## BURIAL RITES AND CERAMICS: EVIDENCE OF EARLY METAL AGE SOCIETY IN SAMON VALLEY

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## Abstract

The Early Metal Age is the transformational period changing from prehistoric society to historical society. In Myanmar, it is found that there are many evidences that the Early Metal Age society had settled down along the Samon River from c. 1000 BCE to c. 500 CE. The burial sites are only major evidences indicating the existence of Early Metal Age society in that area. Such common objects as pottery vessels found in the graves play an important role to understand the burial customs, social and economic conditions, and cultural distribution of the society in the region through the individual burial assemblages. This study, therefore, aims to explore the role of pottery in burial rites, representing social status of the society and their distributions in the local cultural context. In this study, the data was collected from the excavations of the selected five sites undertaken from the late of 1990s to the late of 2010s, belonging to the Early Metal Age society. The collected data was analyzed by using the quantitative approach. The study of grave pottery in Samon valley reveals that the society might have practiced two or more kinds of burial rites and the differences in the numbers and types of pottery represented different social ranks. Moreover, the dynamics utilizing pottery are concerned with the distance between their locations and the water resources.

Keywords: Early Metal Age, burial assemblages, grave pottery, quantitative approach, Samon valley

## Introduction

The Early Metal Age sites, especially in the Upper Myanmar have drawn the attention of researchers from the late 1990s to recent times. Mu, Chindwin and Samon river valleys are the important places where the evidences of the Early Metal Age Society are abundantly found. Since these sites are burial sites, the evidences of these societies from these areas often reflect the funeral ceremonies. An increasing number of researchers, therefore, emphasize the culture of the Early Metal Age society from different point of views such as burial practice, cultural context, metal objects and so on. These research works reveal the local and regional cultural sequences and the chronology of this society, dating back from c.1000 BCE to c.500 CE (Pryce et al., 2016). However, there is no result in the literature regarding how the burial customs impacted on the grave pottery. A few previous researches on grave goods, especially the grave pottery (Ko Ko Kyaing, 2003; Sein Myint , 2003; Win Maung, 2003; Maitay, 2006), focused on the characteristics and typology of the pottery and compared with those of the neighbouring countries. Therefore, this study aims to investigate the role of grave pottery in the burial rite in these sites, how they distribute or spread in the local and regional context, and how they are related to the social status in the past.

#### Previous works on Early Metal Age Society of Samon Valley

There are many research works carried out to learn about the development of cultural achievement of society in Myanmar since the colonial period. Particularly, many scholars have researched the Stone age cultural sequences, early urbanized culture such as "Pyu", the imperial state Bagan and other historical sites through archaeological remains and historical sources. However, there has been little research on the late prehistoric society from Bronze and early Iron ages before 1990s. Due to few researches and archaeological findings, it was difficult to reconstruct the nature of society from these ages. Therefore, Stargardt (1990: 14) suggests that due to lack of the technological achievement in Myanmar shifted studies were made from stone to iron without

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touching upon the copper nor bronze Ages. With the discovery of Nyaunggan burial site in central Myanmar bronze artifacts were discovered in 1998, the archaeologists found evidences of Early Metal Age society along Chindwin, Mu and Samon rivers. Among them, it is remarkable that a great number of the evidences of these societies are abundantly found along the Samon river valley and hence it becomes an important place to study the Early Metal Age in the country. Therefore, many researchers emphasize the Samon valley to excavate cultural artefacts of the Early Metal Age society.

There are series of excavations were carried out to understand the Early Metal Age society at Myin U Hle, Kokkokhala and Hnaw Kan between 1999 and 2001. Win Maung has described the Samon valley culture probably related to the Early Metal Age society. He (2002) found the archaeological evidences of the societies who had settled down in the area with a culture of Samon Valley somewhat similar to Halin ancient city of Pyu Civilization. Therefore, he concluded that the Samon valley was a homeland for the predecessors of Pyu Civilization.

Bob Hudson, the Australian archaeologist, endorses the suggestion of Win Maung's opinion of "Samon Valley as a homeland of the ancestors of Pyu". He, therefore, (2005) articulates a hypothesis that Samon valley was not only a Pyu homeland, but also the origins of the Myanmar's early urban system. Additionally, he claims there might have been cultural affinities between late prehistoric society of Samon Valley and pre-urban society of Halin and the ancient Pyu city, according to archaeological evidences, especially bronze artefacts, carnelian beads, coffin decorations and earthenware: distillation pots. He also compares these cultures with the other late prehistoric society in a local and regional context, especially China.

In 2006, Anna Sophie Coupey studied the funeral practices of children of Early Metal Age society in Myanmar. She (2006) compared the ways of burial for children and grave goods of Myanmar with those of neighbouring countries, particularly Thailand. She concluded that the influence on the funeral practices came from India based on geographic location of Myanmar, funeral practices, and the appearance of exotic objects in graves of Southeast Asia, especially Thailand similar with Samon valley.

Christophe Maitay wrote a research paper to describe the characteristics of ceramics found in Samon Valley. He (2006) attempted to define some specific characteristics of Upper Myanmar ceramics, in order to propose a provisional typology of the Ywa Htin Iron Age potteries, and a more precise chronology for Metal Age. He presented a range of characteristics found in the Iron Age ceramics discovered in Samon Valley burial sites through the archaeological excavations.

In 2010, it was Elizabeth Moore who studied the bronze cultures of Myanmar including Samon and compared them with Dian Cultures of Yunnan, China. She (2010) stated that Samon valley culture, one of Upper Myanmar cultures, did not fall into a 'Dian' cultural sphere, and said instead it was a local development. She also concluded that the Samon finds bring Myanmar into a discourse of wider overland and maritime exchange c. 500 BCE to 800CE.

Khin Cho Htwe wrote a paper orienting to the ancient burial practice in Samon Valley in 2013. She (2013) described the burial features of three excavated sites in Samon: Hnaw Kan, Ywa Htin and Myo Hla and the features of their significant grave goods such as Kye Doke (bronze packets) and "Mother goddess" figures. She described the role of the burial practice and importance of their particular grave goods.

Aung Mon studied a number of Early Metal Age sites for his PhD thesis at the University of Yangon. He (2013) attempted to fulfil the gaps of prehistoric chronology by analysing the culture of the artefacts such as metal artefacts and earthenware, geographical features and their burial practice and ritual thoughts. According to his works, it was revealed that Samon is the area where the social rank began to intensify and represents the transitional period from the bronze to

iron age. Samon people were traders and agriculturalists, and their traditional customs showed and they were not only the ancestors of Pyu but also the ancestors of other tribes settled down in this area. Although there are many archaeological investigations dealing with the Early Metal Age society in Samon valley, these research works revealed the cultural sequences and chronology of this society.

## Geographical and Archaeological settings of Samon Valley

Samon river one of the tributaries of the Ayeyarwaddy flows through Pyawbwe, Meikhtila, Wundwin, Kyaukse and Tada U Township in Mandalay, Region. The location is between Latitude 20.16667 to 20.58333 N and Longitude 95.66667 to 96.5 E, about 200 m above the sea level. The valley runs north-south, bounded to the east by the Shan Plateau. The valley lies in between Shan Plateau to the East and Bago Range to the West.

There are fifteen Early Metal Age sites in Samon Valley excavated by the Department of Archaeology of Mandalay and the French-Myanmar joint archaeological team from 1999 to 2010. These excavated sites are Ywa Htin Gon, Ohh Min, Htan Ta Pin, Hton Bo and Kyo Gon in Pyawbwe Township, Hnaw Kan, Myin Oo Hle and Myauk Lei in Mahlaing Township, Myo Hla in Yamethin Township, Nyaung Gon and Myhar Yawai in Meikhtila Township, Ywa Gon Gyi in Thazi Township, and Kokkokhahla and Kan Thit Gon in Wundwin Township. However, people reported that there are over 60 sites around the Pyawbwe Township alone (Aung Mon , 2013).

Yet, there is no successful absolute chronology for these sites based on scientific dating. Therefore, to establish the chronological sequence of the sites from Samon valley, the archaeologists often used cultural features and artefacts typology from the sites by comparing them with those from the local (i.e. Taungthaman) and regional context. According to the typology of the artifact from most of the sites, especially the southern Samon sites such as Ohh Min, Htan Ta Pin, Hton Bo, Nyaung Gon and Ywa Htin are dated back to c. 500 BCE to c.500 CE. Ywa Gon Gyi, however, is related to the Neolithic occupation and its chronology can be extended to early second millennium BCE (Pautreau, Coupey, & Kyaw, 2010).

Studying the burial sites of Samon Valley, it is found that most of the body of the adult and semi-adult deceased, male and female, were buried in the coffins or shrouds, placed in the supine position with upper and lower members stretched-out. Particularly, the infant deceased were buried inside the two or three big jars, lain with their opening touching and facing each other. Most of the body of the deceased were oriented towards East to West and some were oriented towards north to south (Pautreau, Coupey, & Kyaw, 2010).

Human remains are found in association with their possessions such as various types of pottery, several types of beads, stone artifacts, bronze tools and objects, iron weapons and animal bones. Among the grave goods, pottery is the important funerary inclusions among the burial sites. There can be found three types of pottery: globular pots, cylindrical pots and shallow bowls as particular funeral offerings. Pautreau claims that the tradition of offering the three classic vessels in the graves of the Samon valley probably might have been started in the 4<sup>th</sup> century BCE at Ywa Htin, but it is difficult to determine when the practice declined (Pautreau, Coupey, & Kyaw, 2010).

In this paper, the burial rites and the grave pottery of five excavated sites in Samon Valley are selected for analysis, based on the limitations of the archaeological records. These sites are Ohh Min, Htan Ta Pin, Nyaung Gon, Hton Bo and Ywa Gon Gyi. The individual sites are discussed as follows.

#### **Ohh Min**

It is situated about 10 km to the northeast of Pyaw Bwe Township, Mandalay Region. It is also situated around 1.5 km from the left bank of the Samon River and its coordinates are 20.639167 degrees North and 96.126972 degrees East at an altitude of 206 m. The archaeological excavations was carried out by French-Myanmar joint team in January, 2005. The excavations yielded 10 inhumations; eight inhumations of adult, one immature and one unidentified, and pottery vessels; seven globular pots, five cylindrical pots and six shallow bowls. Bronze and iron tools were not revealed in the excavations although they are found as surface finds (Pautreau, Coupey, & Kyaw, 2010).

In the burial features, the deceased were buried in supine position with upper and lower members stretched-out. Most of them were oriented towards East to West. All the deceased are primary burial. Three pottery vessels were placed around the legs of the deceased, sometimes near the waist and neck as the funeral offerings. This set of pottery were found in four graves (Pautreau, Coupey, & Kyaw, 2010). It is noticed that no beads are found as associated finds.

## Htan Ta Pin

It is situated about 4 km to the west of Pyaw Bwe Township. The village is situated on the left bank of the Samon River and coordinates are 20.58725 degrees North and 96.002272 degrees East at an altitude of 204 m. The archaeological excavations were carried out by the French-Myanmar Archaeological team in 2006. The excavations yielded a total number of 36 more or less intact graves. A number of 23 graves still contained human remains; 17 graves had been used for individual adults and 6 graves for immature (children), and 13 graves contained grave goods. The commonest excavated finds are the classical pottery, and carnelian and glass beads. Some animal remains, bone bracelets and some polished stone tools can be found near the human remains (Pautreau, Coupey, & Kyaw, 2010).

In the burial features, most of the deceased were buried in supine position with the head towards East and the feet towards West. The 21 graves are primary burials and 2 graves are secondary or reduced burials. The pottery vessels were placed near the feet of the deceased. A complete set of pottery were found in 15 graves (Pautreau, Coupey, & Kyaw, 2010). It is suggested that society might have settled down in Htan Ta Pin since the Neolithic period, as some polished stone tools can be found.

## **Nyaung Gon**

It is located to the west of Nyaung Gon Dam, about 10 km to the southwest of Meikhtila Township, Mandaly Region. It is situated on the left bank of Samon valley and coordinates are 20.824111 degrees North and 95.834528 degrees East at an altitude 244m. The archaeological excavations were carried out by the French-Myanmar joint archaeological team in January 2007. The excavation yielded 36 graves. A number of 21 graves are still contained human remains: 9 graves had been used for adults and 17 graves for immature (children), and 10 graves containing only grave goods. Most of the graves were not in good condition due to the grave looters. Some of the deceased children were buried in two or three large jars. The most representative excavated finds are the three classical pottery vessels as well as pedestal bowls, and stone, bone and earthenware beads. The animal remains were also found. The significant finds of Nyaung Gon are one copper arrow spear head and thirteen copper wire bundles (Pautreau, Coupey, & Kyaw, 2010). In the burial features, the deceased were buried in supine position and oriented from East to West. Ten immature graves in large jars placed against each other were found and one grave corresponded to one in which the body had been reduced. The bronze wire bundles were buried around the waist and hand of the deceased. Most of the graves are primary burials and some are

reduced or secondary burials (Pautreau, Coupey, & Kyaw, 2010). Three classical pottery vessels found in most of the burial sites in Samon valley were not found in this site and the pedestal bowls are only related to the adult burials. Therefore, it is assumed that Nyaung Gon is slightly different to the other sites.

## **Hton Bo**

It is situated about 3 km to the west of Yintaw village in Pyaw Bwe, Mandalay Region. It is also located on the left bank of Samon River and coordinates are 20.691128 degrees North and 95.916628 degrees East and at an altitude about 213m. The archaeological excavations were carried out by the French-Myanmar archaeological team in 2008. The excavation yielded 27 graves and 17 graves contained 21 individual human remains (8 graves for adults and 9 graves for immature). Three types of pottery vessels and beads were mostly found in the graves. A very few numbers of iron tools and weapons were also found in the graves. The animal remains and tortoise shells were also found (Pautreau, Coupey, & Kyaw, 2010).

In the burial features, the deceased were buried in supine position oriented towards the East. Most of the pottery were buried around the feet. Both the primary and secondary or reduced burials are found in this area (Pautreau, Coupey, & Kyaw, 2010). The remain of tortoise shells as funeral offerings have not been found in other prehistoric burial sites in the Samon Valley. The finding of iron tools indicates that Hton Bo is more related to the Iron Age.

## Ywa Gon Gyi

It is situated about 10 km to the North of Thazi Township, Mandalay region and from about 1km to the north of Kanthitkon village which also has ancient burial sites. It is also located on the left bank of the Samon River and coordinates are 20.937822 degrees North and 96.032372 degrees East and at an altitude 166m. It was excavated by the French-Myanmar archaeological team in 2009 and 2010. The excavations yielded 82 graves: 46 of the deceased individuals are adults, 18 were immature(children) and other 8 of the deceased were unidentified. The different types of pottery (globular pots, cylindrical pots, shallow bowls and pedestal bowls), bronze wire bundles, bronze coffin ornaments, iron tools, polished stone tools and some beads were found near the deceased. But beads are rarely found (Pautreau, Coupey, & Kyaw, 2010).

In the burial features, the deceased were buried in supine position and oriented towards North to South. The 61 graves are primary burials and 11 graves are reduced and regrouped into 7 structures. Fourteen burials contained no human remains. The pottery vessels were mostly placed near the feet of the deceased. A complete set of pottery vessels were found only in two graves (Pautreau, Coupey, & Kyaw, 2010). It is assumed that Ywa Gon Gyi is related to the Neolithic, bronze and iron ages as the polished stone tools, the bronze artefacts and the iron artefacts were found here. Moreover, it is also found that Ywa Gon Gyi is the only site where the deceased were buried and oriented towards North to South in out of five sites.

## **Materials and Methods**

Quantification is one of the useful methods for studying the pottery in archaeology. It has been defined as 'the process of measuring the amounts of pottery of different categories in one or more assemblages' (Orton, Tyers, & Vince, 1993). The aim is to investigate and compare the populations of different pottery types in order to inform questions of chronology, use, social and economic conditions and site formation process (Barclay, et al., 2016). Orton stated that "this is a subject which has often generated more heat than light in recent years" (Orton, Tyers, & Vince, 1993). His statement has remained as undeniable for more than twenty years. Kotsonas outlined the quantitative approaches that reveal the composition of burial assemblages, the representation

of varied types in different assemblages and the role of ceramics in the funerary ritual (Kotsonas, 2011).

This study, therefore, applied the quantitative method to measure the amount of each type of pottery in individual sites, and Geographic Information System (GIS) was used to explore the spatial context and the role of ceramics in the burial rite among these sites. This study collected the pottery data from the burial sites such as Ohh Min, Htan Ta Pin, Nyaung Gon, Hton Bo and Ywa Gon Gyi in Samon Valley excavated between 2005 and 2010. This study analysed a totality of 153 pottery which are usually found in the excavations. These potteries can be divided into five groups: globular pots, cylindrical pots, shallow bowls, pedestal bowls and vases.

## Results

The pottery from the sites under present research has similar styles of decoration, form and size. These five sites have revealed a series of pottery samples which are fundamental for understanding the Early Metal Age society of Samon valley. A significant variation in shapes has revealed a large number of form variants. As shown in the figure (1), five main groups have been identified due to their morphological variations: cylindrical pots, globular pot, pedestal bowl, shallow bowl and vase. The globular pot can be divided into 10 variants, the cylindrical pot into 16 variants, the shallow bowl into 15 variants, the pedestal bowl into 9 variants and the vase into 1 variant. Figure 2 summarizes the results on the amount of pottery used in graves of five sites. The highest percentage (42%) of all the pottery among the five sites is the globular pots are 14%. These three types of pottery can be found as a set of grave pottery and in all sites. The pedestal bowls total nine percent. This is the least percentage (1%) out of all the pottery. Hence, it is suggested that the globular pot was the most fundamental and essential container in the Early Metal Age in Samon valley.



Figure 1 Morphological Variations of Samon Pottery (modified and adopted from Pautreau, Coupey, & Kyaw, 2010)

Figure 3 presents five main groups of pottery types and their distribution among five sites of Samon valley. The proportion of globular pot and shallow bowl is much higher than the other types of pottery. Particularly, the proportion of globular pot increases in the Ohh Min and Ywa Gon Gyi sites which are short distances to water resources. It indicates that the occurrence of globular pot increases as the location of burial sites are found closer to the water resources. It is, therefore, suggested that the globular pots might have be used for storage of water. Furthermore, the proportion of cylindrical pots associated with the pedestal bowls decreases noticeably in Nyaung Gon and Ywa Gon Gyi which are located slightly further north. It is possible that cylindrical pots and pedestal bowl might have been used for the same function. Moreover, the proportion of shallow bowl gradually decreases as the sites are found closer to the Samon river. It highlights that the utilization of shallow bowl might have been popular in areas closer to the Samon river. The proportion of pedestal bowl increases in the sites which are slightly closer to the northern part of the valley. The vase is a significant type of pottery in the Samon valley and it is only found in Nyaung Gon.



# Figure 1 A Pie Chart showing the percentage of pottery utilization in five excavated sites of Samon Valley

However, pottery can be found in several number and various positions in the graves of the Early Metal Age society. A few human remains are associated with only one type of pottery: globular pot, but some are related to two types of pottery: globular pot and shallow bowls. And in contrast, a smaller number of human remains are associated with three types of pottery: globular pots, shallow bowls, cylindrical pots. Therefore, the globular pot, the cylindrical pot and the shallow bowl can be assumed as a classic pottery set in the Early Metal Age graves. It is indicated that the utilization of pottery in graves are related to the social ranks indicating a higher social class as the number of pottery used increased. Moreover, figure 4 presents the comparison of the total number of graves in individual sites and the number of graves in which the classic pottery sets are found as a grave pottery set. It is found that there is no grave which is associated with this classic pottery set in Nyaung Gon. In addition, only two graves out of seventy-five graves can be found

with this pottery set in Ywa Gon Gyi. It indicates that the burial rite of the classic pottery set of graves decreases in the graves which are commonly related to the pedestal bowls. It supposes that the burial practice of Nyaung Gon and Ywa Gon Gyi slightly differed from the burial practice of Ohh Min, Htan Ta Pin and Hton Bo.



Figure 2 A map showing types of pottery in five excavated sites of Samon Valley and their distributions



Figure 3 Comparison of graves of individual sites and utilization of a set of three classic pottery

## **Discussion and Conclusion**

This research investigated the role of pottery in the burial rite of Samon valley and their distributions. This study shows that there are some differences in the distribution of pottery among the burial sites of Samon valley. Particularly, a large amount of globular pots can be found in all the sites. In some cases, for example, the globular pots are abundantly discovered in the sites which are very near to the water resources such as Ohh Min and Ywa Gon Gyi. It supports that the globular pots might have been used for water storage in that Early Metal Age. Moreover, the globular pot, the cylindrical pot and the shallow bowl were probably the most basic and essential containers for the burial ceremonies and probably for the domestic uses of Early Metal Age as they are found in most of the graves among five sites of Samon valley. Therefore, it is supposed that the distributions of pottery are concerned with the distance between their locations and the water resources.

On the other hand, this study shows that the utilization of pottery in the burial rite somewhat relates with the social status. For example, only one type of pottery might have been used for the lower social rank and the higher social rank might have used a classic pottery set or more types of pottery. Therefore, it is concluded that the utilization of pottery in the burial rites of Samon valley is related to the social status and the amount of pottery in each grave can indicate social ranks of individual human remain. Moreover, the difference between the burial practice of Nyaung Gon and Ywa Gon Gyi, and the burial practice of Ohh Min, Htan Ta Pin and Hton Bo shows that the burial practices of Early Metal Age society might be two or more rites.

This study has taken a step in the role and utilization of pottery in graves and their distributions of the Early Metal Age society in Samon valley by the quantitative and the typological approaches. Further investigation should be verified the quantitative amount of pottery wear types, fabric compositions, making techniques of the pottery to realize the distribution of local cultural context among the Early Metal Age society.

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