The Utilization of the Dorobata Terrace, Dompu Regency, West Nusa Tenggara

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ABSTRACT

Dorobata is a terrace-shaped site that has an important role in the history of the Dompu civilization. This study aims to analyze the utilization period of the Dorobata terraced terrace. Data were collected through excavations, interviews and literature studies, then analyzed by laboratory analysis and qualitative descriptive. Based on historical data and interviews with six key informants, it is known that this terraced terrace is a structure which is established based on a continuing megalithic tradition. Based on the concept of belief in ancestors and natural forces during the Ncuhi period (a tribal institution in Dompu), it is developed during the Majapahit influence in Dompu around 1357. When it is replaced by Islamic influence, this terraced terrace was used as the site of the first palace by the first sultan Dompu with the title Sultan Syamsudin, who was crowned in 1545. This palace is continued to be function in several changes to the sultanate throne in Dompu, until it was finally abandoned because of devastating eruption of Mount Tambora in 1815. Based on the results of the analysis of the findings of Chinese ceramic fragments from the Ming Dynasty, from the 14th/15th century. The relative dating is reinforced by the results of radiocarbon dating 14C of six charcoal samples, it is known that the Dorobata civilization ranged from the 11th-13th and 15th centuries to the early 17th century AD. This date leads to a meeting point, showing the end of Majapahit's influence to the beginning of the Islamic period.

Keywords: dorobata terrace, dating, utilization period, ideology.

1. INTRODUCTION

The terrace is one of the megalithic forms commonly found in Indonesia, which is in the Prehistoric Period that was associated with the tradition of worshiping ancestral spirits, which had been known since the days of farming and metal age, as a medium to ask for prosperity and safety (Linus, 1986, pp. 205–206). Megalithic forms such as terraces and stone thrones in prehistoric times functioned as a medium of worship for respected leaders, maintaining good relations between the living community and the spirit world so that the safety and welfare of the community is well maintained. It can be concluded with the opinion that the ancestral cults found in Indonesia are stated to have similarities with those in the Pacific because they are universal and form the core of the megalithic tradition (Sutaba 1994, 73–104; Loofs 1967, v–vi; Daniel 1962; Bellwood 1978).

The expanse of the spread of megalithic traditions is an indication of the intensity of roaming megalithic communities by following the customs or traditions of constructing or constructing buildings and conceptions with a megalithic pattern, namely cults or worship of ancestral spirits as a belief system, which then dominates people's lives. The megalithic tradition in Indonesia, matured rapidly during the metal age, is estimated to be around the beginning or after the Common Era, or about 2000 years ago. Research on megalithic traditions in Indonesia has found very diverse megalithic forms with various functions, including dolmens, menhirs, megalithic statues or ancestral statues, stone thrones, sarcophagi and others. These findings are found in centers of megalithic
traditions in Indonesia such as Sumatra (Pasemah, Pugungraharjo), West Java (Cianjur), Central Java (Gunung Kidul, Matesih, and Terjan), East Java (Bondowoso), Bali, Sulawesi (Minahasa, Toraja, Besoa, Bada, and Napu), Sumba, Sumbawa, Flores, and others (Soejono et al. 1993, 205–38; Sutaba 2018, 138).

In prehistoric times there was an assumption that elevated lands such as hills and mountains were the places of sacred ancestral spirits, so they were considered sacred and holy. There is a belief, that the spirits areas of the deceased live in high places, hills and mountains, can be known through the remains of prehistoric humans associated with ancestral worship traditions that are generally found in highland (Sutaba 1994, 78; Wales 1953, 91; Soejono et al. 1993, 205–38; Perry 1918).

Megalithic belief in the mountain as a natural force, then became one with the belief in the mountain as the abode of ancestral spirits and the mountain as the place of the God of the Mountain, this perspective is not only found in Indonesia but also in Southeast Asia. This belief turned out to have a great influence on Indonesian society, not only at a time when the megalitic tradition was spreading rapidly, but far in history when the influence of Hinduism was widespread, such as in East Java in the 15th century AD, which saw Mount Lawu and Mount Penanggungan as sacred mountains. As we know that on Mount Lawu, there are Sukuh and Ceto temple, each of them has a megalithic style and on Mount Penanggungan there are a number of places of worship that have a terraced arrangement. Besides East Java, in Bali around the 10th century AD, we also noticed a symptom in East Java which is considered mountains as a sacred place, as a source of prosperity (Sutaba, 1994). The religious elements inherited from prehistoric times originating from levels during the Hindu-Buddhist period (the influence of Majapahit), and this can also be seen at the Dorobata Site.

At the highest part of the Dorobata terraced building, there is a hole that is thought to be a place for sticking a monolith stone by the Ncuhi (tribal institutions) in the past as a symbol of their ancestors as well as functioning as a sacred glorification medium, for safety, fertility, healing, and asking for holy water in their lives. Completing the rituals of the surrounding community (Sutaba 1994, 105–11; Prasetyo 2004, 309). The establish of a place of worship with a terrace on a high place, apart from ideological reasons, there is also a technical reason, namely that it was established on a high place to prevent the soil from being washed away and not slippery during the rainy season (Ekawana, 1986, pp. 150–153).

The same opinion was also expressed by Soeryatno that Islam entered Dompu in the 16th century which was marked by the change from a royal system to a sultanate and Sultan Syamsudin as the first Sultan of Dompu to embrace Islam. Since that time then Islam has become the official religion in the territory of the Sultanate of Dompu (Soeryanto, 2013, pp. 5–6). The proof of that civilization can be seen from its traces on the remains of Dorobata's terraces. Unfortunately, based on information from the community, this terrace has been badly damaged by the eruption of Mount Tambora in 1815, and it was getting worse when there was a change in residential culture from houses on stilts to stone or concrete houses., the community are competing to take the bricks on this terrace until almost only a small part is left. This seek was finally stopped because of an appeal from the local government, because the place is a historical place.

The multistory civilization of the island of Sumbawa, attracts researchers to study the civilization of this island. Chambert Loir and Djafar explained that there are relics in the form of two relief statues, namely statues of Ganesha and Buddha Amitaba, a phallus, and several relief statues of stupas on cave walls located in caves in Batupahat, Bima, which local people call Wadupaa, reputedly since the 19th century, 6–7 (Chambert-Loir 1985, 51; Djafar 2012, 58; Utomo 2018, 3).

Atmojo describes the findings of the Wadu Tanti (Slate) inscription, carved on a large stone, with Old Javanese script in the Bolo area, Bima, around the 14th century. This research is very helpful as evidence that the influence of Majapahit has reached the island of Sumbawa, and has succeeded in defeating its king called Aji Sapalu (Atmodjo, 1994, p. 3). The islands east of Java, first called the island of Bali, were subjugated in 1343 AD, followed by Lombok or the Desert, which was located by the Sasak tribe. Dompo (now Dompu) which is located on the island of Sumbawa, according to Nagarakretagama pupuh 72/2-3 and Pararaton, was subdued by the Majapahit army under the leadership of Mpu Nala in 1357 AD. The impact of Majapahit on the island of Sumbawa including Bima and Dompu left traces of artifacts that can be found today in the area including yoni, nandi, heirloom keris, sacred building structures and so on sebagainya (Muljana 2006, 161; Susetyo 2014).

The previous research in Dompu District, especially the Dorbata Site which is located south of the Laju river, has succeeded in revealing the existence of the Dorbata Site, which is one of the important sites because it became one of the instigate of Dompu Regency, with the remains of a terraced structure (Kusumawati, 2007, p. 112). This site functioned as a place for holding ancestral worship rituals during the Ncuhi era, and the Gods during the Majapahit influence in the land of Dompu starting in 1357 AD, finally in 1545 AD the location of the palace was built by the first sultan Dompu with the title Sultan Syamsudin (Ambarawati 2010, 108–21; Sumerata 2014; Rema, Juliawati, dan
The latest is the research of ancient wisdom of Dompu which was found from traces in the Dorabata area. The results of this study are still very relevant to be applied and used as a reference in the research used (Rema et al. 2020).

The research in Hu'u District found various remains of sitting graves, pottery fragments, megalithic traditions, and various other technologies that are seen as Austronesian culture, along with environmental wisdom. This research is useful for revealing Austronesian cultural traditions in Hu'u District. It is indicated further developments in Hu'u, namely the So Langgodu Site, found pottery and ceramic shards as an indication of the presence of settlements at the site (Kusumawati 2010, 513; Mahaviranata 2004, 4; I. N. Rema dan Syafrudin 2019, 25–38; Bagus 2014, 92).

When it is compared to other places, namely at the Ta'a Site, Kempo District, ceramics, hole money, and bronze objects are used as grave provisions. This conclusion was drawn because the artifact is in the same context as the findings of the human skeleton (Ambarawati, 2003, p. 103). The abundant success that has been achieved finally disappeared due to the eruption of Mount Tambora which left deep pain. The impact also buried the Dompu civilization, which continues to be traced (Haribuana, 2017, p. 20). From the previous studies, none has specifically analyzed the period of use of the Dorobata terrace, which makes this research important to do. This study raises the issue of the use of the Dorobata terrace, with the aim of knowing the period of use of this terrace with the ideology that underlies its establishment.

2. METHODS

The Dorabata site is located in the Sambi Tangga neighborhood, Kandai Satu urban village, Dompu Subdistrict, Dompu Regency, West Nusa Tenggara Province. Astronomically, the coordinates are 8° 32ʹ 42ʺ S and 118° 27ʹ 24ʺ E (figure 1). This research is a qualitative research with a landscape approach, analyzed by laboratory analysis and qualitative descriptive using ideological theory which is a collection of ideas, values or beliefs that exist in the concept of establishing the terraces of Dorobata. In addition, ideology is also defined as ideas favored by certain social groups, as well as values that can perpetuate a dominant power (Cavallaro, 2004, pp. 136–137). The relative dating of this site was obtained based on historical data and analysis of excavated artifacts. Absolute dating was obtained through 14C analysis of charcoal findings.

![Figure 1 Map of the research location of the Dorobata site in Dompu Regency, West Nusa Tenggara (Source: Regional Regency for Archaeological Research in Bali Province Document).](image)

Analysis of radiocarbon dating of charcoal samples begins with a treatment process which includes cleaning the sample from impurities such as soil, roots, leaves, etc., then washing and drying the sample at a temperature of around 200 °C for one night. Furthermore, the combustion process is carried out in the burner tube in a series of CO2-absorption line device. In the combustion process, a strong oxidator is needed such as cupric oxide (CuO). The charcoal sample combustion process is carried out at a temperature of 600 °C under vacuum condition to produce $^{14}$CO2 through the following reaction (Siregar & Satrio, 2012).

$$2CuO + \text{sample (charcoal)} \rightarrow ^{14}CO_2 + 2Cu$$

$^{14}$CO2 which obtained during combustion process is collected in a $^{14}$CO2 trap flask at a temperature of -180 °C using liquid nitrogen. Furthermore, at room temperature, the $^{14}$CO2 is absorbed using 30 ml of a mixed solution of Carbosorb-E/Permafluor-E on a CO2-absorption line device so that a Carbamate solution will be formed (Satrio et al., 2020). A total of 21 ml of the Carbamate solution was then poured into a glass vial with a capacity of 21 ml. The final stage is the counting process using the Liquid Scintillation Analyzer (LSA). Generally, the $^{14}$C analysis of charcoal sample is carried out through the following steps (Figure 2).
This research was assisted by techniques of shooting, depicting, recording, and in-depth interviews with six key informants to obtain relevant data. After analysis, it ended with drawing conclusions.

3. DISCUSSION

Dorabata is a very interesting site to be further researched as the local people believe that there is a hole at the top of this hill containing a distinctive feature. Inside the hole, there is water which is believed to provide benefits such as curing illness, bringing fertility and safety. Information was also obtained that several years prior to the survey there was a cylindrical stone lying near the rock hole, but when the survey was conducted in 1978, the stone was no longer there. In 1989, the Bali Archeology Research Team conducted their first study at this site, assuming that this hill was originally built as a terraced structure, then a monolith was built at the top (Suantika et al. 1991, 4; Ambary et al. 1978, 15–16).

In addition to that, Ambarawati (2010, 117; 2011, 7) reinforced by stating that this site is in the form of a terrace, based on the concept of a continuing megalithic tradition, which developed before getting Hindu-Buddhist influence from the Majapahit Kingdom in the Sumbawa archipelago including Dompu. After obtaining Hindu-Buddhist influence in 1357, this place is allegedly also used as a means of worship (Suantika et al. 1991, 6; Muljana 2006, 161; Djafar 2012, 58).

When Dompu gained Islamic influence, the Dorabata Site was reused as the site of the first Dompu Sultanate palace with the crowning of Sultan Syamsudin in 1545. In addition, in 2010–2011, the team found plain and ornate tombstones indicating this site was also used for Islamic burials (Sumerata 2014). Moreover, Raffles reinforced by stating that in 1815 due to the eruption of Mount Tambora, the Bata Ntoi Palace (Old Palace) at the Dorobata Site was moved to the north of the Nae River, whose location is now in the area of the Baiturrahman Grand Mosque, Dompu during the reign of Sultan Abdul Rassul II (reigned 1809-1857) (Hagerdal, 2017, p. 167).

At the end of the Japanese occupation, the palace was moved again to its current Dompu Regional General Hospital position (Suantika, Ambarawati, dan Mahaviranata 1994, 25; I. N. Rema dan Sumerata 2016, 1, 14).

Based on wall observations and excavation results from 1991-2019, the Dorobata site was formed on a hill with a square plan, measuring 54 x 54 meters in a west-east and north-south direction. The more up, the sides are smaller so as it formed terrace. Each terrace is bordered by river stone, and on top of the stone lined with bricks, a large stone is installed at each corner, which is thought to be a boundary marker, and a confirmation of the sacred area, the stairs as an exit are on the west side (figure 4). Based on the excavation results on the walls and top of the hill, it was successfully reconstructed as follows (I. N. Rema, 2020, p. 155) (figure 5).
A study in 2017 showed excavation was carried out at the top of a hill to find a continuation of the structure that had been found in 2016. Through this excavation, it was discovered two square brick structures, a structure made of greenish-white tuff stone in the shape of a square (picture 6).

Figure 5 Brick Structure. (Source: Regional Regency for Archaeological Research in Bali Province Document, 2017).

The excavation of this structure managed to find charcoal from the same depth of 55cm which was taken for analysis at $^{14}$C. Based on tests of two charcoal samples, one sample dates to the mid-15th to early 17th centuries, and the other to the 11th to early 13th centuries (figure 7). The findings of structures at the Dorobata Site from several stages of research, further strengthen the notion that there were important buildings of its time at this site, and at least have shown the number of years of use, precisely in the 11th-13th, and 15th to 17th centuries (Tim Penelitian, 2017, pp. 23–26).

Figure 6 $^{14}$C calibration curve of the finding of charcoal at the peak of Dorobata, in the northeast quadrant, 55 cm deep. (Source: Research and Technology Center for Isotope and Radiation Applications, 2021).

Based on the results of archaeological research carried out from 1989 to 2019, at the top of the Dorobata terrace, there are at least four buildings that are separated from one another. It shows a complex of buildings standing on the top of a small hill. In addition to the brick foundation structure, metal fragments, red-slip and unslip earthenware fragments, Chinese coins from the Qing Dynasty from the 18th-19th centuries, foreign ceramic fragments from the Song Dynasty of the 12th-13th centuries, Ming Dynasty of the 14th-15th centuries, also the Qing Dynasty of the 18th–19th centuries were also discovered. Most of the discovered ceramics are from the Ming Dynasty from the 14th/15th century. Apart from China, there are also Thai ceramics from the 14th–16th century Sawankhalok, and from the 14th–16th century Vietnam (I. N. Rema et al. 2019, 89, 95; I. N. Rema 2020, 156).

Figure 7 Brick Structure. (Source: Regional Regency for Archaeological Research in Bali Province Document, 2019).

The interesting ones, the finding of pottery shards that have Majapahit characteristics which are red, have a 1-2 millimeters of thickness, and have a smooth temper, was presumed to have come from the shape of a jug or container to hold water, such as a bowl. The existence...
of a Majapahit-type jug or container around the Dorobata peak may function as a place for holy water brought by the priest during the ceremony. The shape of the jug is as same as the ones found in areas that are presumed to be the former locations of the ancient settlements of Majapahit as previously mentioned. It is in line with information from community leaders and culturalists or historians stating that the top of this hill, i.e. the hole, is used as a place of worship and rituals of toho ra dore or ancestor worship rituals.

Regarding the brick structure found horizontally at the top of Dorobata, it is strongly suspected that it originated long before the founding of the Dompu Sultanate Palace, which was at the same time as Majapahit (14th/15th century). This assumption is based on the technique of gluing bricks, namely by rubbing without using cement species (figure 8) (N. Rema et al., 2020). On the findings of this structure, the charcoal was found then being taken and analyzed at $^{14}$C, to obtain absolute dating. The results of the $^{14}$C analysis show that the Dorobata civilization lasted from the 15th century to the early 17th century (figure 9).

![Figure 8](image-url) $^{14}$C calibration curve of the finding of charcoal at the Dorobata peak, in the southwest quadrant, 45 cm and 55 cm depth. (Source: Research and Technology Center for Isotope and Radiation Applications, 2021).

The various research results above indicate that this site was built on a hill based on a continuing megalithic cultural tradition that uses the hill to build a place of worship for ancestral spirits in the form of a terrace. Furthermore, Then Hindu-Buddhist culture entered the Dompo area which seems to be used as a sacred place i.e. a place of worship of ancestral spirits and gods.

When the Islamic influence entered Dompo, this place was also reused as the place where the first palace of the Dompu Sultanate was built. If paying attention to the existence of a rectangular hole at the top of Dorabata, and information about the monolith stone existed and used to lie beside the hole. In addition, it indicates that during the construction of the first Dompu Sultanate palace, the monolith stone was still preserved.

The existence of the findings of plain and ornate tombstones suggest burials at this site. This happened after the palace of the Dompu Sultanate was moved to the Baiturahman Grand Mosque area. This assumption was based on the findings of tombstones located between the brick structures, which were suspected to be the former foundation structure of the terraces before Islam entered Dompu. According to cultural information, after Dompu got Islamic influence, the
previous building was cleaned, then backfilled, on top of which the first palace of the Dompu Sultanate was built.

4. CONCLUSION

Dorobata terrace is a site located on a small hill which is now known by local people as Dorobata. This designation is used because on this terrace once stood a palace. Based on the excavation results, it can be seen that Dorobata is in the form of a terrace with seven steps with the entrance to the west. This terrace was built on a small hill based on the concept of a megalithic tradition allegedly built during the Ncuhi period, as a sacred place for worshipping ancestral spirits. Moreover, it continued to the period of Majapahit influence in 1357 as a place of worship of ancestral spirits and the gods. When Islam entered this area, and the crowning of Sultan Syamsudin as the first sultan of the first Dompu in 1545, Dorobata turned into the place where the first Dompu Sultanate Palace was founded.

In 1815 the palace was unfortunately damaged by the eruption of Mount Tambora, then moved to the Baiturrahman Grand Mosque area by Sultan Abdul Rassul II (1809-1857). In research activities at the top of the Dorobata terraces, ceramic fragments dominated by Ming Dynasty Chinese ceramics from the 14/15th century were found, this finding was strengthened by the discovery of charcoal, then an analysis of 14C was carried out which dominantly resulted in dating from the 11th-13th, 15th century to the early 17th century AD. It indicates that the use of Dorabata from the end of the Majapahit era to the development of Islam in Dompu.

AUTHORS’ CONTRIBUTIONS

The three authors in this article are the main contributors.

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