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## The Influence of Tall Buildings to the Modern Urban Landscape of Jakarta City

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### Abstract

Like other Asian major cities, tall buildings became the dominant physical factor in Jakarta. Not only the CBD that features a cluster of a commercial and residential tower, but also entire neighborhoods of the city have been transformed into districts of tall buildings. According to the tall building year review by CTBUH, Jakarta had the highest 200-meter-plus completions of any city in the world in 2015 with seven. This indicates that Indonesia is aiming to gain an international recognition through building development. Tall buildings have a major role in the urban form and city skyline. With their own personalities and characteristics based on function and location, tall buildings provided a new expression to the indigenous cityscape of Jakarta. This paper attempts to study the influence of tall buildings to the modern urban landscape. With a qualitative method in a case study of golden triangle area in Jakarta city, the paper briefly documents the morphologic development of tall buildings in Jakarta. The structured placement of tall buildings and public outdoor space element significantly provided opportunities to strengthen the Jakarta city's image and influence the urban landscape.

**Keywords:** Tall buildings; Urban landscape; Urban identity; Golden Triangle; Jakarta

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### 1. Introduction

Since the last few decades, the explosive of population growth and the forces of globalization have transformed urban sites around the world. Consequently, the world has witnessed entire major cities being transformed by clusters of tall buildings. The image and the presence of the tall building in the urban form of the city are inevitably a very visible element. Featuring iconic tall building on the city's skyline as stand-alone objects or in clusters, are landmarks that can be used to identify a historical or financial center of even a geographically important location (Gonçalves and Umakoshi, 2010). Tall buildings are considered as the phenomena of modern cities and due to their physis, they have the ability to significantly affect urban

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landscape quality and the visual image of cities. The building as landmark impinges upon the skyline and in turn decorates it with a profile that contrasts in size, scale and form with the surrounding structures. The tall buildings, or parts of tall buildings, are frequently only of a local significance but they are important for the richness and variety they give to the urban environment (Moughtin, 1999). Likewise in Indonesia, as Prasetyo and Danisworo (2015) point out in their article, many types of tall building development have formed enclaves of large scale luxurious residential complexes with excessive facilities and infrastructure superior to those of the surrounding communities and many of them are built for single uses. Therefore, large scale mixed-use development is proposed to serve many facilities of uses in an integrated superblock projects for future developments. Most of the tall building lies in the golden triangle area, in the central of Jakarta, either as a cluster or an individual tall building along the street. The several uniqueness and iconic buildings which became a landmark in this area, provide an aesthetic value to the metropolitan urban landscape and an attractive serial vision to people through it.

Tall buildings on urban landscape have been the subject of several studies (eg., Heath et al., 2000; Moshaver et al., 2014; Yaran, 2015; Samavatekbatan et al., 2015), these studies show that a physical complexity, scale, view, skyline are the strongest factors in the aesthetic quality of tall buildings on the urban landscape. From other research studies (eg., Kaplan and Kaplan, 1989; Asgarzadeh et al., 2012; Gregoletto and Reis, 2012), the impacts of tall buildings in the urban landscape can be identified through the perception and emotional quality of users of urban space, the natural scene of city, urban infrastructure, density can affect the city's landscape. There are less works done in the field of tall building on urban landscape especially in Jakarta city. Hence, in this study, the aim is to study the influence of tall buildings to the modern urban landscape of Jakarta city. First, we discuss the history of development of tall buildings in Jakarta. Subsequently, we documented all tall buildings from the first built until now in two different periods and explained the changes of morphologic development of tall buildings in golden triangle area. The focus of the study is to answer how the development of tall buildings in the new order period and the reform period. Why development of tall buildings can influence the urban landscape of Jakarta city? Thus, a qualitative method with case study approach of urban landscape in golden triangle area in Jakarta city is used in this study. This study can be a consideration to architects and urban designers to design tall buildings that positively contribute to the existing urban fabric of city. They should add to the sense of place for the city, reflect the culture and environment of their location.

## **2. The Birth of Jakarta's Tall Buildings**

As the capital city of Indonesia, Jakarta is not only the seat of the national government and the provincial government but also Indonesia's political government and the political center. Moreover, Jakarta is also the center of Indonesia's national finance and trade. It is no wonder, therefore that Jakarta called as a dynamic city, a city that never sleeps. Jakarta has an estimated population over 10 million people in 2017, up from 9,607,787 recorded during the 2010 census. Jakarta is now reflected on a global city and one of the fastest growing economies in the world. Jakarta is one of the largest Metropolitan City in the world and the largest urban area in Southeast Asia. In spite of the political factor which wants to show the country technology advance to the world, the increasing development pressures and promising market conditions forced many business and trading ventures to expand their activities into property business. Therefore many large-scale tall buildings development projects were being introduced in Jakarta. Impressively, Jakarta recorded the highest return on investment for luxury real estate in 2014 compared to any other city in the world. Jakarta has large clusters of skyscrapers the referred to as Golden Triangle, where many of Jakarta's high-end offices and apartments are located within the three main central roads of Jendral Sudirman-Thamrin, HR Rasuna Said and Gatot Subroto (Fig.1). Therefore, we can see a row of tall buildings in this area, which form a modern urban landscape and a beautiful skyline in Jakarta. The position of Jakarta as the capital impact to the construction of tall buildings in Jakarta, which caused various development parameters.



The old order period (1945-1966) is an early period of tall buildings in Jakarta and Indonesia in general. Notably, this is the period where Sukarno as the first president of the Republic of Indonesia has a vision and idea to create Jakarta as a modern city that could compete with other modern cities in the world. Urban planning in Jakarta during this period not conceptually formulated in the masterplan. Yet, under Presidential Decrees, urban planning apparently becomes a political tool to develop the city. Besides as president, Sukarno remains engaged in architecture, he acknowledges that image of the city could be developed through the quality of its streets. This consideration is a brilliant idea to create the Thamrin-Sudirman axis. Along with this axis, prominent buildings and landmark strategically placed as anchors, which became the pioneer and embryo for further development. These anchor projects were centralize placed on the edge of a roundabout were Hotel Indonesia, Sarinah Department Store, Wisma Nusantara and the Hotel Indonesia Roundabout. The development of tall buildings has started in the 1960s, beginning with the construction of a National Monument (Monas) with 132 m (433 ft) in 1961 then followed the anchor projects as a milestone in the development of tall buildings. President Sukarno built this building to show the advancement of technology and the ability of Indonesian nation in the development of the country. However, Sukarno's decision on developing Jakarta through this Thamrin-Sudirman axis had become a basis for the transformation of urban landscape of Jakarta toward metropolitan city as today.

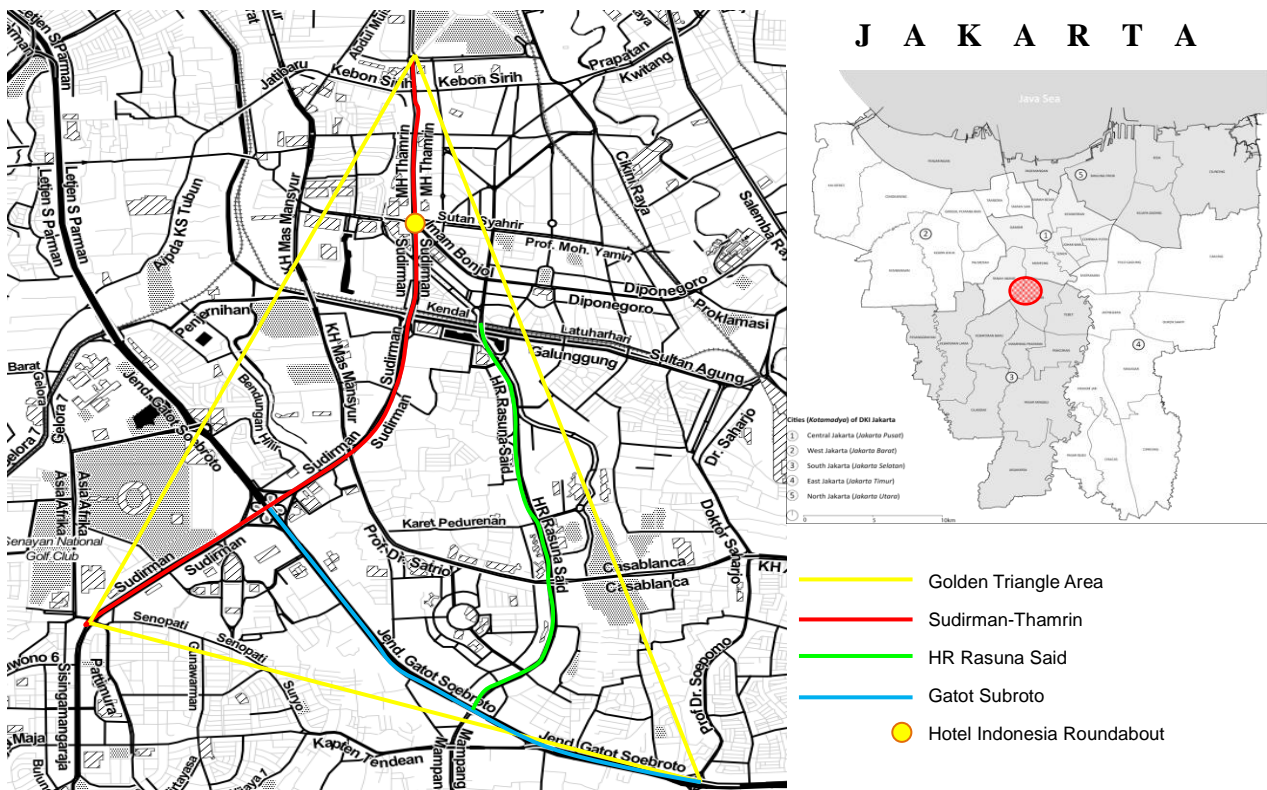


Fig.1. Thamrin-Sudirman Axis and Golden Triangle Area of Jakarta.

### 3. The New Order Period (1966-1998)

The grandiose boulevard, Thamrin-Sudirman axis, where created as main street successfully draw the market economy bring an influence on the development of high-rise buildings projects along this paths. There are dozens of new high-rise office buildings, hotels and high-rise apartment-condominium buildings to be seen in Thamrin-Sudirman corridor. New typologies of buildings projects are sprawling mainly along Thamrin-Sudirman corridor. The tall buildings are most numerous to this corridor, where raised a fast-expanding new commercial district, further expand to Gatot Subroto and HR Rasuna Said streets. Formed by three major traffic corridors, Gatot Subroto, HR Rasuna Said, including the Thamrin-Sudirman

corridor, as approximate edges, called the Golden Triangle. The Golden Triangle is especially impressive, tall buildings which lies in this area not only performing a decorative and functional role in the city; they are the chief monuments in a city and also act as the main landmarks. The tall building as a landmark that serves the city as a whole and even on occasions the surrounding region dominates the whole skyline. For example, the impressive Wisma 46 at Sudirman, the most attractive tall building sited at the highest point in the city in this period, dominates not only the surrounding urban area but also imposes itself upon the surrounding landscape through its top. The most attractive tall building of this period is Wisma 46 which fondly known as the Fountain Pen building because of the antenna shaped like a fountain pen (alternatively, phinisi boat's sail). Wisma Dharmala Sakti at Sudirman designed by Paul Rudolph, is brutalist style of office building, Wisma Hayam Wuruk, Mandarin Oriental Hotel and others are often representative or expressive of the prevailing social-economic structure giving order to the city. Jakarta has grown rapidly, initially, most industrial, commercial and large scale residential development took place along the three main roads forward expanding out into surrounding areas. Later, networks of other main roads and smaller lanes were built to facilitate access to land further away from these main roads. This condition naturally impact the quality in urban environments. The quality in urban environments based on higher densities is inextricably linked to the socio-economic structure of the place and the relationships between open space and buildings.

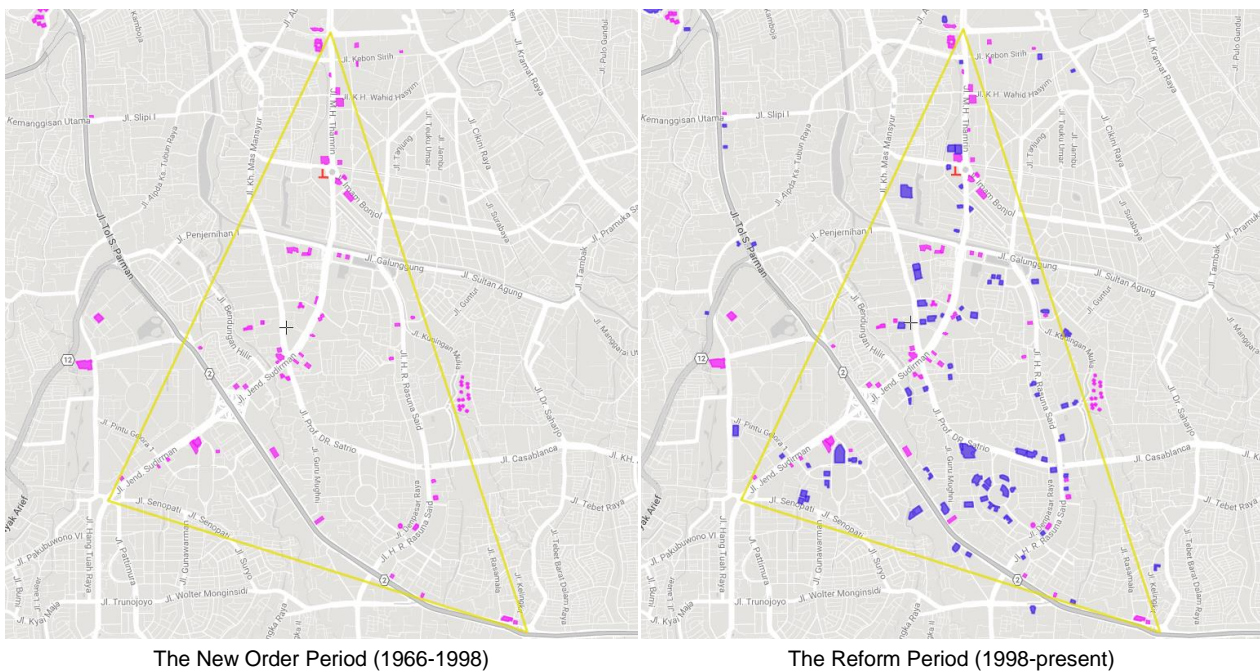


Fig.2. Map of Increase of Tall Buildings in Golden Triangle Area, Jakarta.

#### 4. The Reform Period (1998-present)

Jakarta has a large variety of beautiful tall buildings today, many tall buildings and skyscrapers in Jakarta have a unique and beautiful shape. By virtue of eagerness of investors to use foreign architects to design their buildings, now Jakarta have diverse iconic tall buildings through their character attractiveness. Within reform era, increasing development of tall buildings become enormous widespread in golden triangle area. They are not only spread along three main street edges as individual tall building, but also there is a cluster of tall buildings form a district like in the Mega Kuningan (Fig.2). Since more of a living space, office, recreation and open space are necessary for Jakarta, yet there is lack of land area to build all of these need, development of tall building emerged as the fulfillment of that need. Tall buildings support dense arrangements and help to accommodate much more people and all activities on a smaller land area. But, due to the placement of tall buildings along the corridor either in Sudirman, Gatot Subroto or HR Rasuna



Said Road are arranged in dispersed manner, they may create a problem in increased traffic density and the high concentration of varied activities. Further, it will likely weaken imageability and may convey chaos and disorder.

Mega Kuningan district is one of the concept of superblock area developed in Jakarta city (Fig.3). Combining a commercial function, office, diplomatic and residential functions in one area, this concept ideally able to become an independent controlled zone, where citizen can live, work and recreate in one location. A circular cluster of tall buildings in the Mega Kuningan district located 621 m (0.39 mi) connect to HR Rasuna Said street creates a distinct district in the golden triangle area. Among these buildings are Menara Anugerah (24 floors); BTPN Office Tower 223 m (732 ft); Ritz-Carlton Jakarta 212 m (696 ft); Bellagio Mansions 131 m (430 ft); Bellagio Residence 127 m (417 ft); JW Marriott Hotel 134.2 m (440 ft); Menara Rajawali (24 floors); Oakwood Premier Cozmo 158 m (518 ft); Noble House (32 floors); The East 138.2 m (453 ft); Menara Prima Tower I (27 floors) and Menara Prima Tower II (28 floors). By clustering of tall buildings in this area fosters urban synergy among the provided diverse activities and specialized services. The strategy of clustering tall buildings as illustrated in Mega Kuningan area is most effective strategy to changes the city from an expanding to a compact metropolis. The tall building in the superblock should have a sensitivity to the urban context. The concept of streetwall where rows of straight parallel buildings defines the street space suggested combined with space usage in the building boundary zone as an active public lane. Mega Kuningan skyline viewed from Gatot Subroto Road there can be seen the tallest buildings BTPN Office Tower is needed as a landmark surrounded by less prominent building to mark the massing framework of this area. However, a cluster of tall buildings which lies in Mega Kuningan successfully play an important role in strengthening a path's imageability and for some cluster buildings could reinforce the imageability of a district in multiple ways, exclusively a whole skyline in Jakarta.

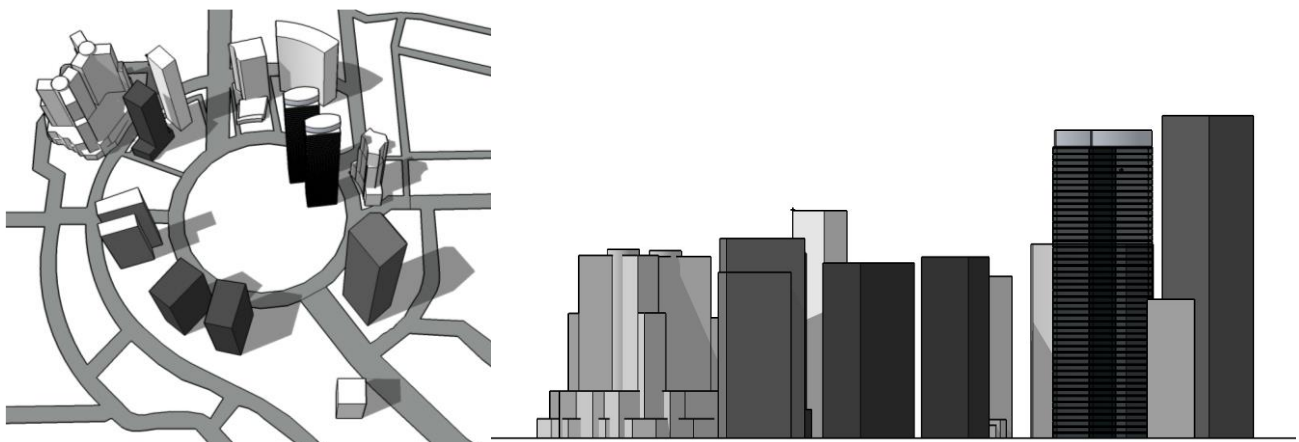


Fig.3. Mega Kuningan Skyline View from Gatot Subroto Road.

In 2015, CTBUH mentions Jakarta had the highest 200-meter-plus completions of any city in the world with seven tall buildings. Therewith totally 31 tall buildings completions in all heights. This is a huge amount ever achieved compared to previous years. Through the presence of these tall building projects, Indonesia is aiming to gain an international recognition. Gama Tower with 285 m, located on HR Rasuna Said reach the position the tallest building in Indonesia today. This building would take the most visible position in the urban landscape, competing with another nearby building for height and space. In urban context, the architectural expression of tall buildings in Golden Triangle defines and closely associated with urban design. Tall buildings shape the identity of cities and the urban landscape, extend the scale of cities, and change the panoramic view of the urban skyline. Nowadays, tall buildings projects in Jakarta continually increased, the placement extends, not only enhance the quality of structural and architectural aesthetics, they strive to create tall buildings that will be the highest ever.

## 4. Conclusion

The old order period is the beginning of development to create the city's image of Jakarta as a modern city. Thamrin-Sudirman axis became a fertile district for constructing newly tall buildings and landmark buildings which then become an orientation centers to the development of tall buildings for the next period to the present and further future projects.

In the new order period and the reform period, there are significant differences on the development of tall building that influence the urban landscape of Jakarta. Many individual tall buildings were placed row in three main streets which contribute to an urban design by helping to define streets and public spaces. Yet, the placement of tall buildings along the three main streets are arranged in a dispersed manner, some buildings not aligned with the edge of street and the building's heights do not follow a rhythm. This tall buildings qualities critically impact an imageability of urban landscape of Jakarta city. Further, less tall buildings provided public outdoor spaces and or public plazas to avoid overcrowding and pedestrian's discomfort.

In the view of that fact, many tall buildings are now being designed in cluster and superblock projects, as an urban design strategy to preserves open spaces since the development uses vertical space rather than lateral space. Clustering creates a ripple effect that promotes powerful socioeconomic and cultural agglomerations; it could give benefit to provides opportunities to strengthen the Jakarta city's imageability and urban landscape, for instance in Mega Kuningan

## References

- 1) Asgarzadeh, M. et al. (2012) Measuring oppressiveness of streetscapes. *Landscape and Urban Planning*, 107, pp.1-11.
- 2) Goncalves, J. C. S. (2010) *The environmental performance of tall buildings*. London: Earthscan.
- 3) Gregoletto, D. and Reis, A. T. (2012) High-rise buildings in the perception of the users of the urban space. *PROARQ*, 19, pp.89-110.
- 4) Heath, T. et al. (2000) Tall building and the urban skyline: the effect of visual complexity on preferences. *Environment and Behaviour*, 32, pp.541-556.
- 5) Kaplan, R. and Kaplan, S. (1989) *The experience of nature*. New York: Cambridge University Press.
- 6) Moshaver, M. K. and Asari, H. A. (2014) The effect of tall facades complexity on the aesthetic quality of urban landscape (the case study: Tehran-Iran). *Applied mathematics in Engineering, Management and Technology*, 2 (5), pp.146-156.
- 7) Moughtin, C. et al. (1999) *Urban design: ornament and decoration*. 2nd ed. Architectural Press.
- 8) Prasetyoadi, T. and Danisworo, M. (2015) Global cities in a local context: the case of Indonesia's urban development. *CTBUH 2015 New York Conference*. pp.204-209.
- 9) Samavatekbatan, A. et al. (2015) Assessing the visual impact of physical features of tall buildings: height, top, color. *Environmental Impact Assessment Review*. 57, pp.53-62.
- 10) Yaran, A. (2015) Investigating the effect of tall buildings on Tehran city landscape. *Armanshahr Architecture and Urban Development*, 8 (14), pp.81-89.

