.** The Sarcophagus inside the Coffee Plantation Land (source: Suhalik's personal document)

The results of the archaeological research proved that Alas Purwa had caves (abris sous roche) which were believed as the temporary human settlements such as Mangleng Cave and several niches [14] At Alas Purwo settlement site, there were caves known as the Istana cave (Figure 5), Padepokan cave, Mayangkara cave (Figure 6) and Putri cave [11] Alas Purwo site in Tegaldlimo, Banyuwangi was believed as the oldest semi-nomad residential site, starting in the Paleolithic era. The Purwa term in Javanese means the origin of events. The results of archaeological research proved that Alas Purwa has caves (abris sous roche) which are believed to be temporary human

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settlements such as Mangleng Cave and several niches [14]. At Alas Purwo settlement site, there were caves known as Istana cave, Padepokan cave, Mayangkara cave, and Putri cave [11]. The distribution of pre-historic human settlement caves in Banyuwangi was also spread along the 176 Km south coast of Banyuwangi, precisely in the Rajagwesi and Grajagan Bay beach area in Pesanggaran. At Dusun Cemoro, Balak village, Songgon Subdistrict, the existence of the pre-script human resident cave was proven by the existence of the Konfrensi cave, Sumur cave, Sodong cave, and Pawon cave. Even the Pasinan cave remained hidden and untouched, which means there was no research had been conducted in it yet [11].





**Figure 5.** Mangleng Cave in Alas Purwo

**Figure 6.** Mayangkara Cave in Alas Purwo

Temu gelang site was located in Tambakrejo, Muncar (Figure 7). It was found in a good condition. The shape of Temu gelang looks like a circular stones. On a special occasion, many visitors come to Punden (terraces structure) to pray for their wishes to become true. One of the megalithic sites that could be found was Gumuk Putri (picture was taken in Muncar). Gumuk Putri looks like a pile of arranged and circular stones with a standing stone in the middle of it. This circular stone pile was used for worshiping purpose by the pre-script people in megalithic times [14]. Recently, the site was threatened by the land conversion into farms, while the government had no intention to preserve it.



**Figure 7.** Megalithic objects in Muncar



**Figure 8.** Megalithic tradition in Kendenglembu

The Neolithic culture's artifacts such as stone axes, square pickaxe stone shale, stroke stones, grindstones, milled stones, shale stones, stone slabs, red pottery, red polished pottery fragments, stone mortar, etc. which was discovered from the Excavation and Research from various institutions are all stored and well maintained in a special place in Kendeng Lembu plantation complex area.

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Figure 9: Megalithic Objects in Aliyan Village, Rogojampi



Figure 10: Megalithic objects in Aliyan Village, Rogojampi

## 3.2 Result of Identification Based on Location

The Megalithic concept possessed the following meanings, megaffflithic as a culture and megalithic as a Behavior [13]. Megalithic as a culture of objects refers to the artifacts produced by a group of people who were aware of the megalithic tradition's aspects. Megalithic as a tradition is a different behavior and cultural thing that emerged when the pre-historic people who settled in Neolithic level [13]. Meanwhile, the understanding of megalithic culture is as follows:

The culture that mainly produces structures of large stones. Megalithic also means that the great stone age of human life, at that time humans had used large stones to build various types of culture (Soekmono, 1973).

However, there were opinions that interpreted Megalithic as a large stone, which would cause a misunderstanding, because small objects also could be classified as Megalithic, if the objects were made for a sacred goal or there was an element of worshipping ancestors (Wagner, 1962: 71). The division criteria of sites based on human activities by Subroto (1981) was including; habitation sites (settlement area), slaughter sites, mining sites for tool materials, workshop/shed sites, and burial sites. (Subroto, 1981).

Table 1. The Identification results of the Biggest Site Potential in Banyuwangi by Region

No	Place/Area	Site	Sub-district	Area Status
1	Kendenglembu	Habitation	Glenmore	PT. PN XII
2	Alaspurwo	Habitation	Tegaldlimo	Protected forest
3	Malangsari	Burial	Glenmore	PT PN XII
4	Rajegwesi	Habitation	Pesanggaran	Protected forest
5	Cemoro	Habitation	Songgon	Residential
				Plantations
4	Patungrejo		Pesanggaran	
5	Tambakrejo	Burial	Mucar	Shrimp farming area
6	Trucuk	Burial	Pegondangan	PT. PN XII
7	Gunung Keraton	Burial	Glenmore	PT. PN XII
8	Gunung Sanen	Burial	Kalibaru	PT. PN XII
9	Pesanggaran	Workshop/shed	Pesanggaran	Protected forest
10	Aliyan	Habitation	Rogojampi	Resident Housing
				area
11	Baluran	Habitation, Burial	Wongsorejo	Protected forest
12	Grajagan	Habitation	Tegaldlimo	Tourist attraction

Source: Authors' Personal Documents

From the results of site identification based on region and activity, Banyuwangi had archaeological potential in the form of megalithic traditions. The megalithic traditions were spread evenly throughout the

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Banyuwangi region. In the southern areas, there are habituation sites such as in Pesanggaran, Sungailembu and around Kalibaru's water source. Habitation sites that were spread in Pesanggaran were hidden and underexplored. The information of the existence of Kjokenmodingger artifacts in Rajegwesi Bay was obtained from the local community and no further research has been conducted. Some artifacts in Pesanggaran were located in the protected forests of Meru Betiri and in residential villages. The existence of a gold mining project in Tumpang Pitu threatened the existence of the megalithic sites that were located around the mine. The residents who carried out illegal mining created hundreds of holes with depths more than 30 meters, which causing damage to the area.

The distribution of the megalithic traditions spread from Jember, Kumitir, Glenmore, to Pesanggaran. The areas contained the large potential of Megalithic, which experienced a serious threat of looting and destruction by the people, motivated by economic interests, also by the lack of understanding about the megalithic culture existence. This megalithic tradition is important for Indonesian history and the identity of Banyuwangi community. The illegal gold mining and logging covered the act of looting.

Many megalithic sites become a target of looting. The dolmen and sarcophagus were the examples because it usually contains beads, gold jewelry, gold crowns, and other valuable objects. The results of the dolmen and sarcophagus studies at Malangsari burial site showed that several dolmen and sarcophagus had been demolished. The evidence was shown by the fact that there were no tombs nor corpses found in the dolmen. Some dolmens were found to be incomplete due to treasure looting by local residents. Gunadi reported that residents kept digging treasure to find out the presence of dolmen or gravestones in the ground. Suhalik added that the looting of stone graves by local residents occurred some time ago, some menhirs, beads, and stone statues were ready to be sold by residents but successfully called of by Suhalik (Figure 2).

The looting activities at 2012 in Trucuk site, contained 12 large trucks of megalithic artifacts that were sold to Bali [11] At the Trucuk burial site, there were menhirs, megalithic statues and other megalithic objects, which valued highly. Therefore, it attracted people to sell it to collectors.

## 3.3 Identification Based on the Human's Activities

Some of the megalithic relics in Banyuwangi were in a good and original state. The example of a megalithic artifact that was still intact and original was the residential cave (abris sous roche). Banyuwangi has many pre-historic residential caves. These pre-historic residential caves were located in Alas Purwo Protected Forest area and Cemoro, Balak. The condition of the caves in Alas Purwo were still original and well maintained because it was located in the protected area. The people used this cave for rituals and hermitage area. Residential cave in Cemoro were hidden, but it was believed to be a prehistoric residential cave.

No	Sites Name	Location	Sites type	Condition
1	Habitation sites	Dusun Cemoro Balak Village, Songgon Sub- District	Konferensi Cave, Sumur Cave, Sodong Cave, Pasinan Cave, Pawon	Not studied yet, original conditions, there was no research activity. The location is in a community Village
			Cave	
2	Habitation sites	Grajagan and Rajegwesi Bay	Kitchen waste (ash)	Original condition, need confirmation/proof
3	Workshop/Shed sites	Pesanggaran, Sungailembu	Art Pottery, Tools pottery, stone mortar, stone kenong	In the form of fragments, incomplete conditions need to be researched
			Dolmen	

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Conservation

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5		Malangsari Sumberlutung	Manic beads Stone grave, dolmen, menhir,	Damaged due to looting Damaged due to looting
			Megalithic	
7	Habitation Sites	Tegaldlimo	Gua Mangleng	residential area Original condition,
			Gua X4	Studied by
			Ceruk 1, 2, 6	the archeological
				Center (Balai Yogjakarta)
8	Habitation Sites and	Kendenglembu,	Shale tools,	Good condition, research
	Workshop/Shed sites	Sungailembu,	Pottery	had been carried out by the
	-	Kaliagung,	fragments, hit	Archaeological Center of
		Sumbergandeng	stones, crockery	Yogyakarta, needs

Source: Author's Personal Document

Some megalithic relics were located around the residents' houses. Temu gelang site (Figure 7) was located in Tambakrejo, Muncar. In Muncar, a number of sites were threatened because of land conversion as a farm. In Aliyan Rogojampi, several menhirs and round stones were found in good conditions in the resident's house (Figures 9 and 10).

#### 4. Conclusion

The Megalithic culture in Banyuwangi developed rapidly that the remnants of the people during themegalithic period can be found almost throughout the region. However, the government and the people of Banyuwangi are not quite aware of this legacy as an important historical heritage for community andthe development of Indonesian history. The effort for site identification and site preservation are carriedout personally by those who treasure history and by Jogjakarta Archaeological Center.

So far, the studies held by the Archeology Center were carried out in Kendenglembu. It had great archeological potential as it was a pre-historic community residential site, where the communities werefamiliar in farming activity. In Kendenglembu, many relics of the community were found in the form of megalithic objects related to the beliefs of the local community and the daily production tools. The artifacts from the Neolithic culture such as stone axes, square stone shale stones, stroke stones, grindstones, milled stones, shale stones, stone slabs, red pottery, red polished pottery fragments, stonemortar, etc., which was discovered from the Excavation and Research activity of various institutions is stored and well maintained in a special place in Kendeng Lembu Plantation Complex area. However, Kendenglembu site was threatened from the development project of the Southern Cross Line (Jalur Lintas Selatan) that runs through the Malangsari Kalibaru Plantation, Kendeng Lembu Glenmore, Genteng, Rogojampi, Srono, Singojuruh, Kabat, Banyuwangi, Giri, to Kalipuro.

The great archeological potential, especially the megalithic tradition in Banyuwangi, demands a serious concern from the Banyuwangi government in order to conserve it. It is essential to collect the data of the heritage, in order to be inventoried as precious archaeological heritage of the Banyuwangian ancestor. The presence of complete archeological data will make it easier for the government to maintain the existence of those sites and preserve them, so that it becomes the pride of the people of Banyuwangi. The Banyuwangi Government needs to conduct research, studies, wider dissemination to all levels of society and introduce it, in order to invite people to participate in maintaining and preserving the megalithic tradition in Banyuwangi.

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## References

- [1] Asrofah A K 2015 Potensi Gua Hunian Prasejarah di Kawasan Taman Nasional Alas Purwo, Banyuwangi, Jawa Timur (Yogjakarta: Balai Arkaeologi Surabaya)
- [2] Callenfels, V S 1950 *Pedoman Singkat Untuk Pengumpulan Pra-Sejarah* (Bandung: A.C.NIX & Co)
- [3] Geldren, R V 1945 *Prehistoric Research in Netherlands Indies*: Science and Scientist in TheNetherlands Indies New York
- [4] Heekeren, H V 1931 Tjidchrift van Het Java-Instituut, Vol XI, 1-18.
- [5] Helen Doyle, Katya Johanson 2006 *Publishing History A Guide For Historical Societies* (Canberra: FAHS)
- [6] Jati, S S 2013 Sejarah dan Budaya, 20-31.
- [7] Kasnowihardjo G 2017 Berkala Arkeologi 1-14
- [8] Noerwidi S 2009 IPPA Bulletin 29, 26-32.
- [9] Piggot, C a. 1967 Prehistoric Society: New York.
- [10] Soejono R. 2010 Zaman Prasejarah di Indonesia dalam Sejarah Nasional Indonesia I. (Jakarta: Balai Pustaka)
- [11] Suhalik 2017 Laporan Penelitian Bersama Balai Arkeologi Yogjakarta.
- [12] Winardi, U N 2018 Bakti Budaya, 30-34
- [13] Yuwono, J 2013 Karakter Geoarkeologi dan Proses Budaya Prasejarah Zona Poros Pojong- Rongkop di Blok Tengah Gunungsewu. (Yogjakarta: Tesis UGM)
- [14] Zed, M. 2004 Metode Penelitian Perpustakaan (Jakarta: Yayasan Obor Indonesia)
- [15] Zulfahri, MH (2015) Kalpataru, Majalah Arkeologi Vol. 24 No.2 November 159-169