# ANTHROPOLOGICAL PERSPECTIVE ON THE BRASS GONG CULTURE OF BAMAR NATIONAL (MYANMAR)

# PhD DISSERTATION

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# DEPARTMENT OF ANTHROPOLOGY UNIVERSITY OF YANGON MYANMAR

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# ANTHROPOLOGICAL PERSPECTIVE ON THE BRASS GONG CULTURE OF BAMAR NATIONAL (MYANMAR)

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### ABSTRACT

The title of this thesis is "Anthropological Perspective on the Brass Gong Culture of Bamar National (Myanmar)". The main purpose of this thesis is to explore the tradition of the brass gong culture of Bamar from the anthropological point of view. The specific objectives are to describe how the brass gong handicraft is inherited from generations to generation, to elicit the brass gong production process and to identify the role and functions of the brass gongs in Bamar culture. The researcher would like to study brass gong in Bamar society through 3Ps, from the stand point of property, prestige and power of brass gong. It means that having the "brass gong handicraft" in Bamar society as a property has some kinds of prestige and powers in Bamar society by that time. The study site is in Tampawady quarter, Chanmya-tha-zi Township, Mandalay Region, upper Myanmar. The informants were included brass gong craftsmen and their families, those who sell gongs in stairway at pagodas, monks, Buddhists, musicians who experienced, knew the background history of brass gong. The study was conducted with qualitative methods such as case study, interviewing and participatory. To collect the data of some background history of handicraft and traditions, non-participant observation, direct observation, key informant interview, focus group discussion, and in-depth interview were used .To study populations were 139. Brass gongs are still used in religious, administrative, economical and social functions, and as musical instruments in some societies in Myanmar. Brass gong still takes wide area as the tools and instruments in the Myanmar society, that the people still value brass gongs, and that ethnic groups in Myanmar somehow share common relation to brass gongs. Therefore, it is suggested that, craftsmen are required to promote their idea, knowledge and way of thinking sensible and appropriate to keep their cultural tradition of brass gong handiwork.

Key words: culture, society, handicraft, craftsmen, role, functions, religious, economic, musical, social activities, property, prestige, power

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## LIST OF ABBREVIATIONS

AD Latin Anno Domini

ME Myanmar Era

TV Television

MRTV Myanmar Radio & Television

MWD Myawaddy Television

CD Compact Disc (CD player)

Kg Kilogram
Cm Centimeter

## CHAPTER (I)

#### INTRODUCTION

#### 1.1 Background

Anthropology is the study of man and his ways of life. And then, Anthropology is so diversified that in order to achieve precision, its practitioners must of necessity specialize. The two main subdivisions are therefore (1) Physical anthropology and (2) Cultural anthropology. Cultural anthropology deals with learned behaviors characteristics in human societies. According to Beals and Hoijer, cultural anthropology studies the origins and history of man's cultures, their evolution and development, and the structure and functioning of human cultures in every place and time. It is concerned with culture per se, whether it belongs to the primitive men of the stone age or to the European city-dwellers of today. According to Keesing, cultural anthropology is the facet of anthropology (manstudy) which describes and seeks general understandings about human "customs" or "cultural behaviors". Particular cultures vary among themselves in specific form and content, but all are alike in general respects; i.e., all have tools, language, customs, beliefs, music, etc. Culture covers material culture and non-material culture.

Material culture is the applied to the sum of the artifacts (manufactured goods and devices of all sorts) that are the result of a technology. According to the definition of culture as a set of patterns and themes for the guidance of human behavior, material culture is of course not a part of culture at all but only a result or product of it (*Beals and Hoijer*, 1953). Material culture means the buildings, tools and other artifacts that include any material item that has had cultural meaning ascribed to it, past and present (*Denise Lawman*, 2004 p-99).

Non-material culture refers to the nonphysical ideas that people have about their culture, including beliefs, values, rules, norms, morals, language, organizations and institutions. For instance, the non-material cultural concept of religion consists of a set of ideas and beliefs about God, worship, morals and ethics. These beliefs, then, determine how the culture responds to its religious

topics, issues and events. This dissertation emphasizes on two main points; material and non-material culture of brass gong culture of Myanmar traditional handicraft.

Many scholars define the term of "tradition" variously. By Richard Appignanesi (2002) the continuity of tradition, these major philosophical trends are continuous traditions uniting the intellectual history of the West. They provide links between the ancient sources, through medieval times, Renaissance, Enlightenment and Victorian speculation, right through to the modern and even the past modern era. According to Denise Lawman (2004) traditions mean a continuum of gradational culture change through time, representing the unbroken development of a single culture.

However cultural heritage is to maintain with various purposes. Heritage is an ancient property which reflects the past creative force of human life such as monuments artifacts including intangible resources such as language, rituals, traditions and values.

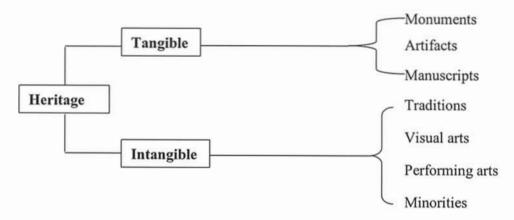


Diagram (1) The structures and elements of heritage

According to diagram (1), heritage is subdivided into two main fields. There are tangible heritage and intangible heritage. According to the convention concerning the protection of World Cultural Natural Heritage, tangible heritage includes monuments and sites; monuments are architectural works, work of monumental sculpture and painting elements or structures of and archaeological nature, inscriptions cave dwellings and combination of works which are of outstanding universal values from the point of view of history, art or science. Sites includes work of man or the combined works of nature and of man and areas including archaeological sites which are of outstanding universal values from the historical,

aesthetic, ethnological or anthropological point of view. Therefore, tangible heritage defines monuments, artifacts and manuscripts.

However, intangible heritage includes; the cultural heritage also comprises oral tradition, languages, music, dance and performing arts, crafts and custom for societies including minority and indigenous peoples. Thus tangible heritage combines those traditions, visual arts, performing arts and minorities.

Myanmar arts and crafts of every nationality show their culture and tradition. The history of Myanmar arts and crafts, under the dominance of the Pyu culture in the Srikistra Kingdom, the reputable level of the songs, dances, music compositions, and musical instruments can be noted. For one thing, the ancient city of Srikistra (AD 400-800), in that city, by excavating, there were five artistes of statues discovered such as (the flute player, cymbal player, drum player and dancers) (Sein Yee, 1979) (see figure-1.1). It could see in National Museum. There are invaluable for the history of Myanmar arts of music and the starting point of how improved the Pyu era (Tin Tun Oo, 2005, p-1).



Figure-(1.1) Pyu musicians, 7th-8th Century

#### 1.1.1 Background of ten kinds of handicraft

Myanmar arts and crafts or ten kinds of handicraft are real pride of Myanmar nationality. Thus, to know the tradition of brass gong in Myanmar, it needs to describe ten kinds of Myanmar handicraft to some extent. Then it is important enough to know about the country, religions and cultures of ethnic groups. There are ten Myanmar traditional handicrafts which are metaphorically called "ten flowers". These ten kinds of Myanmar handicrafts are as follows:

- Panbe (the art of blacksmith)
- Panbu (the art of sculpture)
- Pantain (the art of gold and silver smith)
- Pantin( the art of bronze casting )
- Pantaut (the art of making floral designs using masonry)
- Panyan (the art of bricklaying and masonry)
- Pantamault (the art of sculpting with stone)
- Panpoot ( the art of turning designs on the lathe )
- Panchi (the art of painting)
- Panyun ( the art of making lacquer ware )
   <a href="http://www.myanmartravelinformation.com">http://www.myanmartravelinformation.com</a> (accessed on 14.12.2012)

Beside, the art of *Pantin* is an enterprise producing materials of copper, bronze or brass. The artisans make triangular brass gong, gong, and brass bowl for monk. Weights in the shape of brainy ducks, tray, copper pot, cup bowl, cymbal, and bell jingle bell and small brass gong. Myanmar's traditional coppersmith's craft emerged before Bagan period (AD 849-1297) and it improved during Bagan and Inwa period (AD 1364-1555). Every pagoda in Myanmar has bells which were struck to tell the people of good deeds done. They are triangular bells which twirl when struck and ring with a sweet rising and falling tone which gradually fades away. Moreover there are gongs, slung from carved ivory or wood elephant trunks which are prized as dinner gongs. Different sizes and shapes of bells all unmistakably Burmese in design are popular as souvenirs. So are other castings such as weights and cow bells <a href="http://www.myanmartravelinformation.com">http://www.myanmartravelinformation.com</a> (accessed on 14.12.2012).

Therefore, after the reign of King Anawrahta (AD 1044-1077), ten kinds of art have been in full swing in Myanmar. Then, during the Inwa era, tenfold art had

achieved to the most extent through excerpt written by Letwethondara U Myat San. In "Sadina Pyoe" he wrote, 'Work saves through multiple and intricate crafts such as goldsmith, bronze work, painting, blacksmith, sculpture and lacquer ware alternatively'. Crafts and handicrafts in Myanmar classified to be of ten kinds. The tenfold art was named as "pan ( $\circ \S$ )" long ago but "pann ( $\circ \S$ )" in the present. Some scholars take such craft to be "pann ( $\circ \S$ )" because it decorates and embellishes accordingly as to be artistic and aesthetic. But some researchers imply the word "pan ( $\circ \S$ )" to be 'art of knowledge'. Such ten kinds of handicraft are done through inspiration, skill, and creation. Therefore, it is known as plastic art (Dagon Natshin, 1976, P-6).

Ten kinds of handicraft, art and crafts are black smithy, gold smithy, sculpture, painting, lacquer ware, turnery, stucco, stone sculpture, masonry and bronze casting. Some scholars supposed that the art had flourished at the reign of King Kyansittha (AD 1084-1113). According to evidences of chronicle and inscriptions King Anawrahta was the kings in Myanmar history; it is known that there were so many artisans during his reign.

In other words, during the reign of King Anawrahta, Buddhist stupas and temples had been established. Only then had religious edifices been sustained at the reign of King Kyansittha. At that time, Mon craftsmen who were held captives with king Manuha, those who came from India and those who belonged to Pyu stock created, modified and renovated such ten kinds of art and crafts to a high level (Natmauk Htun Shein, 1979).

Therefore, it may surmise that though plastic art has flourished since Bagan era, before the appearance of Myanmar nationals, at the time of Pyu, these art and crafts such as architecture, black smithy, sculpture, bronze casting, stucco, stone sculpture, etc, had culminated through evidences of urns, images, Bawbawkyi stupa, Laymhetnha stupa, Payama stupa, and images of gold and silver excavated in Srikistra. So, it is known that such art had been developed since Pyu era (*U Min Naing, 1987*).

#### 1.1.2 Background of brass gong

The culture of brass gong, in Myanmar it is called kyaye-mong (Φρίουρε) i.e. brass gong belongs to bronze casting, one of ten Myanmar handicrafts. In Myanmar, "pan-tin (οξιωξί)" is known as "pan-tan" or "pan-tran (οξιωξί)". Brass or Bronze foundry is known as "pa-din (οξιωξί)". Nowadays, it is well-known to be brass smith and bronze foundry. The art of bronze work flourished in the West so as to produce artillery and ornaments but in the East it developed as a religious art (Dagon Natshin, 1976).

Similarly, kyaye-thun (ஹு:ఫ్లిక్) and kyaye-khat (ஹ:ఫ్) are divided in Myanmar bronze work. Kyaye-thun is melting brass and pouring into mould of required shape. Kyaye-khat is beating heated brass or bronze to require form (Aung Nyein Chan, 2005). In Myanmar bronze casting, bronze blocks or plates are beaten with hammer so as to make musical instruments such as brass gong, triangular brass gong, bell, miniature objects such as jingle bell, timing bell, small bell, and culinary articles such as spoon, pot and pan.

The brass gongs are moulded in graduated sizes in wooden frames. Tune is an essential part in brass gong. Xylophone is used to tune the notes of the brass gongs. In doing so, brass gongs are tuned by casing the hollow of the bosses with a mixture of bees-wax and lead filings. After that, chisel is used to cast fringe cloth figures. Brass gong circle is tuned in like manner mentioned above. The total numbers of gongs in the chime are eighteen, tuned with changes of the melody in the flat-succession (Aung Nyein Chan, 2005).

The tradition of bronze casting started in Myanmar history at the Srikistra, Pyu era. By excavating the ancient city of Srikistra, Pyu (Hmawza-69500), the tradition of bronze casting materials were discovered. The statues found from this site were the statues of dancer which were made of bronze. It reflects that the arts of music already popular at that time. This evidence tells the existence of brass gong during the reign of King Alaungpaya, Kounbaung dynasty (AD 1752-1885). There was no evidence that this type of material could be seen during the Bagan era (*U Kyi*, 1953). To be exact, the brass gong is the material, which is concerned with the relationship between religious festival, the process of socialization, the works of art and the

administration. The activities that meet the Myanmar art during three kinds of time, i.e., past, present and future need to be studied well. Different materials availed nowadays had its origin in the past. Neglecting the past but evaluating the present only will bring future determinants erroneous. In the studying history of the brass gong widely used the reign of King *Alaungpaya*, Kounbaung dynasty. Therefore, this dissertation will be studied from the anthropological point of view.

#### 1.2 Rationale

Culture and arts are vital for every nationality. Everyone is responsible for preservation and development of their cultural heritage. Mandalay is a centre of Myanmar cultural heritage. There are brass gong foundries in Mandalay. This is the reason why Mandalay is chosen as the field for this research. Brass gong foundries exist only in Tampawady in Mandalay. No other place in Myanmar has this kind of business. Brass gong handicraftsmen were proud of their work and skill which they consider is dignifying of the city. Brass gong foundries produce the gongs in three sizes -large, medium and small. Brass gongs were used, during the time of Myanmar kings, to make public announcements, and to tell the time for the king to attend a royal audience and end the section. When the royal army marched to the front line, victory gongs were struck, and when the king stepped on the victory land, successful gongs (aung-maun: in Myanmar) were struck. Besides, golden gongs and silver gongs were valued as the auspicious objects in Myanmar culture. However, the Government of Laos, a neighbouring country of Myanmar, requested Myanmar Government, around 2000, to teach Laotians how to cast brass gongs. They requested that some young craftsmen wanted to learn how to cast brass gongs from Myanmar craftsmen. They would like to send some students to Myanmar to learn the art in the University of Culture (presently, University of National Cultural and Art). Unfortunately, the University of Culture, which was under the administration of the Department of Fine Art, the Ministry of Culture, did not teach brass gong casting techniques (Pantin). Therefore, the Government of Myanmar could not admit Laotian Myanmar brass gongs are famous for their voice quality and look students. magnificent. Therefore, the researcher researched this dissertation be significant as Myanmar cultural heritage.

#### 1.3 Research Questions

The main questions of this research are:-

- How long can the people of Myanmar continue to maintain, through generations, the art of casting brass gongs?
- Can the youths of present time learn this art? If not, why?
- How much value do people place on the symbol of gongs?
- What are the roles of brass gongs playing in Myanmar society?

### 1.4 Aim and Objectives

The main purpose of this dissertation is to explore the tradition of the brass gong culture of Bamar from the anthropological point of view.

The specific objectives are;

- i To describe how the brass gong handicraft is inherited from generations to generation
- ii To elicit the brass gong production process and
- iii To identify the role and functions of the brass gongs in Bamar culture

#### 1.5 Conceptual framework

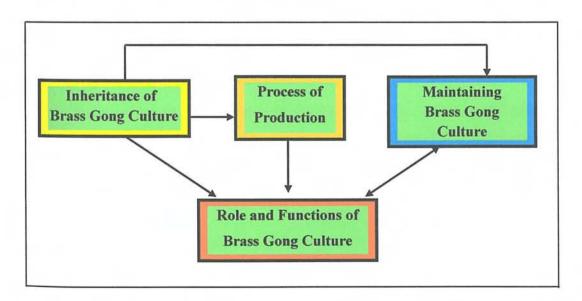


Chart (1) Conceptual framework for the inheritance and maintaining the traditional brass gong culture

According to chart (1), brass gong handicraft, one of the ten Myanmar traditional handicrafts, is a long-lasting inheritance of Myanmar. There are brass gong foundries in Tampawady in Mandalay where traditional technologies are still used to cast brass gongs. There used to be about 30 foundries around 1973, but only nine foundries are running in 2012-2013. It is essential, therefore, to maintain brass gong culture, the Myanmar cultural heritage. Things must be done in order to keep the role of brass gong culture in Bamar society as important as before.

In Bamar society, brass gongs are still used by many associations. During monarchical system, brass gongs had the role in royal possessions. They have been in religious places, within the inhabitance of some Bamar societies, such as pagodas (Mandalay Maha-myat-muni pagoda, Kyeik-hmaw-won-ye-le pagoda, Yangon), monasteries, and meditation centers. For those who practice spirit-worship, brass gongs are useful in the festivals held in the name of spirits (for instance, taung-pyone festival, Ra-ta-na-gu festival, Mandalay Bo-Bo-Gyi shrine, Saw-mon-hla shrine). In some village, brass gongs are used when public announcements are made or to gather the people at a place. In donation ceremonies, when people go round the area in a parade, brass gongs are struck. Therefore, till the present time, brass gongs play important role in some Bamar societies. This brass gong culture, which continues to exit in some Bamar societies, must be maintained as an inheritance of Myanmar cultural heritage.

#### 1.6 Composition of Thesis

There are altogether six chapters in this thesis. Chapter (1) is the introduction of the research, Chapter (2) is the literature review and Chapter (3) is the research methodology, Chapter (4) findings for the thesis, Chapter (5) discussion, and Chapter (6) conclusion and recommendations.

Chapter (1) includes introduction. It concerns with the background stage of the brass gong handicraft, relational for the thesis, aim and objectives of the research, conceptual framework and composition of thesis.

Chapter (2) includes books; articles research papers, relevant dissertation in general as a literature review, but this chapter explains two purposes; the relevant information of external research studies and internal research studies for brass gong culture. Chapter (3) deals with the research design, research site, methodology for the Thesis, collection of data analysis. The main purpose of this chapter is to find out the study of anthropological point of view on brass gong culture.

Chapter (4) describes findings of cultural tradition of brass gong i.e., background history, production process, role and functions. The main purpose of this chapter is to find out the tradition of brass gong culture of Bamar from anthropological point of view.

Chapter (5) is the discussion. In this chapter all findings are to discuss about the brass gong cultural tradition based on symbolic/interpretative anthropology. Chapter (6) describes a brief summary of the cultural tradition of the thesis, conclusions and recommendations thereof. It also contains the implication of the study.

## CHAPTER (II)

#### LITERATURE REVIEW

Many scholars point to the centrality of the dissertation literature review in doctoral education (for example *Boote & Beile, 2005; Delamont & Atkinson, 2001*). However, there has been little discussion about how to teach the skills needed to craft a well-constructed review of the literature or how to assess the finished product. This is surprising as literature reviews are an important part of writing a doctoral dissertation (*Boote & Beile, 2005; Cooley & Lewkowicz, 1995*). Swales and Feak (2000) captured a possible reason for this lack of attention with the remark,

The [literature review] as part of a research paper, proposal, thesis, or dissertation is often thought of as being a boring but necessary chore. Such [literature reviews] are often criticized but are rarely praised. After all, one rarely hears comments such as "the most brilliant part of your thesis was the literature review".

## 2.1 Anthropological cultural heritage approach to brass gong culture

To start with, however, a reference to the concept of 'culture' which has been studied by anthropologists. It may be useful to begin with the definition of 'culture' by Edward Burnett Tylor in his *Primitive Culture* (1871):

"Culture ... is that complex whole which includes knowledge, belief, art, morals, law, custom, and any other capabilities and habits acquired by man as a member of society."

In Workshop Proceedings at Protection of Cultural Heritage in Southeast Asia, held in Hanoi, Vietnam in 2001, culture was defined as follow.

ASEAN Member Countries recognize the following meanings:

"Culture" means the whole complex of distinctive spiritual, intellectual, emotional and material features that characterize a society or social group. It includes the arts and letters as well as human modes of life, value systems, creativity, knowledge systems, traditions and beliefs.

Cultural Heritage was also defined in the same Workshop Proceedings.

- "Cultural Heritage" means:
- (a) significant cultural values and concepts;
- (b) structures and artifacts; dwellings, buildings for worship, utility structures, works of visual arts, tools and implements, that are of a historical, aesthetic, or scientific significance;
- (c) sites and human habitats: human creations or combined human creations and nature, archeological sites and sites of living human communities that are of outstanding value from a historical, aesthetic, anthropological or ecological viewpoint, or, because of its natural features, of considerable importance as habitat for the cultural survival and identity of particular living traditions;
- (d) oral or folk heritage: folkways, folklore, languages and literature, traditional arts and crafts, architecture, and the performing arts, games, indigenous knowledge systems and practices, myths, customs and beliefs, rituals and other living traditions;
- (e) the written heritage;
- (f) popular cultural heritage: popular creativity in mass cultures (i.e. industrial or commercial cultures), popular forms of expression of outstanding aesthetic anthropological and sociological values, including the music, dance, graphic arts, fashion, games and sports, industrial design, cinema, television, music video, video arts and cyber art in technologically-oriented urbanised communities.

Cultural heritage is the legacy of physical artifacts cultural property and intangible attributes of a group or society that are inherited from past generations, maintained in the present and bestowed for the benefit of future generations. Cultural heritage includes tangible culture (such as buildings, monuments, landscapes, books, works of art, and artifacts), intangible culture (such as folklore, traditions, language, and knowledge), and natural heritage (including culturally significant landscapes, and biodiversity) <a href="http://en.wikipedia.org/wiki/Cultural\_heritage">http://en.wikipedia.org/wiki/Cultural\_heritage</a> (accessed on 4.2.2014).

According to ICOM, 2002 cultural heritage is an expression of the ways of living developed by a community and passed on from generation to generation, including customs, practices, places, objects, artistic expressions and values. Cultural heritage is often expressed as either intangible or tangible cultural heritage.

As part of human activity Cultural Heritage produces tangible representations of the value systems, beliefs, traditions and lifestyles. As an essential part of culture as a whole, cultural heritage, contains these visible and tangible traces form antiquity to the recent past. Cultural Heritage can be distinguished in:

- -Built Environment (Buildings, Townscapes, Archaeological remains)
- -Natural Environment (Rural landscapes, Coasts and shorelines, Agricultural heritage)
- -Artefacts (Books & Documents, Objects, Pictures) <a href="http://www.heritageforpeace.">http://www.heritageforpeace.</a> org/heritage-for-peace/what-is-cultural-heritage/ (accessed on 5.2.2014)

Cultural heritage is formed by those things or expressions that show the creativity of people. These can be special monuments, like a building, sculpture, painting, a cave dwelling or anything important because of its history, artistic or scientific value. The styles of buildings can also be part of our cultural heritage because of their architecture, where they are built or what they were used for. Robben Island, The Cradle of Humankind at the caves of Sterkfontein, Swartkrans and Kromdraai in Gauteng, the uKhahlamba Drakensberg Park and the ancient city of Mapungubwe in Limpopo are all examples of South Africans cultural heritage <a href="http://www.sahistory.org.za/topic/defining-culture-heritage-and-identity">http://www.sahistory.org.za/topic/defining-culture-heritage-and-identity</a> accessed on 31.1.2014.

Cultural heritage is central to our present and future identity. Our culture is the system within which we live now. Heritage is the part of our culture that we have inherited or learned from generations past. Our cultural heritage includes physical structures and places such as historic buildings, archaeological sites and artiefacts. It can also include music, language and traditions <a href="http://www.aucklandcouncil.govt.nz/EN/newseventsculture/heritage/Documents/whatisculturalheritage.pdf">http://www.aucklandcouncil.govt.nz/EN/newseventsculture/heritage/Documents/whatisculturalheritage.pdf</a> accessed on 5.2.2014.

According to World Heritage Convention the practices, representations, expressions, knowledge, skill- as well as the instruments, objects, artifacts and cultural spaces associated therewith- that communities, groups and, in some cases, individualbals recognize as part of their cultural heritage. This intangible cultural heritage, transmitted from generation to generation, is constantly recreated by communities and groups in response to their environment, their interaction with

nature and their history, and provides them with a sense of identity and community, thus promoting respect for cultural diversity and human creativity.

Therefore, in this dissertation, a study on brass gong casting as a Myanmar cultural heritage will be made. This study aims at being a helpful means to maintain brass gong casting for a long time in the future so that next generations can receive this cultural heritage. The studies will focus on the steps in casting brass gongs as tangible culture (material culture) and the role of brass gongs in Bamar society as intangible culture (non-material culture), and interpretative symbolic approach to cultural theory will be used in the studies.

#### 2.2 External research Study

#### 2.2.1 Clifford James Greetz's interpretative approach to culture

Clifford Geertz was born in San Francisco, California on August 23, 1926. After service in the U.S. Navy in World War II (1943–45), Geertz received his B.A. in philosophy from Antioch College in 1950. After graduating from Antioch he attended Harvard University from which he graduated in 1956, where he was a student in the Department of Social Relations. This interdisciplinary program was led by Talcott Parsons, and Geertz worked with both Parsons and Clyde Kluckhohn. Geertz was basically trained as an anthropologist, and conducted his first long-term fieldwork together with his wife, Hildred in Java funded by the Ford Foundation and MIT. He studied the religious life of a small, upcountry town for 2.5 years, living with a railroad labourer's family. After finishing his thesis he returned to Bali and Sumatra. He earned his Ph.D. in 1956 with a dissertation entitled "Religion in Modjukuto: A Study of Ritual Belief in a Complex Society" <a href="http://www.encyclopedia.com/topic/Clifford\_JamesGeertz.aspx">http://www.encyclopedia.com/topic/Clifford\_JamesGeertz.aspx</a>, accessed on 4.2.2014.

At the University of Chicago, Geertz became a champion of symbolic anthropology, a framework which gives prime attention to the role of symbols in constructing public meaning. In his seminal work *The Interpretation of Cultures* (1973), Geertz outlined culture as "a system of inherited conceptions expressed in symbolic forms by means of which men communicate, perpetuate, and develop their knowledge about and attitudes toward life" <a href="http://en.wikipedia.org/wiki/CliffordGeertz">http://en.wikipedia.org/wiki/CliffordGeertz</a>, accessed on 31.1.2014. Clifford Geertz - pioneering figure in the symbolic

anthropology-recognizes anthropology as the science of culture. Geertz's interpretive anthropology claims to be a scientific study; however it must be able to excavate or dig out the meanings. Symbols usually signify many things: to use Turner's phrase (The Forest of Symbols, 1967) they are multi-vocal. According to Geertz, human behavior is fundamentally symbolic and therefore laden with meaning for social actors. The primary task of ethnographer is to understand the "webs of significance" which people themselves have spun.

Symbolic/interpretive ethnography focuses on the meaning of behavior and relies primarily on verbal data in support of their interpretations. So, it is not inaccurate to say symbolic ethnographies have been similar to neo-structural in style.

According to Clifford Geertz, the Interpretation of Cultures, the book written by him, will interpret the cultures and elaborate them in detail. Following this example, in this dissertation, the interpretation will be made on how the power and prestige in Bamar society are possible from the point of view of the use of brass gongs in Bamar society and of the brass gongs as the property of Bamar.

### 2.2.2 Interpretative symbolic approach to brass gong culture

The etymology of the word "symbol" is *closer* to Cassirer's use of the word symbol. "Symbol" originated in the Greek language as a construct of two words: *sym* (or "syn", a prefix meaning "with" or "together with") and the root of *bolos* (a throw). Thus, a symbol was a throwing (or putting) together into one piece.

Symbolic anthropology studies the way people understand their surroundings, as well as the actions and utterances of the other members of their society. These interpretations form a shared cultural system of meaning--i.e., understandings shared, to varying degrees, among members of the same society. Symbolic anthropology studies symbols and the processes, such as myth and ritual, by which humans assign meanings to these symbols to address fundamental questions about human social life.

According to Geertz, man is in need of symbolic "sources of illumination" to orient himself with respect to the system of meaning that is any particular culture. Turner states that symbols initiate social action and are "determinable influences inclining persons and groups to action". Geertz's position illustrates the interpretive

approach to symbolic anthropology, while Turner's illustrates the symbolic approach <a href="http://en.wikipedia.org/wiki/Clifford Geertz">http://en.wikipedia.org/wiki/Clifford Geertz</a>, accessed on 31.1.2014.

Symbolic anthropology views culture as an independent system of meaning deciphered by interpreting key symbols and rituals. There are two major premises governing symbolic anthropology. The first is that "beliefs, however unintelligible, become comprehensible when understood as part of a cultural system of meaning". Geertz's position illustrates the interpretive approach to symbolic anthropology, while Turner's illustrates the symbolic approach. The second major premise is that actions are guided by interpretation, allowing symbolism to aid in interpreting ideal as well as material activities. Traditionally, symbolic anthropology has focused on religion, cosmology, ritual activity, and expressive customs such as mythology and the performing arts. Symbolic anthropologists have also study other forms of social organization such as kinship and political organization. Studying these types of social forms allows researchers to study the role of symbols in the everyday life of a group of people <a href="http://en.wikipedia.org/wiki/Clifford\_Geertz">http://en.wikipedia.org/wiki/Clifford\_Geertz</a>, accessed on 31.1.2014.

David Schneider (1918-1995) was another important figure in the "Chicago school" of symbolic anthropology. Schneider defined culture as a system of symbols and meanings (Keesing, 1974). Schneider's system can be broken into categories; however there are no rules for the categories. According to Schneider (1980), regularity in behavior is not necessarily "culture," nor can culture be inferred from a regular pattern of behavior. Schneider was interested in the connections between the cultural symbols and observable events and strove to identify the symbols and meanings that governed the rules of a society (Keesing, 1974). He defined a cultural system as "a series of symbols" where a symbol is something which stands for something else.

Mary Douglas (1921-2007) is one of the general shortcomings of symbolic anthropology. She argues her case from a Durkheimian perspective, suggesting that shared symbols create a unity in experience and that religious ideas about purity and pollution symbolize beliefs about the social order. Douglas also introduced the concept of group and grid. Group refers to how clearly defined an individual's position is within or outside a social group, and grid refers to how well defined an

individual's social roles are within privilege, claim, and obligation networks (Douglas 1970).

In the book, the symbolic form of architecture, written by Alexandria, Virginia (1997), symbolic theory was used. In that book, it was mentioned that buildings were built using symbolic theory. For instance, symbolic theory was used in order to express what the ideas are behind the constructions of pagodas or schools, etc.

There are several possible anthropological and non-anthropological theories we can utilize to examine this question of culture in modern business. For the purpose and scope of this paper, I'm concentrating on the theories off symbolic anthropology, which focus on the role of symbols and how they can lead to a more effective interpretative of organizational culture.

In the book, Culture-Business: Using a symbolic approach to connect organizational and corporate cultures, written by Christopher D. Bailey, the author stated that one needed to have thorough understanding on symbolic theory in order to manage a business. According to Christopher D. Bailey, this understanding on symbolic theory is a helpful means to make faster business connection between organizations.

Ortner's symbolic interpretation account of the Sherpa rituals thus provides a clear framework for conceptualizing the cultural-symbolism through Sherpa rituals. This frame provides the clear cut picture of interplay between the "idealistic" and "realistic" explanations of social and cultural Sherpa life because it reveals the abiding issue to be not one of the anti-social behavior as opposed to their sociocultural values (which is the "ideals" of Sherpas) but of "social behavior" in society.

Ortner's symbolic interpretation persuasively demonstrates that explanation demands not simply discerning symbolic meanings of culture through particular events, but also accounting for how something as improbable for symbolic communication. Her work in general has sought to articulate a "common ground" as early interpretive/ symbolic theorists holds.

Ortner's "Sherpa through their Rituals (1978)" aims to understand the nature of Sherpa society through an analysis of the meanings of certain rituals in Sherpa culture. As such it resembles Geertz's "cockfight" for the Balinese world. It also resembles Pritchard's structural analysis in "The Nuer". Oltner's goal in her

ethnography is to "open" Sherpa culture to readers "unfolding it, revealing it, not only a sense of surface and rhythm, but also a sense of inner connections and interactions. She approaches her goals by focusing on rituals, because she claims that they are events that dramatize and make Sherpa social life intelligible for both participants and observer. According to Ortner, in his book "Sherpas through Their Rituals", used symbolic theory in order to depict religious belief. In this dissertation too, symbolic theory will be used from religious point of view when the brass gong culture is studied to express how Bamar society did not only use brass gongs in the field of music, but also in religious practices as well as in spirit worship.

Victor Witter Turner (1920-1983) was the major figure in the other branch of symbolic anthropology. Turner's focus shifted from economics and demography to ritual symbolism (McLaren, 1985). Turner's approach to symbols was very different from that of Geertz. Turner was not interested in symbols as vehicles of "culture" as Geertz was but instead investigated symbols as "operators in the social process" (Ortner, 1984) believing that "the symbolic expression of shared meanings, not the attraction of material interests, lie at the center of human relationships" (Manning, 1990). Symbols "instigate social action" and exert "determinable influences inclining persons and groups to action" (Turner, 1967). Turner felt that these "operators," by their arrangement and context, produce "social transformations" which tie the people in a society to the society's norms, resolve conflict, and aid in changing the status of the actors (Ortner, 1984).

In the book, "The Forest of Symbols: Aspects of Ndembu Ritual", written by Turner, the author depicted the religious festivals and the ideas behind those festivals using symbolic theory. Turner considers cultural symbols, including ritual symbols, "as originating in and sustaining processes involving temporal changes in social relations, and not as timeless entities". Symbols have some basic properties in common. They are powerful condensations of meaning: "Many things and actions are represents in a single formation". It was learnt that Turner applied symbolic approach to study social process. In the same way, this dissertation will use symbolic theory to explain how brass gongs are used in religious festivals and in traditional sports competitions in Bamar society.

#### 2.3 Internal Research Study

The culture of brass gong plays a vital role in Myanmar musical instruments which again stand in an important place in most Myanmar cultural fields and all Myanmar nationals can be proud of it. In the book of "An Introduction of Culture" (1987), written by U Min Naing, it reviews, since Pyu era, 1500 years ago, Pyu invented folk musical instruments, and so, Myanmar had various instruments. The Pyu had close relationship with neighboring countries like China and India because they all were Buddhists and had similar beliefs and religion. India culture came into contact with cultures of Pyu, Bamar and Mon and they gradually adopted their own cultures. Some names of musical instruments played in Srikistra, Pyu era are found in Bagan inscriptions. Some musical troupe of naji (နရည်းတီးဝိုင်း) and musical instruments used in Bagan era could be seen in some inscriptions such as inscription of Kyan-Thai-Gyi-Thamee and Taung-Gu-Ni pagoda inscription of AD-1081, Dhammarājika pagoda inscription (1196-1198) and Myauk-Gu-Ni pagoda inscription of AD-1214. According to Myauk-Gu-Ni pagoda inscription in AD-1214, in naji troupe, Bagan folks played kyaye-waing (gong, oboe, small brass cymbals, and drum). But specific term naji-sara appeared and it is suggested that naji is a Mon word which means gong of crescent shape; the Mon ancient musical instrument strung with copper wire had its origin in naji-sara of Bagan era.

According to Tin Tun Oo (culture), "Myanmar, Traditional Musical Instruments" (2005), brass gong was called triangular brass gong (naung-nin or kyaye-naung) (နောင်နင်း၊ ကြေးနောင်). The word naung-nin is found in Zayathein inscription of 559 ME and Myauk-guni pagoda inscription in 603 ME. It was found in lines of 9 to 34 inscribed in Myauk-guni pagoda inscription, that 'eight naji-sara, nine naung-nin, three cymbals and three jingle bells are donated to the Buddha'. It explained naji-waing appeared since Bagan era and in the troupe brass gong, small brass cymbal and drum were used. The term naji was derived from naji-sara instrument of Bagan era. By studying these books mentions above, brass gong instrument firstly appeared as naji instrument. Thus, the author would like to present the background history and the first appear of brass gong in chapter of history.

Then, in the book, brass gong appeared to be one of Myanmar musical instruments since Bagan era has been modified gradually from 1266 ME. Therefore,

According to Natmauk Htun Shein, in his book "Mandalay Cultural Arts" (1987) reveals as follows. In bronze casting (in Myanmar language called kyayethun), moulding brass gong is the most dexterous and tiring job. There are two kinds of brass work, such as "melting brass and pouring into mould of required shape, beating heated brass or bronze to required form (in Myanmar Language called khatkyaye and thun-kyaye). Images are cast with mould but brass gong cannot be tuned only by casting. Thus, this art of beating brass (khat-kyaye) is the most ingenious work to make the hollow of the bosses to be able to make better sound. One viss of brass is mixed with 30 ticals (ticals means- part numerical classifier used in counting hundredths of a viss) (4.948 kg of brass to 1.649 kg of tin) of lead to make a better brass gong. According to the ratio, the proportion of mixture differs as sizes change. An expert needs to measure the appropriate mixture of gong which leads to get a block which is called the brass of congealed mass ( 'myo-khei) (4): 3)'. When it is made with a wrong mixture even with a small amount of content is wrong. Then the brass of congealed mass (myo-khe) thus acquired is melted in 'zaw-gyi' foundry (stove). Molten brass is poured into mould and when it cools, bosses are hollowed and brass gongs are tuned. Features of brass are observed and casting may be good or poor and tune will be pleasant or not.

By studying these facts mentioned above, the art of casting brass gong is known to be subtle, wearisome for gong experts and dexterous of craftsmanship. Thus, the researcher would like to note such facts as how gong craftsmen skillfully casting of a brass gong, how gong workers are contented with their wages, how the art of those, craftsmen is profound, and whether or not the art is maintenance to next generation through in-dept study. According to tendency to maintain the art of casting brass gong to new generations not to disappear the art, the researcher goes to the area where gongs are cast, does the research and describes in the chapter of production process of brass gong.

Another perspective is "The Art of kyaye-thun, kyaye-khat and pa-din" (2005), written by Aung Nyein Chan. In this book, brass gong recognized by people and played in Myanmar orchestra is a musical instrument of religious and social use. Then it is a royal artifact. In the reign of Myanmar kings during ceremonies to celebrate any success (in Myanmar Thingyan-daw-khaw) this gong was struck and announced to the public for amnesty like words 'during seven days from that day onwards people are not to be tethered or shackled'. The brass gong was struck when the king went in and out of the palace. Similarly, there were gongs for clock, warning and reminding. In the past, there were leaders of time. Only when they struck silver gong with a padded hummer, royal drum of entry was struck and then the king entered. When he went by land or sea, auspicious gold gong was struck in front of the royal procession. Gold and silver gongs with royal drums were important as royal artifacts. During administration of village headman, he had village crier struck the brass gong to announce the news. In inscriptions, it was found that in donation ceremony in villages 'big pavilions were put up and guests were served through gong struck'. In the past, people used fire to give signal from one mountain to other. They beat on a hollowed log and struck a gong as signal. Similarly, in dramatic art brass gong is an essential musical instrument. When the king performed to come in, big gong is beaten. In the latter play, when actors wail, the gong is accompanied. Therefore, gong is used in tragic ends. Brass gong is used for giving and taking news. By studying the above mentioned book, it is known that during the reign of Myanmar kings, administrative periods of village headmen, brass gong is used and played by musicians and dramatists. Thus, this research would like to shed on brass gong as a musical instrument, a symbol of signal in Myanmar royal artifacts used successively by Myanmar kings, a reminding symbol, a commanding symbol and an advertising symbol in the chapter of roles and functions of brass gong.

Another perception is "Similar Cultural traditions of National Ethnicities" (1968), published by the Committee of the Myanmar Socialist Party. In Musical and Folk Dance of National Ethnic Groups, musical instruments played by ethnicities are brass, string, drum, wind and percussion instruments. In traditional musical instruments of Kachin, brass gong is included. Brass gong is struck on festivals and funerals. Moreover, in Kayah musical instruments, brass gong consists. In Gahtobopwe (ေထိုးတိုးဖွဲ့တော်) or festival of flag mast dance, brass gong is essential. In like manner, Chin have brass gong. In Dak-lam Dance, one of traditional Festivals of Chin ethnicity, after harvesting crops and Chin hunt and when games are killed, in commemoration of the game, dance is held. Not only in this dance but in dances of traditional festivals, brass gong is played. In Myanmar orchestra, gong is played and in other social functions gong is also used. So also, gong belongs to musical instruments of Shan. They play 3 gongs, 5 and 7 gongs. In would-be novice procession (in Myanmar it is called shin-laung-pwe) and donation procession, Shan play gongs.

According to the book, as a researcher, based on brass, string, drum, wind and percussion national ethnicities such as *Kachin, Kayah, Chin, Bamar* and *Shan* play these instruments. Among these instruments, the role of gongs which plays vitally in traditional rites rituals, dramatic and art occasions of happy and grief of *kachin, Chin, Bamar* and *Shan* and the symbol of Shan to be heard (song symbol) (in Myanmar Language called *hnaun vaine hnaun*(apology) (it means that the sound of brass gong and drum) will be studied and cultural contacts among national ethnicities are revealed to reinforce unity of ethnicities in social functions of brass gong.

The researcher would like to study brass gong in Bamar society through 3Ps, from the stand point of *property, prestige* and *power* of brass gong. It means that having the "brass gong handicraft" in Bamar society as a property has some kinds of prestige and powers in Bamar society by that time. Then, brass gong will be revealed through symbolic approaches to culture status symbol used in social function of Bamar society, political symbol in royal administrations of Myanmar kings, economic symbol in economy, ritual symbol in religious functions and ornament symbol in decoration.

# CHAPTER (III)

### STUDY DESIGN AND METHODOLOGY

### 3.1 Study design

This study was viewed from symbolic/interpretative anthropological perspective. Library research, document analysis and field study were conducted. Brass gong handicraft and cultural heritage were approached symbolic/interpretative anthropological perspective. Case study design using qualitative symbolic approach was in this study because it could describe as a particular culture and in order to understand one kinds of cultural maintenance.

### 3.2 Study site

The study site is in Tampawady quarter, Chan-mya-tha-zi Township, Mandalay Region, upper Myanmar. The brass gong foundries remains only in Tampawady quarter, Chan-mya-tha-zi Township, Mandalay Region. The Tampawady quarter is the site where brass gong foundries, craftsmen and artists live, market to sell the brass gong.

### 3.3 Study Population

In Tampawady quarter, the numbers of housing are 2019; the family units are 2958, and the numbers of people are 13436<sup>1</sup>. Among them the brass gong craftsmen and their families, those who sell gongs in stairway at pagodas, monks, Buddhists, musicians who can play well brass gongs and triangular brass gong (kyaye-maun:, kyaye-naung) (@@:@@?& @@:@po&) were selected to collect the data of background history of brass gong and cultural heritage. Total study populations were 139.

<sup>&</sup>lt;sup>1</sup> Source: Record of census-2011 (Tampawady quarter Peace and Development Council)

# 3.4 Study period

This study was conducted from 2010 to 2014. Therefore, this time period presented as the following table.

Table (1) Study period

Year	Month	Facts				
	June	Found out literature from libraries and internet (for thesis proposal)				
	Studied primary documents					
2010	August	Found out primary documents				
	September	Wrote thesis proposal				
	October	Seminar for thesis title				
	November	Carried out pilot survey				
	December	Data analyzed				
	January	Wrote literature review and decided methodology				
	February	Regular seminar for 1st year PhD				
	March	Secondary data analyzed				
	April	Repaired for credit seminar				
	May	Credit seminar for 1st PhD				
	June	Constructed basic question for interview				
2011	July	Field work				
	August	Report and analyzed data				
	September	Discussed with supervisor				
	October	Prepared for 2 <sup>nd</sup> year PhD regular seminar				
	November	Regular seminar for 2 <sup>nd</sup> year PhD				
	December	Field work				
	January	Report and analyzed data				
	February	Discussed with co-supervisor and supervisor				
	March	Credit seminar for 2 <sup>nd</sup> year PhD				
	April	Cross checked for deficiency data				
	May	Repaired				

	June	Field work		
2012	July	Field work		
	August	Field work		
	September	Report and analyzed data		
	October	Discussed with co-supervisor and supervisor		
	November	Field work (for data confirmation)		
	December	Field work (for data confirmation)		
	January	Discussed with supervisor		
	February	Repaired for 3 <sup>rd</sup> year PhD regular seminar		
	March	Regular seminar for 3 <sup>rd</sup> year PhD		
	April	Repaired for 3 <sup>rd</sup> year PhD credit seminar		
	May	Credit seminar for 3 <sup>rd</sup> year PhD		
	June	Report and analyzed data		
2013	July	Discussed with co-supervisor and supervisor		
	August	Discussed with supervisor		
	September	Repaired for 4 <sup>th</sup> year PhD regular seminar		
	October	Discussed with co-supervisor and supervisor		
	November	Finalized for deficiency data		
	December	Repaired for 4 <sup>th</sup> year PhD regular seminar		
	January	Regular seminar for 4 <sup>th</sup> year PhD		
2014	February	Repaired the whole thesis		
	March	Repaired for 4 <sup>th</sup> year PhD credit seminar		
	April	Credit seminar for 4 <sup>th</sup> year PhD		
	May	Submitted thesis		

#### 3.5 Data collection methods

In this thesis, the data were collected by using available information, library research and field research. Qualitative method was used to get data. Therefore non-participant observation (NPO), direct observation (DO), key informant interview (KII), focus group discussion (FGD), in-depth interview (IDI) were applied to collect data. Non-participant observation and direct observation methods were done in

foundry sites of brass gong handicraft in Tampawady quarter, Chan-mya-tha-zi Township, Mandalay Region. To carry out non-participant observation and direct observation, nine brass gong foundries of production processes were observed. Among them three foundries produced big-sized gong, two foundries made middle-sized gong and the rest were small-sized gong foundries.

Key informants were chosen according to their knowledge of brass gong foundry owners, administrative person of 3 people in Chan-mya-tha-zi Township and 2 persons of administrative staff in Tampawady quarter. To take hold of the knowledge of brass gong culture, the native person, 3 monks, 5 persons of headmen, 10 persons of brass gong sellers, who appreciated with the regarding the role and functions of brass gongs cultural traditions were selected as key informants. There were a number of 35 persons who believed Buddhism and they lived in around Mandalay Region and other parts of Myanmar supported to grasp the functional concept of brass gong cultural valuable in religious, social and other functional activities.

Focus group discussion was useful to confirm the data got from the individuals and also to guess and interpret the behaviors, facial expression, and speech in order to grasp the feelings and values of craftsmen in brass gong foundries. There were 9 groups of FGDs were conducted with craftsmen of nine foundries. In each group, there were 7 or 8 persons were interviewed in FGD. A total of 72 persons included in nine FGDs. In-depth interviews were constructed to catch the experience of craftsmen's skillfully casting of brass gong and how to maintain the handicraft from generations to generation. There were a number of 3 persons of big-sized gong foundry, 2 persons of middle-sized gong foundry, and 4 persons of small-sized gong foundry. There were a total of 9 persons involved in IDI.

#### 3.6. Data collection tools

To collect the data of brass gong culture, it was done by taking photographs, recording with video, tape recorder and notes-taking. Moreover, some related data of brass gong culture of Bamar, was collected from newspapers, journals, talk shows from MRTV and MWD Television, films and CDs to view from anthropological point.

# CHAPTER (IV) FINDINGS

## 4.1 Background history of the area of the field research

The ten Myanmar traditional arts and crafts are the heritage of Myanmar fine arts. And the bronze work is one of these fine arts. Tampawady in Mandalay is the only place in Myanmar where the brass gong foundries, which belong to the bronze work, is available. Therefore some knowledge on the history of Tampawady is necessary to get clearer picture of the brass gong handicraft. Mandalay is unavoidable since Mandalay is a centre for Myanmar cultural tradition.

The word "Mandalay" is a Pali loanword of which origin is "Man-da-la". The Pali word Man-da-la means the pleasant plain. The city is located on a plain on the east bank of the river Ayeyarwady and in the east of the city are Shan plateau. The name was given after the pleasant geographical feature of that area. Mandalay had already been developed since Inwa dynasty (AD 1364-1555) and, during the reign of King Bodaw (AD 1781-1819), the founder of Amarapura royal city, in early Kounbaung dynasty (AD 1752-1885); it existed under the administration of Amarapura. Mandalay royal city was established by King Mindon (1853-1878), the tenth king of Kounbaung dynasty, in 1859. The year of its establishment, according to Myanmar numerical letters, was recorded as "Oak-kyit-kyaw-aye" (အုတ်ကျစ်ကျော်အေး) or "Aung-kyaw-chan-aye" (ဘောင်ကျော်ချမ်းဘေး) both of which represents 1221 ME. Construction was completed in March, 1862. According to Tin Naing Toe (2007), the name "Yadanabon" was given to the city by King Mindon. On 22<sup>nd</sup> March, 1862, four sections were demarcated in the four directions round the royal city. Fifty-four quarters within these four sections were also demarcated. The four sections were named as eastern section, western section, southern section and northern section after their respective direction from the royal city (Shopping Directory for Myanmar Culture, 2000).

In June, 1951, after the Independence of Myanmar, the area of Mandalay was formed with two parts-eastern and western Mandalay. During the time of the Revolution Council, the map of the city was re-drawn dividing the city into four

Townships: Region one or north-western Township, Region two or south-western Township, Region three or south-eastern Township and Region four or north-eastern Township. During the time of the State Law and Order Restoration Council, on 10<sup>th</sup> December, 1992, the city area was officially divided into five Townships-(1) Aung-mye-tha-zan Township, (2) Chan-aye-tha-zan Township, (3) Maha-aung-myae Township, (4) Chan-mya-tha-zi Township and (5) Pyi-gyi-dagon Township. Geographically Mandalay is located on the point where north latitude 22 degrees 59 minutes and east longitude 96 degrees 6 minutes meet. A Tampawady quarter, the area of the field research is included in Chan-mya-tha-zi Township. It used to belong to western section during the time of King Mindon.

The name "Tampawady" is an honorific name and was given after the industries which are prevalent in the area. The *Pali* word "*Tampa*" means "brass" and "wady" means "region". Therefore the name literally means "the region for brass casting". It has been two hundred years since people of Tampawady started their brass casting foundries in Amarapura dynasty. King Mindon placed people of the same profession in the same area. Since then, through successive generations, Tampawady has been the centre for brass casting foundries.

Before Amarapura dynasty, the brass gong artisans from Inn-taing village in Monywa came to Mandalay and worked in the brass gong foundries. They worked in Mandalay from October to February when the weather was cold. They went back to their village in March when the weather became hot. There was a custom that brass merchants from Amarapura royal city welcomed the artisans at the Inwa Bridge when they came to Mandalay. From there the merchants offered the artisans bullock-cartrides to Mandalay. Thus, Tampawady became the centre of the brass gong casting art. Therefore it can be known that the brass gong casting was available in Tampawady in late Amarapura dynasty and since then the tradition has continued until now (Natmauk Htun Shein, 1979).

There are nineteen sub-quarters in Tampawady. Some records show that the population in the area is 13436. The total number of houses is 2019 and there are 2958 families living in that area<sup>2</sup>. But there are only six people who own nine brass

<sup>&</sup>lt;sup>2</sup> Tampawady quarter Peace and Development Council, Record of census, 2011

gong foundries. Among them are three foundries where large size brass gongs are made, two for medium size and four for small size ones.

According to the brass gong artisans, at the time of the State Law and Order Restoration Council, industrial zones were set up in Mandalay. Brass gong foundries had to move there. But most workers lived in Tampawady and therefore they had to travel a long way to their work. On the other side, it was too expensive for them to move their families to the industrial zone. For those reasons, the brass gongs foundries did not do well in their new place. Finally they moved back to their home, Tampawady. Thus, Tampawady continues to be the centre of brass gong productions. Therefore Tampawady has been the home of brass gong craftsmen and also of other craftsmen since the time of Myanmar kings.

### 4.1.1 Background history of the name and various uses of the brass gongs

The brass gong was known as *naung-nin* (*kyaye-nin*) during Bagan dynasty (AD 1044-1287). The term '*naung-nin*' can be seen in *Zayathein* stone inscription, dated AD-1199 (559 ME) and *Myauk-guni pagoda* stone inscription, dated AD-1241 (603 ME), both belong to Bagan dynasty. According to these inscriptions, it can be known that nine *naung-nins* were donated to the pagoda (*Tin Tun Oo, 2005*). Researches on the background history of the brass gongs point to the fact that the brass gong handicraft began at the time of *Alaungpaya* in early Kounbaung (*Natmauk Htun Shein, 1979*). However, the brass gongs had been used by the former kings in administration and royal musical concerts. The headmen of the villages also used the brass gongs in some social occasions. There are various names given to the brass gongs when they are used in different occasions and activities. They are the timegong, the warning-gong, the auspicious-golden-gong, the silver-gong, the victorygong and the flat-gong.

The brass gong is a musical instrument which is made of brass. It is circular and shapes like a trail. It is like a trail kept upside down and there is a knob pointing upwards at the centre. When it is struck with a stick padded with a piece of cloth at one end, it resounds, and it sounds like 'hmaung---hmaung (in Myanmar language sound)' (Dictionary of Myanmar Performing and Plastic Arts, 2001). The brass gongs have grooves at the edges, but kyaye-naungs, small brass gongs, do not have

such grooves. The brass gongs are used not only as musical instruments but also in social occasions. As the brass gongs are widely used in different fields—as musical instruments, in religious ceremonies and in social occasions—the names of the brass gongs vary accordingly. Basically the types of the brass gongs can be put into two categories—the brass gongs with thicker brass and with thinner brass. The brass gongs are available in different sizes and basically they are of large, medium and small sizes. However, the brass gongs are made thinner than kyaye-naungs.

A brass gong which weighs over 4.123 kg belongs to the large size group. Usually the size of a large size gong is 43.18 cm in diameter. The largest gong that has ever been made weighs 26.39 kg and it is 91.44 cm in diameter.

Medium size gongs usually weigh between 0.577 kg and 3.298 kg. The smallest medium size gongs are 33.02 cm in diameter and the biggest ones are 40.64 cm in diameter.

Small size gongs usually weigh from 0.082 kg to 0.495 kg. The smallest ones are 15.24 cm in diameter and the biggest ones are 27.94 cm in diameter.

A set of *kyaye-naung* has eighteen *kyaye-naungs* (small brass gongs) which are of different sizes. The biggest one weighs 0.8745kg and is 18.42 cm in diameter. The smallest one weights 0.297 kg and is 8.64 cm in diameter. *Kyaye-naungs* belong to thick brass gongs group.

# 4.2 Professional artisans and essential tools for brass gong casting

Tools necessary in casting the brass gongs of different sizes – large, medium and small– and casting the small brass gongs are basically the same except that the size of the tools used in the work are different. The size of the tools depends on the size of the brass gongs being made. In order to produce beautiful as well as good quality gongs, artisans must be skillful in using tools. The tools that are essential in the gong-casting foundries are mentioned below.

- 1. Stoves
- 2. Hammers
- 3. Anvils
- 4. Pincers

These tools are essentially used in the gong foundries. The stoves are not normal ones; they must produce intense heat. A stove is the most essential tool in a brass casting industry since the works are done mainly with the use of fire. The brass gong casting foundries are of three kinds; large size gong foundries, medium size gong foundries and small size gong foundries. However the technique is basically the same though more artisans and longer time are needed to cast larger size gongs. Since the heat necessary for the work is too intense, the artisans who work in the large size gong foundries usually work between mid-night and dawn. In winters, they start work at three o'clock in the morning. In summers, they start work at one o'clock in the morning.

## 4.2.1 The study of material tools in brass gong casting

The brass gong casting has three main categories - casting big size gongs, medium size gongs and small size gongs. The raw materials used in brass gong casting are brass and tin. The brass gong foundries produce the gongs only when they receive the orders from brassware traders. The brassware traders receive the orders from those who want to buy gongs. It is their duty to get the raw material necessary for the ordered item. They place the order at the foundry together with the raw material. Brassware traders usually run shops. During the time of the government of the State Law and Order Restoration Council, the government sells brass and tin at the factories in order to support the Myanmar traditional arts of handicrafts. But at present one cannot buy the raw material easily. Consequently, the brassware traders had to get the raw materials from different places. Therefore, it is said that brass gong casting business often has shortage of the raw material. However, brass gong foundries do need to find the raw material themselves. They don't have direct contact with the buyers. The tools used in casting gongs include stoves, hammers, tongs and anvil. Stoves, wooden hammers and anvils are made by the craftsmen themselves. They can get the iron hammers and tongs with the required shapes and sizes from the blacksmiths.

### 4.2.1.1 Patterns of foundry

Brass gongs are cast at foundries which are called *maun:-hpou*. These foundries exist in Tampawady, Mandalay for nearly two hundred years. Tampawady quarter has exited since the reign of *King Mindon* who marked this area for different kinds of handicrafts. There were thirty brass gong foundries in Tampawady around 1972-73 (*Natmauk Htun Shein, 1979*). But, in 2011-12, there are only six brass gong foundry owners and nine foundries – three big size gong foundries, two medium size gong foundries, and four small size gong foundries. They have received the foundries and brass gong casting business as the heritage of family tradition. Some new generation have given up the tradition because brass gong casting is full of hard works and also because it is becoming harder to get raw materials.

A sixty-year-old man who owned three brass gong foundries says;

"This is a really hard work. Our forefathers just needed to work five or six months and they got enough money for the rest of the year. They only worked in cool seasons. Now it is different. My father and grandfather enjoyed the work although they had to work hard. They could get raw materials easy and enough. If you don't have the skill, you cannot do the job. We all have to get up early. Some cook and some work in the foundry."

Besides, a fifty-year-old man who owns three brass gong foundries says;

"My grandfather was awarded a gold medal for his skill in craftsmanship during British colonial period."

It can be seen that new generations are not much interested in carrying the tradition of their families due to the following reasons – it involves hard work, the commodity prices are increasing, and raw materials are becoming rare. However, the art of brass gong casting, a Myanmar handicraft, still exists in Tampawady, Mandalay, although it is becoming less popular, because there are still skilled craftsmen, and there are market demands.

Tampawady has been a place for handicraftsmen and their families since the time of Myanmar kings. The brass gong foundries usually produce smoke and make a lot of noise of hammers. Nevertheless, the people in this neighborhood do not really mind the existence of the brass gong foundries since they have other kinds of handcraft businesses too. The owners of the brass gong foundries explained that;

"The people in this neighborhood have understanding and sympathy among each other. Mandalay is located in a dry region and therefore it is likely to suffer fire hazards at any time of the year."

Brass gong foundries have to use high temperature flame in their works. However, the foundries have systematic preventions for fire hazards. Their stoves have fire exists and high chimneys. The roofs of the foundries are also high above the ground (see Figure 4.1). It can be seen here that these people value their jobs and respect the safety of the people around them. A fifty-five-year-old foundry owner said that;

"There has not been a single case in which a brass gong foundry caused fire breaking in Tampawady. It can be seen that the craftsmen of the brass gong foundries have a lot of value and respect for their work."



Figure-(4.1) Foundry of brass gong casting

#### 4.2.1.2 Stoves

The stoves used in brass casting are of two kinds. One of these kinds is used in melting brass and the other is used in shaping *myo-khe* into gongs. Both kinds of stoves are not like ordinary stoves used in the kitchens; they must produce high temperature. Brass casting work mainly uses fire and therefore stoves are very important in the work.

The stoves used in melting brass are the ones that use inflating. That kind of stoves is called inflatable-stove (lay-htoe-pho) (see Figure 4.2). People used to use firewood for the stoves, but at present, they use generators. The engine is connected with a 304.8 cm long iron pipe with 17.78 cm in diameter. The air passes through the pipe to the stove and it increases the temperature to the desired level. At one end of the iron pipe is connected to 45.72 cm long cement pipe. One end of this cement pipe is larger than the other end. One end is connected to an engine and the other end is connected to the base of the upper pot in which brass is melted. The brass melting pot has two levels. The upper part of the pot is made with thick iron (cast iron) plate outside and painted with cement inside, thus it can be used in high temperature. The base has a hole in which the cement pipe is inserted. The upper pot is 45.72 cm high, 25.4 cm in diameter at the upper edge. The outer part of the port is usually an iron bucket. In order to use it in high temperature, the inner part is painted with cement. The lower brass-melting pot is about 15.24 cm high and the upper edge has a duckbilled shape, thus the melted brass can be poured out easily. The lower portion of the upper pot is connected with the engine. The engine is used to produce air pressure that increases the temperature. A field research found that pieces of solid brass and charcoals are put together into the pot while the brass is being melted.

The second kind of stove is used in casting the gong. This stove also uses inflating. The air is pumped into the stove thus the temperature increases up to desired level. This kind of stoves has two different types—the ones used on the ground and the other ones used underground. The on-ground stoves are square brick-walls with 30.48 cm to 91.44 cm in length and in width. All the spaces between the bricks are filled with red soil. The height of the walls is 20.32 cm to 30.48 cm. It is difficult to place the items in the stove or take out them from it if the walls are too high. If the walls are too low, the temperature cannot reach to the desired level. Therefore the

size of this kind of stove is important. First the workers fill the stove with charcoals. Then they light the charcoals and get the air pressure through the pipe into the stove to increase the temperature. Then pieces of brass or brass plates are placed on or inside the burning charcoals. That kind of stoves is called air-pressure-stove (lay-hmoat-pho) (see Figure 4.3).

An underground stove is a 91.44 cm deep hole in the ground. In the hole, there is a 122.92 cm long tunnel where the air comes through to the stove on the ground. The two holes at the lower parts of the two air pumps (pho-kyin) and the hole of the tunnel were connected with a 60.96 cm long earthen pipe. Red soil or sticky thick soil is used to block all the holes around the tunnel, thus the air pressure will not be wasted.

The air from the air pumps goes through the earthen pipe into the tunnel. 30.48 cm above the lower edge of the tunnel is leveled and therefore not many charcoals can be put there. If that place could hold more charcoals, they would be burned up unnecessarily.

Therefore, it creates pressure at the end of the tunnel thus the air can reach to the stove well. From that part, the earthen tunnel goes higher up like a slope. The upper portion of the tunnel can hold more charcoals. The air comes from the pump goes through the charcoals in the tunnel and goes up to the on-ground charcoals holder. The temperature from the tunnel and the temperature in the on-ground stove together increase the temperature at desired level.

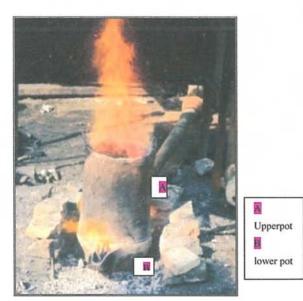
The pumps used in old times were made with huge bamboos called *Wabo* or the trunks of palm trees. The joints of the bamboos or the inner parts of the palm trees were removed to make them pipes. At present, the tree trunks are used after removing the inner parts. The inside surface of the pipe must be smooth thus the air can pass through well. For that purpose, some workers are now using tin pipes.

It does not really matter what kind of pipes are used; the pipes must be big, long and have smooth inner face thus the stoves can get enough air through the pipes. Some workers use the pipes with one end closed. The lower end is closed while the upper end remains open. There is a small hole just below the lower end of the pipe. Previously, the pipes were fixed on the ground thus the lower ends were closed automatically. There used to be a small hole just below the middle point of the pipe

to take the air out. A standard pipe is 30.48 cm in diameter, 114.3 cm long, and has a hole with 7.62 cm in diameter at the lower part through which the air goes out.

The necessary tools that help get sufficient air-presser also include the pumping-rod (*htoe-tan*) that is used to push the air through the pipe. The pumping-rod is usually made with a long thin bamboo stick. A wooden ring is fixed at one end of the rod that remains inside the pipe. The ring is just big enough to go up and down the pipe smoothly. Some hen feathers are stuck around the ring (see Figure 4.4). The feathers help the pumping-rod suck the air better.

Two air-pumps (pho-kyin) (see Figure 4.5) are used simultaneously. Each air-pump has a pumping-rod. A field research shows that there are two pumping methods. The first method is that a worker holds the handles of the pumps pushing the pumping-rods one after another. The second method uses a wooden bar fixing on the tops of both pumping-rods. There is a pole between the pumps supporting the bar. A wooden rod is fixed at one end of the bar. A worker, holding the rod, pushes up and pulls down the rod rhythmically. This way, the pumping-rods at the pumps go up and down one after another pushing the air into the pipe. However, the first method is more useful to have enough pressure, and therefore it is used in gong foundries.



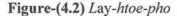




Figure-(4.3) Lay-hmoat-pho





Figure-(4.4) Hen-feathers

Figure-(4.5) Two air-pumps

#### 4.2.1.3 Hammers

Many hammers are used in gong casting processes. Iron and wooden hammers are mostly used. Iron hammers are used to shape the brass into gongs and wooden hammers are used to shape the knobs in a way that the gong produces melodious sound. The hammers are of different sizes.

There are three iron hammers most necessary in gong casting processes. They are of the same size, but the shapes are slightly different. These hammers are made with very thick iron and a hummer is as heavy as up to 6.268 kg. These iron hammers have three parts. They are:

- (1) The hole where the handle is fixed,
- (2) The part that shapes like a bald head and
- (3) The sharp part.

The hole is about 3.81 cm in diameter. It is a circle hole. From the hole to one top of the hammer is about 5.08 cm long. The top shapes like a bald head. From the hole to the other top is about 10.16 cm long. The part near the hole is slightly bigger than the top part. The top that shapes like a bald head is 5.08 cm in diameter and the other top is about 3.81 cm in diameter.

One of those three hammers is called the front hammer (shae-tu) (see Figure 4.6), another one is called the middle hammer (ale-tu) (see Figure 4.7) and the last

one is called the back hammer (nauk-tu) (see Figure 4.8). The names are given after the place at which the holders stand. The pho-kaing, the leader sits in the west side of the stove facing to the south. In front of him is the anvil. The shae-tu-kaing sits in the east of the anvil facing it. The nauk-tu-kaing sits in the west of the anvil facing it. The le-tu-kaing sits in the south of the anvil between the shae-tu-kaing and the nauk-tu-kaing. In Myanmar language, front is ashae, back is anauk and middle is ale. The names are given to the position of those hammer-holders as the front hammer-holder (ashae-tu-kaing), the back hammer-holder (anauk-tu-kain) and the middle hammer-holder (ale-tu-kaing). Later they are simply called shae-tu-kaing, nauk-tu-kaing and le-tu-kaing. The brass gong foundries have to order the iron hammers in the required shapes and sizes at the blacksmiths'.







Figure-(4.6) Shae-tu

Figure-(4.7) Ale-tu

Figure-(4.8) Nauk-tu

#### 4.2.1.3.1 Wooden hammers

Wooden hammers are also called *poat-tu*. *Poat-tus* are a kind of wooden clubs. The handles are usually made with bamboos, but the clubs are made with hard wood like tamarind hardwood. Tamarind or gum-kino (padauk) wood is good for making the clubs since they are not easily broken. The club is a cylinder shape with the same diameter at both ends that have flat surface. In the processes of making gongs, wooden hammers are used to shape the brass in order to have melodious tones. Different sizes of wooden hammers (see Figure 4.9) are used depending on the sizes of gongs. They are used to make the face of the gongs smooth. Some of these wooden hammers are 4.948 kg weigh. The craftsmen of the brass gong foundries made these wooden hammers themselves.



Figure-(4.9) Wooden hammers

# 4.2.1.3.2 Kyin-thwa-tu (or) Carpenter-square hammers

Kyin-thwa-tu is wooden hammers. Kyin-thwa-tu is a kind of wooden carpenter-square hammer. They are 25.4 cm in length and 15.24 cm in width, made with tamarind hardwood. Three kyin-thwa-tu, hammers are needed in the work. They are used in shaping the edge of the gongs casting.

### 4.2.1.3.3 Myin-khwa-tu (or) Horseshoe hammers

Myin-khwa-tu is also wooden hammer made with tamarind hardwood. They are 15.24 cm long and 10.16 cm in circumference. They shape like horseshoe; it is so called horseshoe hammer. They are used to make the outer face of the gongs smooth.

#### 4.2.1.3.4 Sin-tu (or) straight and smooth hammers

Sin-tu hammers are used to strike on the brass plates so that they become smooth enough. Sin-tu in Myanmar language means straight and smooth. The name of this hammer is given after the works it is used in, i.e. making the face of the gong smooth. Sin-tu (hammer) is about 0.825 kg. The shape is similar to that of a middle hammer (le-tu), but of different size. While a gong is being made, the brass

has to be heated with high temperature, made bright and moved from place to place. During this process, some protuberances appear on the face of the brass. *Sin-tus* are used to make the protuberances disappear and make the face become smooth again.

#### 4.2.1.4 Iron anvil

Iron anvil (see Figure 4.10) is used when the brass is stricken to shape the gongs. The anvils used in gong-casting are circle with flat surface. They are about 12.7 cm in diameter and 30.18 cm high. The anvil is pressed into a piece of tamarind hardwood that has 76.2 cm or 91.44 cm in diameter. The tamarind wood is usually about 91.44 cm high. The anvil is pressed into the tamarind wood up to 25.4 cm. About 2.54 cm of the anvil is left outside. Using it for years may make the anvil like a bowl on the upper surface. The middle part of the anvil is gradually deeper and deeper, so it shapes like a bowl. That shape is better for striking the brass plate in order to make it thinner and wider. People say that if the surface of an anvil is not leveled, the material will be wasted. However, it can be seen in a brass gong foundry that the surface of the gong must be smooth in order to have a good quality gone. These iron anvils are also made by the craftsmen themselves.



Figure-(4.10) Iron anvil

### 4.2.1.5 Tongs

A tong is a kind of device used for picking up objects, consisting of two long pieces joined at one end and pressed together at the other end in order to hold an object between them. They are usually made with wood or iron. In brass gong foundries, iron tongs are used since the work uses high temperature fire and the workers have to handle heated objects. Iron tongs have different names since they have different shapes and uses.

The iron tongs (see Figure 4.11) used in brass gong foundries are usually of two kinds—left hand tongs (let-we-nyhat) and right hand tongs (let-ya-nyhat). It is said that pwe-sa-kaing-nyhat, htan-nyhat, and lauk-lan-nyhat are used with left hand. Nyhat-kwin-thay, bu-cha-nyhat, and sauk-kaing-nyhat are used with right hand. The brass gong foundries have to order the tongs in the required shapes and sizes at the blacksmiths'.



Figure-(4.11) Tongs

### 4.2.1.5.1 Pwe-sa-kaing-nyhat (or) Tongs

Pwe-sa-kaing-nyhat (see Figure 4.12) is tongs used in the beginning of the works. The name "pwe-sa-kaing (used in the beginning)" is given after this. It is also called let-we-nyhat since it is used with left hand (let-we). Some people also called it pwe-se-kaing-nyhat. Tongs are used all the time when many small gongs are made together. When many gongs are made together, an htan-nyhat is used. However, in every step in making light gongs, only pwe-sa-kaing-nyhat is used.

A pwe-sa-kaing-nyhat has short handles and long beaks. A pwe-sa-kaing-nyhat is made with iron rods weighed about 5cm. The joint is closer to the end of the handles each of which is about 20.32 cm long. It is about 30.48 cm from the joint to the tips of the beaks. From the tips of the beaks, about 17.78 cm away, the rods are bent to opposite sides. The tips are touched together and the parts about 2.54 cm from the tips are made flat so that they can pick up the brass plate well.



Figure-(4.12) Pwe-sa-kaing-nyhat

### 4.2.1.5.2 Htan-nyhat (or) Tongs

Htan-nyhat (see Figure 4.13) is used to pick up heavy objects. Therefore they are called htan-nyhat in Myanmar Language. The brass gong workers called it hta-nyhat. While shaping the knob on a gong, a few plates of brass are hold together and thus the workers have to handle heavy objects. At this stage, they use htan-nyhat instead of pwe-sa-kaing-nyhat.

The handles of an *htan-nyhat* are about 60.96 cm long from the joint. The rods at other side of the joint are bent outside opposite to each other. At this part, the rods are about 3.81 cm away from each other. It is said that these *htan-nyhats* are made with 10 cm iron rods.



Figure-(4.13) Htan-nyhat

### 4.2.1.5.3 Lauk-lan-nyhat (or) Tongs

One of the beaks of a *lauk-lan-nyhat* (see Figure 4.14) is straight while the other one is bend outwards. The edges of gongs are folded almost ninety degrees from the face of the gongs. *Lauk-lan-nyhat* is used to hold the gong over the folded edge. The handles of a *lauk-lan-nyhat* is about 50.8 cm long. The straight rod of the tongs is about 15.24 cm long. The other rod of the beak is about 7.62 cm bending outwards. The tips of both rods touch each other. While these tongs are being used, they look like a warm (*lauk-lan*) moving. Therefore it is called *lauk-lan-nyhat* (in *Myanmar Language*). *Lauk-lan-nyhat* is also called *law-lan-nyhat*.



Figure-(4.14) Lauk-lan-nyhat

### 4.2.1.5.4 Let-ya-nyhat (or) Right-hand Tongs

Let-ya-nyhat (see Figure 4.15) includes small rounded tongs (nyhat-kwin), the tongs is to make knob of brass gong (bu-cha-nyhat), and the tongs is to make groove of brass gong (sauk-kaing-nyhat). The sizes of those tongs are almost the same, but the names are given after the work they are used in. The handles of a right-hand tongs (let-ya-nyhat) are about 25.4 cm long. The beak shapes like a circle with 5.08 cm in diameter. While a worker is striking on the brass plate with a hammer, the tong-holder (the leader) has to move the plate accordingly. In this process, these tongs are used with right hand, and therefore they are called right-hand tongs (let-ya-nyhat).



Figure-(4.15) Let-ya-nyhat

### 4.3 The responsibilities and social-life of the craftsmen

A brass gong foundry is formed with seven workers – one tong-holder, the leader (nyhat-kaing or pho-kaing), one middle hammer holder (ale-tu-kaing), one front hammer holder (ashae-tu-kaing), one back hammer holder (anauk-tu-kaing), one stove worker (mi-hto), one string puller (kyo-swe or set-swe), and one shield holder (ban-kar). The presence of each of these craftsmen is necessary in a brass gong foundry. There must be five craftsmen in a medium size brass gong foundry, and three in a small one. If one of them is absent for a day, the handicraft has to be stopped on that day. Those craftsmen cannot be substituted unless substitute

craftsmen are also skillful ones. Unity among the craftsmen is also necessary. A slightest mistake (for instance, striking the hammer at a wrong place) might damage the entire work. Therefore, although only few people work in a brass gong foundry, they have to be formed like a small united association in order to complete the work successfully.

The work is necessarily a team work. Therefore all workers must be present when the work is in progress. If one of the workers is absent, the work has to be stopped. Without the necessary skill, one cannot replace a skilled artisan. Each and every worker must be skillful in their respective work.

There are seven artisans who work in a large size gong foundry. They are:

1.	The pincer holder (the leader)	1
2.	The middle hammer holder (the second leader)	1
3.	The front hammer holder	1
4.	The back hammer holder	1
5.	The stove watcher	1
6.	The string holder	1
7.	The shield holder	1

For casting a brass gong that weighs over 16.49 kg, another artisan who assists at the stove is also necessary. Therefore, eight workers are necessary in casting a large size gong. The artisan who works in the lowest position among these artisans is the shield holder. Anyone has to begin with this position where he starts learning the technique of casting gongs. Therefore shield holders are considered to be trainees.

In a medium size gong foundry, five artisans work together. They are:

1.	The pincer holder (the leader)	1
2.	The middle hammer holder (the second leader)	1
3.	The front hammer holder	1
4.	The back hammer holder	1
5.	The stove watcher	1
In a small	size gong foundry, three artisans work together.	They are:
1.	The pincer holder (the leader)	1
2.	The front hammer holder (the second leader)	1
3.	The back hammer holder	1

### 4.3.1 The leader (nyhat-kaing or pho-kaing-saya) (the tong-holder)

The *nyhat-kaing* (tong-holder) is the leader of a brass gong foundry (see Figure 4.16). *Nyhat-kaing-saya* is also called *pho-kaing-saya*. He gives guidance and leadership for all the works in a foundry. The stove worker (*mi-htoe*) has to follow his instruction. While the hammer holders are striking the brass plate with hammers, the *nyhat-kaing-saya* has to hold the plate using different tongs accordingly. He has to keep moving the plate on the anvil thus the hummers strike at necessary points. The thickness of a gong, the temperature of the stove is decided by the tong-holder. In order to become a skillful tong-holder, one needs ten to fifteen years of experiences.

If the gong is over 8.247 kg weigh, a string puller (*kyo-swe*) is necessary. He has to pull up and down the brass plate as he is instructed by the leader (*pho-kaing*). The *pho-kaing* has to give instruction to all the craftsmen at every step in the work.

There are five steps in casting a brass gong. They are melting the brass, casting the brass plate, shaping the gong, shaping the knob, and putting the sound in the gong. The leader (pho-kaing) has to understand everything in these steps and give instructions to the craftsmen.

Every step in the brass casting is hard. The *pho-kaing's* work is the most tiring and his presence is the most necessary in the work. School education is not necessary for a person to be a leader (*pho-kaing*). His love for the handicraft, his experiences in the work and his sharp senses (sense of hear, sense of sight, sense of touch) together form the skill. These are the qualities of a good leader (*pho-kaing*). His work is the tired. He has to sit at the place nearest to the stove. In order to protect the heat, a worker called shield holder (*ban-kar*) has to hold a shield between the *pho-kaing* and the stove. He also has to cover his face from the heat. For that the *pho-kaing* usually wraps a piece of cloth on his heads hanging an edge from the head so that it covers the face exposed to the stove. While he was casting the gong also, he has to wet his face and hands from time to time in order to reduce the heat. Every step is done under the command of the *pho-kaing*. The result of the work is a brass gong, a Myanmar heritage, a musical instrument that can produce beautiful sound. A *pho-kaing* gets 43000/- kyats when he finishes casting a big size gong.

A *pho-kaing-saya* is the owner of a gong foundry. However money alone cannot make a person to be the owner of the foundry. Without proper knowledge and skill that concerns with the handicraft, one cannot become an owner of a brass gong foundry.



Figure-(4.16) Leader of foundry

### 4.3.2 The middle hammer and the middle hammer-holder

One face of the middle hammer shapes like a slop. The lower part is at the side of the handle. The handle is fixed to have less than 90 degree angle with the hammer. The sloping face of the hammer is good to make the brass plate thinner. Among the three hammer-holders, the middle hammer-holder (ale-tu-kaing) (see Figure 4.17-A) is the most experienced and skillful. He is the second leader at a brass-gong foundry. For example, when the east hammer-holder and the west hammer holder is paid one kyat, the middle hammer-holder is paid 1.25 kyat. A middle hammer-holder gets 41000 kyats when a big size gong is finished casting.

#### 4.3.3 The front hammer and the front hammer-holder

The left side of the face of the front hammer is lower than the right side. In order to have this shape, the left side has to be rubbed with a file. This shape is meant to prevent the brass plate to be hit with the left edge of the hammer. Therefore it can

prevent cutting the plate. Besides, while all the hammers are being used at work, they would hit each other if the front hammer was not shaped this way. The front hammer-holder (*shae-tu-kaing*) (see Figure 4.17-B) is the second experienced and skillful worker among the three hammer-holders. He has the third highest position at a gong foundry. The front hammer-holder gets 39000 kyats when a big size gong is finished casting.

#### 4.3.4 The back hammer and the back hammer-holder

The one side of the face of the back hammer is level with the other side. This shape helps to have a brass plate with the same thickness at every point. The back hammer-holder (nauk-tu-kaing) (see Figure 4.17-C) is the least experienced and skillful craftsman among the three hammer-holders. He is the one under training to become a pho-kaing. To strike the brass plate at the right place at the right time is very important. The back hammer-holder has to learn this through experiences. He also has to learn to understand the temperature, the size of the brass plate, the impact of the hammer strikes, and the thickness of the brass plate. All these skills are required to be a pho-kaing. Back hammer-holder gets 39000 kyats when a big size gong is finished casting.



Figure-(4.17) Hammer holders of foundry

### 4.3.5 The stove-worker (Mi-htoe)

The skill of a *mi-htoe* also plays important role in brass-gong foundry. He has to change the temperature of the stove as he is instructed by the *pho-kaing*. Sometimes, he has to understand what the *pho-kaing* wants without being told. The stoves use air pressure. It is very graceful to look at how a *mi-htoe* is working. He pushes down and pulls up the handles of the pumping rods holding in each hand. He has to work bearing the heat. While he is working in his position, he has to learn how the hammer-holders are hitting the brass plate with the hammers. He gets 39000 kyats when a big size gong is finished casting.

### 4.3.6 String-puller (Kyo-swe)

A kyo-swe (see Figure 4.18) is the one who gives the most assistance to the pho-kaing, the leader of the foundry. He helps the pho-kaing (the tongs-holder) while the latter is handling a heavy brass plate. He helps the pho-kaing to move the plate from place to place. He must be able to read the signal of the pho-kaing while working. While the hammer-holders are striking the plate, the pho-kaing has to place the plate at required places. The kyo-swe helps the pho-kaing do this work. He is also a trainee at a brass gong foundry. The center of the plate is held with a pair of tongs which is hung on a pulley with an iron string. The kyo-swe pulls and releases the other end of the iron string. This way, the plate can be moved up or down as required. A kyo-swe gets 20000 kyats for his work. His position at a brass-gong foundry is the second lowest.





Figure-(4.18) Kyo-swe

### 4.3.7 Shield-holder (Ban-kar)

A ban-kar (see Figure 4.19) has the lowest position at a brass-gong foundry. Everyone who wants to learn to make gongs has to begin at this position. He has to hold a wet big bamboo tray between the stove and the pho-kaing-saya in order to protect the latter from the heat. He can watch the entire process while other craftsmen are doing their jobs. A ban-kar is a trainee who starts learning the art of brass-gong casting. Every pho-kaing-saya has to begin their job at the position of a ban-kar. Thus, a ban-kar is the newest trainee. A ban-kar gets 5000 kyats when a big size gong is finished making.



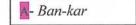


Figure-(4.19) Ban-kar

#### 4.3.8 Social-life of the craftsmen

A study on the brass gong handicrafts, especially concerning with the duties of the craftsmen, shows that a shield holder (ban-kar) is the most junior among the craftsmen. He has to learn about four or five months in this position learning the art. The second most junior craftsman is a string puller (kyo-swe) who has to learn at least six months for a shield-holder. A stove worker (mi-htoe) needs over year training. A back hammer holder (nauk-tu-kaing) has to learn over two years, a front hammer holder (shae-tu-kaing) learns about three years, and a middle hammer holder (le-tu-kaing) learns about five years. To be a tong holder (nyhat-kaing-saya), a craftsman has to learn over ten years. Being a tong holder is not the completion of the training. He has to learn more years learning from skilled a craftsman until he can make a gong

that can produce the melodious tone. Therefore a skill tong holder has learned at least ten to fifteen years under hard training in a foundry. Then only he can lead his team to cast brass gongs. The tong holders who are also the owners of the foundries in Tampawady are in their late fifties. According to a fifty-year-old tong holder, it is not possible for a man to work as a tong holder after sixty. He said,

"Years of work in this brass gong casting business have damaged our hearing and also cause backache."

Most new trainees are teenagers and they are between fifteen and sixteen. They have reasons to learn this art: they cannot afford to go to school, they want to do something to help for their families' income, they are not interested in school education, or they have no other skills. It is a rare case that a man learns this skill only because his father is a tong-holder. The reason is that brass gong casting involves too much hardship, and therefore new generation is only interested in doing other businesses. Therefore the number of the brass gong foundries in Tampawady is decreasing.

According to 80 years old, a skilled craftsman of Tampawady; *Khat-Tan*, brass gongs used to be expensive because the art was valued a lot. It was expensive to order a brass gong, and therefore the craftsmen received good pays. He said,

"When we received many orders and had to work all month, the income was good. But we only have works for about twenty days in a month these days. We cannot work more than that either; it is too hard to work every day. Since craftsmen who worked in brass gong foundries were well paid, they were popular among women. Parents of single women seemed to favor brass gong craftsmen for their daughters. There was a saying, "toat-toat-tin is welcome; but tauktauk-tat-tat is not." Toat-toat-tin is the sound that is produced while casting gongs and tauk-tauk-tat-tat is the sound that is produced while carving wood. Thus it means that brass gong craftsmen were favored by the parents of single daughters, but sculptors were not. Woodcarving did not use to be a well-paid job. However, it is different now. Although brass gong craftsmen are still well paid, the work is so hard that not many people prefer to choose this livelihood. And it is not a regular job nowadays due to the shortage of raw materials.

Therefore, it can be seen that brass gong craftsmen are not popular among single women like they were before".

A tong-holder explained what he does to help the craftsmen in his team. He said, 
"He tries to get as many orders as possible from the brassware 
traders. He has the foundries for all sizes. He has one for big size 
gongs, one for medium size gongs, and one for small size gongs. He 
try to get many orders, thus craftsmen in his team have regular jobs 
throughout the year. They need regular jobs because they have 
families to support. They used to have enough money for all year if 
they just worked for six months in cool seasons. But it is not possible 
now. Because of commodity prices are increasing, that they produce 
brass gongs all the years. On the other hand, they need to have the 
orders from the merchants. They produce number of gongs in that day; 
they are paid daily thus they are wages handicraftsman. Therefore, 
craftsmen can do other part-time jobs also when they finish the work at 
the foundry."

However, a field research shows that craftsmen are paid in advance. When the researcher arrived at the foundry where the researcher has an appointment, it was one o'clock in the morning. The weather was very cold. Not all workers had arrived when the researcher got there. The owner of the foundry sent for the craftsmen in his team. But one of the hammer holders said that he could not come. Thus the owner had to pay the wage for the day to the man's wife and asked her to wake him up. It can be seen here that there is respect between the owner and the craftsmen. Owners have to pay the wages in advance for the following reasons. There are only few skilled craftsmen in Tampawady. If one craftsman is absent, other craftsmen will lose their money for that day also. The owners have to consider other craftsmen. And this is a kind of work one cannot be substituted for.

Some brass gong foundries owners say that;

"They sometimes have to help the craftsmen with their family problems. When they have difficult times due to the problems such as health, religious or social matters, the owners have to pay them the wages in advance. According to those foundry owners, they have to take care of their craftsmen's social life".

Therefore it can be assumed that brass gong casting handicraft needs unity at work, family spirit, social understanding, and helpful attitude. It can also be founded that the skill of a craftsman improves through experiences he acquires in years of service.

## 4.4 Economic activities of brass gong casting

The followings are the tables that show the amount of money paid to the craftsmen who work in the brass gong foundries.

Table (2-A) A big size gong foundry

Level	craftsmens	income	weight	
Leader	Nyhat-kaing	43000 kyats		
Second leader	Ale-tu-kaing	41000 kyats		
Member	Shae-tu-kaing	39000 kyats		
1	Nauk-tu-kaing	39000 kyats	over 4.123 kg	
1	Pho-hto	39000 kyats		
1	Kyo-swe	20000 kyats		
1	Ban-kar	5000 kyats		

Table (2-B) A big size gong foundry

weight	Expe	nses	Selling price	Selling price of 1.649 kg
4.13 kg			97500 kyats	39000 kyats
4.948 kg			117000 kyats	11
6.597 kg			156000 kyats	11
8.247 kg	]		195000 kyats	11
9.896 kg	Craftsman charges	- 20.1	234000 kyats	
11.55 kg	TOWNS AND ADDRESS OF THE PARTY	<ul><li>36000 kyats</li><li>68000 kyats</li><li>330000 kyats</li></ul>	294000 kyats	42000 kyats
13.2 kg			336000 kyats	
14.85 kg	Total charges		378000 kyats	1
16.49 kg			420000 kyats	1
18.15 kg	]		550000 kyats	50000 kyats
19.79 kg	1		600000 kyats	1
21.44 kg	1		650000 kyats	1
23.09 kg			700000 kyats	
24.74 kg	1		750000 kyats	1
26.39 kg			800000 kyats	1

Source: Field survey in 2011-2012

Table (3-A) A medium size gong foundry

craftsmen	income	weight
Nyhat-kaing	7500 kyats	
Ale-tu-kaing	7000 kyats	
Shae-tu-kaing	6500 kyats	0.577 kg - 3.298 kg
Nauk-tu-kaing	6500 kyats	
Pho-hto	6500 kyats	
Kyo-swe	3000 kyats	
	Nyhat-kaing  Ale-tu-kaing  Shae-tu-kaing  Nauk-tu-kaing  Pho-hto	Nyhat-kaing 7500 kyats  Ale-tu-kaing 7000 kyats  Shae-tu-kaing 6500 kyats  Nauk-tu-kaing 6500 kyats  Pho-hto 6500 kyats

Table (3-B) A medium size gong foundry

weight	Expenses	Selling price	Selling price of 1.649 kg (1 viss)
0.577 kg		11500 kyats	
0.825 kg	Craftsman charges-37000 kyats	16000 kyats	-
1.072 kg	Charcoal -30000 kyats	20000 kyats	-
1.237 kg	General charges -60000 kyats	21000 kyats	30000 kyats
1.402 kg	Total charges -127000 kyats	25000 kyats	-
1.649 kg		30000 kyats	-
3.298 kg		78000 kyats	-

Source: Field survey in 2011-2012

Table (4-A) A small size gong foundry

Level	Craftsmen	income	weight	
Leader	Nyhat-kaing	8000 kyats	0.082 kg 0.495 kg	
Second leader	Ale-tu-kaing	7500 kyats		
Member	Shae-tu-kaing	7000 kyats		
1	Nauk-tu-kaing	7000 kyats		
1	Pho-hto	7000 kyats		
1	Kyo-swe	3500 kyats		

Table (4-B) A small size gong foundry

weight	Expenses	Selling price	Selling price of 1.649 kg (1 viss)
0.082 kg	Craftsman charges -38500 kyats  Charcoal -25000 kyats  General charges -50000 kyats  Total charges -113500 kyats	5500 kyats	30000 kyats
0.165 kg		6000 kyats	
0.247 kg		6500 kyats	
0.329 kg		7500 kyats	
0.412 kg		8500 kyats	
0.495 kg		9500 kyats	

Source: Field survey in 2011-2012

According to above mentioned facts that the workers get more money if they finish casting heavier gongs. The working days required to finish casting a gong depends on the size of the gong. A big size gong is over 4.123 kg. It takes about two weeks to make a gong that weighs over 16.49 kg. It takes two to ten days to make gongs that weigh 4.123 kg to less than 16.49 kg. Therefore skilled labor charges depend on the weight of the gongs and the days it takes to complete the gongs. Sometimes brass gong foundries receive the orders for roughly finished gongs. Then the workers cast two gongs 4.123 kg at the same time. For this kind of orders, the workers can get more money and the foundry owners also save some investments (see Tables 2-A and B).

For instance, a *pho-kaing-saya* gets 43000 kyats when a big size gong is finished casting, but he can get 48000 kyats if two gongs are cast together. However, if the weight of the gong is more than 4.123 kg, the workers cannot handle two gongs at one time. Two gongs each of which is more than 4.123 kg will be too heavy for the workers to handle. It is said that there are usually about seven to eight orders received for big size gongs every year.

Field research at medium size gong foundries and small size gong foundries shows that the workers who cast small size gongs get more money (see Tables 3-A and B). The reason is that medium size gongs are from 0.577 kg to 3.298 kg weigh and therefore two medium size gongs are usually cast together. Small size gongs are from 0.082 kg to 0.495 kg weigh and therefore up to twelve gongs can be cast together (*Tin Tun Oo, 2005*) (see Tables 4-A and B). The term used for this kind of work in foundries is "se-nhit-pya-tit-sauk-khat-thi, in Myanmar Language". Since twelve small sizes gongs can be cast together, the workers get more money and the owner can save more money too.

However, there is a saying in this brass gong tradition, "kye-pya-htu-hlyin-tu-chat-ma-na-pa" (Aung Nyein Chan, 2005). It means that if many gongs are cast together, the brass plates do not spared enough. The impacts of the hammers are not strong enough to flat all these brass plates. Then the brass plates do not have proper thickness. There could be damages and loss in works (Aung Nyein Chan, 2005). The gongs may not produce good tones. Therefore, the craftsmen do not usually cast too many gongs together although the workers may get less money and the owners have to invest more money in the work. They said that they usually prefer to have quality than quantity.

# 4.5 Production process of the brass gong casting in different sizes

The brass gong casting technology is a very hard handicraft. Brass gongs are casted basically in three sizes - big, medium and small ones (*Tin Tun Oo, 2005*). Big size gongs usually weigh over 4.123 kg (see Table 5), medium sizes gongs weigh 0.577 kg to 3.298 kg, and small size gongs weigh 22.68 gm to 136.20 gm (see Table 7). The methods used in brass gong casting processes are the same for all gongs in different sizes; only the numbers of craftsmen are different. The places where brass gongs are casted are called brass gong foundries (*maun:-hpou* in Myanmar) or, more technically term, "*hpou-khwin*" in Myanmar. Fire power is mainly used in the processes and the work requires high temperature. For this reason, craftsmen usually cast, especially big sized gongs, between midnight and dawn. In winter, they begin their work at four o'clock in the morning and in summer at one o'clock in the morning. This is a team work and therefore every craftsman must be present at foundry.

Table (5) The weights of big- sized gongs

No	Weight of gongs	The size of Myo-khe	The size of Maung-tabet	The size of the finished gong
1	4.123 kg	22.86cm	6.35 cm	43.18 cm
2	4.948 kg	22.86 cm	6.35 cm	45.72 cm
3	6.597 kg	25.4 cm	7.62 cm	50.8 cm
4	8.247 kg	30.48 cm	8.89 cm	55.88 cm
5	9.896 kg	33.02 cm	10.16 cm	60.96 cm
6	11.55 kg	38.1 cm	10.16 cm	63.5 cm
7	13.2 kg	43.18 cm	10.16 cm	66.04 cm
8	14.85 kg	45.72 cm	11.43 cm	68.58 cm
9	16.49 kg	50.8 cm	11.43 cm	71.12 cm
10	18.15 kg	55.88 cm	12.7 cm	76.2 cm
11	19.79 kg	55.88 cm	12.7 cm	76.2 cm
12	21.44 kg	55.88 cm	12.7 cm	81.28 cm
13	23.09 kg	60.96 cm	13.97 cm	86.36 cm
14	24.74 kg	66.04 cm	15.24 cm 88.9 cm	
15	26.39 kg	66.04 cm	16.51 cm	91.44cm

Sources: Field survey in 2011-2012

#### 4.5.1 Production process of big sized gongs

During the reigns of Myanmar kings, big sized brass gongs were used in royal ceremonies, for military purposes, in social and administrative affairs, and as musical instruments. The brass gongs foundries exist in Tampawady in Mandalay (*U Min Naing, 1987*). Seven craftsmen are necessary in casting big sized brass gongs.

There are five steps in the process. They are:

Step One: melting the brass

Step Two: casting the brass, after melting and keeping it for a certain period, to

get a brass plate.

Step Three: shaping the brass plate into a gong

Step Four: shaping the knob Step Five: tuning up the gong

#### 4.5.1.1 Step one: melting the brass

This step must be done one day or a few more days before the other steps. The first step involves two kinds of work. The first work is mixing brass with tin and the second one is making the required basic material myo-khe. Each and every step in entire processes is equally important. The raw materials required are brass and tin. This kind of mixture is hard enough to make a gong with unique sound. It is necessary that the raw materials used to cast gongs are pure. Otherwise, the gong can easily be broken while it is being made, and the gong also cannot produce melodious sound. The right mixture may mean a good quality gong. The gong also can last longer. A particular skill is needed when the craftsmen mix the raw materials. The ratio of the brass to the tin is 4.948 kg to 1.649 kg (three to one viss). The craftsmen decide how much of the raw materials must be used to cast different sized gongs. However, craftsmen add more tin in the mixture since certain amount of the tin will be burnt up on fire. They also keep extra brass just in case. Then only the possibility of damaging the gong is lesser and the raw material cannot be easily burnt up on fire. Different sized gongs need different weight of the brass, but the craftsmen have to keep extra brass. The following Table (6) shows how much of extra brass is kept.

Table (6) Extra brass of brass gong casting

1 0.082 kg 2 0.165 kg 3 0.247 kg 4 0.329 kg 5 0.412 kg 6 0.577 kg 7 0.825kg 8 1.649 kg 9 3.298 kg 10 4.123 kg 11 4.948 kg 12 6.597 kg 13 8.247 kg 14 9.896 kg 15 11.55 kg 16 13.2 kg 17 14.85 kg 18 16.49 kg 19 18.15 kg 20 19.79 kg 21 21.44 kg 22 23.09 kg 23 24.74 kg 24 26.39 kg	No.	Weight of gongs	Extra brass		
3	1	0.082 kg			
4 0.329 kg 5 0.412 kg 6 0.577 kg 7 0.825kg 8 1.649 kg 9 3.298 kg 10 4.123 kg 11 4.948 kg 12 6.597 kg 13 8.247 kg 14 9.896 kg 15 11.55 kg 16 13.2 kg 17 14.85 kg 18 16.49 kg 19 18.15 kg 20 19.79 kg 21 21.44 kg 22 23.09 kg 23 24.74 kg	2	0.165 kg			
5	3	0.247 kg	0.165 kg		
6 0.577 kg 7 0.825kg 8 1.649 kg 9 3.298 kg 10 4.123 kg 11 4.948 kg 12 6.597 kg 13 8.247 kg 14 9.896 kg 15 11.55 kg 16 13.2 kg 17 14.85 kg 18 16.49 kg 19 18.15 kg 20 19.79 kg 21 21.44 kg 22 23.09 kg 23 24.74 kg	4	0.329 kg	7		
7 0.825kg 8 1.649 kg 9 3.298 kg 10 4.123 kg 11 4.948 kg 12 6.597 kg 13 8.247 kg 14 9.896 kg 15 11.55 kg 16 13.2 kg 17 14.85 kg 18 16.49 kg 19 18.15 kg 20 19.79 kg 21 21.44 kg 22 23.09 kg 23 24.74 kg	5	0.412 kg	7		
8 1.649 kg 9 3.298 kg 10 4.123 kg 11 4.948 kg 12 6.597 kg 13 8.247 kg 14 9.896 kg 15 11.55 kg 16 13.2 kg 17 14.85 kg 18 16.49 kg 19 18.15 kg 20 19.79 kg 21 21.44 kg 22 23.09 kg 23 24.74 kg	6	0.577 kg			
8 1.649 kg 9 3.298 kg 10 4.123 kg 11 4.948 kg 12 6.597 kg 13 8.247 kg 14 9.896 kg 15 11.55 kg 16 13.2 kg 17 14.85 kg 18 16.49 kg 19 18.15 kg 20 19.79 kg 21 21.44 kg 22 23.09 kg 23 24.74 kg	7	0.825kg	0.220 lv-		
10 4.123 kg 11 4.948 kg 12 6.597 kg 13 8.247 kg 14 9.896 kg 15 11.55 kg 16 13.2 kg 17 14.85 kg 18 16.49 kg 19 18.15 kg 20 19.79 kg 21 21.44 kg 22 23.09 kg 23 24.74 kg	8	1.649 kg	U.329 Kg		
11 4.948 kg 12 6.597 kg 13 8.247 kg 14 9.896 kg 15 11.55 kg 16 13.2 kg 17 14.85 kg 18 16.49 kg 19 18.15 kg 20 19.79 kg 21 21.44 kg 22 23.09 kg 23 24.74 kg	9	3.298 kg			
12 6.597 kg 13 8.247 kg 14 9.896 kg 15 11.55 kg 16 13.2 kg 17 14.85 kg 18 16.49 kg 19 18.15 kg 20 19.79 kg 21 21.44 kg 22 23.09 kg 23 24.74 kg	10	4.123 kg			
13 8.247 kg 14 9.896 kg 15 11.55 kg 16 13.2 kg 17 14.85 kg 18 16.49 kg 19 18.15 kg 20 19.79 kg 21 21.44 kg 22 23.09 kg 23 24.74 kg	11	4.948 kg			
14 9.896 kg 15 11.55 kg 16 13.2 kg 17 14.85 kg 18 16.49 kg 19 18.15 kg 20 19.79 kg 21 21.44 kg 22 23.09 kg 23 24.74 kg	12	6.597 kg			
14 9.896 kg 15 11.55 kg 16 13.2 kg 17 14.85 kg 18 16.49 kg 19 18.15 kg 20 19.79 kg 21 21.44 kg 22 23.09 kg 23 24.74 kg	13	8.247 kg	0.925 1.0		
16 13.2 kg 17 14.85 kg 18 16.49 kg 19 18.15 kg 20 19.79 kg 21 21.44 kg 22 23.09 kg 23 24.74 kg	14	9.896 kg	U.823 Kg		
17 14.85 kg 18 16.49 kg 19 18.15 kg 20 19.79 kg 21 21.44 kg 22 23.09 kg 23 24.74 kg	15	11.55 kg			
18 16.49 kg 19 18.15 kg 20 19.79 kg 21 21.44 kg 22 23.09 kg 23 24.74 kg	16	13.2 kg			
19 18.15 kg 20 19.79 kg 21 21.44 kg 22 23.09 kg 23 24.74 kg	17	14.85 kg			
20 19.79 kg 21 21.44 kg 22 23.09 kg 23 24.74 kg	18	16.49 kg			
21 21.44 kg 1.649 kg 22 23.09 kg 23 24.74 kg	19	18.15 kg			
22 23.09 kg 23 24.74 kg	20	19.79 kg			
23 24.74 kg	21	21.44 kg	1.649 kg		
ALTO CONTRACTOR OF THE PARTY OF	22	23.09 kg			
24 26.39 kg	23	24.74 kg			
	24	26.39 kg			

Source: Field survey in 2011-2012

In order to mix the brass and the tin, first the brass is measured in terms of weight (see Figures 4.20 and 4.21). Then the tin is melted and pour on a clean ground until it becomes solid again. Melting the tin is necessary to check whether it is pure or not. The tin, after melting, looks shining if it is pure. Pure tin is good for casting gongs. If the colour is silver or white, it is a sign that the tin is not pure. Impure tin is not good to cast gongs. Using impure tin can damage the gong for it can be broken easily (see Figures 4.22 and 4.23). Therefore, after melting the tin, if it is found to be impure, it must be thrown away. When the tin is found to be pure, required amount of tin is mixed with the brass. The ratio is, as mentioned above, 4.948 kg of brass to 1.649 kg of tin.

Then the brass and the tin are together melted in a particular stove that used air pressure. First the brass and the tin are measured and put into the pot (see Figure 4.24). Some charcoals are also put in that pot in order to get more fire power (see Figure 4.25). Then, using an engine, the air is pumped into the pot. This make the fire increases the temperature and melt the mixed materials together. The melted liquid flows into the pot that is kept lower the first one (see Figure 4.26). This liquid is mixed with some pieces of charcoals. It usually takes about twenty minutes to melt 26.39 kg and 28.04 kg of the mixed material. After that the upper pot has to be removed, that the craftsmen can move the lower pot with melted liquid in it to the mold. The craftsmen carried the pot using the tongs and placed it on an iron shelf (see Figure 4.27). The shelf is made with 365.76 cm long iron pipes and some iron bars. The pipes are fixed parallel to each other. In the middle part, iron bars are fixed on the pipes crosswise in order to hold the pot stable. Two men have to carry the pot holding the edges of the pipes. The pot has a duck-billed mouth through which the liquid is pour into the mould. Then the liquid is kept in the mould for sometimes until it coagulates as it cools down.

The mould (see Figure 4.28) is made of sticky red soil and rice husk. These materials are mixed in the same amount. The moulds are made in different shapes and sizes. The mold is fixed in a wooden frame, or sometimes old car wheels are used as the frame. The frame around the mould is necessary; otherwise, they might change the shape or the size. The surface of the mould is a little lower than the edge and it. Different sizes of moulds are made in order to cast different sized gongs.

Before the brass liquid is poured into the mould, the mould must be thinly painted with oil dregs (see Figure 4.29). This helps the craftsman to remove the brass from the mould when the liquid gets cool. Besides, this way, they can get the brass with one side of the surface harder than the other side. Two men had to carry the pot with hot brass liquid. They pour the liquid into the mold slowly. Another man holds a piece of rough cloth under the pot so that the liquid passes through the cloth and gets into the mould (see Figure 4.30). The cloth serves as a sieve which removes the pieces of charcoals that is mixed in the liquid. This way, only pure liquid flows into the mould (see Figure 4.31)

Three minutes after that, some brass moss (kyaye-hnji in Myanmar) appear on the surface of the liquid (see Figure 4.32) (e.g. some cream appears on the surface of the milk). That the brass moss, technological Myanmar term is called thoù-hpà. The craftsmen have to remove thoù-hpà with a piece of bamboo stick before it gets cool down. The bamboo stick is called thoù-tan in Myanmar. It is important that brass moss is removed before it gets too late. Being late for a second can damage the work. Sometimes, the flame might come out from the liquid since the lower surface was painted with oil dregs. The craftsman who is doing this task must be very careful because he might get burnt. Removing brass moss results in having a solid brass with a clean and smooth surface. It usually takes about twenty minutes to get the brass liquid cool down (see Figure 4.33). Then they get the solid brass which is called myo-khe which literally means the seed of the brass gong (see Figure 4.34). Myo-khe is so called because it is the beginning stage to become a brass gong.

All these processes mentioned above are led by the tong-holder. It is in fact the most important stage in the entire work. A good quality myo-khe can be used to make a good quality gong. The foundry owners usually cast myo-khe as there are sometimes demands in the market. They sometimes keep myo-khe enough for a month work or sometimes for ten days or a week. It can save time and money. Myo-khe is the last stage in the first part of gong casting.



Figure-(4.20) Brass



Figure-(4.21) Pure tin



Figure-(4. 22) Broken the gong



Figure-(4. 23) Broken the gong

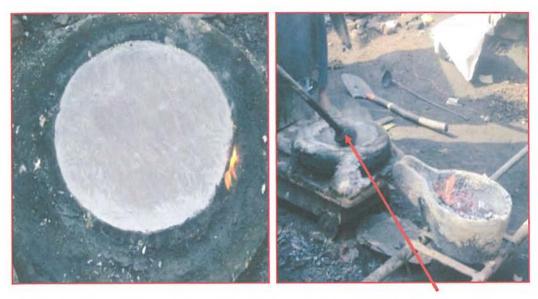


Figure-(4.28) Mould

Figure-(4.29) Oil dregs



Figure-(4.30) A piece of rough cloth

Figure-(4.31) Liquid flows



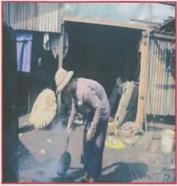




Figure-(4.32) Brass moss Figure-(4.33) To get the Figure-(4.34) Myo-khe melting brass

# 4.5.1.2 Step two: casting the brass plate

At this step, air pressure stoves fixed underground are used to heat the brass. First, the stove is lighted. The brass plate is made on an anvil where the brass is beaten with hammers many times. The craftsmen fixed scaffolding on the ground around the anvil. The scaffolding is necessary for shaping the brass plate in desired thickness and size. Especially it is necessary in casting big sized and medium sized gongs. The scaffolding is just piles of soil fixed on the ground (see Figure 4.35). If the brass plate is big, more scaffolding is necessary. If the scaffolding is high, the brass plate sags deeper and the surface is less smooth. If the scaffolding is low, the brass plate is smoother and sags less deep. Thus, in order to make the plates in bigger diameter, higher scaffolding is used. Craftsmen use higher scaffolding when they need smoother brass plates and use lower scaffolding when they need the concave or convex plates. They say that good scaffolding is good enough for a hammer, and that better scaffolding makes better product. The height of the scaffolding and where it should be put is decided by the tong-holder (the first leader) and arranged by the middle hammer holder (the second leader).

When the *myo-khe*, the stove and the scaffolding are ready, the first step to be done is to make the *myo-khe* to become brass plate (*mjou:-pja:* in Myanmar). In order to make *mjou:-pja:*, *myo-khe* has to be heated and beaten with iron hammers. *Mjou:-pja:* is a small brass plate. They are made in order to hold the *myo-khe* remain stable when *myo-khe* are piled up on one another and beaten with a hammer. When *mjou:-*

pja: are ready, the next step is to be done repairing the edge (in Myanmar called "htaun-pjin-chin:") (see Figure 4.36). In this step, the craftsmen smoothed the edges of the brass myo-khe. The myo-khe is heated in the stove. When the myo-khe gets heated enough, the craftsmen take it out of the stove using a tongs; used in the beginning (pwe-sa-kaing-nyhat in Myanmar). It is put on the anvil and checked if the edges are smooth enough. The shape of the myo-khe is circular. The tong-holder beats it with a small hammer to make it as circular as possible. However, the myo-khe is made in the mould and therefore there might not be much work at this step. Some myo-khe may need ten hits maximum to get the required smoothness. This step is a preparation for the next step in which the brass plate will be beaten with hammers many times. If the myo-khe is smoothly circular, it will remain in circular shape when the craftsmen beat it with hammers many times.

The next step is to make a brass plate. At this step, the circular myo-khe with smooth edges are placed on the anvil and beaten with hammers. First, the stringholder lifts the brass plate up with a pulley. The brass plate has to be held in the middle. The tong-holder waits ready holding right-hand tong (let-ya-nyhat). As the brass plate is put on the stove, the tong-holder has to watch the stove carefully. If the fire does not reach on every part of the plate equally, the brass plate can be broken. This in Myanmar technological term is called kyaye-khe-than-thi. If the flame is stronger in only one part, it is called mi:-sai-thi in Myanmar (see Figure 4.37). If this happens, that part of the plate may get melted. When the plated is heated as desired, the string-holder pulls the plate up and places it on the anvil. The tong-holder, using his tongs, holds the plate and places it on the anvil, that the right spot of the plate is place on the anvil. Three hammer-holders wait for that moment (see Figure 4.38). When the plate is placed on the anvil, the front hammer-holder starts hitting on the heated plate three times. It is a signal that their part of the work has begun. It calls for the attention and concentration of the hammer-holders. As the front hammerholder raises his hammer, the middle hammer-holder hits the plate. As the middle hammer-holder raises his hammer, the back hammer-holder hit the plate. Again while the back hammer-holder is raising his hammer, the front hammer-holder hit the plate. They all start hitting on the centre part of the plate. When the plate is placed on the anvil, the colour is brightly red. The colour changes when the plate gets cooler. It becomes brown. Until the colour of the plate is brown, the hammer-holders beat on the plate.

The number of hammer-strikes is different depending on the size of the gong. Bigger gongs need more strike. For an 8.247 kg gong, there are usually twenty-five to thirty hammer-strikes before the colour changes into brown. All the hammer-holders have to hit on the same spot. The middle hammer-holder has to hit on the spot where the front hammer-holder has hit. The back hammer-holder has to do the same. In order to get the hammer-strikes on the same spot, the tong-holder hold the plate with his tongs and move is accordingly. This step is necessary. Otherwise, the strikes may create holes on the plate and may even break the plate. When the hammer-holders have hit the plate one round, there circles appear on the plate. It looks like the Olympic symbol (see Figure 4.39). In order to appear those circles on the plate, the tong-holder has to move the plate accordingly. The hammer-holders, as they are directed by the tong-holder, beat on the plate. They begin it hitting on the centre sport and then slowly move round and round clockwise until they have beaten all parts on the plate. This is Myanmar technological term called ale-hma-khwei-te-thi. One round beating after heating myo-khe is Myanmar technological term called ti`-mi:-ti`khwei-khà-thi. If the brass plate is big and of heavy weight, the plate is usually heated two or three times and this is called hni-mi:-ti`-khwei-khà-thi or thoun:-mi:-ti`-khweikhà-thi. It means that, since the plate is big, before one round beating is completed, the colour of the plate changes into brown. Thus, it needs to be heated again. Sometimes, the plate needs to be heated three times.

After beating ten or eleven times, they have beaten the plate till the edge. Then the *myo-khe* becomes a **flat-plate** (see Figure 4.40) with the shallow concave part in the middle. Then, again, beating starts from the centre point. After beating four or five times, the shape is like a **mixing bowl** (see Figure 4.41). Beating begins from the center again and after twenty or twenty-one times, the plates shape like a **pan** (see Figure 4.42). If the plate is not wide enough, the craftsmen continue to beat it again. This time the pan-shaped brass is heated upside down on the stove and then beaten on the anvil placing the upside down. As the craftsmen are heating and beating the brass, the scaffolding must be fixed and re-fixed, that the height is equal in every side. If the height is not equal, the brass plate will not be smooth enough. While the

middle hammer-holder (the second hammer-holder) has beaten the brass plate, the scaffolding has to be re-fixed accordingly. The craftsmen say that this is called "*mjei-gji:-tin:-hma-maun:-gji:-tin:mji:*" in Myanmar. It means that strong scaffolding makes strong gongs.

Until the *myo-khe* becomes the brass plate with required diameter, in order to make an 8.247 kg gong, about 55 times beating is necessary. Each round, there are about 25 beatings on the plate at the centre and, as the beating reaches to the edge; the number of beating gets bigger. Approximately, 45 to 55 times beating are required on the edge. The *myo-khe* that is used to make an 8.247 kg gong is about 30.48 cm in diameter. The craftsmen have to beat on the *myo-khe* until it becomes as wide as 63.50 cm in diameter. When the plate is wide enough, the craftsmen start to make the edge-folding. An 8.247 kg gong, if the total diameter is 63.50 cm, 7.62 cm from the edge will be folded. In order to fold that 7.62 cm part, the craftsmen have to beat the rest part more. By beating the inner part, the edge becomes upright in vertical position. This step is called 'dazà-hpan:-thi' in Myanmar. After that, the brass is heated on the stove two or three more times and beaten again and again. This step is called 'hnizà-hpan:-thi' in Myanmar. Craftsmen have to do it until the edge is upright enough. This way, the brass plate starts to be shaped like a gong (see Figure 4.43).

In the second step which is beating the brass plate, 8.247 kg *myo-khe* is 30.48 cm in diameter, and the brass plate is 55.88 cm in diameter. The flat brass plate becomes the brass bowl. The edge of the gong in this size is about 7.62 cm. When the edge is properly folded vertically, the craftsmen beat the other parts with straight and smooth hammer, "sin-tu" in Myanmar. In this step, the soil around the anvil and the soil from both sides of the scaffolding are removed, that the anvil has the same leveling with the ground. The middle hammer-holder has to do this task. In this step, the craftsmen have to heat the brass and beat the plate for about twelve rounds. When the tong-holder thinks that they have made the gong satisfactorily, for the last time they heat the gong again until the colour becomes brightly red. Then they take the gong out of the stove and keep at a place for some time until it gets cool down and the colour becomes brown. As soon as the colour becomes brown, the gong is put into a brick water tank. This is technological called putting in to the water ("maun:-jei-chathi or jei-pji-thi" or "hsei:-dha:-tin-thi" in Myanmar). It is vital that the gong is put

into the water at the right moment. If it is over heated, the brass is too hard and can be easily broken. If it is less heated, the brass is not hard enough and can be easily broken too. Therefore, it is very important to put the water as soon as the colour changes from bright red to brown. Then only the craftsmen can beat the gong again in order to complete their work. When iron is heated, put it in the water, and beat it with hammer, it can be broken. But when brass is treated the same way, it becomes soft enough to work on. However, as it was just said, the craftsmen have to put the gong into the water at the right moment. The mistake at this step can spoil the entire work. There were two times in the entire processes when the brass is put in the water (see Figure 4.44).





Figure-(4.35) Making the scaffolding

Figure-(4.36) Repairing the edge



Figure-(4.37) Fire flame stronger



Figure-(4.38) Three hammer-holders



Figure-(4.39) Olympic symbol



Figure-(4.40) Flat plate



Figure-(4.41) Mixing bowl

Figure-(4.42) Pan



Figure-(4.43) Start to be a gong



Figure-(4.44) Putting in to the water

### 4.5.1.3 Step three: shaping the gong

The first work in this step is technological term called "maun:-zaù-acho:-kainchin: or maun:-dabè-hpo-chin:, maun:-hnoù-khan:-hpo-chin:. It means that a wooden anvil (see Figure 4.45) is used in this step instead of an iron anvil. Tamarind wood is used since this kind of wood is hard enough to take the impact of the hammer strikes. The hammers used in this step are also wooden ones. Craftsmen heat the gong and shape the upright edge with wooden hammers. It is important that they must not beat the center part where the knob is going to be shaped because beating at this place might break it. The upright edge must be smooth. For that purpose, the craftsmen use horseshoe shaped hammer. The next step is called "kjin-htou:-chin:" in Myanmar (see Figure 4.46). It means that the craftsmen create a line between the upright edge and the flat part of the gong. For that purpose, a wooden hammer called carpentersquare hammer ("kjin-thwa:-tu" in Myanmar) is used. This kind of hammer is also called "kjin" in Myanmar. This hammer shapes like an iron pin with a flat end. The blade of the flat edge is thin but not too sharp. The sharpness of this edge is just good enough to create a line. First, the gong is heated until the colour changes into bright red, and the craftsmen place it on the wooden anvil. Keeping the gong in the right position, the craftsmen create the line using the "kjin". Next, they have to beat the upright edge and the flat part of the gong with a narrow horseshoe hammer and wooden club ("poù-tu") or straight and smooth hammer ("sin:-tu") that has the flat surface, that the surface of the gong becomes smooth. By repeated heating and beating, the gong has smooth surface. However, the last stage is still needed to be done; that is to shape the knob at the center of the gong.



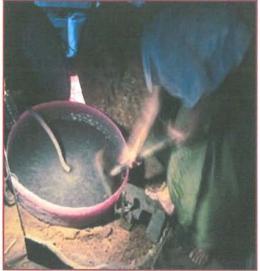


Figure-(4.45) Wooden anvil

Figure-(4.46) Upright the edge

#### 4.5.1.4 Step four: shaping the knob

The shaping knob is always at the center of the gong. The center point is shaped to be like one half of a ball pointing out from the face of the gong. Making this knob is called "bu-cha-thi" in Myanmar. As the "knob" is pointing out from the face, the opposite surface shapes like a bowl. When someone strikes on the gong knob, the sound creates echoes which are deep and long. This part is usually thicker than the other parts of the gong. It is because this is the part that is mostly struck. In order to prevent being broken easily and to have longer deep sound, this part must be thicker that the other parts. The tools used in this step are wooden concave (poù-kjin) (see Figure 4.47), wooden clubs (poù -tu), tongs (nyhat) and wooden pestle (bu-tan). Wooden concave (poù-kjin) is a wooden anvil that has a concave surface. This concave part is where the knob is shaped. Wooden clubs (poù-tu) are hammers with rectangle surfaces. Wooden pestle (bu-tan) (see Figure 4.48) shapes like a pestle. The anvils used to shape knobs are of three kinds - wooden concave used in first stage (jaun-khwè), wooden concave used in middle stage (gja:-khw) and wooden concave used in last stage (hsin.-khwè). Therefore, the wooden club (poù-tu) used with those anvils have the names - wooden pestle used in first stage (jaun-tan), wooden pestle used in middle stage (gji:-tan) and wooden pestle used in last stage (hsin.-tan).

First, the gong is heated on the stove. When the entire gong is brightly red, the tong-holder, using tongs, carry it and place it on the wooden concave. As soon as it is placed on the wooden concave, a hammer-holder places a wooden pestle at the center of the gong and beat on it with a wooden clubs. He has to beat this way until they get the knob with desired shape. If they are making a heavy gong, more craftsmen have to hold the gong and three hammer-holders have to work together. The first round of heating the gong and beating it on the wooden concave used in first stage (jaun-khwè) with a wooden pestle used in first stage (jaun-tan) is in Myanmar technological term called "maun:-bu-jaun-cha-thi". During the second round, wooden concave used in middle stage (gja:-khwè) and wooden pestle used in middle stage (gja:-tan) are used. For the last stage, wooden concave used in last stage (hsin.khwè) is used. Wooden concave used in last stage (hsin.-khwè) (see Figure 4.49), unlike other concaves, has an iron ring around the mouth. The iron ring is to keep the mouth in circular shape. When the gong is heated and placed on the wooden concave used in last stage (hsin.-khwè), the craftsmen use wooden pestle used in last stage (hsin.-tan) and beat the wooden pestle used in last stage (hsin.-tan) with the wooden clubs (poù-tu). The method used in shaping the knob is technological term called (tìmi:-ti`-khwè-loù-thi). At the final stage, the tong-holder checks the knob whether it is exactly at the center or not, whether it is pointed out enough or not, whether it is round enough or not. It means that the stove-holder checks if the knob is just right (see Figure 4.50). If he thinks it is satisfactory, the gong is heated again on the stove and smoothen the surface by beating with a soft wooden clubs (poù-tu). This should be done one or two times. When the gong's surface is smooth enough, it is heated again and put in the water. This completes shaping the knob.



Figure-(4.47) Wooden concave

Figure-(4.48) Wooden pestles



Figure-(4.49) Wooden concave



Figure-(4.50) Shaping the knob

# 4.5.1.5 Step five: tuning up the gong

After shaping the knob, the gong is heated again and keeps in the water for about thirty minutes. The next step is to tune up the gong. The gong can be tuned up without heating it again and putting it in the water. But this way of tuning does not last long. After putting in the water, the brass in some parts of the gong is not hard enough. Therefore, there are other works on it that are needed to be done. Firstly, the tong-holder shapes the knob properly round. He has to do it himself for he is the one who knows how to do it. This step is called tuning the sound wave (athan-hlain:-phothi in Myanmar). The tong-holder knows the spots on which the hammer-holders struck. He can visualize the spots as if he were seeing it with his eyes. Without this skill, the work of tuning the gong may not be quick enough. The craftsmen use a 243.84 cm long wooden bar. This bar is hung at the place above 50.8 cm from the ground. One end of the bar is tightly fixed at a strong place. The other end is left unfixed at any places. The gong is placed blow the bar with its face upward. In the middle of the bar, a hard wooden rod is fixed placing one end on the face of the gong. Some craftsmen sit on the end of the bar that remains unfixed. One to three men have to sit on it to add enough weight (see Figure 4.51). The wooden rod that had been vertically placed on the gong produces the pressure on the gong. The men on the bar move accordingly in order to reduce or increase the weight on the gong. The tongholder gently beat on the spot where the gong gets pressure from the pole. He uses straight and smooth hammer "sin:-tu" (see Figures 4.52, 4.53 and 4.54) this time. This way, the tong-holder fixes the face of the gong in order to make it smooth and to tune it up. Then they remove the pole and test the sound. They have to do it about fifteen times until the tong-holder finds that the gong has been perfectly tuned up. In this step, craftsmen do not use big iron hammers since it can damage the gong.

Any kinds of brass musical instruments must produce echo that follow the sound produce by each strike on them. When someone strikes a brass musical instrument, it usually produces the sound that last for a few seconds. In order to have that kind of echoing sound, craftsmen have to tune up the instruments. Especially, the gongs used to indicate the time or to call for public attention must produce such echoing sounds.

In order to cast a gong that can produce good quality sound, craftsmen have to cast it with different thickness on different parts of the gong. They say that, three parts of thickness of the gong and three parts of thinness of the gong ("htu-thoun:-htupa:-thoun:-pa:" in Myanmar technological term) are necessary characteristics of a good quality gong. The thickness of the gong must not be the same on all parts: some parts must have thicker brass than the others. The characteristics of "Htu-thoun-htu, Pa:- thoun-pa:" are important in tuning a gong. Technologically, it is said that these characteristics are necessary in tuning a gong. According to it, the three parts (1) the knob, (2) shoulder-tip of the gong ("dabè-hpja:") and (3) the fold of the edge ("kjinwai'-htaun.-gjou:") must have thicker brass. The three parts-(1) nearest around the knob ("bu-bei:-than-kwei:-saun:"), (2)surface of the gong; between knob and edge ("kjo:-njil") and (3) inner of shoulder ("dabè-atwin:dha:") must have thinner brass. In order to have the right thickness at the right part, the brass plate must be heated and hammered. Then only, the gong produces melodious sound. It means that the knob is the part where the brass is thickest and at the surface of the gong; between knob and edge ("kjo:-njù") three blocks have thinker brass than the other three blocks. In order to have the right thickness, the tong-holder has to instruct his hammer-holders well. One of the characteristics of brass gongs is that the surface of the gong ("kjo:") must not be too thick. Therefore, the thickness of the brass is an important characteristic of brass gong.

When craftsmen have tuned up the gong, they make two holes where a string will be fixed to hand the gong above the ground. The position of the holes on big gongs depends on the diameter of the gongs. The holes have a distance between them that is 2.54 cm shorter than half of a quarter of the diameter of the gong (see Figure 4.55). The string is made with coconut fiber. While two men are lifting the gong with a wooden bar, crossing through the string, the tong-holder tunes up the gong again and again using a *padded hammer* (small-striker) (see Figure 4.56). He tunes up the gong until he finds the sound satisfactory.

The holes are bigger as the gongs are bigger. Craftsmen use a drill to make the holes. The sound is mainly produced around the knob, and therefore the holes do not effect on the sound. If the tong-holder does not like the sound, the craftsmen place it on an iron anvil again and tune up by beating the gong with a wooden

hammer called athan-taun:-tu in Myanmar. Still, if it is not satisfactory, they have to use the wooden bar and the pole to tune up the gong again. They have to do this, until the gong produces require sound western F (five pitches); fifth note in Myanmar music scale of seven tones (nga:-baù-than in Myanmar) or western E (six pitches); sixth note in Myanmar music scale of seven tones (chau-baù-than in Myanmar).



Figure-(4.51) Tuning up the gong

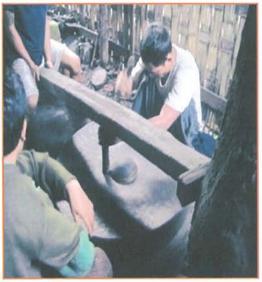


Figure-(4.52) Tuning up the gong

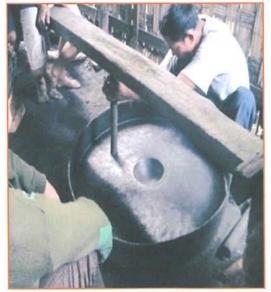
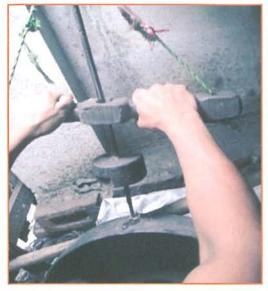


Figure-(4.53) Tuning up the gong



Figure-(4.54) Tuning up the gong



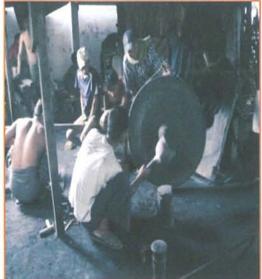


Figure-(4.55) Holding on the gong

Figure-(4.56) Testing the sound

## 4.5.2 The padded hammers (small strikers) used for striking the brass gongs

The padded hammers are of different sizes depending on the size of the brass gongs. Thus, some are short and some are long. One end of a stick is padded with a piece of cloth. This knob is applied with glue and covered with a piece of felt or velvet. The padded hammer made by the elephant skin is the best for *kyaye-naung* (small brass gong circle). The reason is that the small brass gongs are made with thick brass, so hard hammers are necessary to play these small brass gongs. However, since the elephant skin is rare to get and is expensive, it is rarely used. Instead, the buffalo shoulder skins and the ox shoulder skins are mostly used.

Set of gongs or *maun:-saings*, which have seven, nine and eighteen gongs need padded hammers which are a little heavy since the gongs cannot produce proper sound if they were played with the light hammers. Therefore, they are usually made of hard wood such as the gum-kino (*Badau tree*) or acacia (*Htanaun tree*) or dalbergia cultrata (*Yin-taik* tree). These kinds of wood are heavy enough, so they are the best to make padded hammers for *maun:-saings*. The hammers have eight inches (20.32cm) in length and the other ends are as big as 1.27cm in diameter. In the past, a stick must be curved with a knife to get the desired size, then brushed with a rasp and finally

made smooth with sandpaper. But it is not that difficult today; they can be easily made on a lathe.

Table (7) The weight of medium and small sized gongs at different stages

No.	Weight of gongs	The sizes of myo-khe	The sizes of maun:-dabe`	The sizes of finished gongs	Note
1	3.298 kg	20.32cm	6.35 cm	40.64cm	
2	1.649 kg	15.24 cm	5.08cm	38.1cm	
3	1.402 kg	13.97 cm	5.08cm	36.83cm	
4	1.237 kg	12.7 cm	5.08cm	36.83cm	Medium sized gongs
5	1.072 kg	11.43 cm	5.08cm	36.83cm	
6	0.825 kg 10.16 cm 5.08cm 35.56cm				
7	0.742 kg	8.89 cm	3.81cm	33.02cm	
8	0.577 kg	7.62 cm	3.81cm	30.48cm	
9	0.412 kg	6.35 cm	3.81cm	25.4cm	
10	0.329 kg	5.08 cm	3.81cm	22.86cm	0 11 : 1
11	0.247 kg	3.81 cm	2.54cm	20.32cm	Small sized
12	0.165 kg 3.81 cm 2.54cm 17.78cm		17.78cm	gongs	
13	0.082 kg	3.81 cm	2.54cm	15.24cm	

Source: Field survey in 2011-2012

## 4.5.3 Production process of casting medium and small sized gongs

Medium and small sized gongs are with the weight of 0.082 kg to 3.298 kg (see Table 7). The first steps in casting medium and small sized gongs, like large sized ones, include mixing the raw materials and melting the brass. Different sized pots (see Figure 4.57) are used to melt the brass depending on what sized gongs are being casted. Likewise, there are different sized moulds to mould the *myo-khe* (see Figure 4.58). For instance, the smallest pot can melt 0.082 kg brass and the biggest one can hold 3.298 kg. The molds are also from the one that can hold 0.082 kg brass to the one that can hold 3.298 kg. The works in the rest steps including repairing the edges (*htaun-pjin-chin:* in Myanmar), casting the brass, shaping the brass plate into a

gong, shaping the knob, tuning up the gong are the same as that in large sized gongs. However, large sized gongs have thicker brass and therefore craftsmen have to beat only one brass layers at a time. In casting medium sized gongs, if the one being made is a heavy one (e.g. 1.649 kg or 3.298 kg weigh), only two layers are beaten together at a time (see Figure 4.59). When small sized gongs are made, many layers are casted on together as the craftsmen can handle. However, sometimes, when they have received many orders, craftsmen work on ten to twelve layers together (see Figure 4.60). This is called "se-nhit-pya-ti`-sauk-khat-thi" in Myanmar. In other words, it is a part of work in a long process. In casting medium or small sized gongs, craftsmen do not usually work on single layer for the plates are so thin that they cannot take the impact of the hammer strikes. They might be broken within a few strikes. In other words, more damages are possible. Therefore, the thickness of the brass must be just right for the impact of the hammers or the hammer-holders' strength. Thinner plates must be placed together when they are beaten. Working on more layers together can save the time as well. For instance, two brass plates with 10.16 cm in diameter (0.082 kg weigh) are placed together, and when it becomes a plate with 11.43 cm in diameter, craftsmen keep it aside for some time. Then another two plates are worked on together. This way, when four plates with 11.43 cm in diameter are ready, craftsmen put them together and beat them again until they become a plate with 12.7 cm in diameter. When they have seven or eight brass plates with 12.7 cm in diameter, craftsmen place them together and beat them again. This way, the plates are heated and beaten again and again until craftsmen have the plates with 15.24 cm in diameter. Heating, cooling down, and placing one plate on the top of another all these steps require skilled treatment.

For instance, a *myo-khe* shapes like a **kind of creeper, Entada pursaetha** ("goun-njin: in Myanmar") which has rounded edge with the rising middle part. Craftsmen beat with hammers on the *myo-khe* until it has about 5.08 cm in diameter. Before a *myo-khe* is beaten, it has to be heated until it is soft enough. Each round of heating is called "ti-mi-cha-thi in Myanmar". It is important to give the right temperature and the tong-holder has to work on it with great care. It is important that the entire *myo-khe* is heated equally and the colour must become brightly red. However, it should not be overheated. Due to overheating, the colour becomes too

red. It is called "hme.-thi in Myanmar". The stove-holder has to watch carefully that myo-khe is not overheated. As soon as the colour changes into bright red, the stove-holder takes the myo-khe out. If one side is overheated while the other side has reached to the right temperature, there can be damages in the work. The brass loses the weight, or it can become fragile. The craftsmen say that overheating can cause weight loss. Therefore, when they are casting small or medium sized gongs, craftsmen have to be more careful with handling the stove.

In casting small and medium sized gongs, the tong-holder heats one *myo-khe* at a time. He heats the *myo-khe* one or two times or more if necessary. Each heating process is followed by beating the heated *myo-khe*. Then he puts two plates together in the stove four or five times, and beat them each time after heating. After four or five time heating and beating, the *myo-khe* becomes a flat plate which is called "hpjan.-pja in Myanmar". The craftsmen put four or six flat plates together and beat them again and again until they get the plate with the required size, which is called "kjei:-pja in Myanmar". This means that they have completed half of the entire work.

After that, those flat brass plates have to be shaped. The tong-holder put the plate in the stove and when the plate gets heated enough, he takes it out and beat with the hammer until he gets the circular plate. This is called "kjei:-pja-pjin-thi in Myanmar". Then the back hammer-holder uses a file to make the plate perfectly circular (see Figure 4.61). This is called "kjei:-pja-tal-thi in Myanmar". The next step is to place the brass plates on the top of one another, placing the smaller ones on the bigger ones. Then craftsmen beat on them until the plates become a tray inside a betel box. This step is called beating upright the edge ("zaù-jaì-thi in Myanmar"). For 0.412 kg to 0.825 kg gongs, two time of beating upright the edge ("hni'-zaù-jai'-chin: in Myanmar") are required. And three time of beating upright the edge ("thoun:-zaùjal-chin in Myanmar") are necessary for 0.1979 kg and a half to 0.329 kg gongs, and ("lei:-zau-jai'-chin in Myanmar") four time of beating upright the edge for 0.082 kg to 0.1485 kg gongs. Craftsmen set up a scaffold behind the iron anvil in order to beat the depth ("zail-jai" in Myanmar"). (It is like a scaffold set up on the ground for casting large sized gongs.) It means that one cubit long, two bamboos are fixed on the ground about 15.24 cm to 20.32 cm away from the anvil (see Figure 4.62). Craftsmen have to change the height of the scaffold as necessary, and they have to move it accordingly also.

The brass plates put together are heated on the stove and craftsmen start "zaù-jai`-chin in Myanmar". The first time heating is called yellow flame ("awa-mi: in Myanmar"). Craftsmen beat the plates leaving the area about 5.08 cm from the edge. This way, the edges of the plates stand upright. This step is called yellow flame ("dazā-hpan:-thi in Myanmar"). After beating them for some time, the plates have to be heated again – two or three times if necessary. This is called two yellow flame ("hnizā-hpan:-thi in Myanmar"). Two or three times after heating the plates, craftsmen have to lower the scaffold. It is necessary for the next steps. If the shape the upright edge ("maun:-zaù in Myanmar") is not satisfactorily shaped, craftsmen heat the plates two or three more times. This is called "maul-sà-hpan:-thi in Myanmar". Heating the pate more time is called "kjo.-mi: in Myanmar". At this stage, the first-; four or five layers of brass plates have become the depth ("ma un:-zaù in Myanmar"). These upper layers are kept separately. This stage is called "ahtè-aloun:-kjù-thi in Myanmar".

Then the other layers are heated and beaten two or three rounds. This is called "pà-loun:-pà-thi in Myanmar. After that, the lowest layer (brass plates) are kept upside down and beat with a wooden hammer gently until they have necessary upright the edge. When all the plates have become the upright the edge, it is called all layers are take off ("zaù-kjù-thwa:-thi in Myanmar). It is important not to hit the place where the knob is going to be shaped. Otherwise, the brass plates may have holes when the knob is being shaped.

The next step is called "kjin-htou-chin: in Myanmar". It means that the craftsmen create a line between the upright edge and the flat part of the gong. "Kjin" is a type of adze made of hard tamarind wood. At this step, craftsmen shaped the plates become properly round. The anvil necessary for this step is made of wood. The wood is about 91.44cm long, 15.24 cm wide and 17.78 cm thick. Craftsmen use hard wood. There are concave holes on the anvil in which gongs can be placed vertically. The holes are of different sizes for different sized gongs (see Figure 4.63 and 4.64).

The gong of the upright edge ("maun:-zaù in Myanmar") is placed on this anvil and beat with a carpenter-square hammer ("kjin-thwa:-tu"). About two times, craftsmen heat it on the stove and beat it on the anvil. After that, they place it on the iron anvil with the edge outside the anvil. Craftsmen beat the edge with horseshoe shaped tamarind wood hammers, that the edge becomes smooth. The edge of the gong has to be kept outside the surface of the anvil in order to shape the gong properly round. This is necessary for the next step "jaun-cha-chin:. The shaping the edge ("kjin-htou:-chin:), shaping the shoulder (ana:-htoù-chin:) and smoothing the surface ("mjin:-khwa-jai-chin: in Myanmar") are the works in step three.

In casting medium sized and small sized gongs, step three is the last step just before shaping the knob which is the same as the works in casting big sized gongs. The anvil is made of a hard tamarind wood with a concave shaped hole on the surface. After finishing the step called shaping the edge, craftsmen heat the gong again on the stove. Then they place the gong on the anvil keeping the center right on the concave shaped hole. They beat this part with a pestle shaped hammer called "bu-tan". This step is called shaping the concave for craftsmen place the gong on the first concave and beat it with a first pestle. Then the gong with a convex part at the centre is placed on the middle concave and beat it with middle pestle. This step is called shaping the middle concave. After that, the gong is again heated on the stove, and then placed it on the last concave and beaten it with the last pestle. Unlike first concave and middle concave, last concave has an iron ring on the mouth. When these three steps are done, the gong is heated again and beaten with a wooden club gently until the surface becomes smooth. Two or three times heating are necessary at this step. When the surface is smooth enough, craftsmen heat the gong again and place it in the water as the final step of shaping the knob.

The last step in casting small and medium sized gongs is tuning. The gong is taken out of the water, and beaten on the middle part with the wooden club gently until it shapes a little curving out. This step is called to tune a sound wave ("athan-kjo:-hpo-thi in Myanmar"). After that the tong-holder tunes the gongs with a wooden hammer until he is satisfied with the sound.

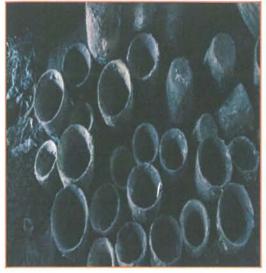
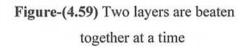


Figure-(4.57) Melting pots

Figure-(4.58) Moulds





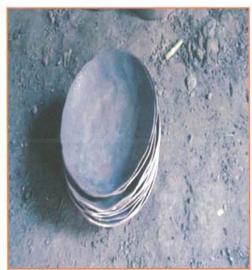


Figure-(4.60) Twelve layers are beaten together at a time



Figure-(4.61) Circular shape with a file



Figure-(4.62) Bamboo scaffold



Figure-(4.63) Upright edge of the gong



Figure-(4.64) Upright edge of the gong

Table (8) A Myanmar Kyaye-naung circle with 18 gongs

No.	Myanmar Tone	Western Tone	Weight	Size (in diameter)	Note	
1	nga: bail	F	0.825kg	26.67 cm		
2	Lei: baù	G	0.577 kg	22.86 cm	Two bars of song to slow	
3	thoun: bail	A	0.577 kg	22.86 cm	(doan:)	
4	hna bail	В	0.412 kg	20.59 cm		
5	da bail	С	0.412 kg	20.32 cm	Basic note	
6	khun nabaù	D	0.329 kg	17.78 cm	Violin	
7	chaù baù	Е	0.329 kg	17.78 cm		
8	nga: bail	F	0.247 kg	16.51 cm		
9	lei bail	G	0.206 kg	16.51 cm		
10	thoun: bail	A	0.206 kg	16.51 cm		
11	hna bail	В	0.148 kg	15.24 cm		
12	da bail	С	0.148 kg	13.97 cm	Basic note	
13	khun nabaù	D	0.124 kg	13.97 cm	Violin	
14	chaù baù	Е	0.124 kg	13.97 cm		
15	nga: bail	F	0.099 kg	13.97 cm		
16	lei: bail	G	0099 kg	11.43 cm		
17	thoun: bail	A	0.099 kg	11.43 cm		
18	hna baù	В	0.099 kg	11.43 cm	extreme right drum with highest pitches in sai-wine "than-gon-phja:"	

Source: Field survey in 2011-2012

# 4.5.4 Casting kyaye-naung traditional musical instrument of brass gong circles

A kyaye-naung is the brass gong of the smallest sizes. Myanmar traditional music is composed of five musical instruments- kyaye (brass instruments), kyo (string instruments), tha-ye (lather instruments), lay (woodwind instruments), and lat-khoke (clapping instruments). Kyaye-naung is one of the brass instruments. A kyaye-naung circle has different sized small brass gongs that can produce seven Myanmar musical notes. The Myanmar musical notes are:

Western key			Myanmar key		
1.	C	(Do)	(Hnyin-lon, Than-hman)	/da boù-than/	
2.	D	(Ray)	(Khauk-thwe-nyunt)	/khun napaù-than/	
3.	E	(Me)	(Mya-chaing)	/chaù paù-than/	
4.	F	(Fa)	(Auk-pyan)	/nga: baù-than/	
5.	G	(So)	(Pyi-taw-pyan)	/lai: baù-than/	
6.	A	(La)	(Duraka)	/thoun: baù-than/	
7.	В	(Ti)	(Palae)	/hna bail-than/	

http://en.wikipedia.org/wiki/Traditional\_Myanmar\_musical\_instruments (accessed on 27.6.2012)

Kyaye-naung casting includes (1) mixing the raw materials, melting the brass, (2) shaping the edge, casting the plates (3) shaping upright the edge and shaping the gong, and (4) final step with shaping the knob. These steps are similar to those in casting big, medium and small sized gongs. The tools used in casting kyaye-naung are also the same. Only difference is that many small sized gongs are casted at the same time while in casting kyaye-naung, maximum two kyaye-naungs are casted together (as mentioned in the history of the brass gongs). To cast small sized gongs with the same size, ten to twelve gongs are casted together "loù-ngan:-dasaù in Myanmar". Kyaye-naung has thick brass, and the sizes of the gongs in a kyaye-naung circle are different. They also have different musical notes. Therefore, only two gongs with the closest musical notes, sizes, and weights can be casted together. Usually, two kyaye-naungs are casted together in order to save the time and reduce the possibility of damages.

The biggest one among the kyaye-naung in a circle is called western F ("nga:-baù-than" in Myanmar). Two plates are place together in order with their sizes from the western F ("nga:-baù-than" in Myanmar) to the smallest two bars ("doun:") when they are casted. The two bars ("doun:"), the middle key and the edge are placed in a way that the smaller one is on top of the bigger one. Handling two plates together is called "hni`-pjà-dadaù-khà-thi" in Myanmar". For instance, a western F ("nga: baù-than" in Myanmar) that weighs 0.874 kg and western G ("lei: baù-than" in Myanmar) that weighs 0.825 kg are worked on together. A western A (thoun: baù-

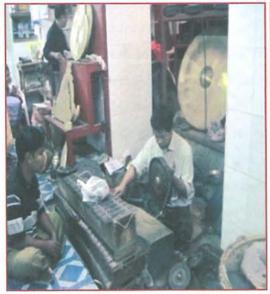
than" in Myanmar) that weighs 0.792 kg and western B ("hna baù-than" in Myanmar) that weigh 0.759 kg are worked on together. A western C ("da-baù-than" in Myanmar) or the normal note; middle C ("than-hman") that weighs 0.726 kg and western D ("khun nabaù-than" in Myanmar) or the sound of violin ("tajo:-athan" in Myanmar) that weighs 0.693 kg are worked on together.

There are 18 kyaye-naungs in a circle (see Table 8). Thus, four different sized moulds are used to make myo-khe. There is 0.033 kg difference between the two gongs with the nearest sizes. To get the gongs with the right weights is important. And to tune the right note is also important. In order to tune the right note, craftsmen tune the gongs with a xylophone (see Figure 4.65). For the biggest sized kyaye-naung which is western F ("nga: baù-than" in Myanmar) and western G ("lei: baù-than" in Myanmar), the myo-khe is about 10.16 cm in diameter. After heating the myo-khe, craftsmen have to beat it with two big hammers about forty times. Then they have the plates with the sizes just right to work on two plates together. Craftsmen put two plates together, heat them and beat them two or three rounds. Then they have the brass plates with about 12.7 cm in diameter.

From that point, craftsmen use scaffolds which they keep changing the position in order to spread the brass wider. They heat the plates and beat them many times. Western F ("nga: baù-than" in Myanmar) brass plates that are placed on the top are beaten until it has the diameter of 17.78 cm and the lower one of 19.05 cm. The plates are beaten until they shape like shallow flying pan. Finally they are heated again and put it in the water for some time. Then craftsmen beat them until they have scale pan. When they get upright the edge shape, they beat it with the back hammer in "si:-kau" way in order to make the edge properly round and the face smooth. Then they are ready for the step called "bu-cha-chin:". Since a kyaye-naung has to produce a particular note, each kyaye-naung has to be worked on separately. The tools called wooden concave ("bu-kjin:), wooden pestle ("bu-tan"), carpenter-square hammer ("kjin-thwa:" in Myanmar") and other tools are made, like in casting brass gongs, of wood. After the step called shaping the knob ("bu-cha"), craftsmen have to tune the note. There can be some rough areas on the kyaye-naung when they are put in the water or painted. Craftsmen use small hammers in order to make the smooth face. While they are doing so, they also tune the kyaye-naung. If craftsmen beat the

kayye-naung with the impact toward the edge, it produces low shorter notes. If they place it with the face on the ground and beat around the knob, it produces longer notes. Unlike brass gongs, kyaye-naung does not need to produce echo sounds. However, it must produce melodious piercing sound. Thickness around the knob can make the kyaye-naung produce long note. The edge and the face of the kyaye-naung must have equal thickness.

Tuning, the most important work, is particularly the work of the tong-holder. He uses straight and smooth hammer ("sin:-tu") for this work. He uses the sound of a xylophone as a model when he tunes a kyaye-naung. He beat on necessary parts of the kyaye-naung until he is satisfied with the sound produced. It is the most difficult part in the entire casting process. The tong-holder must have efficient skill of the musical notes. The notes are basically of three kinds "ti'-hse-khwe:-athan, hse.-chaùmu:-athan and hse.-ti`-athan in Myanmar". In this division, the note of a Myanmar oboe is the model. Traditionally, the note of the kyaye-naung in the circle is put at the fundamental note; key note ("taja-dthan in Myanmar"). The long note of an oboe is 10.5 inches and for a kyaye-naung, it is called "ti-hse-khwe:-athan". If the note of an oboe is 10.625 inches, the note of the kyaye-naung is called hse.-chaù-mu:-athan. If the note of an oboe is 11 inches, the note of the kyaye-naung is called "hse.-ti'athan". Thus a Myanmar oboe is the model for tuning kyaye-naungs. Nowadays, craftsmen use iron xylophones or master key woodwind instruments instead (see Figure 4.66). Among the three sound, "tī-hse-khwe:-athan" is tuned first. In craftsmen's saying that, it is called "hpou-htwè-athan-tein-nei-thahpjin-ti-than-kjaaun-cha-ja-the" in Myanmar. From the "tī-hse-khwe:-athan", craftsmen tune the kyaye-naung to have hse.-chaù-mu:-athan and then to "hse.-ti'-athan". "Ti'-hsekhwe:-athan" is called basic tone ("akhan-athan" or "hpou-htwè-hpo-athan" in Myanmar). The sound is piercing. The singers have to produce high tone when they sing with this "tl-hse-khwe:-athan". "Hse.-tl-athan in Myanmar" is louder and deeper. It is good for the singers who cannot raise their tone. The last one is "hse.chaû-mu:-athan". This tone is neither too high nor too low. It is good for those who sing with normal rising tone. The lowest tone of kyaye-naung instrument is equivalent to the western G ("lei:-boù-than" in Myanmar) tone of internal music. The size of the kyaye-naung that produces this tone is about 20.32 cm in diameter. The smallest kyaye-naung is about 10.16 cm in diameter. Kyaye-naung is a kind of musical instrument that is normally used daily (occasionally). Therefore the tone may change after using them for a year. For instant, western G ("lei:-boû-than" in Myanmar) tone changes into one semitone lower than A note ("thoun:-baû-khwe:" in Myanmar) tone. There is no case where western G ("lei:-boû-than" in Myanmar) tone changes to one semitone lower than G note ("lei:-baû-khwe:" in Myanmar) tone. It is not usual for a kyaye-naung to change the sound into higher tone. However skilled craftsmen can tune it to have original tone. After tuning three or four times, there is less possibility of changing in the tones. Sometimes, the musicians do not have enough time to tune their kyaye-naung or they may be away on the trip of musical performance. During that time, the musicians use the mixture of steamed rice and beeswax to stick under the knob to tune brass gongs. This mixture is called "kyaye:-sa in Myanmar". People in the world of brass musical instruments say it, "kyaye-sa-ko-sa-kà-pji:-athan-ti:-thi in Myanmar".



**Figure-(4.65)** Tune the gong with a xylophone



Figure-(4.66) Master key

#### 4.6 Beliefs in traditional guardian spirit for brass gong foundry

Pabe-Manng-Tint-Te, a traditionally believed spirit, is considered to govern gong foundries. Craftsmen believe that he can bless the craftsmen and their work in order not to have any damages. The offerings are made in the name of this spirit every year and also when the gongs with the weight if 13.2 kg and 24.74 kg are being cast. Casting the gongs with 13.2 kg and 24.74 kg is hard work. Damages are more likely to happen when those heavy gongs are being made. Foundries are usually relented to accept the orders for heavy gongs. When they have to accept the order, they perform propitiatory offerings to the guardian spirit of the gong foundries hoping that the spirit will watch then and bless them. The propitiatory offerings are led by the foundry-owner (the tong-holder). The offertory includes three branches of bananas, a coconut, three scented sticks, and a plate of pickled tea-leaves (with fried garlic, sesame, salt, and oil) (Khin Maung Than, 1997). They are placed in a bowl. The tong-holder held up the bowl and say,

"We are casting a 13.2 kg or 24.74 kg gong today. We request traditional guardian spirit (Pabe-Maung-Tint-Tè), the guardian spirit of the foundries, to bless the work. Please bless us and protect us".

They can start work after the offering. These offertories are removed only after the gong has been successfully casted. Yearly propitiation is made in March ("Tabaung" in Myanmar). The function is meant to regard the spirit as the guardian of the foundry. When the old tools are replaced with the new ones also, propitiatory offerings are made. The functions are organized in the morning. The offertories include three branches of bananas, a coconut, three scented sticks, three candles some alcoholic drinks, some fried chicken, some fried noodles and fried rice-noodles, one kind of leaf; sprig of Eugenia (see Figure 4.67) ("dhabjei-ban"), three soft-drinks, and cigarettes (Si Thu Myaing, 1993). The foundry-owner and all craftsmen must be present at the foundry. They make these offerings every year and occasionally out of sincere belief that the guardian spirits really protect the foundry. According to a fifty-five-year-old foundry owner said,

"We make offerings in the name of Pabe-Maung-Tint-Tè because our works belong to him. Our forefathers did the same. It is proved to be true that he really protect and bless us. We have faith in him".

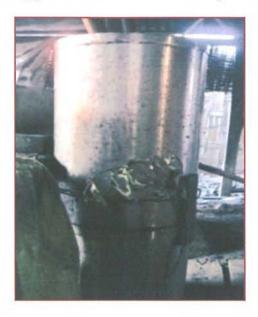


Figure-(4.67) After offering nat ("Maung-Tint-Te")

# 4.6.1 Taboos for brass gong foundry

Gong craftsmen follow all the necessary rules and regulations in order to be successful in their work. They make propitiatory offerings to the foundry guardian spirit besides; they have certain rules and regulations. Craftsmen avoid any conversations relating to snakes or dragons while they are at the foundries. They believe that the gong being made will be broken while being casted if they talk about such things. They work might get delayed. If they happen to have a dream at night, they chant the attributes of the Buddha before they get to work.

Another rule is that craftsmen have to avoid saying the word "zaw"; they believe that it can destroy the work. If one of the craftsmen has the name with the word "zaw", he has to take another name. For example, if the name is "Pho Zaw", he will be calling another name like "Pho Chaw".

Though craftsmen believe that "Pape-Maung-Tint-Te" to be the guardian spirit of the foundries, they have to avoid talking about him. This is due to the belief that it might be disrespect towards the guardian-spirit and he might get angry. If he is angry,

there will be disturbances at work. The researcher did not know about this until the researcher asked the craftsmen about "Maung-Tint-Tè" spirit while the researcher was observing the work. The researcher was then led out of the foundry and they answered the question outside a foundry.

All the above mentioned facts highlight the facts that brass gong casting, a Myanmar traditional handicraft, uses traditional methods and that the traditional beliefs and customs are still carried out by the craftsmen. The researcher thinks that craftsmen should value and maintain the art of brass gong casting as they continue to keep the traditional practices that have been handed down to them through generations.

## 4.7 The role and functions of brass gong culture in Bamar national

## 4.7.1 The role and functions of brass gong culture in religious beliefs

Every human society has built their cultural traditions in their ways. Each culture and tradition of different nationalities and nations possesses peculiar features. Brass gongs are a symbol of Myanmar handicraft. They were in the royal possession of the ancient Myanmar kings. Brass gongs were used for administration purpose as well as use as musical instruments. With the fall of monarchical system, brass gongs that used to be in the royal possession of the ancient Myanmar kings became the property of all people in Myanmar. However, brass gongs are still widely used for religious and social purposes. Brass gongs can be seen at pagodas. At some monasteries, brass gongs are used while monks go alms round. When people give donations, the sound of brass gongs spread around as the symbol of wholesome deeds. Besides, they are also used as the Bavanto (ba.-wun-to: in Myanmar) round. It is means go round village or town to accept offerings of food with music group. Alongside Buddhism, there are some people who also practice traditional spiritworship. In some spirit-worship acts, brass gongs are played in the honour of the deities. Thus brass gongs played important role in Bamar society since the time of Myanmar kings, and are still standing as a symbol of Myanmar culture or as a typical Myanmar musical instrument.

#### 4.7.1.1 Brass gongs used for Buddhist religious purposes

Brass gongs are fixed at the highest place of the Buddhist pagodas or temples. Buddhists take refuge in the Triple Gems - the Buddha, the Dhamma, and the Saṃghā. To represent the Buddha himself, they build pagodas and temples that stand the symbol of their devotion. There are umbrellas fixed at the pinnacle of the pagodas. The history of umbrellas at the pagoda goes back to the time of Saṅkha Brahmin, the Buddha-to-be, who placed an umbrella above the bone-relics of Susïma Paccekabuddha, his son.

"Susima was the son of Saikha Brahmin. Susima became Paccekabuddha and entered into Mahāparinibbāna, the final liberation. The father clean the place where the bone relics of Susima paccekabuddha, and place an umbrella above the relics. Since then, it is said that, the tradition of fixing umbrella at the top of the pagodas has continued to exist. Brass gongs are also fixed along with the umbrellas at the pagodas."

It was said by a person who was taking care of Muttho-Shw-Gu-Shwe-Thein-Daw pagoda in Ywamissa Village in Ye-Oo Township, Sagaing Division.

The types of umbrellas usually fixed on the pagodas are of five kinds: (1) the umbrellas shaped like a 'crested headdress forming one of the ceremonial regalia of a monarch' (magai in Myanmar), (2) ball of yarn taken from a spindle shape umbrella (chi-win in Myanmar) aμδοδ, (3) a betel box with a procession conical cover shape umbrella (kun:-daun in Myanmar) αρδιεσορδ, (4) the umbrellas shaped like Inn-lay pagoda (in:-lei: in Myanmar) αρδιεσορ, and (5) royal act of merit shape umbrella (kaung:-hmu.-to in Myanmar) αρορδιεσορδ. The most common shape of pagoda-umbrellas in Myanmar is magai shape. An umbrella with magai shape has nine tiers. They are decorated with mouth opening (moù in Myanmar) φδ, neem leaf (dhagji: in Myanmar) (Azadirachta indica) αρορδ (σορορδ), eminent (hman-gji: in Myanmar) φξορδε, floral accents festooned (pan:-hmo in Myanmar) οξεφος, bowl (hpala: in

Myanmar) అయి:, the bronze-winged jacana (bi-la: in Myanmar) నేయి:, and terrible (naja: in Myanmar) ఖయి: (see Figure 4.68) (U Kavisara, 1989).

"The nine brass gongs that will be fixed at the pagoda are known by people as bowls. However, what is important is the intention of the donors who donate the umbrella. The number nine represents the nine attributes of the Buddha. Although the bowls are used in the donations, the donors take them to be the gongs. It is because gongs can produce sweet sound which can give the message of donation to the people around, and especially, they wish that their donation should be heard by the beings in the highest plain."

Brass gongs can also be seen at the monasteries and pagoda platforms. There are two huge gongs at the platform of *Shwedagon* pagoda in Yangon (see Figures 4.70 and 4.71). Those gongs are donated by *Thai* people as the commemoration of the occasion of 2600 years of Buddhism. They are made of iron and therefore they do not produce sound like the brass gongs in Myanmar do. It can be founded that gongs are used as the symbols of Buddhism, and there are some common ideas and practices among Buddhist countries. Both Myanmar and Thailand are Buddhist countries. The

gongs donated by *Thai* people also stand as the symbol of friendship that case on religion between the two countries. It can be said then that gongs are also used for political purpose.

There is another huge gong donated at the historic *Kyeik-Hmaw-Won-Ye-Le* pagoda in *Kyauk-Tan* Township, Yangon division. It is 203.2 cm in diameter and weighs 32.99 kg. It cost about two million kyats at the time of donation. It was donated by *Myaing-Gyi-Ngu-Sayadaw* (the name of monk) from *Kayin* State on the occasion of the 64<sup>th</sup> Independence Day. It is supposed that this gong was struck nine times while the nine attributes of the Buddha were being chanted at the official ceremony of the gong donation that took place on 10 January, 2012 (see Figure 4.72). On the face of the gong, the name of the donor, *Myaing-Gyi-Ngu-Sayadaw*; the name of monk, can be seen (see Figure 4.73). On the back of the gong was the inscription that reads, "*May all citizens of Myanmar be peaceful*".

People who come to visit the pagoda strike this brass gong and develop loving kindness mediation. They believe that the sound produced by the brass gong when it is struck while developing loving kindness mediation can create peace in the mind of all people who hear it. Therefore, it can be said from religious point of view that brass gongs are also symbol of peace.

A (2156 viss) 3556.21 kg gong was donated at the *Maha-myat-muni* pagoda in *Maha-aung-myae* Township, Mandalay Region. This brass gong was donated by *U Nyaing* and *Daw Shi-Shi* from Mandalay in 1333 ME. It was made by *U Ba-Yin* who lived near the *Bayagyi* in *Ba-Htoo* Street, Mandalay (see Figure 4.74). This gong is considered to be the gong of conquest. Since this brass gong was made using the traditional brass gong casting technique, it cannot produce sound. People pay respect at the brass gong folding their palms on their foreheads, and rub the brass gong with their hands (see Figure 4.75).

"A woman, thirty years old, from Pyi-gyi-takhon Township, Mandalay, made good wishes for her brother at the gong. Her brother, a twenty-seven year old man, applied for a job at a company. She made the wish rubbing on the face of gong and said, "May my brother be successful." She said it twenty-seven times for her brother was twenty-seven years old.

"A twenty year old young woman, from Maha-aung-myae Township, Mandalay, made a good wish for her brother who was about to take the matriculation examination. She rubbed the gong nine times saying, "May my brother pass the exam".

People believe that making good wishes while rubbing that brass gong will make their dreams true. They believe that the brass gong can bring them good luck. Therefore, it can be seen that, brass gongs, whether they produce sound or not, are considered something sacred in the practice of Myanmar Buddhists. China, Korea and Thailand also use brass gongs, but, unlike Myanmar, they do not have such practice with the brass gong. This kind of practice is a unique culture in Myanmar. Brass gongs are one of the religious objects for Myanmar Buddhists.

Brass gongs can be seen at the pagodas, hanging at some places (see Figure 4.76). Buddhists, who visit the pagodas, strike the gongs after they have done their prayers. While striking the brass gongs, they share their merits to all beings including the other people who may hear the sound or the unseen beings. There are religious teams that, on religious occasions, chant the discourses taught by the Buddha at the pagodas. They usually chant the discourses such as wheel of Dharma; first sermon given by the Lord Buddha on attainment of Buddhahood (*Dhammacakkappavattana sutta*) (*damasè-kja* in Myanmar) and *Pali* verses consisting of the eleven prescribed suttas (*Paritta*) (*paret-kji*: in Myanmar) (see Figure 4.77). After chanting, they strike the gong and drum three times while sharing their merits with other beings (see Figure 4.78). Some meditation centers still used brass gongs. Brass gong and brass bell are played three times before meditation sections in order to gather the practice religious meditation and after the meditation sections as the symbol of sharing merits (χρόδως αροι ο κόσδος αροι ο κ

This tradition has existed for a long time and still continues to exist. This tradition somehow helps maintain the handicraft of casting brass gongs. Most Buddhist monasteries in Myanmar have brass gongs that they strike as the *Bavanto* (ba.-wun-to: in Myanmar) which means go round village or town to accept offerings of food with music group (Tight Soe, 1986). People strike the brass gongs around the neighborhood near monasteries to wake the devotees in the area. With the sound of the brass gong, people get out of their bed and prepare breakfast for the monks who

come to their house for alms round at dawns. This used to be a common tradition in most villages and towns, and known as going Bavanto (ba.-wun-to: in Myanmar) with music group. It is called hsun:-khan (&&;å) in Myanmar. In some villages and towns, this tradition can still be seen. Previously, people used short drums, musical instrument consisting of a set of graduated series of gongs (maun:-saing in Myanmar), big gongs and oboes when they go Bavanto round. At present, people do not use all these musical instruments, but they still use big brass gongs.

Before dawn, a team of people go round the area carrying a big brass gong with them. A monastic school boy shouts, "Please get up to prepare offerings for monks, Bavanto ... oh ... good people." At the end of these words, another person in the team strikes the brass gong. The sound enhances the voice of the school boy in devotional way to devoted people.

In some places, some people come to the area with the brass gong just a few minutes before the monks come for alms (see Figure 4.79). They strike the gong which let the people know that they should be ready to offer alms to the monk. The sound of brass gongs can go deep into the mind of hearers in a distance. This sound associates with religious practices. It can be said that gongs have been used in religious practices and have become a symbol of the religion.

In some villages and towns, during rainy retreats which last for the three rainy months; period of the Buddhist lent (wa-dwin:-ka-la 'ologe's' in Myanmar), every eve of Sabbath Days is filled with the sound of brass gongs when groups of people go round to collect the donations around the area. The donations are meant for supporting the monasteries and Dhamma organizations in the area. One can see that monks come to the area for alms round walking in a queue with young boys before them who are carrying a brass gong on their shoulders and striking it from time to time (see Figure 4.80). It is called "tan-swan-kywa in Myanmar". The sound of brass gongs can arouse devotion in the mind of people. It can be seen, therefore, that brass gongs have been playing important role of bridging between the religion and the culture in Myanmar traditional practices. People volunteer to collect the donations in their 'community hall for religious purposes' (dama-joun in Myanmar) in towns and villages. They usually play musical instruments such as instrument featuring a set of

graduated gongs (naji: in Myanmar) or kind of long drum (byaw) (bjo: in Myanmar) while they are going around the area (see Figure 4.81).

The term "kind of long drum" (byaw) (bjo: in Myanmar) is a short form of "si byaw" that is a kind of percussion drum that people play by hitting them with your hand or objects such as sticks (see Figure 4.82). The musician carries it on his neck with a string. The sticks used are bent at one end. The sound of this drum is said to be similar to the sound of the fruits from Eugenia trees (zabu.-dhabjei in Myanmar) falling on the water. It sounds like "pjoù-pjoù-pjoun: in Myanmar". According to the history of Myanmar, this musical instrument was invented during the reign of King Alaungsithu (1112-1167). In a team of si-byaw, the musical instruments used include two "zither-like stringed instrument" (don-mins) (doun-min: in Myanmar), one big drum (si-poù in Myanmar), a set of cymbals, one to five big saxophones, three to eleven small saxophones, and seven to fifteen trumpet-shaped wind instrument (khaja in Myanmar) (Soe Myint Lat, 2013).

Since the end of Myanmar monarchical period, byaw music has been heard only at the ordination ceremonies and donation ceremonies. Besides, the si-byaw is replaced with a short drum. In a si-byaw team, the instruments used include a short drum, a brass gong, and a maun:-saing, and an iron xylophone. Previously in Myanmar, byaw teams are commonly seen when volunteers collect the donations for religious purposes (Myanmar Encyclopedia, vol. IV, 1962). Present Myanmar, especially in most places upper Myanmar and also in some villages in lower Myanmar, still has this tradition. Therefore, as long as si-byaw musical teams exist, brass gongs will possibly exist.

It can be seen that byaw musical teams use maun:-saing. One can still see that, in some places, people from different quarters of the town or villages have competitions in their byaw music. While collecting donations, each team tries to win the attraction of more people with its music than other teams. This tradition of music is linked to the devotion that fills up the mind of Buddhist people in Myanmar.

There are some people who make good wishes at certain pagodas that are known as "the wish that is made at such pagodas will be fulfilled" (su-taung-pyae in Myanmar). They wish for success in businesses or social welfares. There are some pagodas that are considered to be special in this respect. People take some meditation

retreats or donations at those pagodas, thus their wishes will be fulfilled by the power of those wholesome deeds and the power of the pagodas. Drums and brass gongs called "the drums and brass gongs that can bring success in life" (aung-si, aungmaun: in Myanmar) can be seen at those pagodas. One of those pagodas, for instant, is located in Thin-taung-gyi village, Kyauk-se Township, and Mandalay Region. It was the donation of King Anawrahta (AD 1044-1077). The pagoda area is consecrated as an ordination place (Simā) by Shin Araham. Therefore the name of the pagoda is known as "Su-Taung-Pyae-Shwe-Thein (Simā)-Daw" in Myanmar. People make offerings with sets of banana-and-coconut in bowls at this pagoda. They believe that this kind of offering can result in getting what they wish for. A man who works at the Shwe-Thein (Simā)-Daw pagoda described how people make wishes as follows. They have certain thing relating to businesses or social welfares in their mind.

"They make offerings at the pagoda and say, 'May my business will be successful. May I have good lucks in my business? If my wishes are fulfilled, within a month (or some people say 'two months or a year'), I will come back here again and make another offering'."

People prepare bowls of coconuts and bananas, donate them to the pagodas, play brass gongs three times and say "Sādhu" three times (see Figure 4.83). People believe that with the sound of the brass gong, their sacrificial offerings are completed.

For another instance, a religious customs that people practice at "Shwe-Kan-Ku-Lay-Pyan-Thit-Taw-Yoke-Shin-Taw-Myat" will be presented here. This Buddha image is located in Yan-Aung-Myin quarter, Sint-Kaing, Mandalay Region. The image is 10.16 cm tall. It was curved out of the wood from a teak tree in a forest. The forest is in upper Chin-Dwin-River valley in upper Sagaing Region. The teak tree existed two hundred years ago. People from teak product companies try to cut down the trees, but they always fail to do so somehow. Time has gone by until one day when they could finally cut down the tree by following the advice of some local people. They had to make sacrificial offerings at the tree before they cut down. But to their surprise, the tree mysteriously disappeared from the place they had left it. There was no remaining of the tree, not even a leaf. During the time of State Law and Order Restoration Council in Myanmar, the tree appeared again. But when people try

to carry the tree, it disappeared again. It happened again and again. Finally, some people who live in *Sint-Kaing* get some pieces of wood. They curve a Buddha image out of the wood they have got. On the 9<sup>th</sup> of September 1999 (9-9-99), the image showed miracle before the eyes of many people (*Bo Bo, 2013*). It was placed on the throne, but it moved miraculous itself to the things placed there as donation. Since then, many people believe that this Buddha possesses great power to assure good luck for the devotees. Many people come to make offerings at the pagoda and make wishes. They share the merits, say "Sādhu" three times, say "they have accomplished" three times while striking the brass gong (*the-Shwe-kan-ku-aung-maun*: in Myanmar) three times. The purpose of keeping *Shwe-kan-ku-aung-maun*: at the pagoda is that, said the donor of the pagoda who was also a writer:

"People can make the sharing of their merit, make wishes, and by striking the gong; their mundane and supra-mundane wishes will be fulfilled" (see Figure 4.84).

Therefore, it can be seen that Myanmar Buddhists consider brass gongs as part of their religious practices, and also mundane practices. Another well known place where a brass gong is seen is "successful magical power place" (Siddhi-aung-hill) (thel-di-aun-koun:-mjei in Myanmar) in Mataya township, Mandalay division. Aung-Siddhi-Sayadaw U Obhāsa (the name of Arhat) (jahan:-da in Myanmar) dwelled at the monastery on the hill. There are two special places relating to Sayadaw U Obhāsa (နက္ခတ္တရောင်ခြည်မဂ္ဂဇင်း၊ ၂၀၁၀). One is a rock plate where Sayadaw practice meditation, and the other is a room where successful brass gongs (Siddhi-aung-maun: in Myanmar) are enshrined (see Figure 4.85). Those gongs are the symbol of the accomplishment of religious tasks. There is a notice in the room. It reads "spirit-possession is not allowed". Therefore, this place seems to be purely religious without mixing with spirit worship which is not really the practice of Buddhism. Sayadaw is also known as Yetkan-Sin-Taung-Sayadaw. The place is frequently visited by people who come to make their wishes. They go round the place beginning at the kaung-hmu-taing brass bell. At the end of their short trip at the place, there exists the room with the successful brass gongs. They strike the bell and the brass gongs making wishes. People believe that by doing so, their wishes will be fulfilled.



Figure-(4.68) The umbrella of the pagoda



Figure-(4.69) Bowls (or) brass gong



Figure-(4.70) Hanging gong at Shwedagon pagoda



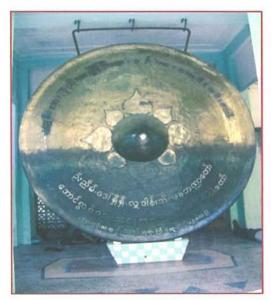
Figure-(4.71) Hanging gong at *Shwedagon* pagoda



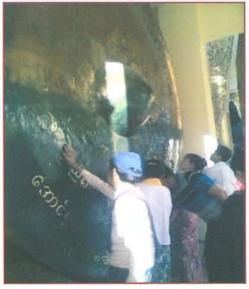
**Figure-(4.72)** Ceremony of the gong donation



Figure-(4.73) The name of the donor



**Figure-(4.74)** A big brass gong at *Maha-myat-muni* pagoda



**Figure-(4.75)** People pay respect at a big brass gong



Figure-(4.76) Hangng gong at the pagoda



**Figure-(4.77)** Pali verse consisting of the eleven prescribed



Figure-(4.78) Hanging gong at the pagoda



**Figure-(4.79)** Before the monks come for alms striking the gong

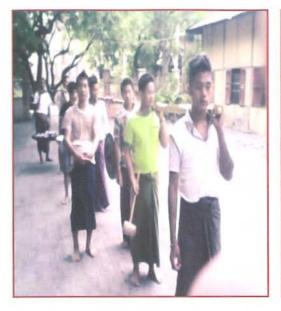


Figure-(4.80) Before the monks come for alms striking the gong



Figure-(4.81) Donations with music (byaw)

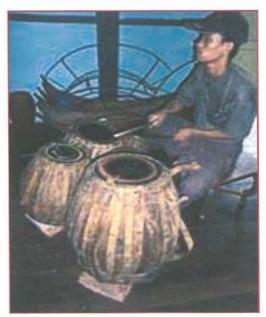


Figure-(4.82) Byaw (drum played with stick)



Figure-(4.83) Hanging gong at shwe-thein-daw pagoda





Figure-(4.84) Hanging gong at shwe-kan-ku image

Figure-(4.85) Successful brass gongs (at siddhi-aung-hill)

## 4.7.1.2 Gongs used in spirit-worship practices

Bamar people also use brass gongs not only in Buddhist religious practices, but also in spirit-worship practices. Spirits (*nat* in Myanmar language) are beings who are worshiped by some people with the belief that *nats* can give the worshipers rewards and protection. Spirit-worship is a practice common around the world. People believe that *nats* have greater power than human beings (*Myanmar Encyclopedia*, 1962).

The word "nat" derives from a Pāli word "Nātha" which means "the object of taking refuge". In many discourses taught by the Buddha, the Buddha approved traditional spirit-worship. The Buddha said that one should not neglect worshiping or honoring traditional nats (Si Thu Myaing, 1993).

People of Myanmar accept spirit-worship as a practice that can produce good results in their lives. People talk about five kinds of honoring. People who believe in traditional *nats* says, "there are five kinds of honoring or making offerings: (1) making offerings to *nats*, (2) making offerings to the guests, (3) making offerings to one's relatives, (4) making offering in the names of late relatives and sharing the merit with them, and (5) giving taxes to the government."

There are various nats in Myanmar that people worship. Thirty-seven inner nats (Atwin-nats in Myanmar) and thirty-seven outer nats (Apyin-nats in Myanmar) are most common local-nats. Nat festivals are seen throughout the country. The most crowded and famous nat festival is in taung-pyone village. This festival takes place in taung-pyone village, Mattaya Township, and Mandalay Region every year from the eighth day of the waxing moon in August (Wakhaung in Myanmar) to the full moon day of the same month. The festival includes events such as bathing the nats, hunting rabbits, offering festival (htein-khoù-pwe: in Myanmar) and offering alms to the monks.

There used to be a saying that describes the yearly events during the time of Myanmar kings. It reads, "March to the battle-front in the month of December (Nattaw in Myanmar), retreat in the month of March (Tapaung in Myanmar), and organize spirit-worship in the month of August (Wakhaung in Myanmar)". According to this tradition, the kings celebrate a festival at the shrine of the two taung-pyone-nats in December (Nat-taw). In March (Tapaung), they have another festival when they come back from the battle-front. In August (Wakhaung), a nat festival takes place for a week and it has been the biggest nat festival in Myanmar. There are spirit-mediums who lead the festivals. They know the tradition and sacrificial methods. The team of spirit-mediums is led by a chief who is called Queen (thous:-zaung:-mi-baja: in Myanmar) and the other members act as royal members, the silver brass gong player, gold brass gong player, inner brass gong carriers, and outer brass gong carriers. A message concerning with marching to the battle-front is read, as the tradition goes, by a spirit-medium. As soon as the message is finished reading, silver brass gong is struck and then the brass gong of conquest is struck. Then the musical team at the shrine begins to play a special music for nats played at the time of propitiation of nats (nat-hsain: in Myanmar). With this music, the inner brass gong carriers, outer brass gong carriers and the commander-in-chief lead people, and go round the shrine seven times.

The festivals in taung-pyone do not have as many participants as before. However, "they try to have as many as possible", said the spirit-mediums. Previously, in the festivals, the participants include silver brass gong carriers, gold brass gong carriers, inner brass gong carriers and outer brass gong carriers. But they can only afford ordinary brass gong carriers.

The brass gong is kept in the shrine of the two taung-pyone-nats (see Figure 4.86). People who come to the festivals offer the two taung-pyone-nats with money or flowers as they have promised. As taung-pyone-nat festival is the biggest and the most crowded festivals among the nat festivals in Myanmar, hundreds of thousands of people come there yearly. Not all people can go into the shrine since there are too many people during the festivals. The people who come to the festivals are basically of two kinds - those who follow the tradition of their elders in the families, and those who come to make offering with the hope of success in their businesses or those who come to make offerings to keep their promises made to the nats. As they have promised the nats, they offer money and flowers to the nats. Only those who can manage to go into the shrine or those who have a special permission can see the face of the two nats. The spirit-mediums mention that it is not possible to play the gong for each and everyone who come to the festivals. They said they might break their arms if they do so. Thus, they play the brass gong on the last day of the festival making good wishes for everyone who comes to the festival. One can see many people are pushing one another happily around the shrine. They try to strike the brass gong with the flowers in their hands while they are standing outside the shrine and reaching the brass gong through the iron bars (see Figure 4.87). It can be noted here that brass gong culture is also belong to traditional spirit-worship.

The second biggest *nat* festival is that of Puppa-mother (the name of Puppa is mountain) (poù-pa:-medò-pwe in Myanmar). This festival is also known as pagoda festival; the name of pagoda is Ra-ta-na-gu festival (jadana-gu-pwe in Myanmar). The festival takes place yearly at the area near four villages – Shwe-Lon village, Paramat village, Kyaung-Sha village, and Phaung-Taw village – that are located in the west of Amarapura Township in Mandalay. The festival used to be a pagoda festival. It has become a Nat festival since 1183 ME, during the reign of King Bagyidaw (AD 1819-1837), when Queen Nanmadaw and Salin-Town chief organized a nat festival along with the pagoda festival. Later, this festival is known by people as nat festivals. This festival takes place just after taung-pyone-nat festival that is from the eighth day of waning moon of August (Wakhaung in Myanmar) to the fourteenth

day of the same month. People who come to *taung-pyone* festival also come to *Ra-ta-na-gu* festival. *Ra-ta-na-gu-nat* festival is nothing to do with marching to the battle-front nor was it about coming back from the battle-front. It was only meant to be a nat-festival. *Ra-ta-na-gu* festival was the festival of the mother of the two *taung-pyone-nats*. Thus, people come to pay respect the mother when they come to pay respect to the son. Therefore, this festival has shrines for all the *nats*. Each *nat* shrine has a celebration where people try to make better than the celebrations at the other shrines. Music teams try to win the attention of the audience. There are many spritmediums and people dancing like sprit-mediums. There are believers who gather at shrines to ask about their future predicted by the *nats* through spirit-mediums. Some of the shrines have brass gongs. The spirit-mediums make offerings on behalf of the believers and strike the brass gongs each time they make offerings for individuals (see Figure 4.88). Therefore, it can be seen that brass gongs are also used in spirit-worship and traditional spiritual artifacts.

Spirit worship is common seen in Myanmar. There are locally worshipped spirits in different regions. For instance, in Mandalay, many people believe in *Bo-Bo-Gyi*. He was said to be a Brahmin-minister who attended *King Anawrahta* (AD 1044-1077). He was given the duty to look after two young *taung-pyone* princes. When the princes were executed by *King Anawrahta* for their negligence in the duty, *Bo-Bo-Gyi* had to face the same execution too since the king considered that *Bo-Bo-Gyi* was responsible for the princes' misbehavior. He was believed to become a spirit and famous as Mandalay *Bo-Bo-Gyi* from whom many people in and round Mandalay seek protection. People built a shrine for him.

Mandalay Bo-Bo-Gyi is a famous nat well-known in Mandalay. His shrine is frequently visited by the residents of Mandalay. It is located at the foot of the Mandalay Hill. Mandalay Bo-Bo-Gyi is a local nat. There is no fixed date for the festival. However, people from Mandalay visited the place occasionally when have some businesses, buy a vehicle or when they have job interviews. They make good wishes at the shrine making offerings to Mandalay Bo-Bo-Gyi. People go to Bo-Bo-Gyi's shrine with their new vehicles, and make offerings so that Bo-Bo-Gyi will watch them out of accidental dangers on the roads. Some business people make offerings

there wishing for good businesses. Some wish to have stable jobs or some wish to get a promotion transfer in their jobs.

Some business people mentioned,

"Car-owners usually wish to have good businesses. They make promises at the shrine that they would make certain offerings to Bo-Bo-Gyi if the business meets their expectation. If they are successful, they pay a visit to the shrine and make offerings they promised. When they make promise, they usually play the gong three times."

Some government officer workers say,

"We make offerings and wish at the shrine when we want certain things in our works. Some might want to prolong their rank or some wish to get promoted, or some prefer to get transferred to the place they wish. If they have problems at work, they come to Bo-Bo-Gyi and ask for blessing. They also make promises that they will come to make offerings if their wishes are granted. They usually play the gong three times after making those wishes."

People believe that their wishes are fulfilled after making offerings at the *Bo-Bo-Gyi's* shrine. One can witness people making wishes; promises and striking the gong at the shrine (see Figures 4.89). Therefore, brass gongs are used as the symbol of success in traditional spirit-worship.

In Shwe-Sar-Yan village, Pathein-Gyi Township, Mandalay division, there is a pagoda with the name Shwe-Sar-Yan pagoda. This pagoda was built with the donation given by Saw-mon-hla, a Shan queen, during the time of King Anawrahta. Successive kings renovated the pagoda many times. The pagoda was said to be built by Saw-mon-hla who made a wish that was known by generations of later time. The pagoda festival takes place in March (Tapaung in Myanmar) every year. The name was previously known by most people as Shwe-Sar-Yan, but later it is more commonly known as Saw-mon-hla pagoda. This name was in fact the name of the donor. Since the pagoda donation and the wish of Saw-mon-hla have a well-known connection, people considered it to be a place where they can also make good wishes. Later, people made an image of Saw-mon-hla that is housed in a shrine. It has become a spirit-shrine where people come to pay respect to her. Although, the

festival is in March (*Tapaung* in Myanmar), the pagoda is visited by many people every day throughout the year. Spirit-worship is not new; it has as long history as that of human race. Some Myanmar Buddhists seem to respect nats as almost equal as they respect the triple gems (*Si Thu Myaing*, 1993, P-25). However, traditional spirit-worship is only meant for secular purposes. It is said that those who come to *Sawmon-hla* shrine have their secular wishes. A spirit-medium who presents at the shrine has a formula of expressing the wish which is basically as follow.

"The woman, (for example, a Wednesday born woman), have given a donation in the name of her, Sister Saw-Mon-Hla. Please protect her and grant her with good luck".

The spirit-medium strike the brass gong on which the name Saw-mon-hla was inscribed as the donor of the brass gong (see Figure 4.90). This tradition is the belief that the offering has completed and the wishes will be fulfilled. Every day, Saw-mon-hla shrine is crowded with spirit-mediums and people who are dancing nat-dance. There are songs composed about Saw-mon-hla or related to her. It means particular and special songs for and about Saw-mon-hla. A musical team plays those songs that are usually quite active to dance a nat-dance.

Peculiar features that can be seen at Saw-mon-hla shrine are that most visitors and all spirit-mediums are women, and playing the gong after making offerings and wishes (see Figure 4.91). Therefore, the place is filled with the sound of the gong throughout the day. The sound of the gong at Shwe-sa-yan pagoda represents the symbol of the secular achievements of the believers.



Figure-(4.86) Hanging gong in nat shrine



Figure-(4.87) To strike the gong with flower



Figure-(4.88) After offering strikes the gong



Figure-(4.89) Striking gong at the *Bo-Bo-Gyi* shrine



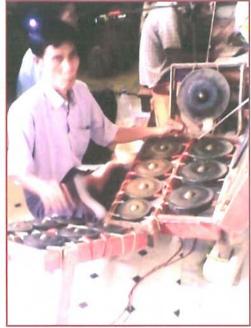


Figure-(4.90) Striking gong

Figure-(4.91) Playing maun:-saing

# 4.7.2 The role and functions of brass gong in economic activities

People of Myanmar are enjoying better economic lives at present age ever than before. It is said that brass gongs play an important role in having a better economy in some businesses. Brass gong foundries have existed in Tampawady in Mandalay since a long time ago. Previously, brass gong production has only local market in the country, but now the market has extended to some foreign countries.

The main reason for this extension is that Myanmar brass gongs possess peculiar qualities. The gongs casted in Myanmar have melodious sound, and gong makers can tune the gongs until they get desired sound. They can make gongs with short or long tunes or make the gongs as musical instruments. Myanmar brass gongs are mostly exported to Germany, Japan and the US. One of the brass traders who have a shop in the western platform of *Maha-myat-muni* (*Bayagyi*) pagoda mentioned that, Japan and Germany made more orders in the past, but recently, the United States of America has placed more orders for brass gongs. It is said that those countries really like and value Myanmar brass gongs. Some people use the gongs to decorate their living rooms. According to the owner of Win Star, a shop that sells brass products, Myanmar brass gongs are also displayed in music stores for musicians use

them to add their music more lively. They have to export the products to the USA very often. They often have to go to the USA for their customers in the USA want them to tune the brass gongs, thus they can have the sound as they desire (see Figures 4.92 and 4.93). The sizes of brass gongs ordered are various. Therefore, it can be said that, brass gong production is helping Myanmar economy by getting foreign income. Besides, Myanmar can be proud of their traditional handicraft.

Myanmar economic situation has developed making the country different from the situation in a few decades ago. Most businesses are equipped with modern technology. Brass gongs have been playing a role in this. In fact, it is clear that brass gongs have been playing this role since the time of Myanmar kings.

Myanmar kings made public announcements using the brass gongs. When they collect the taxes, the royal servants use the gongs. In social and religious activities also the sound of brass gongs could be heard. Usually, announcements are made publicly to let people know particular information (*Myanmar Encyclopedia*, vol. II, 1955). However, at present people are more familiar with advertisements.

As media has developed quickly, business people advertise their products through media. There are some advertisements on TV in which brass gongs are used. For instant,

- (1) Sumo fried kimbop: Naung ... Naung ... (the sound of a brass gong) .... An announcement will be made by playing the brass gong ....
- (2) Tun-Shwe-Wa bulm, and
- (3) *Bio-Plus* purified water is the companies that use brass gongs in their advertisements (see Figure 4.94).

Most people use brass gongs in their business are the people of common status. They are street vendors who sell the food they make going around with the food on carts. One can see that those street vendors hang small gongs on the carts. They play the gongs from time to time trying to get people's attention to their food. A street vendor said,

"They have been a street vendor for many years.... It is like they sell the food while their enjoy striking the brass gong. People used to call the seller like, 'Hey, the vendor, come here, please', but now they call us, 'Hey, naung-naung, come here, please'. The brass gong is the symbol for the vendors like me. Anyway, we have gain more attention from people since we used the gong in our business" (see Figure 4.95).

The information given above shows that the sound of brass gongs can attract people attention, and the gongs are used for public announcements and business advertisements.

There is a peculiar way people use brass gongs. The platforms around *Mahamyat-muni* Pagoda are filled with shops where brass products are sold (see Figure 4.96). One of the shops has a brass gong hanging, and there is a line on the gong that reads, "zay-khaw-maun: (ဇဈ:ဇခ် (ဇောင်း)" (see Figure 4.97) which means "the gong that brings customers". They said that a monk made special mantra chanting on the gong, and they have to strike it three times wishing to have good business.

The owner of this shop said,

"I do not really know whether it was because of the monk's mantra or the power of the brass gong, we have more or less good businesses every day. We receive orders. Thus, we strike brass gongs every day and make wishes".

It can be founded here that Myanmar brass gong culture has influence on economic situation. Therefore it can be assumed that the brass gongs are of the valuable cultural heritage of Myanmar, play some important roles in economic development in the country. In order to get a wider marketplace, both locally and internationally, businessmen and handicraftsmen should create some attractive ideas. On the other hand, handicraftsmen should maintain the existing qualities of the brass gongs.

Therefore, it seems that there is a need to attract more people's attention to this handicraft. Media can be of much use in this case. Through media, brass gongs production may have a better marketplace.





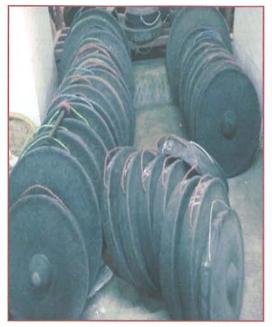
Figure-(4.92) Tuning up the gong in USA Figure-(4.93) Tuning up the gong in USA





Figure-(4.94) Brass gong used in TV

Figure-(4.95) Gong use in street vendor



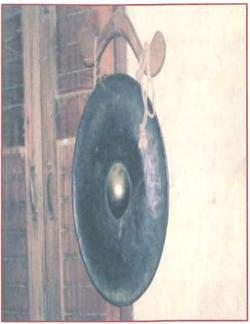


Figure-(4.96) Brass gong shop in Bayagyi

Figure-(4.97) Zay-khaw-maun

# 4.7.3 The role and functions of brass gong in musical activities

As music is an important aspect of culture and art, musical instruments have become necessary in the field of culture and art. Music can relax and cheer up people's mind. This is why music has become necessary part of people's life all over the world. In Myanmar cultural and art tradition, five kinds of musical instruments – brass instruments, string instruments, percussion instruments, woodwind instruments, and clappers—are used in making music. In this dissertation, the focus is mainly placed on brass instruments, especially brass gongs. Brass gongs are used as musical instruments. Discussions are made covering the historical facts such as when, where, and how brass gongs were started to used as musical instruments, and how they develop and are used throughout the history.

# 4.7.3.1 Srikistra period (5 to 9 Century AD) (AD 400-800)

In 802, during Srikistra period, a Pyu cultural team went to China as a mission to promote good relation between the two countries. The team includes vocalists, dancers, and musicians. The music they performed used brass instruments, conch shells, string instruments, bamboo instruments, percussion instruments, instruments

made with ivory, and instruments made with gourds dried. A record described that Pyu performers danced in harmony with the music. When the musicians played conch shell instruments, the dancers swayed their heads to both sides in turns; when the musicians played bass gongs, the dancers raised up their arms and legs very harmoniously (Myanmar Encyclopedia, 1966). This is the evidence of the fact that brass musical instruments have been used since Pyu period, and that brass gongs were used for correct timing in music.

#### 4.7.3.2 Bagan period (9 to 13 Century AD) (AD 845-1297)

Five kinds of musical instruments - brass instruments, string instruments, percussion instruments, woodwind instruments, and clappers- are called Pañcań musical instruments, and they were pioneering musical instruments in Myanmar. Brass gongs were included in brass instruments. There were developments in musical instruments during Srikistra period, and more developments could be seen during Bagan Period. There were musical teams organized during that time. Some marble inscriptions Kyan-Tain-Gyi-Thamee inscription (1081) (dated Myanmar year 433), Myauk-Gu-Ni pagoda inscription and Taung-Gu-Ni pagoda inscription (1241) (dated Myanmar year 603), Dhammarājika pagoda inscription (1196-1198) (dated Myanmar year 558), that were inscribed in Bagan, proved this fact. Those inscriptions mentioned the kinds of musical instruments and the existence of 'instrument featuring a set of graduated brass gongs' (naji: in Myanmar) musical teams (U Min Naing, 1987). Another notable fact mentioned in *Dhammikarājika* pagoda inscription was about the motivation behind the pagoda festival, and according to this poetic writing, while young boys were playing gongs, flutes, and oboes, young girls were singing beautifully (Myanmar Encyclopedia, vol. X, 1966). It was also mentioned that naji: musical team used small brass gongs (kyaye-naung), brass gongs, small brass cymbals, drams, and small drum. Naji: musical teams play to tall the time for preparing alms-food, offering alms-food, putting the alms-food away, paying homage to the Buddha, and its finishing time. Kyaye-naungs were used in naji: musical teams that always play at the pagodas during Bagan period. They used eight kyaye-naungs. It was known to be the earliest time when kyaye-naung was used as musical instruments (The Directory of Musical Instrument Exhibition, 1955). Moreover,

during Myanmar monarchical reign, *naji:* instruments were played to tell the time such as time to get up and time to pay homage to the Buddha (*Mann Nyunt Tin*, 1983). The findings presented proved that brass gongs were widely used as musical instruments in *naji:* musical teams during Bagan period. They were also used especially in religious activities.

## 4.7.3.3 Inwa period (14 to 18 Century AD) (AD 1364-1555)

During Inwa period, brass gongs were said to be used as 'lachan-kyaye-waing turiya' in Myanmar, which was a set of small brass gongs (kyaye-naung) fixed on the crescent-shaped frame placed vertically (Dictionary of Myanmar Performing and Plastic Arts, 2001). The history of music during Inwa period shows that lachankyaye-waing was used at that time. 'Myanmar dance and drama of olden times performed on the ground with audience around it' (myae-waing-zat-thabin in Myanmar) that was originated that time used lachan-kyaye-waing. Therefore, it can be seen that drum circle (pat-saing in Myanmar), brass gong circle (kyaye-waing in Myanmar), and xylophones were used during that time. 'The form of lyric beginning and ending with the / e: / sound' (e:-gjin in Myanmar) dedicated to 37 spirits were first composed at the time of Minister Padesarājā. This e:-gjin and spirit festivals were mentioned in the records made during the time of King Bodaw (AD 1781-1819). According to those records, the music was composed in different styles dedicated to different spirits. Thus, the music played with drum circles, brass gongs, and oboes had their peculiar styles (Myanmar Encyclopedia, vol. X, 1966). Therefore, it can be noted here that brass gongs were used, during the time of Inwa period, in 'Myanmar dance and drama of olden times performed on the ground with audience around it' (myae-waing-zat-thabin in Myanmar) and for religious purposes. According to the above mentioned facts, brass gongs continued to exist as musical instruments during Inwa period, and played an important role in the field of music.

Brass gongs became useful as musical instruments during the time of Nga-Si-Shin-Kyaw-Swa, in Pinya period (AD 1297-1364). This was mentioned in martial songs for shield dance (ka-gjins in Myanmar) composed by Nga-Si-Shin-Kyaw-Swa. Therefore, Pinya period was believed to be the earliest time when brass gongs were used as musical instruments.

#### 4.7.3.4 Kounbaung period (18 to 19 Century AD) (AD 1752-1885)

Kounbaung period was the time when all people – the rulers and the rules – had serious studies and works in music. The ruler class sang classical songs in the royal palace, and play harps, a kind of wind musical instrument (njin in Myanmar), three-stringed musical instrument in the shape of a crocodile (mi.-gjaun: in Myanmar), and xylophones. For the rulers, common people in villages, dances were performed with the songs of the royal drum, folk songs chanted to the lilting cadence of the long drums and the clash of cymbal, songs sung with open-ended drum with a long body, songs with short drums, and songs with kind of long drums called byaw (bjo: in Myanmar). The music produced from byaws was enhanced with the sound of a brass gong circle. In a byaw team, the lead of brass gong (kyaye-naung) was followed by oboes and gongs. Since that time, byaw music has been admired and become pleasant in Myanmar ears (Lan-Sin-New vol. IV, No. 8, 1968). Moreover, dramatic art experienced successful development during Kounbaung period. Consequently, brass gong circle was widely used during that period.

Kounbaung kings were interested on music. Especially, King Shwe-Bo, who was also known as King Thayawaddy (AD 1752-1885), was interested on playing musical instruments. According to 'type of Myanmar classical song set to the cadence of the drum circle' (saing-taw-bwe-pat-pjou: in Myanmar) composed by Myawaddy-Mingyi-U-Sa, King Shwe-Bo invented the system and decoration of Myanmar music team with the help of sculptors.

Brass gong circles were widely used during Kounbaung period. Studies show that *Myawaddy-Mingyi-U-Sa* worked as a musician of the brass gong circle in a team led by *U-Taloak*, a famous musician of that time.

#### 4.7.3.5 Ratanapon period

First of all, it has been known that brass gongs were used as 'instrument featuring a set of graduated gongs' (naji in Myanmar) musical instruments during Bagan period. Naji musical team mainly used kyaye-naung. It was played when a team of soldiers patrolled in the moat around the palace. This particular music was called jei-kin: music in Myanmar language (Dictionary of Myanmar Performing and Plastic Arts, 2001). This jei-kin: patrolled in the moat around the palace. In order to

keep the soldiers alert all the time, this lively music was played. *Jei-kin:* music mainly used *kyaye-naung* as in *naji* music during Bagan period. *Jei-kin:* music was also time-telling music for the people around the area.

After the last Myanmar king and queen were dethroned from Mandalay royal city, the royal naji music team was moved to Thibaw town where it existed through many generations (Mann Nyunt Tin, 1983). Until present time, naji musical teams can be seen in some 'the first metal of Buddhist monks taken at daybreak' associations (dawn) (a-joun-taw in Myanmar). A naji musical team plays at Mahamyat-muni Pagoda in Mandalay twice a day every day- at four o'clock in the morning and four o'clock in the evening. They play the music as they are paying homage to the Buddha. A typical naji musical team during Bagan period used kyaye-naung, a gong hanging on a stand, a small brass cymbal and a drum. The hanging brass gong was a big size one, and kyaye-naungs were thick brass gongs. The present naji team at Maha-myat-muni pagoda only uses a big size hanging gong, an iron xylophone, an oboe, and a small drum which is played with drum sticks; it is called boun-daun in Myanmar. Therefore, the naji musical team presently playing at Maha-myat-muni pagoda (see Figures 4.98 and 4.99) and the naji teams during Bagan period was different. The hanging gong used at the above mentioned naji team is a big size gong. The team unlike the naji team in Bagan period does not used kyaye-naung. In comparison between the naji teams at present and those existed during Bagan period, it can be said that naji music was and is played in the form of prayer: the function remains the same. However, there are a few differences in the musical instruments used. Thus, it can be said that the appearance has changed.

#### 4.7.3.6 From the past to the present days

Throughout different ages, brass gong musical instrument has entered into Myanmar traditional musical world and has been standing as an important figure. Drum circle is an exemplary figure in the field of Myanmar cultural musical instruments. A State Musical Team was formed which has been revealing Myanmar art. Drum circle, brass gong circle, big drum, and oboe are main parts of a musical team. There can be seven to over ten musicians forming a team. They are usually one who plays the drum circle, one who plays the brass gong circle, one who plays the

big drum, one who plays the oboe, an assistant who plays the big drum, one who plays the gong, one who plays the Si (another kind of big drum), and one who plays the bamboo clapper. Beside these musicians, there are also some people who are called 'vocalist-cum-clown whose place is at the back of the Myanmar orchestra' (naù-htain in Myanmar) who assist the team of musicians. The assistant big drum musician sits next to the musician who plays the big drum. He plays a set of big cymbals, and medium size cymbals. A musician called big drum (si-ti: in Myanmar) sits behind 'entryway made in the panels forming the framework of a drum-circle' (min:-paù in Myanmar) and plays timing bells (khà-si: in Myanmar) and small brass cymbals (than-lwin in Myanmar). A musician called (wa:-ti: in Myanmar) clapper together with the singer sits next to the timing bell player (si:-saya in Myanmar) and plays the bamboo clapper. Brass gong player sits on the right side of min:-baù, next to the brass gong circle (see Figure 4.100).

A brass gong circle has brass gongs called kyaye-naung hanging on a frame orderly from big ones to small ones. It has a circular shape (Dictionary of Myanmar Performing and Plastic Arts, 2001). The brass gong circle is called kyaye-waing or kyaye-naung-waing since it is, like the drum circle, fenced with wooden plates decorated with glass, gold, and floral curving. Kyaye-naungs are small thick brass gongs.

The musician who plays the kyaye-naung is the second leader of the team who will become the leader one day. The sound produced from kyaye-naung is more piercing than that of maun:-saing. Kyaye-naungs with different sizes are hung with strings and fixed on a circular frame. A brass ring or coil (kjei-khwei in Myanmar) that is made with (dawe-kjein in Myanmar) a big cane stick is bent touching one end with the other to from a circle, and hung on small iron hooks above the kyaye-kar. This can be either tighten or loosen accordingly. The strikers used to play kyaye-naungs is made with leather and harder than those that are used to play gongs (maun:). The reason is that kyaye-naungs are made with thicker brass than gongs (maun:). Musicians use a mixture of lead powder and beeswax to tune kyaye-naungs. In order to be able to play kyaye-naung well, one has to learn and become skillful in playing maun:-saing. Musicians used to use eighteen kyaye-naungs in a circle, but now they play nineteen kyaye-naungs. The kyaye-naung music is used to inform the

audience that the performance is going to begin soon. It is also played as an introduction to a new music or when music called *kayaung-yodaya* and *myin-tat* yodaya are played. In si-ti: team and naji team, kyaye-naung circle is the main instrument. In a team without a drum circle (chan-waing in Myanmar) the musician who plays kyaye-naungs is the leader of the team. This is a musical instrument with all keys, so it is possible to play all kinds of music with kyaye-naungs (see Figure 4.101).

The songs sung with the music led by the gong circle were: Yodaya-kyaye-thwa "ခိုင်ဝန်းစုံမှုမာလာ၊ ဝင်သိင်္ဂါ သင်းပျံ့ ကြိုင်လှိုင်မွှေး၊ လေပြေဆော်လာမြင်လုံးသွေး" and "တောနှင့် တောင်စွယ်၊ ပြောကြမောင်မယ်၊ ငှတ်တယ် လူလို၊ သံချိုနှောလို့ ပြောကြမြန်သတို" (Lan-Sin News, vol. IV, No. 8, 1968). These songs were composed especially to go with brass gong circle. This proves that brass gong circles were quite famous that time in the past.

The musician who plays the brass gong circle is an important person. When the drum circle musician plays high keys drums, brass gong circle musician also plays high keys gongs. They both play in harmony. With the music of big drums, the brass gong circle musician can play openly. Since brass gongs have all the keys, the musician has to know the music in detail. Brass gong circle musician can be helpful in case when the drum circle musician have any difficulties. Therefore, brass gong circle musicians (see Figure 4.102) are usually second leaders who assist the leading musician of the drum circle. Maun:-saing is also called than-soan-maun: (ὑἡϵωνδί). It is a musical instrument that uses seven to twenty brass gongs. The brass gongs were hung on a rectangular shape wooden frame. They were hung orderly from big ones to small ones in rows. The musicians use two strikers to play those gongs (Dictionary of Myanmar Performing and Plastic Arts, 2001). Brass gongs in maun:-saing are small and thin. At first, in the past, only one big gong was used in musical teams (see Figure 4.103). Saya-Saint, who was famous throughout the country, was the first musician who started to use two or three brass gongs in his team. His father was Saya-Be, a royal musician, who was the chief of ten Si-Son villages and received the title "Nay-Saya- Saint's son was U-Bha-Maung who received Myo-Kyaw-Swa-Khaung". Alańkā-Kyaw-Swa title. In 1264, he was only eight years old when he learned how to play gongs from his father. For him, his father invented a gong instrument that was

made with seven gongs that had the pitch western F (nga:-batì-than in Myanmar), western C (da-batì-than in Myanmar) from to western B (hna-batì-than in Myanmar). He was taught how to play the gongs adding minute notes between each two main notes. The first song sung with maun:-saing music was-"တျန်တော်အဖေတာထီးနန်းအောက်တ မွေးခဲ့စပေါက်စလေးနဲ့ တူဝါတယ်ခင်ဗျာ။ ပုဝါနီနီခေါင်းတင် စီးလိုက်တော့ ၊ တတောင်း အရှင်ကြီး နဲ့ တူဝါတယ် ခင်ဗျာ။" Saya Saint also made developments in the existing form of the gong instrument. He did so by adding small notes into the double notes (than-htà in Myanmar) that was usually played together with 'instrumental rendition by a Myanmar orchestra' (bala-hsain: in Myanmar) played for the songs sung by U Aung Bala and into the music played by the big drummer Saya U Hte. This development results in presently existing maun:-saing (Lan-Sin-News vol. IV, No.1, 1968) (see Figure 4.104).

Maun:-saing has become essential in Myanmar musical teams since then. Maun:-saing is played (see Figure 4.105) with the company of drum circle, brass gong circle, oboe, 'drum ensemble consisting of six graduated drums' (chaù-loun:-bà in Myanmar), short drum, big drum, cymbal, timing bell, and bamboo clapping, etc. Musical teams led by the drum circle, the six drum circle and 'the first metal of Buddhist monks taken at daybreak' associations (dawn) (a-joun-byaw in Myanmar) necessarily need maun:-saing. Around 1266 ME, musical teams started to use maun:-saing. Before that time, the musicians such as Saya Phe, Sayagyi U Yaung Ni and the others did not use maun:-saing in their teams (Mann Nyunt Tin, 1983).

Brass gong set that had all the keys were unused for a short period of time. *U Bo Seit*, a musician and a brother of *U Bo Sein* who was a performer in *Myanmar zat* (concert), reused seven big hanging gongs. He hung the gongs on a rope and played in *Pyin-ma-na*. *Alańkā-Kyaw-Swa-U-Ba-Maung* who was thirteen years old (in 1271) became an assistant musician in *U San Kwun's zat* team. He played the gongs he used when he was young. He fixed the gongs on a wooden frame and placed it in the corner of the music team. Later, this musical instrument had the place at the corner of brass gong circle. At that time, musicians used only eight gongs that had the pitch from double key of western F (*than-jin:-hna-baù* in Myanmar) to double key of western B (*than-hpja:-hna-baù* in Myanmar). Later, nine to nineteen gongs were used

(Lan-Sin-News, vol. IV, No. 1, 1968). Gongs were started to use as a musical instrument in Bagan period. This musical instrument started to get developed in 1266 ME. Musicians used seven gongs, then nine gongs, fourteen gongs, and finally seventeen gongs (Tin Naing Toe, 2007).

A maun:-saing usually has two rows of gongs - three hanging on the above row and four hanging on the lower row. The gongs on the above rows include five pitches, one pitch, and seven pitches, and those on the lower row include two pitches, one pitch, seven pitches, and two pitches. Sometimes two gongs with different pitches have to be stricken to create a particular sound. In a set of nine gongs, the four gongs on the above row are with two pitches, one pitch, seven pitches and six pitches, and the five gongs on the lower row are with five pitches, four pitches, three pitches, two pitches, and one pitch. It can be seen that present maun:-saing are quite different from the ones in the past. During the reign of King Thibaw (1879), Sein-Be-Da, a famous leading musician of Myanmar music, played before the king. He based his music on seven Myanmar melodies using seven-brass gong-sets. Later, musicians use seventeen-brass gong-sets which have six brass gongs in one row and five brass gongs in the other row. This maun:-saing was used for a long time. With a set of seventeen brass gongs, a musician can play all Myanmar notes. However, some musicians add one two-pitch-brass gong in order to get the complete note. Therefore, the instrument has now eighteen brass gongs (Aung Nyein Chan, 2002).

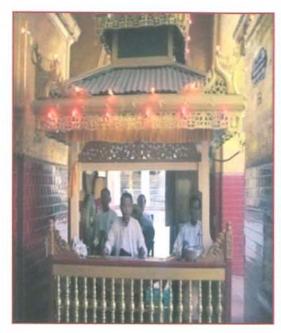


Figure-(4.98) Naji music at Maha-myat-muni



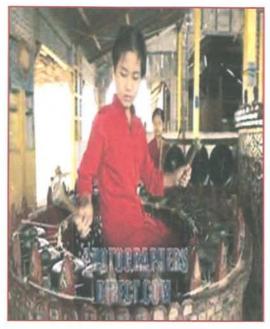
Figure-(4.99) Naji music at Maha-myat-muni



Figure-(4.100) Saing-waing in ancient Myanmar



Figure-(4.101) Brass gong circle



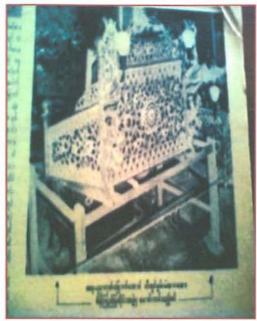


Figure-(4.102) Brass gong circle musician Figure-(4.103) Maun:-saing in the past



Figure-(4.104) Maun:-saing



Figure-(4.105) Playing the maun:-saing

## 4.7.4 The role and functions of brass gong in social activities

Since the years in the long past, gongs have been used as musical instruments and also in social activities. During Myanmar monarchical reigns, golden and silver gongs were played at royal ceremonies. Brass gongs were used as time-telling instruments, also to make public announcements and to alarm people. Therefore, there are time-telling gongs, alarming gongs, auspicious golden gongs and silver gongs, and victory gongs, etc named for different uses. Besides, depending on the value placed on the gongs by the owners, some gongs were made of gold or silver.

Gold, silver, and brass gongs were used as royal musical instruments during the time of Myanmar kings. Gongs also play an important role in administration. In villages, when the chief wanted to gather the people in the village, he played the gong. This custom still exists in some regions in Myanmar. Therefore it can be seen that in Myanmar society, gongs have been used for social activities, and this custom still exists in some villages until now.

# 4.7.4.1 King Anawrahta, the founder of the first Myanmar kingdom, and Maun:-ti: pagoda (ఆసర్:లోజంలో)

Studies on the history of brass gongs in Myanmar show that brass gongs was used for different purposes. Brass gongs were used as musical instruments, in social activities, and for admonition purposes. King Anawrahta of Bagan marched to Ussā-Pegu, Thahton, and Muttama regions. The army went to the south through the river. There was a place, presently known as Dala, which was of much importance for military purposes. The king donated a pagoda and named it maun:ti pagoda (ောင်းတီးစေတီ). This pagoda can still be seen on a hill in the middle of the fields near Sann Village, which is about a mile away from a road leading to Kwan-chan-gon. The place is located in the south of Dala-taw-gyi-tan.

King Anawrahta together with his four famous knights marched to the regions of Mon and Kayin. The areas they went were filled with the sounds of gongs. The king gathered young Mon and Kayin people and gave them martial trainings. When he had enough men power, he marched to Ussā-Pegu (or) Thahton-Muttama. In order to commemorate those activities which brought him the conquest, King Anawrahta

donated a pagoda and named it *maun:ti* pagoda (see Figure 106). According to some sources, the name resembled the sounds filled up the area during their stay at the battle-front (*Dr. Myint Hlaing, 2007, P-23*).

By using the sound of the gongs King Anawrahta, could motivate his soldiers who became so active and so eager to fight. Those young native people became warheroes. Therefore, it can be seen that the sound of gongs can give mind power to people. Some records show that the king also used gongs to gather his people in emergency situations. Relating to this history, there is a well-known saying in Myanmar society that says "Akyaung-kyi-yin-maun:-tiba" (ထားကြာင်းကြီးရင်မောင်းတီးပါ). It means, "Strike the brass gong when you have emergency".

This saying is still commonly used in Myanmar society. Therefore, in villages and towns, people become alert when they hear the gongs. People accept that the sound of the gongs is the sign of emergency. Therefore, gongs are the instruments that create unity among the people in societies.

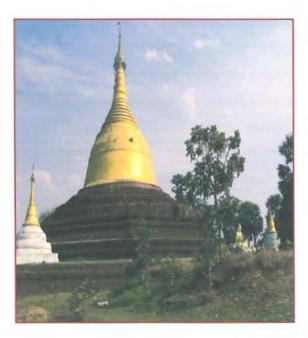


Figure-(106) Maun:-ti pagoda, 11th century

#### 4.7.4.2 Auspicious golden gongs, silver gongs and the victory-gongs

When Myanmar kings marched to the battle-fronts through land or water, they marched with the gongs being played before them. This kind of gong is called auspicious golden gong. When they came back to the palace, there were gong players before them. This kind of gongs is called auspicious silver gong. Myanmar kings also used auspicious big drums along with auspicious golden gongs and silver gongs. Auspicious golden gongs, together with auspicious drums, are placed on the right side of the red gate. Seven service men are appointed to play auspicious golden gongs. The time for the kings to go into the palace or to come out of the palace was announced with the music of silver gongs played by time-keepers (na-ji-hum in Myanmar) (Dictionary of Myanmar Performing and Plastic Arts, 2001). These facts show that golden and silver gongs were used in royal affairs during the reign of Myanmar kings. It can also be seen that silver gongs were important in ceremonies when the kings go into or come out of the palace.

As a definition is given, the victory-gong was used in the Myanmar monarchic time when the king's royal armies marched to the front line (Dictionary of Myanmar Performing and Plastic Arts, 2001). The victory-gongs and drums were played while the troops were marching. The victory-gongs were widely used in the royal armies. King Myin-saing-nga-si-shin (1297-1364) himself, who ascended to the throne in 704 ME, composed a Kar-chin (martial song) in the honour of Myin-saing Township. This Kar-chin reads, "ထာမောင်းတစ္စမာစီးတို့ ထာမောင်းသည် ထာမောင်း သားလော" "Ta-maun:-ta-maun:-doe-ta-maun:-the ta-maun:-bha-kaung-tha-law" which means "We belong to a gong-regiment. Are you the true son of valiant fathers?" (Aung Nyein Chan, 2005). This Kar-chin shows that the resonant sound of the brass gongs were of much importance at that time for it could stimulate the patriotic spirit of the soldiers.

When the royal armies marched to the front line or when they trod on the victory spots (Aung-mye) before they started marching, the victory-gongs and Rousing-gongs were played. As the use of gongs was essential in almost all the activities in during the time of the Myanmar kings, the gong artisans were appointed to cast gongs of various sizes.

# 4.7.4.3 Time-telling gongs

During the time of Myanmar kings, clocks were not invented. Therefore, in order to know the time, time-keepers were appointed in the palace. 'The record of Myanmar time verse' (Myanmar na-ji-hmà-tan:-lin-ga in Myanmar) composed by Wet-Ma-Swut-Nawaday (1118-1202), who is a composer, mentioned that time-keepers played brass gongs to tell the time. There were people appointed as time-keepers in the palace. The time-keepers and gong-players watched a brass bowl while they were on duty. The bowl was made with specific measurement. The weight of the bowl was exactly 0.264 kg. The size was seven finger-breadths high and nine finger-breadths in diameter. A hole that was as thin as sixteen hairs of a young girl was made in the bottom of the bowl. The bowl was put on the water in a bowl decorated with gems. The water flowed through the hole into the bowl as the bowl sank down. When the bowl completely sank it was counted as one hour and the time-keepers played the gong (Mann Nyunt Tin, 1983).

The manor of Shan local chiefs (ho-nan: 'coɔs̄s̄s̄s̄:' in Myanmar) also used clock (na-ji) to tell the time. The first clock (na-ji) was played at six o'clock (Myanmar time-three maun:) and the second clock (na-ji) was played at nine o'clock (Myanmar time – one maun:). At the manor of a Shan chief (ho-nan:), clock (na-ji) was played twice a day. It is said that at the end of the na-ji music, a big gong was struck three times.

Kin-Won-Min-Gyi, who was a minister during the time of Myanmar king, mentioned about Myanmar time-telling system during the time of Myanmar kings. He mentioned that gongs were used to tell the time. In his writing, he composed,

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"ဆံကေသာသွယ်ပြောင်း၊
ဆယ့်ခြောက်ပင် ဝင်ရုံလှစ်ပါလို့၊
တစ်ခါနှစ်လျှင် နာရီကြော့တယ်
တီးတော့ငွေမောင်း" (Aung Nyein Chan, 2005, p-40)
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Time (na-ji) gong music is still played at Maha-myat-muni pagoda twice a day: once at dawn and once in the evening. It is housed in the same building with 'time-signal drums, announcing the hours as marked by the clepsydra' (ba-hou-zi in Myanmar). The music is meant to pay homage to the Buddha and also to tell the time. Therefore this one is not the same as time-telling gongs played (see Figure 107)

with the use of a water timer that was used during the time of Myanmar kings. The culture has changed, but the purpose still remain the same since time (na-ji) gong music was and is played in the sense of paying homage to the Buddha and to tell the time (see Figure 108).





Figure-(107) Time-telling gong at Maha-myat-muni

Figure-(108) Time-telling gong at pagoda

# 4.7.4.4 Gongs used to make announcements, to alarm, and to gather people

As Myanmar started living under the rules of the kings, gongs were used. Therefore, it can be said that the royal cities and the gongs were born at the same time in Myanmar. Gongs were played to gather people. This kind of gongs was called announcement gong (hso-o:-maun: in Myanmar) (ဆော်သြေမောင်း) which is now known as alarm gong (hat-maun: in Myanmar). Myanmar also used gongs to alarm people. In ancient time, people gave massages from one mountain to another using the fire or playing wooden drums or gongs. King Kya-Swa (1315-1364) inscribed a royal order that announced punishments for theft cases on marble slabs. But later, gongs were used for the same purpose. This is called maun:-kyaye-nin-khat in Myanmar (မောင်းမည်းနှင်းခတ်). A group of service men went round the royal city playing a gong in order to let the people in the country know about how a criminal was punished. The

order reads with striking the announcement gongs, "Let everyone know why this criminal was punished" (Aung Nyein Chan, 2005) (see Figure 109).

In ancient time, village-chiefs (headman) used gongs to gather the people in the village. This custom still exists in some areas and gongs are still seen at the residences of village-chiefs. An authority announced with striking the announcement gong, "Everyone can come and enjoy the feast at the donation ceremony in the village". They used gongs to spread out the announcements. Gongs were also used to give messages within a village. When villages were under the administration of village-chiefs (headman), social activities were announced by a team playing gongs. Some villages of present time still use gongs to make announcements.

The announcement gongs (hso-o:-maun: in Myanmar) in villages are used when the village-chief (headman) or the administrator of the village wants to make announcements or gather the people at his residence. When people hear the sound of the gong, they know that they are wanted at the residence of the village-chief (headman). Thus, they gather at the place and listen to the village-chief (headman) (see Figure 110). The above mentioned facts point out that gongs played an important role in making announcements during the reign of Myanmar kings and also when villages were under the administration of the village-chiefs (headman).

It can be seen that the custom of playing gongs that began at the time of Myanmar kings remains the same throughout different periods and systems. However, in previous time, gongs were played to make announcements or spread out the royal orders during the time of Myanmar kings, and played in villages when village-chiefs wanted to make announcements concerning with the activities in their villages.

The discussion below concerns with the fact that the people of villages played gongs when they had something to announce.

The farm lands of 7867.78 acres altogether that belong to the farmers from twenty villages in Salingyi Township, Monywa District, Sagaing Region was taken for a copper mine project. The farmers are demonstrating to get their lands back. The farmers placed the sign-board that read "No-one is allowed to invade these farm lands". When they placed that sing-board, they played gongs. This news can be read in the article written by Zayya Maung (Nay Pyi Taw) published in the Express Time

Journal, page 19, dated 5 November 2012. The articles mentioned, the farmers in *Salingyi* Township placed sign-boards (notice-board) that read '*No-one is allowed to invade these farm lands*' (see Figures 111 and 112).

A farmer who participated in this demonstration said,

"This lè-pan-taun: Mountain, it means that name of mountain (lè-pan-taun:-taun in Myanmar) is like a mother to them. They have livings at this place. Digging this mountain up is the same as taking their hearts out. Thus, they are playing the brass gongs to demonstrate."

The above mentioned statements show that the use of brass gongs in Myanmar society at present time is different from that during the time of Myanmar kings. Myanmar kings used gongs for spreading out the orders or making announcements. At present, gongs are used by people in villages to express their wishes and needs. Therefore, it can be seen that the tradition of brass gongs used for making announcements remains the same in terms of the function as it was in the ancient time, but most people began to play brass gongs when they demonstrate their wishes and desire. Therefore although the use of brass gongs remains the same, the appearance and aim have changed. It can be said that there is a danger for the disappearance of the brass gongs used as the instrument for public announcement as it carries Myanmar royal atmosphere; therefore this tradition should be preserved.

In comparison between the custom of using gongs in ancient time and at present, it can be seen that the use of gongs remain the same, but the purpose has changed. Therefore, it seems that Myanmar royal custom faded away.



Figure-(109) Striking the announcement gong Figure-(110) Listen to the headman



Figure-(111) Notice board with striking gong

Figure-(112) Notice board with striking gong

# 4.7.4.5 The roles of craftsmen and the gong players

During the time of Myanmar kings, in royal palaces, brass gongs were used widely. According to some sources, there were craftsmen appointed to cast brass gongs in various sizes. They were placed at ba-din:-wun-su in Myanmar (οξιωξιοξο). It is means that, this place was lived with together craftsmanship. There were up to 33 craftsmen who lived and worked for the king. They were paid with 12728.02 kg (610 tin: in Myanmar) of rice-grains in monthly basis (Natmauk Htun Shein, 1979).

The gongs used to make public announcements or spread out royal orders were kept only in the use of authorities such as kings and village-chiefs. Common people were not allowed to touch the brass gongs; let alone use them. Service men appointed by the kings were the only people who were allowed to play the gongs. In villages also only those who were appointed by the village-chiefs played the gongs.

Brass gong craftsmen were given places to live, and paid for their skill and work. Brass gong players held somewhat higher ranks in the palace. It can be seen that gong-craftsmen had some social roles during the time of Myanmar kings.

Although gongs are just a kind of non-living thing, it stood as a symbol of administration system. It can be noted here that gong-craftsmen and the gong-players were also significant case in point in the history.

#### 4.7.4.6 Bamar broadcasting and shwe-maun:-than programme

Although Myanmar monarchical system had ended, brass gongs still play an important role. Myanmar broadcasting was originated by British government during the British colonial period. In 1937-1942, the period during British colonial period, broadcasting service was named as "Myanmar Government Broadcasting Department". In 1942-1945, during Japan ruling in Myanmar, it had the name "Japan Broadcasting Service". In 1945-1946, this service had a new name "South-East Asia Military Head-quarter Broadcasting Service". In 1946-1948, the name was "Bamarathan-ti-dang-chein" (the time of Bamar broadcasting establishment)". Myanmar Broadcasting Service has got various names in its history and now it is known as "Myanmar Broadcasting". Gongs had a role in Myanmar Broadcasting Department.

Myanmar Broadcasting Service aimed at giving information, education and entertainment.

British Government established broadcasting service for Myanmar. In 1946-1948, Myanmar broadcasting (Bamar-athan in Myanmar) was established. As this establishment, the responsible people agreed to transform the broadcasting department into the images of Myanmar culture. The programmes broadcast included 'reply to the sakka'; (matali-say-khan in Myanmar), announcement gong to the people (shwe-maun:-than-akhan in Myanmar), reading magazine to the people (athan-dwe-magazin: in Myanmar), funny talk to the people (san-sha:& bjan-hlwa: in Myanmar), make known to the people (ajin:-dain:-pyaw-mè in Myanmar), for children programmes (kalei:-mja:-akhan in Myanmar), market information programmes (zay-hnon-thadin in Myanmar), "education Programmes", the information of Bamar and globe (Bamar and gaba in Myanmar), the literature knowledge of Myanmar (Myanmar-sa-pei-lo:ka in Myanmar), and slowly reading about the News (tha-din:-mya:-ahnay-hpà-chin: in Myanmar).

One of the most popular programmes at that time was announcement golden gong to the people (shwei-maun:-than-akhan in Myanmar). This programme was created in order to inform people about important political situations, news and public affairs. Therefore, the role of announcement golden gong programmes was important for the people of Myanmar. The responsible person for this programme was U Than. He was famous singer Daw Tin Tin Mya's father. Shwe-maun:-than-akhan was broadcast every week. In the programme he shouted loudly (bjou in Myanmar) and it went along well with the sound of striking the gong (Du... in Myanmar). It was very attractive to people who listened to it every week even if the news was not that important. U Than became very popular among the people of Myanmar and had a nick name "shwe-maun:-kyi". When he passed away, there were other people in succession who carried on this work. "Shwe-maun:-than-akhan" was in the air weekly until April 1962. As it can be noted here, shwe-maun:-than programme played an important role among the people of Myanmar (U Kyaw Thein, 1979).

The above mentioned facts show that the use and the purpose of gongs at present time is not the same as during the time of Myanmar kings or village administration system. However, the purpose of using gongs such as making

announcements, warning, or spreading out the orders remains the same. Throughout the history, one thing about gong is the same: although people see gongs less frequently, they know that the sound of gongs represent order or news. Thus gongs are used to alert the mind of the people, they seem to stand as one of the Myanmar cultural heritage.

#### 4.7.4.7 Stamps and brass gongs

Brass gongs are used in many activities in Myanmar society. There was a stamp with a picture of a brass gong on it. Stamps are used in postal services in all countries. There are symbols representing some of the countries' culture.

There were stamps with the head of King George on them used before the Independence of Myanmar. During the Second World War, when Myanmar was under Japanese ruling, there were stamps with various symbols printed on them. After the independence, the stamps in Myanmar have symbols representing about Myanmar society. In order to honour national leader, General Aung San, who brought back the independence for the people of Myanmar, some stamps had the picture of his head printed on them. There were also some stamps with Manaw pole and brass gong, valued by Kachin people of Myanmar. This stamp is still used as a symbol of the culture by the people of Myanmar including Kachin people (see Figure 113).

Mon people have lachan-saing that is an ancient musical instrument with gongs fixed on the crescent-shaped frame. This lachan-saing appeared on the stamps as people value the culture (see Figure 114).

The stamps with the picture of gongs printed on them are used in Myanmar. Gongs are the symbol that represents unity among all the people in the country. With this meaning, the government issued the stamps with the picture of gongs (see Figure 115). Therefore, this kind of tradition should be maintained.







Figure-(4.113) Kachin stamp Figure-(4.114) Mon stamp Figure-(4.115) Stamps with The picture of tradition

#### 4.7.4.8 Waso chin:-lon: (cane-ball) festivals and brass musical instruments

Mandalay is the city of Myanmar cultural tradition. It may not be wrong to say that the people of the city have maintained Myanmar cultural tradition. One of the traditions is Waso (the month of July) Chin (Cane-ball) Festival which is held in Waso (July) every year. It has been 85 years since this tradition began. This festival takes place every year at Maha-myat-muni pagoda from the first day after the fullmoon day of Nayon: (the month of June) to the full-moon day of Waso. In the festivals, there are cane ball teams that play cane-ball in competitions and individual (both male and female) competitions. Each year, 1500 to 2000 teams participate in the festival. Since this is a big event, there is music played by a team equipped with complete set of Myanmar musical instruments. Therefore, kyaye-wain and maun:saing are necessarily seen in this event. Active music played at the festival can stimulate the athletic spirit and motivate the players to win. Kyaye-wain and maun:saing are the instruments that can play very active music that matches with active competitions since the music played with these instruments has full notes. It is so beautiful to see cane-ball players playing cane-ball without letting it touch the ground. Cane-ball is flying just above the ground from one player to another with the background of the music. Myanmar tradition sport and Myanmar tradition music go together very well.

In fact, cane-ball tradition is common in entire country. There are people in different places in the country where one can see groups of people playing cane-ball. There are also cane-ball festivals held individually in most quarters in towns (see

Figures 4.116 and 4.117). These small cane-ball festivals are usually held after the rainy retreat (after *Thidingyut* or October) at pagoda festivals everywhere in Myanmar. These festivals take place every year. The music accompanying these cane-ball festivals was, unlike the music played at June (*Waso* in Myanmar) cane-ball (*chin:* in Myanmar) festivals, not that of fully equipped music teams. They use 'instrumental rendition by a Myanmar orchestra' (*ba-la-hsain:-wain* in Myanmar) which is a music team with the lead of *maun:-saing*. Therefore, gong musical instruments are related to one of the Myanmar traditional sport. It can be seen as one of the prides of Myanmar traditional cultural heritage.

The above mentioned facts show that Myanmar traditional sports and Myanmar traditional brass musical instrument is good match for each other. As in Myanmar saying "lotus flowers are more beautiful in a pond full of water", they help to promote each other's dignity. The reason is that it is necessary to promote a typical Myanmar sport on one hand and to promote a typical Myanmar music tradition on the other. It is important to maintain the essence of Myanmar traditional sports, thus they can become worldwide recognized sports. For this, Myanmar traditional music can give a helpful hand. In the same way, along with the sports, the music can be known internationally.



Figure-(4.116) Cane-ball festival in quarters



Figure-(4.117) Cane-ball festival in quarters

# 4.7.4.9 Tug-of-war contests organized to call for rain and the role of brass gongs in those contests

Brass gongs have taken important roles in various forms in Myanmar society. This tradition of brass gongs can be seen in some societies and regions. Some areas in Mandalay region have tug-of-war contests occasionally when a particular area needs rain water. In those contests brass gongs are played. Therefore it can be seen that brass gongs play an important role in Myanmar society.

Mandalay is located in central Myanmar which is basically dry and hot. Some people in Mandalay believe that they can call for rain if they organize tug-of-war contests. With this belief, they organize the contests occasionally. The tug-of-war contests have a long tradition in the history. In the years when the weather is very dry and hot, some people in Mandalay organize tug-of-war contests. They also invite monks who chant nga-jan.-min: Paritta. It is means that the doctrine of Buddha's written homily. The people believe that recite the safeguarding as in sutta to ward off evil or harm.

There is a pagoda known as nga-jan.-min: joù-tu-zei-di in Myanmar, on the Yankin Mountain, in Patheingyi Township, Mandalay Region. It was built in 1095 (457 ME) with the donation of King Alaungsithu (1112-1167). A statue of a fish known as banded snakehead (Ophiocephalus striatus) was also made at the pagoda. People believe that this statue can protect them from dangers. It is also said that this statue can give people regular rainfall. In dry season, people bring the statue to their area and organize tug-of-war contests.

There was a tug-of-war contest at 5 o'clock in the evening on 23 May 2012 in Pale-Ngwe-Yaung quarter (see Figure 4.118), Aung-Myae-Tha-Zan Township, and Mandalay. The event was organized by Baung-Taw-Kya Pagoda Trustee and the Administrator of the quarter. It took place on 81st Street in front of the pagoda. Before the contest, they brought nga-jan.-min: statue to Pale-Ngwe-Yaung Quarter and went around in the area. After that men and women sang and danced while some teams were in tug-of-war contests. Two men were carrying a gong on their shoulders, and playing it. It enhanced the happy atmosphere at the event. A responsible germ from Pale-Ngwe-Yaung quarter explained why they played the gong at the event: He said.

"The sound of gongs can really stimulate people's active spirit. Tugof-war is a kind of game where people have to complete their strength. The sound of gong can give them strength. Gongs have been used since the time of Myanmar kings. Besides, with this event, they intended to call for the rain; rather than winning over one another. It may not be wrong to say that they played gongs with the belief that they will get what they wanted: His mean they will have rain."

Therefore gongs are related to some activities in some societies. It seems that gongs are also the symbol of success and making the dreams come true.

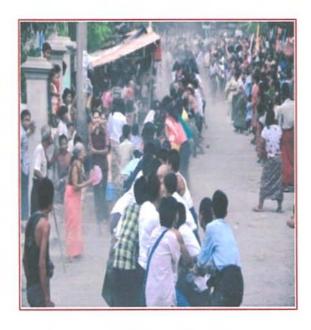


Figure-(4.118) Tug-of-war in *pale-ngwe-yaung* quarter

#### 4.7.5 Ethnic groups of Myanmar and gong musical instruments

There are various ethnic groups in Myanmar. They live together, share the same air and water, and have basically very similar traditions and cultures. Within a society, they work together in religious, social and economical affairs. They help one another. They share the works on their farm lands and share the profits. These are the traditions and customs common in all the ethnic groups in Myanmar. Other ethnic groups have musical instruments that are not much different from those of Bamar people. The martial song for shield dance (ka-gjins in Myanmar) was the first Bamar songs which were sang with long necked drum, cymbals, and gongs. Studies show that those musical instruments are basically used by all the ethnic groups of Myanmar. Therefore, songs sung by different ethnic groups are sweet in Myanmar's ears. People like one another's songs and music. Some evidences point to the fact that basic musical instruments of all ethnic groups in Myanmar are based on brass instruments, string instruments, percussion instruments, woodwind instruments, and clappers. Here, the traditions and customs of some of the ethnic groups that use brass gongs will be discussed.

#### 4.7.5.1 The Kachin ethnic group

Basic musical instruments of the *Kachin* are also brass instruments, string instruments, percussion instruments, woodwind instruments, and clappers. Since they were developed in a particular environment, they have peculiar features. They use a kind of twin-flute, the drum (with a neck longer than that of Myanmar and shorter than that of Shan), the violin, the cymbals, the brass gongs, and the oboe, etc. The *Kachin* have traditional festivals such as harvest-time festivals, spirit worship when they celebrate before they begin hill-side cultivation, *Manaw* festivals, housewarming parties, *Ginsaing* that is a function organized for single men and women, and funeral ceremonies. Among them, *Manaw* festivals are the most famous and the biggest function. One of the musical instruments played in *Manaw* festivals is the gong. They play two gongs each of which is as big as ten-hand spans. When *Manaw* brass gongs (see Figure 4.119) and *Manaw* drums are played, they produced deep sound (*Party, committee of Myanmar Socialist, 1968*). The way these instruments are play at *Manaw* festivals is similar to *Myanmar Sitawgyi*. When the *Kachin* play musical

instruments, they do not play composed music. The music is played to match with the dance. People sing songs when dancing is in progress, and the oboe music has to follow the song. The drum and the gong give timing for the dance. The music teams usually use two or four gongs. They play the gongs rhythmically. Therefore, gongs are timing musical instrument for the *Kachin*. A *Kachin* saying is, "Dancing with the sound of gong." In *Kachin* traditional dance, gongs are necessary (*Myanmar Encyclopedia vol.I*, 1955). The *Kachin* celebrate naming ceremony for their new born babies. People usually give the presents to the parents of the babies' swords, spears, or gongs. Therefore, it can be seen that gongs are considered auspicious objects for the *Kachin*.

There is evidence that supports the fact that gongs are important objects for the *Kachin*. In 2013, Mandalay Region the *Kachin* Cultural Associations and the *Kachin* Literature and Cultural Association organized a concert named "*Nyein-Chan-Than-Sin*" which means "Peace Melody". The concert was held at *Kokant* Dhamma Hall. At the end of the concert, *Kachin* people presented a brass gong to the leader of *Kokant* people as a token of their appreciation for letting them use the ethnic of *Kokant* community hall for religious purposes. The chairman of Universities of Mandalay the *Kachin* Literature and Cultural Association explained,

"Brass gongs are valuable objects for them. Thus, they presented it to the people of another ethnic group as a symbol of friendship and a token of their appreciation for their help".

The above mentioned facts point to the fact that brass gongs are not only useful for the *Kachin* as musical instruments, but also valuable auspicious object for them.



Figure-(4.119) Brass gong in Manaw festival

# 4.7.5.1.1 Flat gong (athan-kwe-maun:)

Brass gongs (athan-kwe-maun: in Myanmar), unlike usual gongs, do not have knobs in the middle of the gongs. A flat gong (athan-kwe-maun:) is more like a brass tray (see Figure 4.120). When it is played, it does not sound like a usual brass gong. A usual brass gong has echoing sound, but the sound produced from an athan-kwe-maun: is not deep. The Kachin usually use athan-kwe-maun: in funeral functions. As the name suggests, they are used in funeral functions and when they make donations in the names of late relatives.

In a Kachin funeral function, three athan-kwe-mauns: are played one after another in turn. The dance usually seen at funeral functions is called Kabondon Dance. This is a dance meant to make the soul of the dead one happy. Besides, there is another purpose of the dance: that is to distract the family members from sorrowful environment. Three Athan-kwe-mauns: are played as timing instruments for the dance. The dance is so gentle and so beautiful since it is performed at the funeral home. Everyone dance gently trying to console the family members with their beautiful gentle dance. Athan-kwe-maun: are only used in funeral functions and other functions meant for late people. Thus, they are not used in other functions. Therefore, athan-kwe-maun: are inauspicious musical instruments for the Kachin.

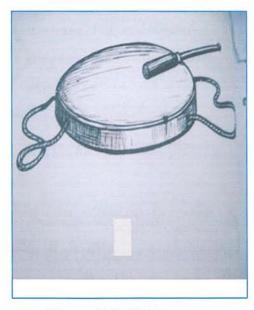


Figure-(4.120) Flat gong

#### 4.7.5.2 Kaya ethnic group

Like the *Kachin*, musical instruments of the *Kaya* are based on brass instruments, string instruments, percussion instruments, woodwind instruments, and clappers. Their musical instruments include *Pha-si* (a drum), the big gong, the small gong, the long-necked drum, the short-necked drum, the flute, the cymbal, the oboe, and the trump (*Party, committee of Myanmar Socialist, 1968*). Among them, *Pha-si* and *maun:-saing* with the short-necked drum are used only in auspicious functions. Other instruments can be used for all kinds of functions. Therefore, it can be seen that gongs are auspicious musical instruments for the *Kaya*.

#### 4.7.5.3 Kayin ethnic group

The musical instruments of the Kayin are also based on brass instruments, string instruments, percussion instruments, woodwind instruments, and clappers. The usual musical instruments include the double-headed drum, the big drum, the oboe, the Bin, the iron xylophone, the bamboo xylophone, the cymbal, the bamboo clapper, the timing clapper, the Gin, the bamboo flute, and the open-ended drum, etc. Pha-si is made of copper and other metal. It is a musical instrument valued by the Kayin and used in social functions. Pha-si is also called Si-maun:, but the name Pha-si is more commonly known (Party, committee of Myanmar Socialist, 1968). Pha-si is a valuable auspicious object of the Kayin. However, Pha-si is used in funfairs, auspicious functions, and also in funeral functions. Therefore, it seems that Si-maun: which is well known with the name Pha-si is a musical instrument with great social value for the Kayin.

#### 4.7.5.4 Chin ethnic group

The musical instruments of the *Chin* are based on brass instruments, string instruments, percussion instruments, woodwind instruments, and clappers. Their musical instruments include the double-headed drum, the drum (big size, medium size and small size), the bamboo oboe, the cymbal, and other traditional instruments such as buffalo horns, and domesticated wild ox horns. The *Chin* has seasonal traditional festivals. The musical instruments they use in those festivals include various sizes of

use the cymbal, the *Yin-ha*, the gong and the big drum. Therefore, it can be seen that the *Chin* use gongs in their social events.

# 4.7.5.5 Mon ethnic group

The rarely recorded traditional music of the Mon people is vanishing and endangered, highly developed, and barely known even to Asian traditional music connoisseurs. Historically the Mon was a dominant, highly cultured, and influential people in Burma more than a thousand years ago. There are several instruments peculiar to the Mon. Most recognizable is the Kyam (crocodile zither), a 3-string long zither with frets that is shaped like a crocodile. Another is the Bat Kine - Another uniquely Mon instrument is the row of gongs known as the Bat Kine. Rather than the circular set of tuned brass gongs used in Burmese, Thai, Cambodian, and Laotian music, the Bat Kine is shaped like a quarter full moons, upturned steeply on both ends. Also, there is the Mon violin, a 3-string fiddle with a western-like body played upright http://www.Cdbaby .com/cd/naihtawpaing (accessed on 7.11.2012). Among the musical instruments of the Mon, there is one instrument called Mon-saing (lachan-saing) (see Figures 4.121 and 4.122). It is a set of graded kyaye-naungs (small size brass gongs) hung on a U-shape wooden frame. (Dictionary of Myanmar Performing and Plastic Arts, 2001) This musical instrument is still necessarily used in the traditional festivals of the Mon. Moreover, the music that uses Mon-saing is regularly performs on Mon National Days, Mon State Day, Union Day, and other important receptions. This musical instrument is also widely known as kyaye-naung circle of the Mon.



Figure-(4.121) Mon-saing



Figure-(4.122) Mon-saing

#### 4.7.5.6 The Shan ethnic group

Like other ethnic groups in Myanmar, the Shan also use the musical instruments based on brass instruments, string instruments, percussion instruments, woodwind instruments, and clappers. The Shan use their famous Shan-o-si (a type of long-necked drum), the gong, and the maun:-saing, and the cymbal. The maun:-saing of the Shan are of four different kinds: with three gongs, five gongs, seven gongs, and nine gongs. The dance of the Shan includes Shan-o-si dance, swordsmanship dance, fabulous creature said to inhabit the Himalayan regions (toù-na-ya in Myanmar) dance, mythical bird with human head and torso (kinnaya-kinnayi in Myanmar) dance, and Shan women's choral dance. A novice initiation ceremony (shin-long-pwe in Myanmar), ceremonial round of visits with the novice-to-be (shin-laung-hlae-pwe in Myanmar), and ceremonial round of visits in a donation ceremony (a-lhu-hlae-pwe in Myanmar) (see Figures 4.123 and 4.124) of the Shan are filled with the music of maun:-saing and short double-sided drum that are played in slow rhythm. The Shan also use gongs in their religious functions. They use single gongs, or maun:-saing usually played in traditional and religious functions. Therefore, the main musical instrument of the Shan is Shan-o-si which is always accompanied by the music of gongs (Party, committee of Myanmar Socialist, 1968). The people of Myanmar know the music that sounds like "naung ... naung ... naung ... bain ... naung". Therefore, it can be noted here that brass gongs are not only important for the Shan as a musical instrument but also in religious functions.



Figure-(4.123) Donation ceremony of the *Shan* 



**Figure-(4.124)** Donation ceremony of the *Shan* 

Therefore, all the ethnic groups in Myanmar possess gong-culture. Their close relation and the same origin can be seen in the following poem. In this poem, it can be seen that the gong is a musical instrument that brings about the unity among the people of all the ethnic groups in Myanmar.

#### A Nation United

"Shan bay hton .... Shan bay hton (the sound of Shan music)

Shan-ka-lay ti-de O-si bon (the strike of the Shan's drum)

Shan bay hton toe ka lo kwe (the dance with Shan music)

Chin ne kayin lay (the Chin and the Kayin)

Gain phaw lay ne Kaya maung (the Kachin and the Kayar)

Maun:-lay: ta-naung-naung (the sound of striking the gong)

Pyi-htaung-su-phwe Su-lo-si (unity with the music)

Bama let-khok ti" (unity all the people)

# CHAPTER (V) DISCUSSION

This thesis studies and describes the tradition of the brass gong culture of Bamar national observed accordance with administrative, economic, social and religious behavior and practices of Bamar social life.

According to objective (I) brass gongs are used in Bamar society socially, religiously and in administrative purposes. Brass gong foundries have existed in Mandalay, Tampawady for many years. The study on preservation of brass gong handicraft shows that this Myanmar traditional handicraft has not been preserved much through generations. Only few new generations continue their parents' tradition of this handicraft. Besides, this is not a kind of handicraft that can be learnt easily. In order to become a leader of the foundry, ten to fifteen years of experience is necessary. During that long period, the craftsman has to use his full senses to learn subtle and difficult steps of casting gongs. Then only, he can become a good leader who can lead his assistants well. For those reasons, children rarely take the inheritance of their brass gong handicraftsmen-parents. However, it is not necessarily to be one's children to take the place. Anyone who wishes to learn this handicraft can continue the tradition. The handicraftsmen usually let an outsider of their family if that person is keen to learn this handicraft. Moreover, most of the handicraftsmen in brass gong productions were in business because they do not possess other skills or they have to earn for their family. During the time of Myanmar kings, handicraftsmen of brass gong casting could hold certain status as royal servants. But their generations are gradually faded away. Around 1972-73, there are about 30 people in Tampawady in Mandalay who own brass gong foundries. But in 2011-2012, there are only nine of them running brass gong foundries. Most workers seem to have less value and interest in their work. Not many people want to learn this art for it involves hard works. They are in the business only for one reason that they do not have any other skills. They say that they would rather do some other works if they can get better income.

According to Socio-Economic and Educational Development Society (SEEDS) (2006), in this book 'Status Study of Tribal Handicraft' mentioned that Indian people consider their handicrafts (terracotas, weapons and implements,

ornaments) as their livelihood as well as their tradition, and heritage of a living passed on from one generation to another. Therefore, the tradition continues to exist and serve as the main source of family income. For this reason, 'Tribal Handicraft' of India can exist through generations.

According to Saheed, Zakaree S. (2013), "the Adire was first produced in Jojola's compound of Kemta, Abeokuta by Chief Mrs. Miniya Jojolola Soetan, the second Iyalode (Head of Women) of Egba land, and later passed the process to her children and onward to the future generations. Adire production was formerly known to be a family business passed from parents to their female children and their male children wives". The Yoruba people of Nigeria is most positively multi-ethnic, and it gives a lot of value to different types of arts, which primarily include ivory carving, grass weaving, wood carving, leather and calabash, pottery, painting, glass and metal works, and cloth weaving (textile). Especially more than any form of these arts, adire textile, which is common among the people of Egba land in Ogun State of Nigeria, reflects the culture from which they come. It can be founded that Nigeria people have many different kinds of handicrafts. Some of them were led by women who hand the tradition over to the next generation. Therefore it can be assumed that Nigeria people are good at preserving their traditional arts.

According to Blerim Kola, a study on Albanian people shows that it is problematic to say that the occupation of craft products from the Chinese market is dominating the Albanian market. Feature of these imported products is the low cost of purchase and the many colors that represent a beautiful view of "lying". The word "lying" is used here because apparently products from China are quite beautiful colored eye catching but not genuine products of inherited folk crafts of Albania. It is because of this reason that Albanian artisans feel quite threatened by imported goods "craft" but which in itself are manufactured in a factory. In most cases there is a talent inherited generation after generation, talent that is not adapted to the evolution of time and preferences of potential consumers of these products. However, 'inherited folk crafts' have been made improved throughout the history. Therefore it can be assumed that Albanian people are able to preserve their inherited art by using better techniques which are based on those used in the past.

However needlework of Hmong people who live in hills is a handicraft that has been inherited from ancestors for hundreds of years. The craft was developed during free time among females after work in the fields had finished. Cotton planted in the village was spun into fine threads and woven into reams. These reams were then designed with ancient tribal patterns. The handicraft was developed according to the satisfaction of the people and became a hill-tribe production with important mental value. Hill-tribe embroidery is an indigenous craft that is visible in every hill-tribe settlement and uses beautiful designs that occur from thorough and delicate handiwork. This generates a special interest in hill-tribe needlework, whether it is used for clothing or household objects. Hmong people have an artistic culture of creative clothing decoration (ornamentation) that is no less prominent than other tribal communities and is particularly visible in clothing embroidery, which is their highest value artistic handicraft (Thongchue Khiatthong, 2013).

Hmong people continued their handicraft work for many years. They tried to develop their work and to maintain it. According to some sources, the art of casting Myanmar brass gongs did not start in Myanmar. (Dagon Nat Shin; Nat Mauk Tun Shein). However, Myanmar people invented this handicraft and make better quality or innovation in this brass gong handicraft. The quality of brass gongs improved gradually. Thus, brass gong casting is one of the ten kinds of Myanmar cultural traditional handicraft.

Therefore most handicrafts are being preserved as heritage. Parents tried to hand over their tradition to their children. However, there are some weaknesses in receiving the heritage. This art is not preserved as the inheritance from parents, but the handicraftsmen learn the art due to their interest and hobby. Since this work involves hard works and needs skills, it is difficult for new generations to maintain their parents' tradition of livelihood. Formal school education is not necessary in learning this art; only interest and work experience are necessary. For this reason, there are not many people who want to work in the brass gong foundries and also the number of foundries is decreasing. It is important to preserve this handicraft which has existed for a long time as Myanmar cultural heritage.

According to objective (2), the brass gong casting foundries, a handicraft of Myanmar, exist in Tampawady in Mandalay, Myanmar. Those foundries have existed since the time of Myanmar kings. The handicraft of brass gong casting still survives since there are a few brass gong foundries, handicraftsmen, and markets in Tampawady in Mandalay. This research is based on field researches at those foundries. According to those field researches, the techniques being used at present is the same as those used during the time of reign, Myanmar kings. Myanmar brass gongs are made by hands and man's power without using any machines. There are five to seven handicraftsmen working in each foundry. The tools used in those foundries are ordered from blacksmiths' or made by the handicraftsmen. United and harmonious work is necessary in casting brass gongs. Without the unity and harmonious work, good quality brass gongs cannot be made.

Brass gong casting is the most difficult and hardest work in *Padin*. In *Padin*, there are two separate works – *khat-kyaye* and *thun-kyaye*. The bronze statues belong to the second category and brass gongs to the first one. Casting alone cannot make the gongs musical instruments, striking with hammer on the brass plates is necessary. Therefore, the work of *khat-kyaye* or brass gong casting requires difficult skills. This is a kind of work that demands physical strength, talent, sense power and unity among the craftsmen.

According to Central Highlands of Vietnam, Vietnamese also possess the art of casting gongs. Their gongs are made of brass alloy or a mixture of brass and gold, silver, bronze. Their diameter is from 20cm to 60cm or from 90cm to 120cm. A set of gongs consists of 2 to 12 or 13 units and even to 18 or 20 units in some places <a href="http://www.Vietnamtorism.com/disan.en/index.php/world">http://www.Vietnamtorism.com/disan.en/index.php/world</a> heritage in Vietnam (accessed on 23.11.2012).

They do not use the same formula as Myanmar handicraftsmen when they mix brass with other materials. Mixing brass with other materials is the most important step in Myanmar brass gong casting. Brass is mixed with tin and there is exact formula in this step. Brass and tin used must be clean. If any other kinds of materials are mixed with them, the gongs cannot last long. They can be easily broken. Besides, they cannot produce good quality sound.

According to the history of brassware in Korea, brass is a typical copper alloy. Depending on the ratio of each element in the alloy, it is divided into several different types. The Bangja brass, for example, has copper and tin in a ratio of 7:3, while yellow brass is made from copper and zinc <a href="http://www.nricp.go.kr/eng/Digital">http://www.nricp.go.kr/eng/Digital</a> Archivea/video-list (accessed on 23.11.2012).

Philippine hanging gong used as part of the Kulintang ensemble, gongs are broadly of three types. Suspended gongs are more or less flat, circular discs of metal suspended vertically by means of a cord passed through holes near to the top rim. Bossed or nipple gongs have a raised centre boss and are often suspended and played horizontally. Bowl gongs are bowl-shaped, and rest on cushions and belong more to bells than gongs. Gongs are made mainly from bronze or brass but there are many other alloys in use (Malay: gong is an East and South East Asian musical percussion instrument accessed on 24.11.2012).

Therefore, according to above mentioned that the production process of brass gongs, especially in Myanmar, is not always the same. The tong-holder has to be experienced and skillful in his work for he has to know how to change the procedure if necessary. He has to use all his senses in the work. The clean mixture of brass and tin is used to cast brass gongs. The ratio of brass to tin is three to one. Mixing with any other materials such as lead, iron or zinc can spoil the work. The gongs, in this case, will be easily breakable or cannot produce melodious sound. Therefore, the handicraftsmen have to be very careful from this step. In the same way, there is no fixed formula for the number of hummer strikes or the temperature to be used. The tong-holder makes the decision for those steps. He has to play it by ear and eye in every step.

The craftsmen learn the handicraft through experience. Their skills in handling their tools need adaptation. This skill cannot be taught or learnt. For instance, they know how much impact is required to strike on the brass plates and where they must strike. There is no fixed formula for such activities but the skill come to the workers through experience. One may just watch all the processes and try to imitate the workers, but it is not possible to copy the system of tuning the brass gongs. Therefore, it can be assumed that brass gong casting is not possible without the experience and adaptation of handicraftsmen.

For the medical point of view, this work is harmful for health. Old craftsmen who have been casting gongs have their health problems that are the results of their work. Their backs are bent and weak, and their hearings are weak or some of them become deaf. There are some middle aged tong-holders who suffer from weakness in their hearing.

It is founded that raw materials are not available enough. Especially, there is shortage of tin in the market. After the tin trading was handed over to private companies, it becomes more difficult to buy tin for brass gong casting. There is not much increase in the cost, but there is lesser availability of the material.

In fact, brass gong casting only involves human's labour and man's power. Human skills that are necessary in this art cannot be replaced with machine. At present, new generation is not interested in learning this art since they consider this work as very tiring. Only old craftsmen are still in business. There is a need for new generation of workers in this work. These reasons – shortage of skilled workers, losing emotional value on the work, shortage of raw materials – make it difficult to preserve this art.

Myanmar brass gongs possess good quality sound, and are stronger than the other gongs. The reasons may be as follows. Although the technique used in Myanmar in gong casting is not developed, the craftsmen have years of experience. Moreover, they are not only working physically, but also have all sharp senses on their works. They also have faith in traditional. They believe traditionally worship nats, making spiritual offerings and consequently they have strong believed that they will be successful if they do accordingly. Some written records mentioned that brass gongs are not really first created and used by Myanmar. However, when they adopt the handicraft, they could make better quality gongs. Myanmar craftsmen gradually develop the technique, thus they finally have present techniques that they can be proud of. Thus brass gong casting has become Myanmar's own handicraft. It is assumed that the art of casting brass gongs, which is handed down to us, should be maintained as a valuable handicraft. Everyone is responsible for preserving this beautiful handicraft which has existed for that long years.

According to objective (3), the role and functions of brass gong cultural tradition shows that the use of the brass gong cultural heritage, they were practices since the time of Myanmar king. However, according to the role and functions of brass gong culture in religious beliefs, brass gongs take the most respected places at pagodas and brass gongs are used to decorate the umbrellas at pagodas. It can be

assumed that brass gongs are valued so much so that they are fixed on the pagoda umbrellas that are at the highest place on pagodas.

However, the gong was the inscription that reads, "May all citizens of Myanmar be peaceful". People who come to visit the pagoda strike this brass gong and develop loving kindness mediation. They believe that the sound produced by the brass gong when it is struck while developing loving kindness mediation can create peace in the mind of all people who hear it. Therefore, it can be mentioned that from religious point of view that brass gongs are also sound symbol of peace.

Similarly, people pay respect before a large brass gong marked as auspicious gong, an omen of victory gong although it cannot be struck. But people rub on the surface of the gong and make good wishes. It can be founded that the brass gong is the symbol of believe in people that the brass gong can bring them good luck.

The sound of the brass gongs is also a mark that monks are coming for alms or a team of people is coming to collect donations. In such a team, brass gong accompanies with *naji* and *byaw* musical teams. Therefore, the sound of the brass gong is also a symbol of religion. It can stimulate the devotion of people. It bridges between religion and culture. It plays a role in Myanmar culture and also a symbol of profundity of religion. The people of Myanmar use brass gongs to make good wishes for their religious as well as mundane practices. Therefore, it can be assumed that brass gongs are uses as a tool of symbol in society.

According to Isabel Wong (1985), brass gongs are uses as musical instruments in the countries where they are produced. Some people who love art and culture use brass gongs as decorations at their houses. However, Su de San Zheng (1990) mentioned that, brass gongs are used as a musical instrument at traditional dance shows in China. Chinese dance concerts including Chinese Dragon Dance used brass gongs as essential instrument. Balinese Music in America of Gamelan Sekar Jaya (1995) the Balinese only use brass gongs as musical instrument. In their ritual and ceremonies, everyone hold a brass gong and play it while they are dancing. Therefore, Myanmar is peculiar culture in the fact that brass gongs are used for religious, economic, administrative, and social purposes. According to the facts that there are some other countries in the world where brass gongs are used, but they only use brass gongs in religious functions and some festivals. These facts mentioned that Buddhist

religious purposes, it is assumed that brass gongs, whether they produce the sound or not, are considered auspicious objects that enhance the blissful environment of the pagodas. For Buddhists, gongs serve as peculiar symbol of Buddhism.

According to above mentioned that the sound of brass bells and brass gongs represents wholesome deeds, success in life, and fulfillment of good wishes. They serve as auspicious symbols, the instrument for blessing, and mundane and supramundane attainments. It can be found that brass gongs stand for the sign of propagation of Buddhism.

Brass gongs also play important role in economy. Previously, brass gongs only have local market, but at present they are also exported to foreign countries. Myanmar brass gongs in international attraction due to their peculiar features. Myanmar brass gongs produce melodious sound and can be tuned. The main reason for this extension is that Myanmar brass gongs possess peculiar qualities. The gongs casted in Myanmar have melodious sound, and gong makers can tune the gongs until they get desired sound. They can make gongs with short or long tunes or make the gongs as musical instruments. Orders are received mainly from Germany, Japan and the United States where the sound quality of Myanmar brass gongs is appreciated.

However Blerim Kola mentioned that Albanian craft market is being dominated by Chinese market. Imported products from China into Albania are cheaper than those produced inland. They are also attractive to the eyes of many people. The products from China are colourful and attractive although they do not have much value from the point of view of inherited folk crafts. However, Albanian artisans are trying to maintain their inheritance generation to generation.

According to Blerim Kola, the contribution of web marketing to the selling of craft products in Albania and hypothesizes that web marketing has an impact on their selling. Some artisans invest significant expenditure in web marketing. Often web marketing professionals want to prove how much value web marketing has to an artisan, for example how much web marketing increases profits, contribute to market share, and support customer satisfaction. According to Belch, G. E. and Belch, M. A. (2003), a business requires marketing advertisements through media, and the price must be reasonable. However, Avlonitis, G.J. and Papastathopoulou, P. (2000), said that a product gains customers' attraction if the quality is satisfactory. Besides, there

must always be newly invented attractions. The brass gong production in Myanmar is barely enough for local uses in the country. To sell them locally, all the foundries in Tampawady are running throughout the year. Therefore, Myanmar brass gong handicraftsmen have to maintain the quality of their product in order to penetrate into foreign markets.

According to above mentioned findings, brass gongs play a role in the economy of the country. It is important for brass gong craftsmen and businessmen to get more places of brass gongs in international markets. They need to produce better quality brass gongs. There must be more attraction added to presently existing quality of the brass gongs. The craftsmen must also try to maintain the sound quality of Myanmar brass gongs.

It is assumed that, at the time of Myanmar kings, brass gongs are used to collect taxes and also to make public announcements. At present time, some business companies are using brass gongs directly or indirectly to advertise their products. Some use brass gong as their trade mark. Brass gongs are useful for economic purposes. They play gongs in order to advertise their products. According to these findings that as people change in different situations, periods and places, they also develop their tradition through generations. Moreover, the role of Myanmar cultural musical instruments and, it is a believable fact that brass gongs have been used as musical instrument in Myanmar culture since *Pyu* period (AD 5 to 9). It can also be found that music is a tool to create better relationship with other countries.

Based on the studies on the history of the brass gongs, it can be safely said that brass gongs were first used in administration during the reign of King Anawrahta, the founder of the first Myanmar Kingdom. Along with the spread of Buddhism in Bagan period, naji musical teams were formed for religious purposes. In the same way kyaye-wain which is also called kyaye-naung had its origin in Bagan period. Marble inscriptions dated Bagan period mentioned that kyaye-naung was called naji: musical instrument. Moreover, during the reign of king Sin Phyu Shin, the second son of king Alaungpaya, brass gongs were first used as musical instrument.

Naji: musical teams that have existed since Bagan period still continues to exist. It is the evidence of the fact that the people of Myanmar do not fail to maintain their cultural tradition. There are some differences in appearance of present naji:

teams compare to those in Bagan period. However the purpose remains the same. Therefore, it can be founded that the people of Myanmar inherit their dignity and quality from the cultural heritages handed down through generations. This cultural heritage has become their life and the environment they live in. They also maintain the heritage they have received while developing them.

It can also be founded that brass gongs are widely used in the fields of administration and social activities. At present, brass gongs are not much used for administrative purposes, they are still used for social, especially for religious purposes.

During the reign of Myanmar kings, royal armies were equipped with brass gongs. The sound of gongs filled the battles where Myanmar royal armies engaged in. In Myanmar royal army, every troop has a gong, the sound of which can stimulate their patriotic spirit.

Therefore, there is a non-material cultural tradition; brass gongs cannot speak a language, of course. However, it may not be wrong to say that the sound of brass gongs used to represent the orders of the kings in ancient time. Therefore, it can be noted here that brass gongs play an important role during the time of Myanmar kings.

At present, every parts of the country are filled with the sound of brass gongs. Although, there are some differences in the use of brass gongs in different regions and time, the value and importance placed on brass gongs by the people remain the same.

Therefore, studies on the use of brass gongs show that the role of brass gongs at present time is not the same as it was during the time of Myanmar kings when it comes to the appearance, but it remains the same when it comes to the function. At present, people use brass gongs when they demonstrate their feelings and wishes publicly. The tradition of brass gongs transforms itself from royal uses to common uses, and therefore it is something to be proud of for the people of Myanmar. Thus, brass gongs that were only in royal property now belong to the people. Therefore, it can be assumed that as one realizes the unique uses of Myanmar brass gongs and the value placed on them, one is responsible to maintain this unique culture of Myanmar and this pride of Myanmar should be maintained forever.

Another notable fact is that all ethnic groups in Myanmar share common uses of brass gongs as musical instrument. Since their music is based on brass instruments,

string instruments, percussion instruments, woodwind instruments, and clappers, they all use brass gongs as musical instrument. Therefore, it can be founded that all kinds of Myanmar traditional music use brass gongs. Since festivals organized in their culture also share the same purpose, their purposes of using brass gongs are also the same.

It is necessary to restore and promote the culture and traditional handicrafts of the tribes in Myanmar. Then only, the culture and traditional handicrafts of the tribes will develop. Every citizen of Myanmar has to learn the history of the arts and traditions of theirs. They are also responsible for preserve these arts and traditions. The unity among the people, irrespective of differences in the traditions of the tribes, is necessary. Therefore, knowing the value placed on the brass gongs by Myanmar people and valuing the use of the brass gongs, everyone should try to preserve their peculiar tradition of brass gongs. This will build up unity, create understanding and love among all ethnic groups in Myanmar.

According to Hiromi Lorraine Sakata (1999), "the influence of power of the Hindu kingships, the great Mongol invasions, and the spread of Buddhism and Islam all played an important part in contributing to the cultural life of Asia as well as to the religious and political aspects of their dominion. Wealth and power are symbolized by the ownership of bronze gongs in Southeast Asia".

The cultural space of the gongs in the central highlands of Vietnam covers several provinces and nearly seventeen minority ethnic groups belonging to the Austro-Asian and Austronesian linguistic groups. These populations live of traditional agriculture and have developed their own craft traditions, decorative styles and types of dwelling. Their most popular beliefs come from the cult of the ancestors, shamanism and animism. Behind every gong hides a god or goddess who is all the more powerful as the gong is older. Every family possesses at least one gong, which indicates the family's wealth, authority and prestige, and also ensures their protection. While a range of brass instruments is used in the various ceremonies, the gong alone is present in all the rituals of community life and is the main ceremonial instrument <a href="http://www.Vietnamtorism.com/disan.en/index.php/world-heritage-in-Vietnam">http://www.Vietnamtorism.com/disan.en/index.php/world-heritage-in-Vietnam</a> (accessed on-23.11.2012). According to above mentioned that the South-east Asian countries value brass gongs. However, there are cultural differences of brass gongs

between Myanmar and the other countries. According to the concept of Bamar people, brass gongs are not only of material cultural value, but also there is spiritual aspect involves in the use of brass gongs.

However, the use of brass gongs differs in Myanmar and Vietnam. In Myanmar, not every family has brass gongs. Brass gongs do not represent the social status of the families. But some people who value the culture keep brass gongs at their houses and hotels for decorative purpose. During the time of Myanmar kings, brass gongs were only in the possessions of royal families and high rank people. This tradition is still seen at present. In some villages, only village chiefs can use brass gongs. Pagodas, monasteries and public halls at some places have brass gongs. The brass gongs at those places are used for religious purposes. Lately, people use brass gongs to demonstrate their feelings and wishes. Therefore, in Myanmar, brass gongs do not belong to individuals, but they belong to public organizations. It can be assumed that brass gongs are the **properties** of societies, represent **prestige** of the society and used in ceremonies held within the societies.

According to Hiromi Lorraine Sakata (1999), the music culture of Southeast Asia has been described as a 'gong' culture because so many of the traditional, large ensembles of the area consist mainly of tuned metal gongs. In fact, the Javanese word, gamelan, referring to the large gong ensembles of Indonesia, has entered their vocabulary. The production of early, ritual bronze drums, shaped like inverted kettles, dates back to about 400 BC in Southeast Asia and is associated with the Dong Son Culture of Indochina. It is thought that these bronze drums were used as signaling instruments as well as melodic instruments when played in sets of four to sixteen drums. Basic forms of gong ensembles are found in the mountainous regions of mainland Southeast Asia and the islands of the Philippines, Malaysia and Indonesia. In many cases, the gongs are communally owned and are played for ceremonial purposes.

"Chinese Music in Chinese and Thai Culture" of Jintana Thunwaniwat mentioned the use of brass gongs. Chinese people use brass gongs in their traditional festivals and musical teams. They use them in their cultural traditions such as the lion dance, Chaozhou opera and Amateur musical groups. Single brass gong or many brass gongs in a row are used in their festivals.

According to above mentioned facts, the people of Myanmar use brass gongs as musical instruments in Myanmar traditional music bands. They are used in kyayenaung instrument and maun:-saing instrument. Myanmar people use single brass gong especially in religious functions or when they collect donations.

Jintana Thunwaniwat mentioned that Gongde is a Chinese funeral ceremony originally held in Southern China, especially in the Shantou, Chaozhou region. Chinese musical instruments used in the Gongde ceremony are similar to those used in Chaozhou opera and can be divided into two parts. On one side is a string ensemble and on the other side is a percussion ensemble (drum and gongs). Therefore it can be founded that Chinese people use brass gongs in auspicious functions as well as funeral functions.

In Thai Music, the most common and iconic Thai classical music is called piphat ensembles that symbolizes the dancing of the Thailand's legendary dragons, a midsized orchestra including two xylophones (ranat), an oboe (pi), barrel drums (klong) and two circular sets of tuned horizontal gong-chimes (kong wong). Piphat can be performed in either a loud outdoor style using hard mallets or in an indoor style using padded hammers. There are several types of piphat ensembles ranging in size and orchestration, each kind typically being associated with specific ceremonial purposes. The highly decorated piphat ensemble that features the ornately carved and painted semicircular vertical gong-chime is traditionally associated with the funeral and cremation ceremonies of the Mon ethnic group. Therefore, for Thai people, brass gongs are important instruments in their traditional music bands. In Thailand, brass gongs are used in State functions as well as funeral functions. According to above findings that Bamar of Myanmar use brass gongs only at auspicious ceremonies. They value brass gongs as religious objects of symbol. Therefore, it is assumed that brass gongs are auspicious objects for Bamar society.

According to Liswaniso Kamuwanga, music can stimulate mental energy. He thinks that music and dances, played in honour of the soldiers, can bring about conquests. Myanmar kings used brass gongs in battles. The sound of brass gongs can promote mental power in the mind of soldiers. Battles during the time of Myanmar kings accompanied with the sound of brass gongs. The sound of the gongs can attract people to join the army. But, brass gongs are not part of battles now. However, since

the sound of the brass gongs can stimulate mental power, sport matches such as cane ball (chin-lone), a Myanmar traditional sport, or tug-of-war contest, still use brass gongs to stimulate the players' mental power. Therefore, the use of brass gongs at present is not the same as that of the time of Myanmar kings, but people still accept the fact that the sound of brass gongs can give mental power. Therefore, although brass gongs are not used for political purpose these days, people use them for religious purpose. Bamar society preserves the tradition of brass gongs in some ways.

According to above mentioned finding that on the tradition of the brass gong culture in Bamar society, SWOT analysis of the brass gong handicrafts were described as follows:

Strengths: Myanmar handicraftsmen can make the tools they need themselves. They can make good qualities gongs without using machines. People value brass gongs not only as musical instrument but also as religious objects.

Weaknesses: Raw materials necessary for brass gongs are not easily available. Craftsmen do not like their job as they did in the past. Long year working in brass gongs casting can damage the craftsmen's health. Attempts are not made to promote the work. People do not really care about this art as valuable heritage. Parents do not force their children to learn this art.

Opportunities: There must be an organization that works for the preservation of traditional arts. State should support handicraftsmen and give help in their work. Brass gongs can promote faith in religion. Music produced with brass gongs can create unity among the tribes of Myanmar. There is a need to promote this art as internationally known handicraft work. A way must be finding to widen brass gong market internationally.

Threats: Losing value on the art of brass gong casting may end up with the lost of a valuable Myanmar heritage. There also is a danger of the technique being stolen by others. The tradition that has existed since the time of Myanmar kings can disappear.

# CHAPTER (VI)

#### CONCLUSION AND RECOMMENDATIONS

#### 6.1 Conclusion

According to above mentioned findings, it was studied that the background history of the brass gongs, which belong to Myanmar cultural tradition and musical tradition, highlights, the brass gongs were reportedly used first in Myanmar during the time of King Alaungpaya (U Aung Zayya). However, the use of the brass gongs was already available at the time of King Myin-saing-nga-si-shin who ascended the throne in AD 1297-1364 (704 ME) (Aung Nyein Chan, 2005). However, the uses of the brass gongs differ from place to place; the value given to the brass gongs in those places was almost the same. The brass gongs were widely used in religious, social, artistic and administrative fields. However, Tampawady in Mandalay is the only place where the brass gong casting foundries exist.

Brass casting involves hard and deep works, but minute details are also necessary. Thus, it is a really delicate craftsmanship. It is not the handicraft that one can learn easily. It is not step by step learning either like in school education. Therefore brass gong casting is a kind of art that involves craftsmanship which requires both material culture and non-material culture. It needs experiences, sharp senses (hear, sight, touch), and talent. To skillful in this art, years have to be learning at work. From the position of a ban-kar to that of a pho-kaing-saya, it takes ten to fifteen years. A pho-kaing-saya has to understand everything about the work. Trainees must have full commitment in every step. They have to learn all steps one after another. They cannot skip any steps in their learning. Therefore this is a beautiful yet very difficult handicraft.

The craftsmen do not need school qualifications. What they need is their experiences and skills at work. Without experience and skill, one cannot be part of the work. Because of this works is a very tired handicraft, there are not any female workers. Thus, this handicraft no needs to have division of labor. If the workers do not have necessary skills, they will not be able to make a good quality gong and they will lose the money. If one of the workers is absent, it is not possible for other workers to continue the work. The place of the absent worker cannot be substituted.

It can be assumed that brass gong casting handicraft requires value systems of respect and sympathy between the owners and the craftsmen, and of unity among the craftsmen. Therefore, in order to finish the work, all skillful workers must be present at work. Among the workers at a foundry, unity and understanding is essential. Therefore it can be founded that this is one of the Myanmar traditional handicraft that requires unity, understanding and harmony.

According to the above findings, the brass gong casting handicrafts show that the main problem which the foundries have is the shortage of raw material. It assumes that it is very important to maintain this handicraft which belongs to Myanmar tradition alone. A way must be found to make the raw material available enough for the demands in the market. It is founded that raw materials are not available enough. Especially, there is shortage of tin in the market. After the tin trading was handed over to private companies, it becomes more difficult to buy tin for brass gong casting. There is not much increase in the cost, but there is lesser availability of the material. However, many difficulties lay the process of material tools using such as raw material shortages, skillful craftsmen scarcity, interest people scarcity, poor health and market.

It is also equally important to help the craftsmen and their families whose livelihood has been dependent on the skill they have had. Moreover, it can be assumed here that something must be done in order to attract the attention of the new generations to this handicraft which is the heritage of Myanmar tradition. This is a kind of work that demands physical strength, talent, sense power and unity among the craftsmen. Craftsmen will be more encouraged to continue their work and also they will have new generation to learn this art if they get help from the government associations.

According to the above mentioned findings that the production process of brass gong casting show that every step consists of works that are not fixed in a formula. The handicrafts are mainly carried out depending on the skill of the craftsmen, especially of the tong-holder. The tong-holder's senses and skills are the essence of the handicraft. At the stage of mixing the raw materials, brass and tin are used and it is important that the materials must be pure. Lead, iron, or zinc mixing in the raw materials may damage the entire work. Even if the gong is shaped in its

finalized form, it may not be tuned. Therefore, this is a type of handicraft that requires careful treatments right from the beginning. In beating the melted brass or myo-khe, there are no fixed times of hammer hitting. In the same way, craftsmen have to handle the stove using their skills and experiences that tell them how much temperature must be kept. Their experiences enable them to decide, seeing the colour of the flame, whether they have the required temperature. For the medical point of view, the work is harmful for health. Old craftsmen who have been casting gongs have their health problems that are the results of their work. Their backs are bent and weak, and their hearings are weak or some of them become deaf. There are some middle aged tong-holders who suffer from weakness in their hearing.

There is possibility of casting a brass gong using the proper techniques. However, it is not possible to tune the gong unless the craftsman has necessary skill which he has acquired through long year experiences. It seems that tuning a kyayenaung is more difficult than tuning a brass gong. It is because, brass gongs have thin brass and tong-holders find it easier to handle them while kyayenaungs have thicker brass. A thick brass kyayenaung may produce deep tone and then it may not be used as a musical instrument. Therefore it can be founded that craftsmen have to handle thick brass musical instruments very skillfully that they can produce required tone.

The brass gongs made in Myanmar possess peculiar quality. The sound they produce is melodiously to hear. There were people who came from Germany and Japan to Myanmar in order to study the handicraft. They made video recordings, and used other modern equipments to record all the processes in detail. They tried to cast gongs in their countries using the records they had had. They were able to cast gongs, but they were not able to tune the gongs they made. They had to bring the gongs to Myanmar where Myanmar craftsmen tune the gongs.

The quality of Myanmar brass gongs was appreciated in the United States of America and some gongs were exported there. Most orders have been received from San Francisco, Boston, Chikako, New York, New Jersey, Chris Land and Venetian Portlet. They sell Myanmar brass gongs in stores in America along with other musical instruments. The gongs were shipped to America. Those companies in America also offer the leader of the craftsmen and the owner of the foundry a trip to America, that they can tune the gong.

In fact, gong casting is a handicraft that involves only handiwork and there is no machinery used in the work. This is the reason for the hardship of gong casting. Nowadays, only few people join the craftsmen of gong foundries. The people who still remain in gong casting are those who have been doing it for years. One of the peculiar features of gong casting is the relationship between the foundry owner and the other craftsmen. The owners have to treat very humbly to the workers. The craftsmen have upper hand since there are only few craftsmen and the work is too tiring. Therefore, if a craftsman is absent, the owner has to postpone the work until that man is ready to come back to work. It is because, that man may not be replaced, and a craftsman may not be hired on daily wage.

Although the technique used in Myanmar in gong casting is not developed, the craftsmen have years of experience. Moreover, they are not working physically, but also have all sharp senses on their works. They also have faith in tradition. They believe traditionally worship nats and consequently they have strong believed that they will be successful if they do accordingly. Some written records mentioned that brass gongs are not really first created and used by Myanmar. However, when they adopt the handicraft, they could make better quality gongs. Myanmar craftsmen gradually develop the technique, thus they finally have present techniques that they can be proud of. Thus brass gong casting has become Myanmar's own handicraft.

It can be assumed that it is important for Myanmar people to value their cultural heritage. If one does not value something precious, it is more likely that other people will possess that thing or it might get damaged or lost. It would be good if the handicraft of casting brass gongs should be exhibited at cultural and handicraft exhibitions in order to make the handicraft known to people. It would help the handicraft continue to exist.

According to above mentioned findings that the Buddhist religious purposes, it is founded that brass gongs, whether they produce the sound or not, are considered auspicious objects that enhance the blissful environment of the pagodas. For Buddhists, gongs serve as peculiar symbol of Buddhism. These above mentioned that the sound of brass bells and brass gongs represents wholesome deeds, success in life, and fulfillment of good wishes. They serve as auspicious symbols, the instrument for

blessing, and mundane and supra-mundane attainments. Therefore, brass gongs stand for the sign of propagation of Buddhism.

Brass gong culture founded in religious, social, administrative, and economical activities in Myanmar is unique in the world. There are some other countries in the world where brass gongs are used, but they only use brass gongs in religious functions and some festivals. Moreover, brass gongs play the important role in economic activities. During the time of Myanmar kings, brass gongs were struck to alarm the people that it was the time for them to play taxes. At present time brass gongs are still used directly or indirectly or as the logo for some advertisements. It can be assumed that as people change in different situations, periods and places, they also develop their tradition through generations.

Moreover, the role of Myanmar cultural musical instruments and, it is a believable fact that brass gongs have been used as musical instrument in Myanmar culture since *Pyu* period (AD 400 to 800). It can also be mentioned that music is a tool to create better relationship with other countries. According to above mentioned that the history of the brass gongs, it can be safely founded that brass gongs were first used in administration during the reign of King *Anawratha*, the founder of the first Myanmar Kingdom.

Along with the spread of Buddhism in Bagan period, *nari* musical teams were formed for religious purposes. In the same way *kyaye-wain* which is also called *kyaye-naung* had its origin in Bagan period. Marble inscriptions dated Bagan period mentioned that *kyaye-naung* was called *naji*: musical instrument. Moreover, during the reign of King *Sin Phyu Shin*, the second son of King *Alaungpaya*, brass gongs were first used as musical instrument. *Naji*: musical teams that have existed since Bagan period still continues to exist. It is the evidence of the fact that the people of Myanmar do not fail to maintain their cultural tradition. There are some differences in appearance of present *naji*: teams compare to those in Bagan period. However the purpose remains the same. Therefore, it can be said that the people of Myanmar inherit their dignity and quality from the cultural heritage handed down through generations. These cultural heritage has become their life and the environment they live in. they also maintain the heritage they have received while developing them.

According to above findings that brass gongs are widely used in the fields of administration and social activities. Therefore, it can be founded that gongs are also widely used in Bamar societies. During the reign of Myanmar kings, royal armies were equipped with brass gongs. The sound of gongs filled the battles where Myanmar royal armies engaged in. These findings illustrate that the sound of brass gongs could stimulate the patriotic pride of the soldiers. Brass gongs do not speak. However, it may not be wrong to say that the sound of brass gongs used to represent the orders of the kings in ancient time. Therefore, it can be distinguished here that brass gongs play an important role during the time of Myanmar kings.

There are some differences in the use of brass gongs in different regions and time, the value and importance placed on brass gongs by the people remain the same. At present, every parts of the country are filled with the sound of brass gongs. Therefore, studies on the use of brass gongs show that the role of brass gongs at present time is not the same as it was during the time of Myanmar kings when it comes to the appearance, but it remains the same when it comes to the function. The tradition of brass gongs transforms itself from royal uses to common uses, and therefore it is something to be proud of for the people of Myanmar.

Another founding that all ethnic groups in Myanmar share common uses of brass gongs as musical instrument. Since their music is based on brass instruments, string instruments, percussion instruments, woodwind instruments, and clappers, they all use brass gongs as musical instrument. Since festivals organized in their culture also share the same purpose, their purposes of using brass gongs are also the same. It is necessary to restore and maintain cultural traditions and arts of ethnic groups in Myanmar. This will help culture and tradition handicrafts of ethnic groups develop. Everyone is responsible to study their own valuable handicrafts tradition and history. They are also responsible to maintain those handicrafts and traditions. This will build up unity, create understanding and love among all ethnic groups in Myanmar.

## 6.2 Recommendations

According to the studies and research on the tradition of the brass gong culture in Bamar society, the recommendations of the complications were described as follows:

- (1) However, foreign countries interest on Myanmar cultural traditions could promote foreign income and it is something to be proud of. Myanmar possesses the ten traditional arts and crafts called "pan:-hse-mjou:" in Myanmar, that are of too much value. Among them brass gong casting is endangered one. It can be taken by other people easily. Therefore, it is suggested that there must be a systemically formed organization that would work to maintain as Myanmar traditional heritage including brass gong casting in Tampawady.
- (2) It is recommended that, since the work mainly involves human labour and skill, foundry owners should help the craftsmen in ways that the latter do not need to leave their work. It is supported that must be done in order to encourage the craftsmen and consequently they value their handicraft.
- (3) The handicraft of casting brass gongs, which is inherited from generation to generation, should be maintained as a valuable handicraft. Everyone is responsible for preserving this handicraft which has existed for that long years.
- (4) The government association is suggested that the handicraft of casting brass gongs should be exhibited at cultural and handicraft exhibitions in order to make the handicraft known to people. It would help the handicraft continue to exist. Most important of all, the craftsmen must be encouraged to continue their work. The government is suggested for supporting the brass gong foundries and the craftsmen. Then only, craftsmen will find the value of their handicraft and continue to maintain the handicraft.
- (5) Therefore, it is recommended that there is a need to attract more people's attention to this handicraft. Media can be of much use in this case. Through media, brass gongs production may have a better marketplace.
- (6) It is suggested that, craftsmen are required to promote their idea, knowledge and way of thinking sensible and appropriate to keep their cultural tradition of brass gong handiwork.

## REFERENCES

- Appignanesi, Richard, 2002, Introduction to Anthropology, Singapore by Tien Wah press.
- Boote, D. N., & Beile, P, 2005, Scholars before researchers: On the centrality of the dissertation literature review in research preparation. Educational Researcher, 34(6), 3-15. Retrieved from <a href="http://edr.sagepub.com/cgi/content/short/34/6/3">http://edr.sagepub.com/cgi/content/short/34/6/3</a>
- Bailey, D. Christopher: Culture-Business: Using a symbolic Approach to connect organizational and corporate cultures, P-5
- Beals, Ralph and Hoijer, Harry (1953), An Introduction to Anthropology, New York: University of California, Los Angeles.
- Bo, Bo, 2013, The history of Shwe-kan-ku-lay-pyan-thit-taw-yoke-shin-taw-myat, published by Mandalar printing press
- Chan, Aung Nyein (MU), 2005, The Art of Kye-thun, Kye-khat and Pa-din, published by literature printing press.
- Cooley, L., & Lewkowicz, J, 1995, The writing needs of graduate students at the University of Hong Kong: A project report. Hong Kong Journal of Applied Linguistics, 18, 121-123.
- Chan, Aung Nyein, 2005, *The Art of Kye-thun, Kye-khat and Pa-din (Literature award)*, published by literature printing press
- Delamont, S., & Atkinson, P, 2001, Doctoring uncertainty, Social Studies of Science, 31(1), 87
- Dictionary of Myanmar Performing and Plastics Arts, 2001, published by Ministry of Culture printing press
- Express Time Journal (5.9.2012), p-19
- Felix M. Keesing, 1966, Cultural Anthropology, printed by United States of America
- Feak, C. & Swales, J. M, 2000, English in today's research world: A writing guide, Ann Arbor, MI: University of Michigan Press.

- G.J, Avlonitis, and Papastathopoulou, P, 2000, Marketing communications and product performance: innovative vs non-innovative new retail financial products, International Journal of Bank Marketing, Vol. 18 (1).
- G. E. Belch, and Belch, M. A, 2003, Advertising and promotion: An integrated marketing communication perspective, McGraw-Hill/Irwin, Boston.
- Geertz, Clifford, 1973, The Interpretation of Cultures, New York: Basic Books, Inc.
- Geertz, Clifford, 1983, Local Knowledge: Further Essays in Interpretive Anthropology, New York: Basic Books, Inc.
- Geertz, Clifford, 1974, Myth, Symbol, and Culture, New York: W. W. Norton and Company, Inc.
- Geertz, Clifford, 1995, After the Fact: Two Countries, Four Decades, Cambridge: Harvard University Press
- Htun Shein, Natmauk, 1987, Mandalay Cultural Arts, Published by Mandalar press
- http://www. Vietnamtorism. com/disan.en/index.php/world heritage in Vietnam (accessed on 23.11.2012).
- http://www.nricp.go.kr/eng/DigitalArchivea/video-list (accessed on 23.11.2012).
- http://www. Vietnamtorism. com/disan.en/index.php/world heritage in Vietnam http://www. Cdbaby.com/cd/naihtawpaing (7.11.2012)
- http://en.wikipedia.org/wiki/Traditional Myanmar musical instruments (27.6.2012)
- http://en.wikipedia.org/wiki/Cultural heritage (accessed on 4.2.2014)
- http://www.heritageforpeace.org/heritage-for-peace/what-is-cultural-heritage/, (accessed on 5.2.2014)
- http://www.sahistory.org.za/topic/ defining-culture-heritage-and-identity accessed on 31.1.2014.
- http://www.aucklandcouncil.govt.nz/EN/newseventsculture/heritage/ Documents/ whatisculturalheritage.pdf accessed on 5.2.2014.
- http://www.encyclopedia.com/topic/ Clifford\_James\_Geertz.aspx, accessed on 4.2.2014.

- http://en.wikipedia.org/wiki/ Clifford Geertz, accessed on 31.1.2014.
- http://www.myanmartravelinformation.com (accessed on 14-12-2012)
- Isabel Wong, 1985, "The Many Roles of Peking Opera in San Francisco in the 1980s." Selected Reports in Ethnomusicology:
- Jaya, Gamelan Sekar, 1995, Balinese Music in America.CD, GSI-011
- Kamuwanga, Liswaniso, 2003, The role and function of music at Pretoria Central Baptist Church; University of Pretoria
- Kola, Blerim, 1998, "The marketing of the craft productions in Albania, the effect of web marketing", Public University of Durres, Albania, European Scientific Journal February edition vol. 8, No.3
- Khiatthong, Thongchue, 2013, Hmong Needlework: Development of Interior Decoration Patterns and Products for a Creative Economy, Asian Social Science; Vol. 9, No. 13;
- Kyi, U, 1953, Myanmar Yarzawin Thihmatphweyar Aphyarphyar, Pitakaptaw Pyainpyarya, publishing house, Aung San Road, Mandalay
- Kavisara, U, 1989, *The history of Muttho-shwe-gu-shwe-thein-daw pagoda*, published by U Kavisara
- Kyaw Thein, U, 1979, 30<sup>th</sup> anniversary of Myanmar broadcasting, literature printing press
- Khin Min, Maung (Danuphyu), 2009, *Introduction to Symbol*, Published by Seiku Cho Cho press
- Keesing, R.M., 1974, Transformational linguistics and structural anthropology.
  Cultural Hermeneutics, Inc press
- Lawman Denise, 2004, Illustrated Dictionary of Anthropology; P:99
- Lan Sin News, Vol-IV, No.8, 1968, published by literature printing press
- Lan Sin News, Vol-IV, No.1, 1968, published by literature printing press
- Let, Soe Myint (2013), the remarkable of Myanmar Traditional Culture, published by Seitkue Cho Cho printing press

- Min Naing, U, 1987, In Introduction to Culture, published by literature printing press
- Myanmar Language Commission, 2008, Myanmar-English Dictionary published by Myanmar Language Commission
- Mary Douglas, 1966, Purity and Danger: Concepts of Pollution and Taboo,
- Mary Douglas, 1970, Natural Symbols: Explorations in Cosmology,
- McLaren, P.L., 1985, A tribute to Victor Turner. Anthropological, 27 (1-2), 17-22
- Manning, F.E., 1990, Victor Turner's career and publications. In K.M, Ashley (ed.)
- Myaing, Si Thu, 1993, Atwin 37 nats and Traditional worships, Myit-ma-kha printing press.
- Myanmar Encyclopedia Vol-I, 1955, published by literature printing press.
- Myanmar Encyclopedia Vol-II, 1955, published by literature printing press.
- Myanmar Encyclopedia Vol-IV, 1962, published by literature printing press.
- Myanmar Encyclopedia Vol-X, 1966, published by literature printing press.
- Myint Hlaing, Dr, 2007, *Da-la-taw-kyi-tan-shar-pon-taw*, published by literature printing press.
- Malay: gong is an East and South East Asian musical percussion instrument accessed on 24.11.2012).
- Ministry of Culture, 1955, The Directory of Musical Instrument Exhibition.
- Nyunt Tin, Mann, 1983, *Myanmar Leather Instruments*, published by literature printing press.
- Natshin, Dagon, 1976, Myanmar ten Kinds of handicrafts, published by mandalar press.
- Oo, Tin Tun, 2005, Myanmar Traditional Musical Instrument, published by literature printing press.
- Ortner, Sherry B, 1978, Sherpas through their Rituals, Cambridge University Press.

- Ortner, Sherry B, 1984, *Theory in Anthropology science the sixties,*Comparative studies in society and history, Cambridge University Press
- Protection of Cultural Heritage in Southeast Asia, Workshop Proceedings,

  Hanoi, Vietnam, 9-13 April 2001, edited by Amareswar Galla, P-108
- Proceeding of the Workshop on Bronze Age Culture in Myanmar, 1999, Universities Historical Research Center Yangon, Myanmar
- Party, committee of Myanmar Socialist, 1968, Similar Cultural Traditions of National Ethnicities, published by Committee of Myanmar socialist party.
- Sakata, Hiromi Lorraine, 1999, *Asian and Asian-American*, in the School of the Arts and Architecture at the University of California at Los Angeles
- Sahlins, Marshall, 1976, *Culture and Practical Reason, Chicago*: University of Chicago Press.
- Schneider, David M, 1980, *American Kinship: a Cultural Account*, 2<sup>nd</sup> edition. Chicago and London: University of Chicago Press.
- Schneider, David M, 1995, as told to Richard Handler. Schneider on Schneider: The Conversion of the Jews and other Anthropological Stories. Durham and London: Duke University Press.
- Soe, Tight, 1986, The remarkable of culture, published by literature printing press.
- Shopping Directory for Myanmar Culture, 2000, published by Mandalar press.
- Status Study of tribal handicraft-an option for livelihood of Tribal community in the States of Arunachal Pradesh Rajasthan, Uttaranchal and Chhattisgarh, May 2006, Socio-Economic and Educational Development Society (SEEDS)
- Tylor, Edward Burnett, Primitive Culture, 1871.
- Turner, Victor W, 1967, *The Forest of Symbols: Aspects of Ndembu Ritual*, Ithaca and London: Cornell University Press
- Turner, Victor W, 1980, Social Dramas and Stories about Them, Critical Inquiry 7:141-168
- The Production of Culture Perspective Annual Review of Sociology

- Vol. 30: 311-334 (Volume publication date August 2004) Department of Sociology, Vanderbilt University
- The Shanghai Charter, adopted at the 7th Asia Pacific Regional Assembly of
  the International Council of Museums (ICOM) in Shanghai in October 2002.
  Cassirer, Ernst. The Philosophy of Symbolic Forms; Volume One: Language
  (preface and introduction by Charles W. Hendel; New Haven, Connecticut:
  Yale University Press, Inc., 1953)
- Than, Khin Maung, 1997, Belief worships and Psychological point of view, Pin-wayone printing press
- Toe, Tin Naing, 2007, The history of Mandalay, published by Aung Paing Min press.
- The Music of Thailand- A Piphat (accessed on 23.1.2014)
- Thunwaniwat, Jintana; Chinese Music in Chinese and Thai Culture (accessed on 15.4.2014)
- Union of Cultural Exhibition, 1955, Exhibition of Musical Instrument, published by dramatic art of musical instrument committee
- Virginia, Alexandria, 1997, The symbolic form of Architecture, April 28, p-6
- World Heritage Convention, 2003, Protocols for Best Conservation Practice in Asia, 2001,
- Wong, Isabel, 1985, "The Many Roles of Peking Opera in San Francisco in the 1980s." Selected Reports in Ethnomusicology
- Yee Sein, U, 1979, *The Pyu Diplomatic Misson to China-myanmar year 802*: Researches in Burmese History volume 3
- Zakaree S, Saheed (Ph.D), 1999, "Adire Textile: A cultural heritage and entrepreneurial craft in Egbaland, Nigeria", Nigerian Defense Academy
- Zheng, Su de San, 1990, "Music and Migration: Chinese American Traditional Music in New York City," World of Music.
- နက္ခတ္တရောင်ခြည် မဂ္ဂဇင်း၊ အတွဲ အမှတ်(၂၈၃) ဖေဖေါ် ဝါရီ၊ ၂၀၁၀-စာ-၆၂

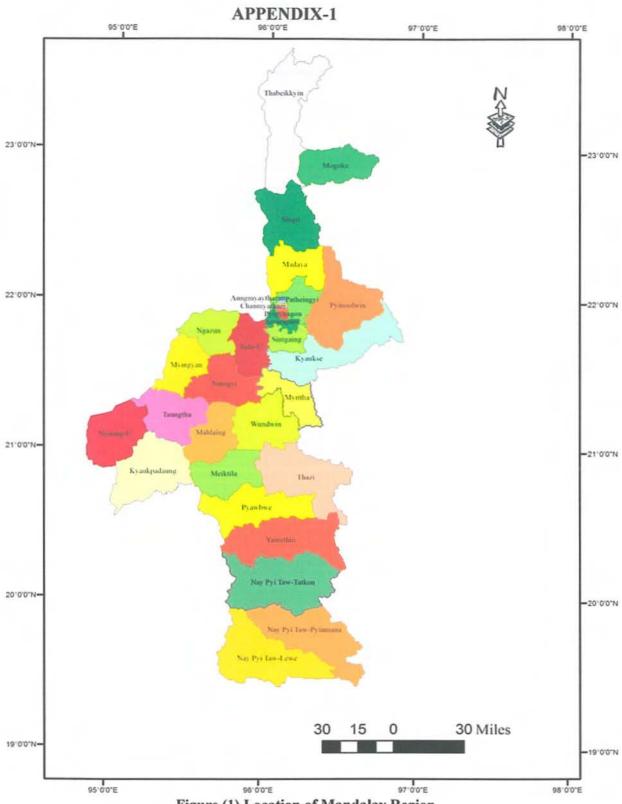


Figure (1) Location of Mandalay Region Source: Geography Department, Mandalay

## **APPENDIX-2**

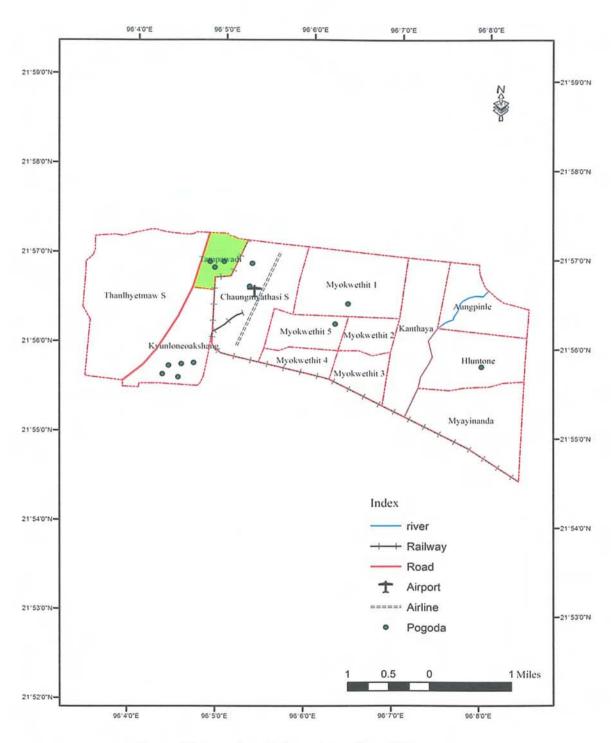


Figure (2) Location of Chan-Mya-Tha-Zi Township Source: Geography Department, Mandalay

## UNIVERSITY OF YANGON DEPATRMENT OF ANTHROPOLOGY

External Examiner's Report on the PhD Dissertation

Dated-25th May, 2014

TO WHOM IT MY CONCERN

Ref: Lei Shwe Sin Myint's PhD Thesis

Thesis Title- Anthropological Perspective on the Brass Gong Culture of Bamar National (Myanmar)

Lei Shwe Sin Myint's systematic research on "The traditional brass gong culture of Bamar national (Myanmar)" and its results are satisfactory.

Her dissertation on the traditional process of brass gong production in Tampawady quarter, Chan-mya-tha-zi Township, Mandalay Region, along with her findings is interesting from the point of view of symbolic/interpretative anthropological perspective, and will be very much useful for working to achieve further progress and will be help to maintain in brass gong production process. This dissertation has advised by her that national association of brass gong craftsmen to be formed with the aim of brass gong production penetrating international market.

Moreover, this study is the first study of focusing on the role and functions of the brass gong culture in Bamar society, thus brass gongs played important role in Bamar society since the time of Myanmar kings, and are still standing as a symbol of Myanmar culture or as a typical Myanmar cultural heritage.

I therefore consider that this dissertation is eligible for the Doctorate degree of Philosophy in Anthropology.

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DEPATRMENT OF ANTHROPOLOGY

Referee's Report on the PhD Dissertation

Dated-25th May, 2014

TO WHOM IT MY CONCERN

Ref: Lei Shwe Sin Myint's PhD Thesis

Thesis Title- Anthropological Perspective on the Brass Gong Culture of Bamar National (Myanmar)

Lei Shwe Sin Myint conducted her PhD thesis with the title "Anthropological Perspective on the Brass Gong Culture of Bamar National (Myanmar)".

She described the cultural aspect as well as the symbolic/interpretative importance of the tradition of brass gong culture completely. She described the detailed process of the brass gong production in Bamar society. She supported valuable recommendations depending on her findings. Her answers to defend the questions of the members of the board of examiners were also satisfactory.

Therefore, I would like to recommend that her degree of Doctor of Philosophy in Anthropology be awarded to her.

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