Stone grave in Sangihe Islands, North Sulawesi

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Abstract. Sangihe Island is one of the leading island in North Sulawesi, from the northern side this island borders Philippines. There are various types of archeological sites found here, including megalithic sites of stone grave. Local people call it lebbing, four-square box shaped by flat stone, some boxes used cover, but some not. The stone graves distributed in many areas, can be found in the southern side of Sangihe Island and also in the smaller islands around. The results show there are two types of stone grave with various variants, the stone grave used andesite stone slabs that shaped by sheeting joint materials that found from the same island area in Tanjung Tatonaha. The finding of many large stone grave in this area can be the evidence of leadership character with mutual cooperation.

1. Introduction

Sangihe is one of the Islands Regency part of North Sulawesi Province where the position is at the northern tip of Sulawesi Island. The northern part of the region is directly bordered by the Philippines. The location is about 142 nautical miles from the capital of North Sulawesi Province, Manado. The position between 2 ° 4 '13" - 4 ° 44 '22" North Latitude and 125 ° 9 '28" - 125 ° 56 '57" East Longitude. As an island that borders directly with neighboring countries, since prehistoric times it is believed by experts of North Sulawesi, especially the Sangihe and Talaud Islands, is a strategic area in the Pacific region. There is a bridge connecting the migration of fauna and humans between the mainland region of Asia, especially Southeast Asia and the Pacific Islands region in the past. Migration of fauna and humans and their culture at that time can be proven by the discovery of fossils of ancient mammals found in Pintareng Village, Southeast Tabukan Sub-District, Sangihe Islands Regency. Furthermore, according to experts from the Bandung Geological Museum and from the Jakarta National Archaeological Research Center, the fossils were stated as part of the Stegodon fossils that had lived in the Archipelago during the Pleistosin period about 2 million years ago. This ancient elephant in addition to Pintareng village similar fossils have also been found in Sangiran, in Sragen Regency, Central Java, in the Cabenge Valley in South Sulawesi, in the Napu Valley and the latest data in North Morowali, Central Sulawesi. In Indonesia, stegodon lived with other ancient animals such as Rinocheros (ancient rhino) and ancient buffalo and so forth. With the findings of ancient elephant fossils in Pintareng, South-Eastern Tabukan Sangihe, proving that in the past, elephants lived on Sulawesi Island and especially in North Sulawesi.

Information about the existence of megaliths in North Sulawesi was first informed by C.T. Bertling in the Minahasa area is waruga. In addition to other megalithic waruga that can be found in North Sulawesi, quite a lot and varied include stone mortar, menhir (watutumotowa), cliff grave, stone altar, and dolmen. But the dominant megalithic heritage is waruga.
Other archaeological remains as a new discovery for Sangihe Island and North Sulawesi in general are the stone graves which are spread in the southern part of Sangihe. The results of the study to date include South Manganitu District and Tamako District to the surrounding islands [1]. In addition to the stone graves, other megalithic remains in the Sangihe Region include, menhirs, dakon stones, and stone mortars [2]. Each of these findings is distributed in different places with far distances. With the existence of the stone graves remains and other findings in Sangihe, this is evidence that megalithic culture also affects the islands in North Sulawesi or maybe even as a path that goes from the north to other areas in the archipelago.

The spreading of stone graves found in the territory of Indonesia include Pagaralam (South Sumatra), Buning (Cirebon), Cibuntu, Patalagan, Ragawacana, Cirendang, Rajadanu, Cigadung, Cigugur, Cipari and Citangtu (Kuningan), Kajar, Bleberan (Wonosari), Cepu and Bukit Pontang (Blora), Kawengan, Kidangan, Gunung Mas (Bojonegoro), Mount Sigro (Tuban), in the Toraja ethnic region the graves are placed in caves, niches or rock cliffs [3–8] and in the Bah Kalalan border between Serawak and East Kalimantan [9].

The distribution of stone graves in Southeast Asia is in Laos and Thailand as slab box stones. The results of the calendar for the age of the box stone slab in Thailand 2350 BP until the 4th century AD. Another region is Malaysia, the stone graves known as the distribution of slab graves located in western Malaysia, Sabah, Sarawak and Silver [10]. The date for the stone graves in this region is 200 BC [11]. Pacific region, distribution is in the middle of Melanesia region [12].

The stone grave in Sangihe is called lebbing by the local people (stone grave). The use of the term stone graves at Sangihe is used based on the characteristics of the relics. In contrast to the stone, graves described earlier, the stone graves at Sangihe is a sign of a tomb, consisting of flat, flat, and not too thick stones arranged in a box shape, two short sides and two other longer sides. The stone graves buffer is sometimes in the form of flat stone itself, some use natural stone, and sometimes it is combined between natural stone and flat stone. At the top wear a lid that is also flat or flat stone. The size of the grave follows the age of the dead, children or adults.

The use of flat stones into stone graves is a form of environmental adaptation carried out by people in the Southern part of Sangihe because the availability of materials is not far from the location where they live. The source of material was obtained from the village of Makalekuhe, along the coastline, hefty sheets of stone (geological terms) were very widely spread. On the cliff wall of the beach the layers of stone are still very clearly visible. The remnants of many stones scattered on the beach, also seen the extent to which the results of the use of material resources with increasingly protruding beach cliffs where the composition of the sheet to the ground.

The appearance of rocks, some solid or wide is still intact (still attached to the hills along the coast), and others are loose rocks that are scattered in many parts of the beach (both thin and thick, large and small). Some of the beaches which are the source of raw materials of this rock start from Kohase Beach then east of Tatonaha Cape, then Pedatole Cape to Pahampang Beach, and Makalekuhe Beach to almost reach Pananaru Beach. (along the coast from west to east).

From the observations on the coast, those exploited for the construction of the stone graves are at the coordinates of 03 ° 24'40.4 "- 03 ° 24'44.8" North Latitude and 125 ° 32'40.3 "- 125 ° 32'42,5 "East Longitude, or from Pedatole Beach to Pahampang Beach. From this location it can be seen that the solid sheet has been used up to the boundary end of the stock by forming an inward curve. The sheet length that has been exploited is 160 meters, the length to the sea is 50 meters, and the height is 5 meters or about 40,000 m³.

As an issue in this paper, try to see how the shape and location of the stone graves. How the stone grave culture spreads and the underlying belief system, and the rituals performed, the activities are observed with an ethnoarchaeological approach.

Based on these problems, the purpose of this paper is to obtain a description of the form, location, spreading and belief systems that lay behind the use of stone graves in the past.
2. Method
The study of the stone graves in the southern Sangihe Region was carried out as an effort to uncover everything related to these stone graves. The study was conducted by survey and using descriptive qualitative methods, with inductive reasoning. The focus of the study is based on the state of the natural environment, the location, shape and distribution of the tomb as a source of data that is characteristic of qualitative research and is descriptive at the time of its explanation. Inductive reasoning is used because research starts from the field, which is based on empirical data.

The first stages of data collection are carried out by literature study, searching for written literature on the distribution or use of stone graves in Indonesia and Southeast Asia or specifically in the Land of Minahasa, and observing in detail the distribution routes. Then interviews with community leaders or informants who have found and if possible, have been involved in a burial procession using a stone grave.

The survey was conducted by conducting direct observations in the field, collecting data on the distribution of stone graves in two locations, Tamako District and South Manganitu District, whose distribution reaches out to the surrounding small islands. Detailed data recording includes measurement, shooting, recording and drawing.

Data processing is carried out based on the findings on the surface of the land (survey) namely the stone graves. The analysis of the stone graves as the main data is examined to answer the problem and research objectives. The stages of data analysis that will be carried out are preceded by typological analysis, namely observing in detail the shape of the artifact, the size and the process of work (taking and removing material). Furthermore, contextual analysis is to determine the relationship of artifacts with the surrounding environment, topographic and geological analysis, and analysis of the layout of the stone graves.

3. Discussion
3.1. The shape, location and spreading of stone graves
The results of data collection on the distribution of stone graves which are concentrated in the southern part of Sangihe are in two Subdistricts namely Tamako District and surrounding islands and South Manganitu District until now scattered in 39 site locations, totaling 644 stone graves.
3.1.1. Type I.
This type consists of a sheet of solid stone slabs as a cover tomb, supported by a number of stones. Buffer stones generally use solid sheets, both flat and square in shape. But some also use other types of rock.
Type I variant 1
This type consists of several Variant 1. It supports several stones and consists of a single sheet of solid stone slabs to cover the tomb.

![Figure 3. Stone Grave Type 1 Variant 1](image1)

Variant 2. Supported by several stones and cover consists of 2 (two) or more solidly shaped stone slabs.

![Figure 4. Stone Grave Type 1 Variant 2](image2)

Variant 3. The cover of the tomb is supported by one or more stones on one side while the other side is pressed against the incline.

![Figure 5. Stone Grave Type 1 Variant 3](image3)
3.1.2. Type II
This type consists of several sheets of burly stone in an upright position rectangular floor plan.

Variant 1. Consists of several solidly shaped stone slabs forming a square plan without a cover.

![Figure 6. Stone Grave Type 2 Variant 1](image6.png)

Variant 2. Shaped stone cubicle and the top is covered by a sheet of solid stone slabs.

![Figure 7. Stone Grave Type 2 Variant 2](image7.png)

Based on its size, stone gravess in Sangihe are classified in 3 sizes.

1. Large, with the length of the floor plan or the length of the cover between 150 cm to more than 200 cm
2. Medium, with a floor plan or cover length between 100 cm and 150 cm.
3. Small, with the length of the floor plan or the length of the cover between 50 cm to 100 cm.

A rectangular stone graves composed by a stone slab consisting of a slab making up four side walls (right, left, top and bottom) and a slab covering. According to the resource person, Mr. Christ, the basic plates were not used because the bodies that were buried were first placed in wooden tombs (crates) before being put into the ground. After the corpse is buried, and the soil buried by the grave, then the stone slab is arranged on it, by immersing some of it in the ground. There is space or gap between the ground and the slab. Thus the formed stone slab is a sign of the grave.

Morphological analysis of the remains of the stone graves, most are in poor condition, damaged, and there are some fruits that are not in place. The pattern of distribution is in hilly areas which are placed along the hillside to the summit. The size of the stone graves follows the size of the person who is buried, the small size is intended for children or minors.

Technological analysis, stone grave material is available along the beach in Makalekuhe Village. Intake of material is done by piercing the lumps of stone with an iron tool that is tapered at the edges, after the iron is partially placed in the lumps of stone, oiled then the stone pieces will break along the groove.

After that, on the beach of the slabs that have been prepared with certain rituals and then dragged in a group to the burial site. There is no decoration on the stone slabs either buffer or cover slab. In one stone graves used by one individual or in other words, one stone graves is used to bury one person. The shape of the cover is generally rectangular but not exact and follows the shape of the support. Looks like aesthetics are not too important. Also related to grave markers, none of the stone
were marked on each grave, because the community at that time did not yet have the ability to read and write (illiterate). Information about who is buried is only spoken through the generations in a family circle. So most of the stone graves are no longer clear who is buried.

Contextual analysis, relating to the condition of the surrounding natural environment and other archaeological findings, the distribution of stone graves in one site location were found to be covered or uncovered. The number of stone graves in one area is not always the same. The direction toward the stone graves is not bound by one cardinal direction. There are stone graves with a North-South orientation, some are East-West, and some are Northwest-Southeast.

The date of the use of the stone graves in Sangihe is uncertain, although it is believed that one of the migratory megalithic migrations from the north passed through Sulawesi, but when compared to the waruga tomb in Minahasa, which is classified into the chronological phase of the prosthesis, due to the relatively long usage period, since BC until the 13th century AD, the stone graves may have been used at a younger age but in a fairly long period of time (stone graves information was used until around 1980). This very long span of time is evidenced by the location of the source of material in the village of Makalekuhe which was quite widely exploited at that time.

3.2 Background of Megalithics Beliefs in Stone Graves Users

Megalithic research in Sangihe Islands Regency as one of the border islands can be said to be very behind when compared to other regions that have potential in Indonesia. The possibility of the distribution of the results of migration or just because of the availability of material sources (local genius) interesting things to be studied further. Can be associated with three cultural forms, namely the complex of ideas (complex), complex of activities or action patterns (activities), and the work of human beings themselves (artifacts).

Each of the relics from the megalithic period in North Sulawesi has a special feature. Megalithic relics in the Minahasa land are known as waruga stone graves, which are square in shape consisting of a container and a lid. Both the lid and the container are sometimes given decorations.

The stone graves in Sangihe as a whole are in the area of population plantations and are found together with newer tombs, generally located in higher areas (hills). Because of the limited land, in the cemetery area, it is common to plant plants which are basic needs such as sago and other plants.

In one event of death, sacredness was only seen when lifting stones from the beach to the location of the grave. After the dead are buried, a week to two weeks the family then invites the community to help lift (maneke) stones from the beach. Stiff rock that has been taken from the beach cliff arranged its position in the middle of the wood (using wood resin), then clamped with wood and tied with ropes from straight tree roots. The greater the strength of the chosen stone the greater the cost required to transport because more people are involved in the lifting and the time required is longer because the stone is very heavy, which can take up to a week of the time required. Usually large stones are chosen by families whose level of life is quite well established.

After the stone is ready to be lifted, there is one person who stands / sits on the rock as the command giver; this person holds the tagonggong (a type of drum, a typical Sangihe musical instrument. During the trip tagonggong is beaten continuously as an encouragement for people who lift stones. Strength fighting stones are also done, usually the fighting is done by pushing each other's heads like bullfighting, kicking each other's feet, this is done outside of consciousness because it is under the influence of liquor (wine / saguer).

After arriving at the cemetery location, burly stones have not been directly installed. The family will come back to an agreement when the right time to lay the stone. There is no party in the installation of this sturdy stone, only a short worship is preceded before the stone is set. The buffer is first installed, the way the soil is dug a little, and then natural stone or rock solid arranged after that the cover is installed on it.

Collecting stones for the people in Mahumu Island is done at the same location, TanjungTatonaha. The stones that have been selected are lifted near the boat, and then tied under the boat. If the stone taken is large, use 2 tied boats. Binding of stones is done waiting for the sea water
to recede, then after the tide sea water the group returned to its destination. The procession of lifting from the pier to the location of the cemetery is the same as previously described (Informant Mr. Hino Patindagheng).

The use of burly stones began to decrease since Christian influence entered the Sangihe. The rituals in the process of rapture and burial are considered not in line with the values of Christianity. In addition, because the appointment process takes a long time and costs are not small. This is not realized by the community, one form of their unity that is mutual cooperation began to disappear slowly.

4. Conclusion

The stone graves in Sangihe Islands Regency is a sign of a grave, composed of a stone slab consisting of four slides (right, left, top and bottom) and a lid. After the body is buried, one to 2 weeks later a slab is arranged on it. Some plates are buried in the ground, so that between the cover plate and the ground surface there is still space. For a stone graves on a hill, one of the tightly closed sides of the slope. There are stone graveress that use a cover and some are without cover. Bury the stone without a cover shaped like a stone cubicle. In one stone graves buried one individual. Some of the stone graveress are accompanied by tombs that are placed between the gap between the lid and the surface in the form of ceramic plates. Most stone graves are already in damaged condition.

The spreading of stone graves is concentrated in the southern part of Sangihe Island, namely in the South Manganitu District and Tamako District and the surrounding islands. This is possible because of the availability of material resources found in Makalekuhe Village, Tamako District. Based on its shape, the stone grave consists of several types with their respective variants. A higher social status symbol is seen on the part of the lid used, the bigger the lid, and the more difficult it is to take the material.

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