

STUDY ON THE VISUAL ASPECTS OF URBAN DESIGN IN THE VICINITY OF THE SHWEDAGON PAGODA

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ABSTRACT: Yangon, the capital of Myanmar, is developing along with the changing aspects of socio-economic developments. The earliest accounts of Yangon are always associated with the Shwedagon Pagoda. The Shwedagon is the cultural lighthouse as well as a landmark of Myanmar. The ancient Myanmar planned this pagoda to attain visual supremacy and dominance over its environs. Conservation of such a historical heritage is to be regarded as our national concern. Some newly built buildings have become visual obstructions to the Shwedagon in the recent years. This situation calls for a scientific study and decisive actions in urban planning of Yangon. It is in need of strict regulations to preserve and protect visual axes of the Shwedagon. There has been a restriction for over six-storeyed buildings in the preservation area of the Shwedagon according to the 1996 Yangon municipal bylaw. However, these are not supposed to meet the actual requirements of present situation. Proper recommendations for newly built buildings in the environs of the Shwedagon need to be considered from visual aspects of urban design. The first portion of this paper is to review and study the traditional practices of urban planning in comparison with present conditions in the immediate vicinity of the Shwedagon. The critical analysis is made from visual aspects of urban design. Secondly, individual axes of the Shwedagon are found out and identified based on the present and past conditions. The last portion of this paper is providing specific guidelines to protect these visual axes of the Shwedagon with its setting. This may be a contribution to current and future efforts to conserve a landmark in the planning and development of a modern city.

Keywords: Visual axes, Conservation, Urban planning.

1. INTRODUCTION

In the field of urban design, every built form, old or new, visually manifests the beauty of the whole city. The appearance of each new building should be considered from the actual vantage points from which they will be seen. Special care must be taken into account when a new building is to be built in the immediate vicinity of a historic heritage site. In the urban design history of Myanmar, such a heritage always got supremacy of site and structure over its environs. The ancient Myanmar knew well how to dominate an important structure in its whole urban scene and where the accessible axes should be placed. The main structures had these concepts of urban design and they perfected the utility of these concepts to suit the nature and cultural traditions of Myanmar. Throughout the history, Myanmar stands out proudly for her own culture from old days. Yangon, the capital of Myanmar, is famous for its cultural heritage, the Shwedagon Pagoda. During the 2500 years of its existence, the Shwedagon was endowed with her relics from the ancient history. The Shwedagon is also attractive for its architecture. Many visitors from various countries come to see the Shwedagon. Conservation of such a

heritage is a matter of great importance. In this case, the visual approaches to the Pagoda are to be studied and properly maintained. Because the first sight of a landmark leaves a lasting impression. As the city grows, many buildings are built along and near these visual axes of the Shwedagon Pagoda. Some of them cause obstruction to the Pagoda in the foreground. It is necessary to provide specific guidelines to protect the existing views towards the Pagoda.

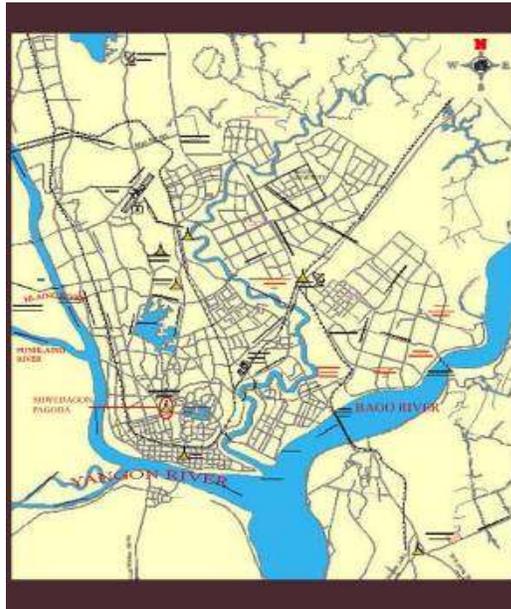


Figure 1. The greater Yangon, the capital of Myanmar



Figure 2. Shwedagon Pagoda, the unique landmark of Myanmar.

2. METHODOLOGY

Eye-level studies were first made. All possible visitor's views towards the Shwedagon Pagoda were studied from literature, old photographs, records and then practically. The existing law of the Shwedagon Pagoda restriction zone was studied from the aspect of visual axes. This study was made from other architecture points of view such as visual supremacy, harmony, emphasis of nature, skyline and visual proportion. Topographical studies, analysis of approximate heights of standpoint an

each axis above sea level are made according to the satellite images. From all these attempts, each visual axis to the Pagoda is identified and method of conservation of these axes is to be found out.

3. URBAN DESIGN IN THE IMMEDIATE ENVIRONS OF THE SHWEDAGON PAGODA

3.1 Review of the Urban Design History of Yangon

Yangon was founded by King Alaungphaya on the site of a small village called Dagon when he conquered lower Myanmar in 1755. In Alaungphaya's Yangon, as a religious heritage, the Sule Pagoda got the supremacy of site and structure. Before the colonial period, the Shwedagon Pagoda became the most dominant structure over the environs. After the time of Myanmar-English Second War (1852), a new settlement plan for Yangon was made. Yangon became the capital of Myanmar in 1885. It is obvious that the Shwedagon Pagoda Road was primarily planned as a visual axis to the Pagoda. Other roads were planned making reference to this road later. The urban design of Yangon at present needs to be studied compared with the past ideas and situation.



Figure 3. Sule Pagoda and the old city of Yangon, after 1755.

In visual proportion, the Shwedagon loses its supremacy which it got in the past. There has been a restriction for over six-storeyed buildings in the preservation area of the Shwedagon Pagoda according to the 1996 bylaw of Yangon City

Development Committee. It is the region within the radius about 0.7 mile from the pagoda, taking the main roads as boundary. Exactly, it covers 3367'(0.64 mile) to the north, 6227'(1.18 miles) to the south, 3812'(0.72 mile) to the west and 3321'(0.63 mile) to the east of the pagoda. However, these can partly meet the requirements of present situation. Some newly built building within this restricted area becomes visual obstruction to the pagoda while the others outside this area spoil the special vistas to the pagoda. It is essential to make an analysis and needed a careful zoning plan to protect and conserve this landmark visually.

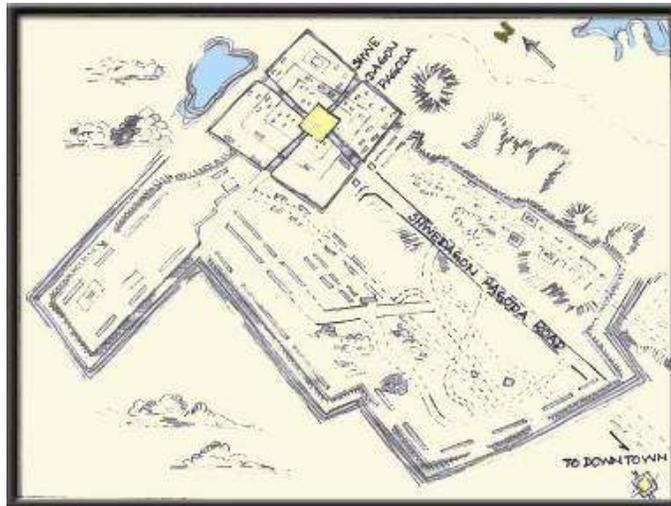


Figure 4. Shwedagon Pagoda in the map of Yangon after the second Myanmar-English War, 1855.

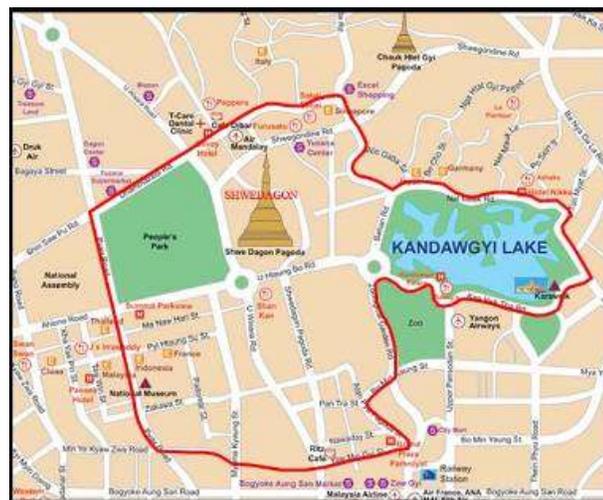


Figure 5. Shwedagon Pagoda restricted zone by Yangon City Development Committee (Y.C.D.C), 1996.

3.2 Study from the Visual Points of View
a. Harmony between the Structures

On Singuttra Hill, all the structures are being in harmonious relationship with the main structure, the Shwedagon Pagoda. The Naungdawgyi Pagoda and the Mahavijaya pagoda have same function, form and colour with the Shwedagon Pagoda. Considering architecture in relation to its environment can create unity. The whole composition of the hill and the pagodas keeps unity.



Figure 6. Shwedagon and its harmonious structure, Naundawgyi.

b. Deference between the Structures

The Shwedagon Pagoda and its smaller harmonious structure, Naungdawgyi Pagoda, can be seen in above figure. Naungdawgyi Pagoda is respectfully situated on the lower level and giving deference to its main structure.

c. Emphasis of Nature

Shwedagon Pagoda was built on the summit of the 190-foot-hill call Singuttara. Natural landform is emphasized by complementary urban form to express the importance of the pagoda.

d. Supremacy of Site and Structure

The Shwedagon Pagoda can be seen through the grand urban space, the People's Square. It gets supremacy of site and structure over the environs.

Height of the Singuttara Hill = 190'

Overall height of the pagoda = 326'

Total height = 516'

Distance through the Square to the Shwedagon = 3619'



Figure 7. An urban scene of monumental scale is seen from Pyay Road.

It is learnt that the degree of enclosure is directly proportional to the relationship between the viewing distance and the height of the structure which we view. This urban space and scene were intentionally designed. This view needs the formal recognition and protection essentially.

e. The Skyline

Viewing from the western bank of Hlaing River, the skyline of Yangon can be seen. In the past, it formed a harmonious relationship between the Shwedagon Pagoda as a dominant landmark and the rest of the city below it. The Shwedagon Pagoda was the most meaningful and powerful symbol of Yangon City. The city exploited its own topography. The resulting sky line was not the result of the placing of a single imposing landmark, but the result of a total built form in harmonious relation to the terrain. The vertical accent tied the heterogeneous elements of the periphery into a single visual unit. The isolated or visually independent hilltop was treated with the important building at the summit. The Shwedagon Pagoda, that stood out in the skyline derived emotional significance to the viewer. The Pagoda on the crown of the hill turned a lovely shape into a jagged skyline.

In the past, the highest roofline in the skyline was about 70 feet and when compared with the height of the Shwedagon Pagoda which was about 600 feet, the visual proportion was roughly (1):(9). At the present time, the environs of the Shwedagon were being overwhelmed by high rise buildings of about 700 feet height and more. The visual proportion previously mentioned became roughly (1.2):(1). This shows how they badly marred the skyline traditions of the ancestors.



Figure 8. Skyline of Yangon in the past, view from the western bank of Hlaing River.



Figure 9. Present skyline of Yangon, view from the western bank of Hlaing River.

It is not beyond the preventive phase. Certain regulations should control the form and location of high buildings when they affect the appearance of the skyline. Preserving fine old skyline with historic and symbolic accents near the Shwedagon Pagoda is especially vital. This must be done with care, for a continuous stretch of squat low buildings can be dull.



Figure 10. Present urban skyline of Yangon, view from the southern bank of Yangon River.

3.3 Identification and Analysis of the Visual Axes of the Shwedagon Pagoda

This study can find out the possible visual axes to the Shwedagon Pagoda. These axes are;

a. Along the Shwedagon Pagoda Road (from Pantara Street to the Shwedagon)

The Shwedagon Pagoda Road had been a main visual axis to the Shwedagon Pagoda before 1885. It is straight towards the pagoda in the part between Pantara Street and the Pagoda. This road is one of the most attractive entrances to the pagoda.



Figure 11. Shwedagon Pagoda Road can be seen as the main visual axis from the past till the present.

b. Along U Htaungbo Street (from U Htaungbo Roundabout to the Shwedagon)



Figure 12. A view towards the Shwedagon from U Htaungbo Roundabout stimulates acute power of sight

U Htaungbo Street is not in straight direction to the Shwedagon Pagoda. But, a view from it towards the Pagoda should be protected. The partial view of the

pagoda from U Htaungbo Roundabout heightens anticipation, alerts and sharpens the eye for the full observation of the things ahead.

c. Along Kyartawya Street (from the junction of Nutmauk Street and Bahan Road, to the Shwedagon).

The view from the junction of Nutmauk Street and Bahan Road towards the pagoda, along Kyartawya Street is supposed to be artfully aligned to give monumental view of the pagoda as one approaches it.



Figure 13. View from Kyartawya Street gives a monumental scene of the pagoda.

d. From the junction of Pyay Road and Ahlone Road towards the Shwedagon (area between the eastern side of Pyay Road and the Shwedagon)

In this case, a wide horizontal angled view of about 90 from the junction of Pyay Road and Ahlone Road towards the Shwedagon should be kept open. This view through People's Square is the most amazing of all.



Figure 14. Shwedagon Pagoda seen through the People's Square, well proportioned as a distinct object in silhouette against the sky.

e. Area within the north-eastern side of the Shwedagon Pagoda and the junction of Shwegontaing and Kabaraye Pagoda Roads

This wide angled view of the area should be kept free. The view of the pagoda aids orientation within this region.



Figure 15. View from the junction of Shwegondaing Road and Kabaraye Pagoda Road without visual obstruction.



Figure 16. Sight line to the Shwedagon is visually obstructed on Kabaraye Pagoda Road, near Home for the Aged.

f. Along the direction of Inya Road (from Panwar Street towards the Shwedagon).



Figure 17. A view from the Inya Road

Inya road frames a view of the Shwedagon being in harmony with Naungdawgyi Pagoda at normal eye level.

g. Along the U Wisara Road (from Hanthawaddy Roundabout to West Shwegontaing Road).



Figure 18. A view towards the Shwedagon Pagoda from U Wisara Road, near Blazon Building.



Figure 19. View to the Shwedagon Pagoda was obstructed by AWB building at the corner of U Wisara Road and Dhamazedi Road.

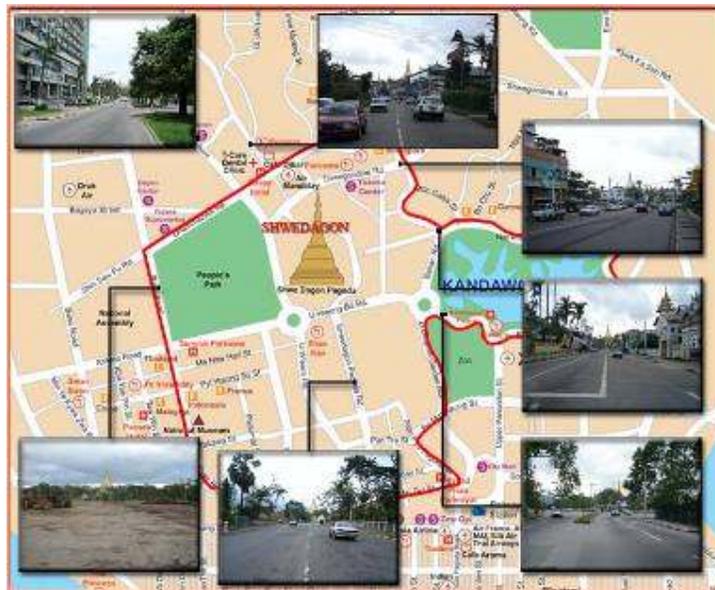


Figure 20. Views towards the Shwedagon Pagoda from each standpoint on each axis

The approximate numeric height and length of each axis are followings.

Axis	D	L	H	ϕ
a	4535'	74'	442'	5.6°
b	2888'	74'	442'	8.7°
c	3016'	85'	431'	8.1°
d	3619'	85'	431'	6.8°
e	3352'	111'	405'	6.9°
f	3608'	103'	413	6.5°
g	4392'	80'	436	5.7°

Table 1. Basic data from the survey of endpoints of important visual axes.

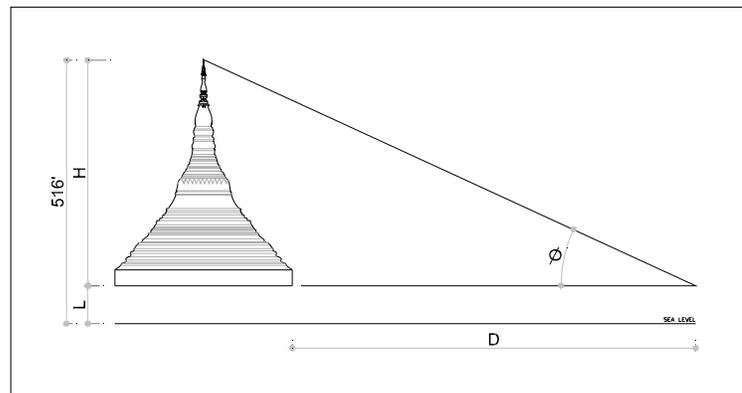


Figure 21. Figure showing the angle of view from the standpoint on each axis

D = distance from end point of axis to the Shwedagon Pagoda.

L = standpoint level above sea.

H = height of the sight line.

ϕ = angle of view from standpoint.

In this case, each axis is on its respective level and their distances from the Shwedagon Pagoda are quite different. Even on a certain axis, levels of standpoints can be different from one another. Therefore, it is impossible to determine the height of the buildings to be limited exactly for the whole. This problem should be dealt with on an ad hoc basis.

4. CONCLUSION

It is needed to survey and evaluate all important views and vistas to the Shwedagon. Then it should draw up a map with the streets, buildings and angles of view to serve as a basic document against which every related construction can be

checked. Each newly built building should give deference to the existing heritage. Moreover, the visual impact of it to its environment and urban skyline should be considered. In some cities, laws have been passed to restrict building height as a means of protection of skyline. Visual axes to our historical buildings and other urban design traditions of Myanmar are to be lovingly maintained and protected. Without conservation, nothing can be left permanent behind. Our cultural heritage structures are in need of strict regulations to preserve and protect special vistas. It is found that any building which would cause visual blockage to a historical heritage should not built along and across its visual axes. The author think this is a matter of great urgency. Fine views from the visual axes should be kept open by stipulation. Special historic zoning ordinances are needed in the Shwedagon Pagoda zone. This can be done only by the coordination of people like city officials, architects, planners, private builders and developers. Such ideas must be transferred to the public's trust and consciousness to meet our goal to be a sustainable built environment.

5. REFERENCES

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