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| Title      | Culture Heritage Buildings in Mandalay City (Myanmar) : A Geographic Approach to the Urban Landscape |
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### Cultural Heritage Buildings in Mandalay City (Myanmar): A Geographic Approach to the Urban Landscape

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#### Abstract

The cultural heritage buildings give a sense of past and of cultural identity. Those buildings encompassed the historical evidence, artifacts and beliefs. As being a last capital of Myanmar Konbaung Dynasty, there were various kinds of building which are still left out in Mandalay City. Since the City was founded in 1857, the King Mindon intended to be very spacious capital by laying down the systematic town planning. The urbanization is taken placed since that time. Moreover, the study area was experienced by the diverse political systems and is ruled by the different governance. Therefore, the buildings were constructed according to the rulers. In this study the buildings are categorized into 4 groups: religious buildings, institutional buildings, and residential buildings, industrial and commercial buildings. Although the buildings regarding religions and institutions are already recorded by the Government Offices and Archaeology Department, there is lack of record on the commercial or industrial or residential buildings. Nowadays, the urbanization system has been taken place very quickly in the city. The range of pressures facing urban heritage include: population gains propelling rapid, uncontrolled growth and socioeconomic transformations generating functional changes in the city. It caused to renovate or reconstruct the new buildings in the places of previous ones, especially for residential, commercial and industrial buildings. It will affect to lose the ancient architectural style of the buildings and their significance. Therefore, the major aim of this research work is put on to define, to record and to locate as the cultural heritage buildings.

Keywords: cultural, heritage, buildings, Mandalay City, urbanization, conserve

#### Introduction

Although the State Peace and Development Council enacted the law for defining the cultural heritage buildings which have to be recorded for those which have been existed since 100 years before the date on which the Department of Archaeology make inquires as an ancient site. In Mandalay City there were various kinds of building which are still left out in the study area as being a last capital of Myanmar Konbaung Dynasty. Mandalay City gets its name from the nearby Mandalay Hill. The name is likely a derivative of a "Pali" word although the exact word of origin remains unclear. The root word has been speculated as "Mandala" (meaning circular plains), "Mandare" (believed to mean auspicious land) or "Mandara" (a mountain from Hindu Mythology). Mandalay, the last capital of Myanmar Kings, stands on the east bank of the Ayeyarwady River in Central Dry Zone. It lies between North Latitudes 21° 51' 15" and 22° 01' 33", and between East Longitudes 96° 03' 15" and 96° 08' 21" (Map 1). The study area is famous as heart of Myanmar culture. In this research, the classification of the heritage buildings and the historical periods are categorized into 4 types of building for four different periods. Nowadays, the urbanization system has been taken place very quickly in the city so that it has being affected to lose the ancient buildings especially their architectural style and their significance. To recover such cases, this paper will focus on the present spatially distribute patterns of different buildings according to the historical period. Place and Culture is designed to understand what is encompassed within the term "cultural heritage." It also introduces concepts such as how shared ideas, values, and experiences help defined a community, and the importance of record and the transmission of shared values and experiences to cultural heritage preservation. Many historic places may be eligible for designation as historically or culturally important by local governments. Particular type of buildings could be noticed significantly as shown in the following table. To be clearly seen on the distribution of the buildings, the field survey was conducted. Then, those are depicted on the maps of Mandalay Municipal Area (before November 2012).

| Types of Building                   | Founded Periods of Buildings            |
|-------------------------------------|---|
| Religious buildings                 | Before Yadanabon Period                 |
|                                     | (Before 1859)                           |
| Institutional buildings             | Yadanabon Period (1859-1885)            |
| Commercial and Industrial buildings | Colonial Period (1885-1948)             |
| Residential buildings               | Parliament Democracy Period (1948-1962) |

#### **Objectives**

- To understand the value of cultural heritage buildings around the city.
- To know the spatial distribution pattern of these buildings through periods.
- To promote the awareness of the Mandalay people to conserve the buildings.

#### Methodology

Identifying and listing items of heritage significances are only the first step in protecting and managing those places and objects that have to be kept. It will be developed as an understanding

of how people and society defined the places that are important. To maintain, the sites of cultural buildings, first the spatial or locational distribution patterns of those buildings are described periodically. The researcher has roamed throughout the city to collect the data of primary source (i.e. the number and location of cultural heritage buildings which are focused for this study). While the buildings of religious and industrial purposes could be noted easily from varying literature sources, it was very difficult and took much time consume for collecting the buildings of residence and commercial ones. Moreover, it was also hard task to identify the building whether it was constructed for residential or commercial purpose. Throughout the study area, there are number of buildings which used as commercial cum residential purposes. Being a geographical research, the heritage buildings which distributed in the recent Municipal Area should be studied. The study will be approached by the historical background and the use or type of the buildings. The comparative study according to the periods or years will also be considered.

#### Discussion

The following criteria are laid down for the classification of the buildings according to the types and periods when they were constructed if a building is as:

- 1. an item which is important in the course of cultural or natural history.
- 2. an item it has strong or special association with the life or works of person, or group of persons, of importance in cultural or natural history.
- 3. an item that has strong or special association with a particular community or cultural group for social, cultural or spiritual reasons.
- 4. an item that has potential to yield information that will contribute to an understanding of cultural or natural history.
- 5. an item that is important in demonstrating the principal characteristics of a class of cultural or natural places or cultural or natural environments.

The classification of the heritage buildings and periods are categorized as follows:

- 1. Religious Buildings,
- 2. Institutional Buildings,
- 3. Commercial and Industrial Buildings, and
- 4. Residential Buildings.

Four periods are considered as:

Before Yadanabon Period (Before 1859)
 Yadanabon Period (1859 - 1885)
 Colonial Period (1885 - 1984)
 Parliament Democracy Period (1948 - 1962)

Hence, this research work is totally related to the buildings, which had already existed or constructed before 1962.

#### **Religious Buildings**

In this category, pagodas, monasteries, community halls (*Zayat* and *Dammayon*), mosques, churches, Chinese temples and temples of Sikh and Hindu are included. The pagodas which already existed in the municipal area of Mandalay City are mostly founded before 1859 and during 1859-

1885 periods. Before 1859, the pagodas were built by Myanmar Kings of Minshinsaw, King Badon, King Thayawddy, King Bagan, etc. and in the period of Yadanabon, the pagodas were built by King Mindon and King Thibaw. During the reigns of the British and Japanese, only two pagodas were added and; during 1948 and 1962, only one was founded. It can be noted that a total of (47) pagodas were built before the period of Yadanabon City. Since the regime of Bagan Kings, they visited up to the study area for the purposes of touring to the 9 districts of wet agricultural lands (*le dwin koe kayaine*). There was a belief that Lord Buddha has pronounced that there will be bright of Buddhist teaching and the *Dhamma* of Lord Buddha would be brought to around Mandalay Hill and its environs. Due to that reason, the ancient Myanmar Kings might have constructed the pagodas to pay respectful homage to Lord Buddha. During the period of King Mindon and King Thibaw, the relatively small number of pagodas (only 3) was also constructed. They have very devoted to Buddhism.

#### **Monasteries**

The monasteries are founded in all four periods. During Yadanabon Period (i.e. 1859 - 1885) there were many numbers of monasteries. At the reign of King Thibaw, total of (154) monasteries were found around the palace in four directions. Moreover, within a campus of monastery, at least 8 to more than 20 buildings were constructed as residence for monks (*Shwekaingtha*, 2007). Some monasteries were damaged by the World Wars and some are ruined because of very old age. Here, the monasteries which still existed or maintained are considered for research. For example, there were so many buildings of monasteries along the 62<sup>nd</sup> Street from Mandalay Hill, where only Khinmakan, Tagaung, Innkhan, Manaung, Hsinte, Ngarsoet ans Hlatwe monasteries can be observed at present. It can be assumed that along with the setting up of new capital of Yadanabon by King Mindon, the King had invited the monks respectfully who interpreted omens about the foundation of the new capital at the site of Mandalay. For the allotment of lands for those monks, the King constructed new monasteries very grandly and offered them to the monks. Moreover, the family members of the King also donated the monasteries to their respective reverends. Due to the housing pattern of political leaders during colonial period and after Independence, the construction of new monasteries had become less in number.

#### **Community Halls**

Regarding the community halls, it can be noted as two types: Zayat (wayside public rest-house) and Dammayon (community hall for religious purposes). Hence, those can be considered that Zayat can serve the people to take rest and to perform occasion. Dammayon can serve only for such occasion and notification about Damma sermons, giving homage to the elders or teachers by respective social groups, meditation centres. In Myanmar, Zayat can be lodged by anybody to take a rest, but it cannot be occupied permanently. It can be noted that, before Yadanabon Period, there was no community hall in Mandalay City. Otherwise, such community halls might have been already ruined, because of long time ago. Apart from those types of community hall, there is one more type, i.e. the Buddhist ordination hall. But, most of such halls are already destroyed or innovated in recent period. During the field survey period, Montae Thein (Ordination Hall) and Thagaungyan Thein (Ordination Hall), Bamaw Thein (Ordination Hall) and Seedawmyinwun Thein (Ordination

Hall) are still left out as they were. Apart from the above mentioned number of *Dammayon* in the city, there was at least one *Dammayon* in each ward since ancient Myanmar Kings' regime. King Mindon posed the rules to construct such *Dammayon* in all wards of public residential area and he also instructed to sermon the *Dhamma* and to worship the Buddha Image by flower, fresh water, fruits and food according to time by time. Hence, it can be noted that at least (54) *Dammayon* were already existed since Myanmar King's period.

#### Mosques

Among the existing mosques of Mandalay City, Kaingywa, Dawnachan (South), Dawnachan (North) and Shwephoneshein mosques are constructed before the Yadanabon period. All the remaining mosques are founded during the period 1859 to 1885, i.e. the reigns of King Mindon and King Thibaw. Some of them are innovated (e.g. Gyun, Kalarpyo and Mibazay) and some are still found as it was (e.g. Dawnachan (South), Dawnachan (North), while in the Colonial Period and after Independence Period, there was no mosque which was newly constructed. It can be noted that, before the period of Yadanabon, there were a very less number of population including Muslims. Hence, a very small number of mosques were found. After the setting the new palace at Mandalay Area, King Mindon had allowed many Muslims to serve especially for defense and other services. Therefore, since the reign of King Mindon, the number of mosques was increased year by year. Again in the colonial period, due to the depression of economy around the world and the outbreaking of the Second World War, the traders tried to escape from the study area to nearby countries. After Independence, Parliament Government which was led by the Prime Minister U Nu did not allow Muslims to construct new mosques in the city. Hence, there was no construction of new mosque in those two periods.

#### **Churches**

After founding the Yadanabon City by King Mindon, the Christian churches were constructed. Because of the idea of King Mindon, the diplomacy was made by sending diplomats to such European countries as France, Britain and Italy. For the country's development programme laid down by the Crown Prince Kanaung, many industries were also built up in and around the campus of the Mandalay Palace. For that purpose, many European people (some are engineers, some are English teachers, etc) also came to stay at Mandalay. For those people, the King permitted to construct Armanian Church. After the annexation of the whole Myanmar by British in 1885, totally 12 churches were founded around Mandalay City. After Independence, two more churches are added in the study area. Out of the two, one is not only a church but it is also a Theological Bible School for the teaching of Christianity to Christians.

#### **Temples**

Regarding with temples, Chinese temple and Hindu temple are included. Out of the two categories, the most prominent number is observed for Hindu temples. Hindu temple was found since very early days of Myanmar history. Even during Bagan Period (11<sup>th</sup> to 13<sup>th</sup> century), the traders from India had visited Myanmar and some of them were settled in Bagan area. Along with the touring of

Bagan Kings to Upper Myanmar, some Indian people had settled at Mandalay region. But, up to the period of 1885, there were very less amount of Hindu temples. After occupying the entire Myanmar by the British, many Indian people have been moved not only to Myanmar but up to Mandalay area along with British Army. Since 1885, the number of Hindu temple had increased greatly up to (7) around the city. After Independence, many Chinese have come down to Myanmar as traders and Mandalay has become a centre of commerce. Moreover, Mandalay area is so safe that many people from Myanmar-China border have come to settle down in the study area. Hence, the numbers of Chinese temples have been significantly increased.

#### **Institutional Buildings**

All institutional buildings in the study area which are assumed as heritage buildings were constructed or existed after occupying by the British. Because the British Government wanted to expand their administration in Myanmar, many institutional buildings were constructed. In this category, the sub-divisions regarding general administrative offices, education, health care centres, recreation centres and some landmark buildings are presented separately. The most prominent institutional buildings are the Royal Palace, the Palace Wall, the moat, four gates and bridges and Royal Watch Tower. Earlier, there were totally 12 bridges which crossed the moat but at present only 4 could be observed. The buildings of General Post Office, Court of Justice, Railways Station, Archaeology Department, Library and Museum Department, Headquarters of Construction, Pension Department, Inland Waterways Office, Myanmar Petroleum Product Enterprise, and 11 numbers of Police Stations were newly constructed by the Colonial Government during 1885 to 1948. Since that time, the above mentioned offices had served their respective duties to the British Government. After Independence, only the respective designation, were converted into Myanmar words. In the Colonial Education Systems, totally 11 High Schools and 1 Middle School had been opened. For Higher Education System, Mandalay University was started as Mandalay Intermediate College in 1925. Various types of disciplines such as arts and science, agriculture, medicine, engineering were provided to the scholars from Upper Myanmar area. Since that time, for healthcare facility, E.E.N.T (Eyes, Ears, Nose and Throat) Hospital, Mandalay General Hospital, Hospital for Infectious Diseases and Hospital for Malaria were built by the British Government. But after Independence, the Parliament Government had tried to develop the study area. Hence, so many training colleges, academy and some high schools were also extended. Moreover, Telegraph Office, Bank (1), (2), Town Hall (1) and Pharmaceutical Store House were erected during the Parliament Government.

Under the type of recreation buildings, sports stadium and hotels are considered. All those heritage buildings for recreation purposes were founded during 1948 and 1962.

#### **Commercial and Industrial Buildings**

At the reign of King Mindon, such industrial buildings as factories for cannon, mint, saw mill, rice mill, sugar mill, cotton ginning mill, weaving of wearing materials mill, dock yard etc., amounting to more than (50) were constructed by the management of the Crown Prince Kanaung. It was as unlucky as many factories were damaged by the bombings during Second World War. Up till now

the Royal Mint Factory, Yadanabon Dock Yard and Distillery Plant can be observed; the former one is located in the campus of the Palace. However, the latter two are located on the east bank of Ayeyarwady River and in Amarahtani Ward of *Myaukpyin* (Mandalay North area), respectively. During the Colonial Period, the economic activities related to trade and commerce had been developed and Mandalay had become a centre for trade, some private enterprises had appeared, e.g. Curtic's building, Thukhawady Press, Ludu Press, Hla Khin and Sons Press and Pwegadaw Indigenous Medicine House. After Independence, some more industrial buildings were also constructed. At that time, Datan Softdrink Factory, Yekhetaung Softdrink Factory, Pyinyunt Press, Ngwese Soap Factory, Tampawady Vermicelli Factory, Aungmyanmarnyunt Oil Mill and Shwepya Blanket Factory or Vest Factory were owned by the private enterprises. Only the Tatmadaw Canning Factory was state owned. But, till now, the development of industrial sector is still lagging behind in the study area.

#### **Residential Buildings**

Many residential buildings which were existed before 1962 are lost because of the wars and the breaking out of careless fires. Whatever the number of buildings will be in the city, they have been collected during the field survey already carried out in May, 2011. According to the wards is Mandalay City, total number of (557) houses were found after the field survey which was finished in December, 2012. The houses which were built up during the Colonial Period were found in small number of wards. Since the time of Yadanabon Period, the Kings allotted to the public to reside around the palace and named as Ashaypyin (east ward), Anaukpyin (west ward), Taungpyin (south ward) and Myaukpyin (northward), totally 54 wards. It can be noted that since the time of Myanmar Dynasty in Mandalay City, the residential area was demarcated in square shape along with that of Palace and the residential houses had sprung up. As stated in above, however, almost all houses in that period were ruined or destroyed. Hence, at the time of field survey, the old buildings which were constructed during before Colonial Period could not been collected. Among (5) townships of Mandalay City, the greatest number of residential buildings (before 1962) were found in Chanayethazan Township (with 257 houses) and it is followed by Aungmyaythazan Township (with 155 houses), Mahaaungmyay Township (with 135 houses) and Chanmyathasi Township (with 10 houses). In Pyigyitagun Township there is no residential building which was constructed or existed before 1962. Hence, regarding with Pyigyitagun Township and residential buildings, it will not be explained or interpreted in foregoing analysis. Many persons of older generation had stated that many residential houses which were existed before 1962 were destroyed by the outbreak of two great fires. Some said that after bombing in Mandalay City during Second World War, many houses were lost, so that the Clock Tower could be clearly seen from the University Estate at that time. Sometimes, it can be found that few numbers of buildings were used as residential-cum-commercial or industrial purposes.

#### **Location of Religious Buildings**

As described in the previous section, many numbers of pagodas were found but most of them are located very close to the Ayeyarwady River (i.e. in the western portion of the city). It can be assumed that the Ayeyarwady River may be the most important and very useful transportation route at that time. The ancient Myanmar Kings constructed many pagodas especially along the

eastern bank of Ayeyarwady River. Even the Bagan Kings donated to set up new pagodas around the environ of Mandalay. It means that even before Yadanabon Period, the religious buildings were occupied in Mandalay area. Apart from the pagodas, two mosques (out of 4 in that period) were also located very near to Ayeyarwady River. Even two Hindu temples lay on the 35<sup>th</sup> (A) Street of Mandalay City. As the Hindus are fortune tellers in choosing the sacred places of their Gods and Goddesses, the present Ponnagone area (Setkyanwesin Ward) was developed at the junction of 35<sup>th</sup> and 73<sup>rd</sup> streets.

During 1859 and 1885 (in the period of Yadanabon), many more religious buildings related to Buddhism were set up in the city, especially around the Mandalay Palace. Due to the setting up of new capital and the growth of settlement area in Mandalay area, many other religious buildings apart from the pagodas are also found. For convenience of performing or celebrating the religious functions, many community halls and monasteries had been also constructed. It can be noted that near any pagoda there is at least one monastery. Whereas, most of the Buddhist ordination hall are located very near to the respective monastery. But, Zayat or Dammayon can be found especially in the wards or settlement area, so that the public were assembled easily and conveniently at that place within the short period for the discussion or for the meeting or for participating the occasions. During the same period, other religious buildings such as church, mosque and Hindu temple are also located very close to the Ayeyarwady River. The religious buildings are found in concentrating pattern at the southeast corner of the moat. Moreover, one patch of concentration of a religious building is located on the north and east of the moat and around the Mandalay Hill. Although King Mindon had allotted to the city dwellers in four directions of Mandalay Palace, the clusters of religious buildings are notably in the southeast and northeast of the moat. It may be due to the customs of Myanmar people who used to believe the right, suitable and pure place for constructing such sacred buildings. Again during 1885 and 1948, due to the rule by British and Japanese Governments, many more churches had been formed. Moreover, the Hindu temples were also increased in number because many Indian soldiers also arrived at and settled down in Mandalay area. After Independence, the number of Chinese temples had increased; it may be due to the immigrants from the northeast border. Moreover, the population of Mandalay also increased since the end of the Second World War, the number of community halls also increased. It can be observed that most of the religious buildings are clustered at the corner of the southwest part of the city during the study period. It may be also due to the only waterway transportation route.

#### **Location of Institutional Buildings**

Only the landmark of bridges, lion statues and epigraph are found before 1859. It can be assumed that from the jetty to the palace, there might have been such bridges and lion statues. Like other buildings those landmarks were close to each other at the southwest corner of the moat. Only the epigraph which is called Pepontaw Epigraph was found. Being founded by King Badon in Amarapura Palace, it seemed more near to Amarapura than that of Mandalay. During the reign of King Mindon and Thibaw, only the Royal tombs are left as landmarks in the campus of the palace. Moreover, the newly constructed Myanansankyaw Palace was located at the centre of the campus and it is surrounded by the halls for the queens. Moreover, Swetawsin (Where the relics of the Buddha are maintained) and Watch Tower are located next to the east of Myaanansankyaw.

Moreover the epigraph building is adjacent to the Watch Tower. North of the epigraph building the Royal Tombs existed continuously starting from King Mindon, Queen Setkyadewi, Queen Longshe and Queen Hsinphyumashin. The tomb of the mother of King Bagan was found between the tomb of King Mindon and the epigraph building. The old military prison is located very close to the north wall. During this period, Nandawun Garden was there, but nothing was left except old small cannons. During 1885 and 1948, many more institutional buildings had come out around the palace. For the convenient administration by the British Government in Myanmar, many governmental offices such as Police Academy (now Children Hospital), Police Stations, University College, Railways Station, Hospitals, General Post Office were built. Due to the clusters of residences around the palace, those institutional buildings were concentrated especially south of the moat. It can be assumed that the residential area could not be extended to the south at that time, So that the hospitals for Malaria and infectious diseases were located at the edge of the City Municipal Boundary. Due to the nature of the Inland Waterways Offices and for easily transport of petrol by ships, those offices are located very adjacent to the east bank of the Ayeyarwady. The police stations were spread out in the city, at that time. After Independence, Teacher's Training College, Government Technical Institute (now Central Women's Hospital), Technical High School, East Pwegon Private School (now the campus of Mandalay University of Foreign Languages), the School of Arts, four Basic High Schools and Town Hall (1) had been founded. Even up to 1962, such institutional buildings are located around the Mandalay Palace.

#### **Location of Commercial and Industrial Buildings**

Before 1859, commercial or industrial buildings could not be found. During 1859 and 1885, there were many industrial and commercial buildings. The Prince Kanaung wanted to develop the nation and he was so much eager to protect the Upper Myanmar from the threats of British Colony. So that he set up more than 50 buildings regarding with industry including arms and weapon factory. During the Second World War, the bombing destroyed almost all factories except Royal Mint, dockyard and distillery plant. It is no doubt that the dockyard is located on the eastern-bank of Ayeyarwady. Due to its important situation, the Royal Mint was located in the compound of Royal Palace. In the Colonial Period, two more pharmaceutical buildings and four printing presses were constructed. It can be also observed that those buildings are located at the southwest corner of the palace. During the Parliament Government Period, two soft drink factories, two printing presses, one vest factory, one soap factory, one vermicelli factory, one cheroot factory, one photo studio and one canning factory were increased and their locations had spread out from the Mandalay Hill.

#### **Location of Residential Buildings**

It is no doubt that before the founding of *Yadanabon Shwe Myodawgyi*, there was a small village so that no residential building was noticed at the present site of MandalayCity. During Yadanabon Period, the King allotted 54 wards to make the people reside who migrated from Amarapura Old Capital. But due to the wars and breaking out of fires, no building of residence was left. Only very small number of residences which built during 1885 and 1948 are found at the southwest corner of the moat. It might be assumed that so many houses were constructed but mostly were destroyed. The great number of houses could be found in the study area for the period of 1948 and 1962. During this period, houses were also concentrated at the southwest corner of the palace. It can be

assumed that, the waterways transportation and railways transportation were important up to the period of Parliament Democracy Government.

#### Conclusion

Before the foundation of Yadanabon City near Mandalay Hill, the maximum number of buildings are constructed according to the religious purpose. It was found that, the ancient Myanmar Kings from Bagan Period or Ava Period or Pinya Period or Konbaung Period had visited the study area. Being Buddhists Kings, they founded the pagodas or other religious buildings when they stayed there within a short duration. It was because; at that period Mandalay area was not recognized as the settlement or new palace area. Moreover, only the waterways transportation was available to navigate upstream along Ayeyarwady River for construction of such buildings and, as a consequence the religious buildings are also found very near to the jetty.

In adding the number of buildings for two periods, the cluster pattern of the buildings is changed. King Mindon was very pious and was a respected devotee to Buddhism, so that the greatest number of buildings were related with religions during his regime. Moreover, the diplomatic relations was also started to develop during this regime and it was also one of the major causes to appear such as other religious buildings like mosques, Chinese temples and Hindu temples. At that period, the Ayeyarwaddy River also played a critical role for the transportation of goods and passengers. But, as other road transportation modes also became important, therefore the other types of buildings also appeared around the palace. It can be observed that the lesser the number of buildings the more the distance from the palace was. After occupying the Upper Myanmar, first the British and then Japanese Governments also extended the buildings and expanded the space of Mandalay City according to their administrative purposes. Among the four major types of buildings; institutional and residential buildings had increased significantly around the palace during the Colonial Period. Although their respective numbers are not so high the remaining two types had been also noticed. It is no doubt that both railway and road transportation systems have been important for the city development. But, the distribution patterns of the buildings are still concentrated around the palace only. Even though many buildings were destroyed during World War I, most buildings were found in the south and southeast direction from the centre of the circles. During the Parliament Democracy Period, all types of the buildings with the exception of religious purpose, the respective number had been increased significantly during this period. After becoming the commercial centre of Upper Myanmar and due to its secure environment, the total number of population has also been greatly grown in and around the city. The expansion of the city area has also been carried out by the authorities. Because of the opening Zegyo Market, Gawwein and Mayanchan jetties, commodities flowed along the Ayeyarwady with a great volume and value. It was the main reason to raise up the land value of those areas.

#### **Future Prospects**

For conservation on the heritage buildings around the city, the concerned department has taken the measures to record and to define such buildings. According to the list on heritage buildings, religious ones are still conserved not only by the authorities but also by the local people. Whatever the religion will be, a person who used to pay respect such sacred area. Therefore, conservation on religious buildings is not the hard task. Conservation is a set of principles that guide conservation work based on six key ideas and everybody can follow these guides to conserve the heritage buildings.

- the important place (e.g.-Royal Palace)
- understanding the significance (e.g.- Maha Myat Muni Pagoda)
- making decision on significant level (e.g.- Court of Justice)
- doing as much as necessary (e.g.- Missionary Schools)
- keeping records (e.g.- Lord Buddha's lessons lied at Sanda Muni Pagoda)
- doing in logical order (e.g. General Hospitals)

A key principle of conservation work is the importance of understanding the significance of a place before making any decision about its future. It is not much difficult for religious buildings, whereas for the other buildings, e.g. institutional buildings, even though they are said under maintenance, mostly are already renovated. By doing so, the original architectural style is lost or covered. Therefore, without renovation or transformation, such buildings should be taken necessary modification. Moreover, some residential or commercial buildings are still found and used as it was. But, some of these buildings were also renovated. Unfortunately, some are already ruined or destroyed. Therefore, the persons who belong to such buildings should have morale to maintain its cultural values. So, to conduct the heritage conservation process in the study area, the most important thing is to look after the cultural buildings and it should be noticed by the city dwellers.

If there is a threat to demolish or harm a place of potential state significance, interim heritage orders should be made by the Department of Archaeology, Myanmar. In addition, the Minister should authorize some local council to make interim orders for items of local heritage significance. If avoidance of the cultural heritage is not possible, harmful amelioration should be achieved by reduction of the potential impacts and the preservation of heritage features, such as physically relocating them.

Heritage buildings should be modified in a systematic and sympathetic way to meet fire safety standards while respecting their heritage significance. All the assessments should be conducted by an expert in cultural heritage and further evaluated and endorsed by the authority or the governmental body concerned.

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#### References

Scott O'Connor, V.C (1987): Mandalay and Other Cities of the Past in Burma, AVA Publishing House Ltd, Bangkok, Thailand

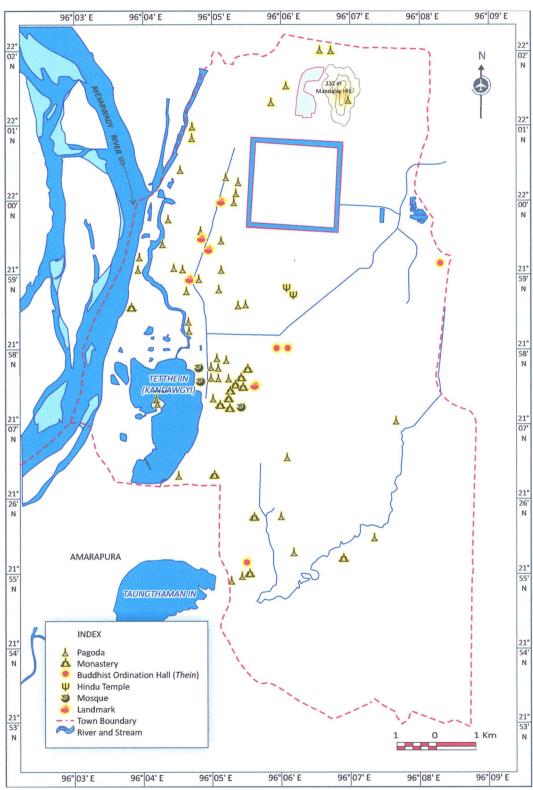
Searle, H.F. (1928): Burma Gazetteer, The Mandalay District, Volume A, Superintendent, Government printing

MANDALAY DIVISION UNION OF MYANMAR SAGAING DIVISION MAGWAY DIVISION DIVISION MANDALAY CITY PATHEINGYI TOWNSHIP AUNGMYAYTHASAN TOWNSHIP PATHEINGYI TOWNSHIP CHANMYATHASI TOWNSHIP YIGYI TAGUN TOWNSHIP INDEX Town Boundary Township Boundary Block Boundary AMARAPURA TOWNSHIP Rail Road River and Stream Canal Lake 22° 51' 77" N 96° 03'[17" E Embankment

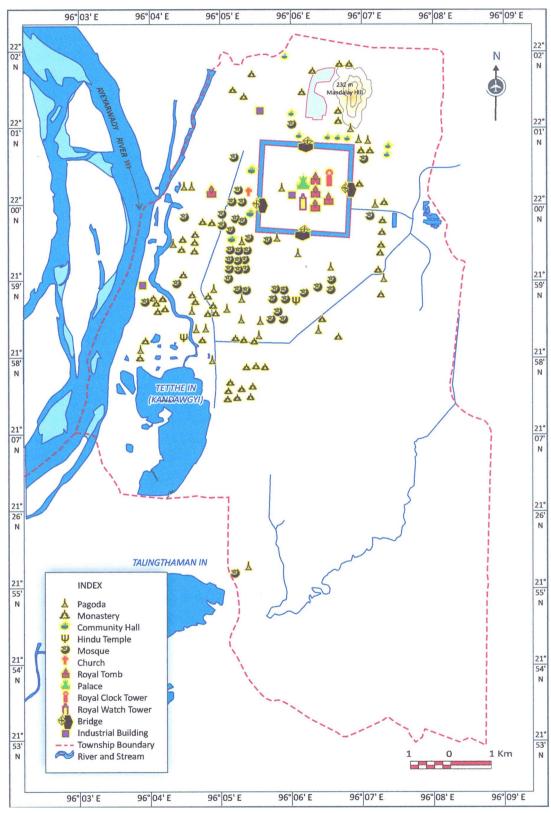
Map 1
Location of Mandalay City

Source: Department of Geography, University of Mandalay

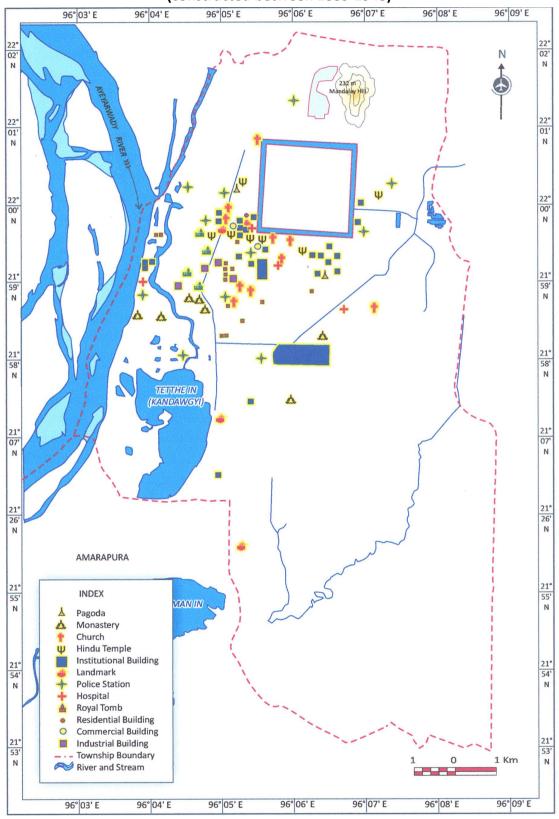
Map 2
Location of Heritage Buildings in Mandalay City (constructed before 1859)



Map 3
Location of Heritage Buildings in Mandalay City
(constructed between 1859-1885)



Map 4
Location of Heritage Buildings in Mandalay City
(constructed between 1885-1948)



Map 5
Location of Heritage Buildings in Mandalay City
(constructed between 1948-1962)

