



# Distribution Patern of Megalitik Site In Slamet Mountain, Central Java

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## ABSTRACT

Around 70 megalithic sites were found on Mount Slamet, distributed within 5 regencies, that is 20 sites in Purbalingga, 11 sites in Pemasang, 15 sites in Tegal, 5 sites in Brebes, and 19 sites in Banyumas district. In general, the megalithic sites on Mount Slamet consisted of monuments intentionally erected for religion. Those sites reflected the religious activities carried out in the past. The quantity as well as distribution of the sites show that the megalithic culture in Mount Slamet was supported by a large member of the community within a wide range of space. However, the social system of the community itself is not clear yet whether it consisted of a single communal social system or several sub-social systems formed as a group. This paper attempts to find the relationship between the site's distributional pattern and the social organization system of the megalithic society on Mount Slamet. Spatial and activity system analysis will be used to disclose the distributional pattern which will also show the distribution of the supporting community. The variability of distance among the sites will show the variability of accessibility that influenced the interaction intensity. Activity distributional patterns will show whether it is part of a culture system or a part of a culture sub-system. Specific analysis will be applied to the megalithic monuments to reconstruct whether they belonged to an assemblage or a sub-assemblage.

**Keywords:** *megalithic, artifact assemblage, punden building, site pattern, activity setting analysis.*

## 1. INTRODUCTION

Recent efforts to reconstruct the culture of megalithic societies by archaeologists have shown an increasingly clear picture. The studies that have been carried out can contribute to eventually forming a "mosaic" of a more complete picture of the life of megalithic societies. Megalithic culture is one of the prehistoric human cultures whose development is directly adjacent and even penetrates the boundaries of historical time. Therefore, the life of megalithic society in some aspects has had almost the same abilities and living systems as the people of historical times (Koentjaraningrat. 1992) (Vella Gregory 2017)

Culture owned by a society is a system in which various subsystems are interrelated with one another, namely technological subsystems, sociology, and ideology). Similarly, the culture of megalithic societies includes these subsystems. The ideological subsystem of megalithic culture has been widely studied by archaeologists, through an ethnoarchaeological approach

archaeologists can reconstruct how the background of beliefs are adhered to, and how ritual ceremonial activities are carried out in their life cycle (White, 1949)

Similarly, with the technological subsystem, efforts to reconstruct megalithic culture in the field of technology have obtained an overview of various tool-making capabilities, increasingly advanced agricultural techniques, and most importantly the introduction of metal technology. The use of metal as a material for making objects and equipment can bring many changes to the survival of human life to date (Aranda Jiménez et al. 2021).

One of the subsystems of megalithic culture that until now has not been clearly described is the social subsystem. How the social structure is, and how the social system is adopted, until now has not been studied much by archaeologists. The unclear picture of the social life of megalithic societies may be due to limited data. The data on the social life of megalithic societies that archaeologists can observe are limited to the physical data of the objects themselves, there is absolutely no

written record as was the case in historical times. This data limitation is indeed a significant obstacle to uncovering the social aspects of megalithic societies. This is because the social aspects of a past society cannot be directly observed through physical data in the form of objects left behind. Therefore, this data limitation needs to be solved through maximum utilization of existing data. Information that can be obtained from data is not only from the physical data of the object itself but can also be obtained from the relationship between objects and the relationship between objects and their environment (White, 1949).

This paper seeks to examine the social system of megalithic societies by linking the distribution patterns of sites and the complexity of findings. The data used are from megalithic sites in the Mount Slamet Area, Central Java (Sulistyarto: 2003).

## 2. METHOD

Archaeological research in the Mount Slamet area in Central Java managed to find megalithic buildings spread across 70 sites. Data collection in the field is carried out by survey techniques. Data collection is intended to obtain descriptions of physical data of megalithic buildings and site location data, both administrative areas and astronomical position coordinates. In addition, data were also collected on the size of the height of the site from sea level, the distance between sites, and the area of the study area. The distance between the sites in question is a straight distance while the area of the study area is measured from the area of the sub-district area that has megalithic sites and which are located on the slopes of Mount Slamet. Data collection was carried out with GPS tools, altimeters, and topographic maps.

Analysis of the distribution pattern of megalithic sites is carried out by nearest neighbor analysis techniques, namely to determine the density of sites at the research site, by making a point as a symbol of the location of the site on the distribution map (plotting) and measuring the closest distance between sites (Mundardjito, 1993).

Analysis to determine the system of activities in the site group uses an approach called the setting system. The setting system is one branch of architecture that studies space or area, in terms of human activities. The concept of a setting system defines an area as the boundary of a group of spaces or settings where humans carry out their activities. A group of spaces or settings is arranged in a system that accommodates the system of human activities, which is briefly called the setting system. Each component of a space or building is a container or setting of certain activities of humans. These components are interrelated according to the interrelation of types of human activities. The concept of a setting system is a tool that can be used to identify spaces as containers for human activities in conditions where humans as actors of activities no longer exist. Spatial and physical signs will be able to replace human absence. These signs will be

able to provide an overview of the space used by humans in carrying out their activities (Haryadi, 1995 and Rapoport, 1997).

The distribution of megalithic sites in the Mount Slamet area is divided into four slopes according to the cardinal directions, namely on the southern slope under the administrative area of Banyumas Regency there are a total of 19 megalithic sites. The eastern slope corresponding to the administrative area of Purbalingga Regency has 20 sites, the northern slope or administrative area of Pemalang Regency has 11 sites, while the western slope includes two districts, namely Tegal Regency 15 sites and Brebes Regency 5 sites.

Megalithic sites on the southern slopes of Mount Slamet are included in the administrative area of Banyumas Regency, astronomically located between 07°10'9" - 07°36'49" S and 109°12'16" - 109°25'54" E. These sites are located at locations that have an altitude between 195 - 760 m above sea level (d<sub>pal</sub>). The area of the study area was 4357 km, the total distance between sites was 72.58 km, and the average distance between sites was 3.82 km. The types of megalithic buildings found consist of menhirs, stepped buildings, phallus, stone mortar, altar stones, megalithic statues, stone structures, and stone tables (dolmens). In this area, there are classical period buildings associated with megalithic objects, namely temple stones and yoni (table 1).

Table 1

No.	Site	Findings
1	Batur Arca	Menhir, Stone structure
2	Ganda Tapa	Punden
3	Batu Gathel	Phallus
4	Batur Agung	Punden, Menhir, Stone Mortar, Statue
5	Batur Golek	Punden, Statue
6	Batur Lurah	Stone Structure, Menhir
7	Batur Panembahan	Punden, Statue
8	Batur Rana	Altar, Menhir
9	Batur Gunung Jenar	Stone Structure, Menhir
10	Batur Bedil	Stone Structure, Dolmen, Yoni
11	Batur Macan	Stone Structure, Menhir
12	Batur Ronggeng	Stone Structure, Menhir, Stone Mortar
13	Batur Panembangan	Punden, Menhir, Stone Structure, Stone Mortar, Phallus

14	Watu Lumpang	Punden, Menhir, Stone Structure, Stone Mortar
15	Madas Mayung	Stone Structure, Menhir
16	Kejiamba	Punden
17	Pesawahan	Stone Structure
18	Karang Gintung	Stone Structure
19	Batur Raden	Punden

Megalithic sites on the slopes of Mount Slamet east of Slamet are included in the administrative area of Purbalingga Regency, astronomically located between 07°03'00" - 7°26'10" S and 109°20'15" - 109°29'13" E. These sites are located at altitudes between 35 - 710 m above sea level. The area of the study area is 5168 km<sup>2</sup>, the total distance between sites is 128.5 km, and the average distance between sites is 6.42 km. The types of megalithic buildings found consist of menhirs, stepped buildings, phallus, stone mortar, altar stones, megalithic statues, stone structures, stone tables (dolmens), dakon. In addition, there are relief stones, phalluses, and yoni associated with megalithic objects (table 2).

Table 2

No.	Site	Findings
1	Sokasada	Phallus, Lingga, Yoni
2	Pamujan	Menhir
3	Glempang	Dolmen
4	Batur	Menhir, Stone Structure
5	Kepyar	Menhir, Stone Structure
6	Gampingan	Stone Mortar
7	Bata Putih	Menhir, Stone mortar
8	Drengkol	Menhir
9	Karanganyar Serayu	Stone Mortar
10	Karanganyar Onje	Megalithic Statue
11	Kauman	Dakon Stone
12	Brubahan	Megalithic Statue
13	Karang Tewang	Menhir
14	Tegalsari	Altar Stone, Menhir
15	Rajawana	Menhir, Stone Structure
16	Kebun Makam	Menhir
17	Sura	Punden, Phallus, Lingga
18	Keputihan	Menhir

19	Kali Atos	Menhir, Dakon Stone
20	Bandingan	Megalithic Statue, Menhir, Phallus, Altar Stone, Relief stone

Megalithic sites on the northern slopes of Mount Slamet are included in the administrative area of Pemalang Regency, astronomically located between 07°20'11" - 7°52'30" S and 109°17'30" - 109°40'30" E. These sites are located at altitude locations between 340 - 875 m above sea level. The study area was 499.12 km<sup>2</sup>, the total distance between sites was 46 km, and the average distance between sites was 4.19 km. The types of megalithic buildings found consist of menhirs, phallus, stone mortar, megalithic statues, stone structures, hollow cylindrical stones, and square container stones. In addition, there are phalluses associated with megalithic objects (table 3).

Table 3

No.	Site	Findings
1	Lunggi	Menhir, Stone Structure
2	Mandiraja	Stone Structure, Stone mortar
3	Cempaka Wulung	Menhir, Stone Structure
4	Sima	Menhir
5	Kubang	Hollow Menhir
6	Cibengang	Menhir, Stone Structure
7	Candi Kontol	Phallus, Stone Mortar
8	Kali Lingseng	Menhir, Megalithic Statue, Phallus
9	Pakuncen	Stone Vessels
10	Sukmajati	Menhir, Lingga
11	Mendelem	Megalithic Statue, Stone Vessels

Megalithic sites on the western slopes of Mount Slamet are included in the administrative area of Tegal and Brebes regencies, astronomically located between 07°03'11" - 7°15'30" S and 109°17'30" - 109°40'30" E. These sites are at altitude locations between 125 - 1010 m above sea level. The area of the study area is 8088.36 km<sup>2</sup>, the total distance between sites is 113.8 km, and the average distance between sites is 5.69 km. The types of megalithic buildings found consist of menhirs, stepped buildings, phallus, stone mortar, altar stones, stone structures, whetstones, pee stones, hollow cylindrical stones, and dragon relief stones (table 4).

Table 4

No.	Site	Findings
1	Lembasari	Stone Structure, Menhir

2	Sumur Dlingo	Stone Structure
3	Rembul	Stone Mortar
4	Batu Nyana	Stone Mortar
5	Bala Cina	Stone Structure
6	Gunung Anjing	Stone Structure
7	Gunung Jati	Cylindrical Stone, Menhir
8	Paneker 1	Stone Mortar, Grindstone, Menhir
9	Paneker 2	Stone Mortar, Menhir, Punden
10	Batu Meriem	Hollow Menhir
11	Garan Gobang	Menhir
12	Karanganyar	Stone Mortar, Stone Structure
13	Jejeg	Stone Grinder, Grindstone
14	Istana Budha	Stone Structure
15	Bedug Basu	Natural Stone
16	Jati Sawit	Stone Mortar
17	Kedawung	Altar Stone
18	Gunung Gruyung	Natural Stone
19	Buniwah	Phallus
20	Manggis	Dragon Carving stone

In connection with the approach used, the procedures passed in this study include: identifying the type of findings, reconstructing the activity system based on the function of the findings, and linking the diversity of types of findings with the activity system. Types of findings at megalithic sites in the Mount Slamet Area include:

### **2.1 Punden**

The distribution of stepped punden is found in 10 sites. The stepped punden on these sites has almost the same characteristics, which have a stepped yard, square plan, fenced door, and the main object on the top step. The main objects in the stepped punden include menhirs, stone dies, and dakon, as well as phallus. The object at the top step is a sacred object that functions as a means of ceremony or even becomes the main object of worship. The function of the object that is the object of worship gives clues as to the purpose of the worship ceremony. The orientation of stepped buildings is generally oriented towards the top of Mount Slamet.

Based on its physical characteristics, namely having a courtyard, the stepped punden building is a place that allows accommodating a large number of humans. Thus,

the stepped punden building is a place where worship ceremonies are carried out by a community, not for individual purposes.

### **2.2 Menhir**

The distribution of menhirs in this area includes 34 sites. Based on the context with other types of findings, the menhirs can be grouped into 3, namely menhirs located at burial sites, menhirs located at worship sites, and menhirs located in agricultural environments. Menhirs located at burial sites are planted in pairs or doubles, serving as grave tans. Menhirs that function as grave marks are generally equipped with stone structures as grave barriers.

Menhirs located at worship sites are in the same context as phalus and menhir statues. In this context, menhirs are usually considered to function as a medium to honor a figure, both living and deceased figures (Sukendar, 1985: 7). While menhirs located in agricultural environments have no context with other megalithic buildings. Menhirs that have no context with other findings show no clear function. However, based on the environment in the form of agricultural land, it may function as a boundary monument. Based on the context between the findings, it can be concluded that the function of menhirs can be divided into three groups, namely: 1) as a sign of the grave, 2) as a medium of worship, and 3) as a boundary monument.

### **2.3 Hollow Menhir**

Perforated menhirs are the same as menhirs in general. The difference lies in the hole located in the middle that extends from the base to the end so that it resembles a cylinder. In the area of Mount Slamet, the distribution of hollow menhirs is only found in 2 sites and is limited to the western and northern slopes, even the type of perforated menhir findings has never been found anywhere else. Based on observations of the hole, it shows that the hole was formed by natural processes. Thus this type of finding has the same function as other menhirs.

### **2.4 Stone mortars**

The distribution of stone dies covers 15 sites. Stone mortar in everyday life is an important component in agrarian society, which functions practically as a tool or container for pounding rice or other grains. In the context of megalithic this object often becomes a sacred object, namely as a means of fertility ceremonies. In the Mount Slamet area, dies findings can be grouped into 2 based on the context of other findings. The deaths in group 1 were associated with the place of worship ceremony, while group 2 was on agricultural land and there was no context with other findings. Thus, the mortar can be assumed to have a dual function, namely as a means of worship and a practical function as a container for pounding agricultural products.

## 2.5 Phallus

Phalus at megalithic sites on Mount Slamet is found in 6 sites, its distribution is evenly distributed throughout all parts of the slope. Phalus is a megalithic relic made of oblong-shaped stone at one end carved in the shape of male genitalia.

In megalithic cultures, the shape of male genitalia is often found in human statues that show parts of the body organs depicted prominently. These organs are sculpted naturally with a larger proportion of size than other organs. Phallus is no longer depicted attached to the body of the statue but is deliberately made only to depict male genitalia. According to the beliefs of megalithic people, human organs are considered to have supernatural powers and the genitals are the most powerful objects containing supernatural powers (Sukendar, 1985).

Based on the assumption that phallus has supernatural powers, it can be suspected that the function of phallus in megalithic societies is associated with the function of human reproductive organs, namely as a symbol of fertility. Thus the establishment of a phalus illustrates a hope that the land on which the phalus is established will become fertile.

## 2.6 Megalithic Statue

Megalithic statues in the Mount Slamet area were found in 7 sites. The distribution of this object is evenly distributed throughout the slope. The physical characteristics of megalithic statues have various forms from simple shapes to dynamic forms. The distribution of simple megalithic statues is on the northern slope, while dynamic forms are scattered on the southern slope. Megalithic statues are always found in the context of other findings, including menhirs, stepped punden, and altars. The situation of the context of the findings and the environment shows that the site where megalithic statues were found was a site of worship and megalithic statues acted as objects of worship.

## 2.7 Dakon Stone

Dakon stone is only found in 2 sites, both on the eastern slope. These sites are located in neighborhoods adjacent to water sources and confluences between rivers.

Both dakon stone finds are still sacred with the offering of dakon offerings found on the top steps of stepped buildings and are objects of worship. This placement gives a clue that dakon stone is an object that is considered to function sacred.

## 2.8 Altar Stone

The distribution of altar stones at the study site covers 5 sites evenly distributed on the four slopes of the mountain. Altar stones are generally made of square-shaped stone slabs, at research sites altar stones are found associated with stepped punden buildings and/or menhirs, both of which function sacredly as a means of

worship. In the stepped punden building, the altar stone is located on the top terrace adjacent to the main object of worship.

The context of this finding shows that the altar stone is a sacred object that serves as a place to place offerings.

## 2.9 Dolmens

Dolmens are megalithic relics shaped to resemble stone tables. The object consists of a stone slab that functions as a table surface and is supported by a stone pole. The dolmens on Mount Slamet were found at only 2 sites, each fruit. These types of findings do not show a clear context with other findings. Ha means that the use of dolmens in megalithic societies in the region t widely developed. Comparison with dolmens elsewhere shows fu associated with worship ceremonies, i.e. as a place to place offerings. In the area of Mount Slamet, the function of dolmens as a place of offerings may be replaced by another type of ten in the form of altar stones.

## 2.10 Stone Vessels

Types of stone vessel findings were found at 2 sites, namely the Pakuncen and Mendelem sites, both on the northern slopes in the Pemalang Regency area. Stone vessels at the Pakuncen site are not associated with any other type of find. The location of the find is on a slope between granite hills. While at the Mendelem site, this finding is in the same context as megalithic statues. The location of the find is in the niche of Mount Mendelem at an altitude of 20 m above ground level. Both sites have the same environmental character, which is above the surface of the granite rock layer, a layer that has no groundwater content. By connecting the environment and the context of the find, it is possible for the stone vessel to function as a reservoir for water, both for profane and sacred purposes.

## 2.11 Stone Structures and Menhirs

Stone structures and menhirs in the Mount Slamet area are a combination of two types of findings that are often found in a single building. The stone structure consists of chunks of andesite stone arranged in such a way that it forms a square or oval plane. In the central part of the field were planted two menhirs, one located on the south side and the other on the north side. The distribution of this type of find is evenly distributed on the slopes of Mount Slamet which is found in 23 sites. The location of discovery is generally in the environment peaks or on ridges. The shape of this building is reminiscent of the tomb of the Islamic period because of the orientation of the grave sign in a north-south direction. This type of finding is generally associated with other megalithic remains. Thus, it cannot be revealed whether this type of find is an Islamic tomb or a megalithic tomb. Therefore, further research is needed on this type of finding.

**2.12 Relief stone**

Types of relief stone findings were found at 2 sites, namely at the Bandingan site (east slope) and the Mangosteen site (west slope). This type of find is made of andesite stone. The relief stone at the Bandingan site has a human-shaped sculpture depicted as half a body and is in the same context as the stepped punden building, while the relief stone at the Manggis site is in the form of a dragon head sculpture found in a rice field area on the hillside. This type of find probably has the same function as megalithic statues.

**2.13 Grindstone and Stone Grinder**

The distribution of whetstone finds was found in 2 sites, namely at the Paneker site and the Jejeg site, both located on the western slope which belongs to the administrative area of Tegal Regency. This type of find is made of basalt rock material. The whetstone at the Paneker site was found adjacent to the stone dine, while at the Jejeg site, it was found adjacent to the pee stone. These three types of objects are very closely related to agriculture, namely to sharpen or sharpen weapons from metal materials and to pound grain.

Based on identification and functional analysis of artefactual data can be obtained information about the character of the site from the reconstruction of human activities at the site. Based on the function of the findings, sites in the research location can be grouped into 2 types of activities, namely; 1) sacred activities in the form of worship and burial and 2) profane activities related to daily activities.

Sites that function as places of sacred activity are characterized by buildings or objects that function as a means of worship ceremonies, including stepped punden buildings, stone altars, megalithic statues, dolmens, dakon stones, and menhirs. While the sites that function as places of profane activities are characterized by objects that function as a means of daily activities, including stone mortar, menhirs, stone vessels, whetstones, and peep stones.

**3. RESULTS**

Analysis of the distribution pattern of megalithic sites is carried out by nearest neighbor analysis techniques, namely to determine the density of sites at the research site, by making a point as a symbol of the location of the site on the distribution map (plotting) and measuring the closest distance between sites (Mundardjito, 1993).

Calculations to identify patterns of spread are carried out in the following ways:

- Calculates the average distance between sites, by summing up all distances between sites and dividing by the number of sites

- Calculates the average distance between randomly patterned sites through site density numbers
- Calculates the distribution index of nearby neighboring sites by dividing the average number of distances between sites with random patterns

Formula:

index approx. 1.0 = randomly patterned

index approx. 0 = clustered pattern

index around 2.15 = regularly patterned

Counting:

- Total distance between sites (Sj) = 359.2 km

- Number of sites (SN)= 70

Average distance between sites (Ju) is  $\frac{359,2}{70} = 5.2$  km

- Area (L) = 2,085.87 km

Site density (P) =  $\frac{SN}{L} = \frac{70}{2,085.87} = 0.0336$  km<sup>2</sup>

- Average random patterned distance (jh) is

$\frac{1}{2\sqrt{P}} = \frac{1}{2\sqrt{0.002}} = \frac{1}{2(0.044)} = \frac{1}{0.0894} = 11.19$  km

- The distribution index of nearby neighboring sites (T) is

T =  $\frac{Ju}{Jh} = \frac{5.2}{11.19} = 0.46$  km

The calculation results of the analysis of the nearest neighbor showed an index figure of 0.46. This means that the distribution of megalithic sites in the Mount Slamet Area is clustered.

Observation of the site distribution map based on the density of sites from medium to high levels and relatively close distances between sites obtained an illustration that there are symptoms of grouping into 3 groups of sites. Group 1 is megalithic sites located on the southern slope or in Banyumas Regency. Group 2 is megalithic sites located in the southeast or the southern part of Purbalingga Regency. Group 3 are megalithic sites located on the northwestern slope or in the eastern part of Tegal Regency and western Pemalang Regency. In addition, there are still megalithic sites that do not fall

into the three groups, namely sites on the southwest and northeast slopes, as many as 3 sites each.

The social system is defined as a system that regulates people's lives through customs and rules to form a social unity. Social unity at the smallest and most closely related level is kinship unity, consisting of the nuclear family and other relatives. Kinship unity is influenced by kinship factors. Social unity to a greater extent is community unity, that is, a social unity consisting of groups of individuals who have ties to the place of life. Community unity is influenced by local living unity factors (Koentjaraningrat, 1990).

The characteristics of community unity consist of:

- Territory: the community needs a certain area on earth as a place to live together. In addition, members of a community are required to have bonds of pride and love for their territory. This feeling causes its members to want to immediately return to their territory if they are in another region or feel reluctant to live permanently in another region.
- Group personality: members of a community have a very strong bond of unity that forms a group personality that is different from other groups. Group personality is generally in the form of cultural characteristics or similar ways of life (Koentjaraningrat, 1992).

Interpretation of the social system of megalithic communities in the Mount Slamet Region is done by correlating the distribution pattern of the site and the complexity of the findings. The distribution pattern of megalithic sites in the Mount Slamet Area is grouped, which is divided into 3 groups of sites. Group 1 is megalithic sites located on the southern slope or in Banyumas Regency. Group 2 is megalithic sites located on the southeastern slope or in the southern part of Purbalingga Regency. Group 3 is megalithic sites located on the northwestern slopes or in eastern Tegal Regency and western Pemalang Regency. In addition, there are megalithic sites that do not fall into the three groups, namely sites on the southwest and northeast slopes, as many as 3 sites each.

If the grouping is related to the complexity of the findings, the composition is obtained as shown in the following table:

Table 5: Distribution of Finding Types in Site Groups

No.	Types of Findings	Group 1	Group 2	Group 3
1	Punden	8	-	1
2	Menhir	11	12	11
3	Hollow Menhir	-	-	2
4	Stone mortar	4	3	8
5	Phalus	2	2	2

6	Megalithic Statue	2	3	2
7	Dakon Stone	-	2	-
8	Altar Stone	2	2	1
9	Dolmen	1	1	-
10	Menhir and Stone Structure	10	3	10
11	Relief stone	-	1	1
12	Stone Vessels	-	-	2
13	Grindstone	-	-	2
14	Stone Grinder	-	-	1

Group 1 consists of 19 sites and is a group of sites that has a very clear grouping pattern because it is very far apart from other groups of sites. The distribution of sites in this group is very dense, and the distance between sites is very close (3.82 km). This proves that the distribution of group 1 sites is a place that was deliberately chosen as an area to carry out various activities using megalithic buildings as a means. The high density of the site proves that the activities are carried out by one community. In addition, based on its findings, this group has sites with the most stepped punden building findings compared to group 2 and group 3. Group 1 has 8 sites, group 2 has no stepped punden buildings at all, while group 3 has only 1 site.

Based on the composition of the number of stepped punden, it can be said that this type of finding is the main characteristic of group 1.

The difference in the number of sites against the findings of stepped punden buildings is an interesting symptom to observe. The stepped punden building is a room where worship activities are carried out which allows mass worship ceremonies to be carried out. This proves that the stepped punden building was deliberately erected by a social unity bound by rules that demanded to carry out worship ceremony activities together, thus influencing their lives to live in groups. Thus this group has become familiar with the social structure with the presence of worship ceremony leaders and community members who are led.

Group 2 is megalithic sites located on the southeastern slope or in the southern part of Purbalingga Regency. The group consists of 20 sites. The distribution pattern of sites in this group showed a lower density than group 1, with an average distance between sites of 6.42 km. This also proves that the distribution of the site is a human effort in forming an area chosen jointly by one community. However, in this group, there are no sites that have the remains of worship buildings that allow them to carry out ceremonial activities together. The existing cult sites only allow for individual worship activities. This proves that the social system formed is limited only to

consideration of the needs of local unity of life, not by the same social rules.

The distribution of group 3 sites indicates the lowest site density. In calculating the analysis of the nearest neighbor in the macro space unit, the result of the site density index number is 0.17, which means it shows a clustered distribution pattern. However, in smaller units of space, an index number of 1.126 is obtained, which means a random distribution pattern. This shows that the distribution of these sites is not formed by a single community but by smaller communities that are not bound by social rules with each other. The activities carried out are also more varied, as evidenced by more diverse types of findings.

#### 4. CONCLUSIONS

The conclusions that can be drawn from this paper can be elaborated as follows:

- The results of the nearest neighbor analysis that calculated between the area of the study area, the number of distances between sites, the average distance between sites, and the density of sites obtained a site density index of 0.75. The index figure means that megalithic sites in the Mount Slamet region are clustered in clusters.

- Based on observations of the distribution of sites in the distribution map by taking into account the density and distance between sites, it was concluded that the megalithic sites consisted of 3 groups of sites. Group 1 is megalithic sites located on the southern slope or in Banyumas Regency. Group 2 is megalithic sites located in the southeast or in the southern part of Purbalingga Regency.

Group 3 are megalithic sites located on the northwestern slope or in the eastern part of Tegal Regency and western Pemalang Regency. In addition, there are still megalithic sites that do not fall into the three groups, namely sites on the southwest and northeast slopes, as many as 3 sites each.

- Based on identification and functional analysis of artefactual data can be obtained information about the character of the site from the reconstruction of human activities at the site.

Based on the function of the findings, sites in the research location can be grouped into 2 types of activities, namely; 1) sacred activities in the form of worship and burial and 2) profane activities related to daily activities.

- Based on the correlation between the distribution pattern of the site and the complexity of the findings, it can be concluded that the social system of megalithic communities in the Mount Slamet Area consists of social unity groups at the community level. Group 1 is formed by a community that has bonds and social rules that lead to group life. Worship ceremony activities are carried out

en masse. Groups 2 and 3 are not formed by a single community but by small communities that are not bound by the same social rules. Groupings are formed only by the need for local life, not by social rules.

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