



Study of the Identity Elements of Cilegon City and Their Influence on Urban Spatial Development

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Abstract. Cilegon City, located in Banten Province, Indonesia, has characteristics with unique features that are nicknamed the “Steel City”. To emphasize the city's characteristics, it is necessary to study further the “Image of the City” of Cilegon. The influence of city elements (Kevin Lynch) on the development of Cilegon City emphasizes serves as the basis for this research. Research objective Identifying the elements that are characteristic of Cilegon City and understanding how these elements contribute to shaping the overall structure and function of the city. Meanwhile, the methodology of this research uses a descriptive qualitative method with data collection through field observations and literature studies. Research results show that the city image of Cilegon City is good, but there are a few categories that need improvement. Cilegon City has various weaknesses in its urban planning, particularly in terms of spatial fragmentation, traffic congestion, lack of green open spaces, and the impact of industrial areas.

Keywords: the image of the city; Cilegon city

I. Introduction

The Unitary State of the Republic of Indonesia has both traditional and modern meanings in its current development. As a country with unique ethnic, cultural, and racial diversity compared to other regions, Indonesia has its own uniqueness. In the urban context, each city area should have characteristics that reflect its background. However, the development of a city cannot be separated from its history, because each city has traces of the past formed from the role of its founders in building the area [1].

Cilegon City, located in Banten Province, Indonesia, has unique characteristics that make it stand out among other cities in Indonesia. With its strategic location at the western tip of Java Island and directly bordering the Sunda Strait, Cilegon City has become the main gateway connecting Java and Sumatra. This geographical position not only makes it an important transportation hub but also a strategic industrial center in Indonesia. One of the main identities of Cilegon City is its nickname the "Steel City." This nickname comes from the presence of PT Krakatau Steel, the largest steel producer in Indonesia, as well as other related industries such as petrochemicals and energy. These industries not only drive the city's economy but also play a vital role in national development. Most of the city's area is utilized for heavy industrial zones, which significantly contribute to economic competitiveness at both the local and national levels [2]. As a city, a clear image becomes an important element in helping the community orient themselves, reducing confusion, and minimizing the risk of getting lost. This is also considered crucial in strengthening the identity of the place and creating harmonious relationships between the various areas within it. Kevin Lynch defines the image of a city as a mental picture of an area formed based on the average views of its society. These five elements become the main focus and the primary framework for understanding how society perceives, organizes, and interacts with the urban space around it. However, as a rapidly growing city, Cilegon City also faces significant urban challenges. Intensive industrial activities have an impact on environmental quality, including air and water

pollution. In addition, rapid urbanization puts pressure on urban space management and public services. This condition requires careful planning to address these dynamics and ensure a balance between economic development, environmental sustainability, and the quality of life for the community.

The purpose of this research is to evaluate the utilization of various potentials possessed by Cilegon City in supporting the holistic growth and development of the city and to identify the elements that characterize Cilegon City as well as to understand how these elements contribute to shaping the overall structure and function of the city.

2. Methods

This research uses a qualitative-descriptive methodology with a content analysis approach, which includes the analysis of urban planning documents as well as field observations. This analysis is based on the elements of the city proposed by Kevin Lynch—namely path, edge, district, node, and landmark—as a framework to evaluate the formation of these elements and the influence of spatial planning policies on the structure and function of urban space, particularly the regulations of Cilegon City. This approach aims to provide a comprehensive understanding of the interaction between spatial planning policies and the physical characteristics of the city.

3. Results and Discussion

Urban spatial planning has a very significant role in creating a quality environment for its users, both in terms of the effectiveness of natural resource use and in the management of other resources. Well-planned spatial planning can support the balance between industrial areas, settlements, green open spaces, and other supporting infrastructure so that it can improve the quality of life of the community.

In urban planning, spatial planning is a basic element in determining optimal spatial patterns and spatial structures for its users. With effective spatial planning, regional management can run more focused, avoid conflicts of interest in land use, and create a balance between economic, social, and environmental development. Therefore, on a spatial planning scale, several types of plans are used as guidelines in regional management [3], namely:

a. National Spatial Plan (RTRWN)

This plan is a general guideline for national development that includes comprehensive regional development policies. RTRWN is a reference in determining the direction of development in various sectors, including infrastructure, industry, protected areas, and other spatial utilization on a national scale.

b. Provincial Spatial Plan (RTRWP)

RTRWP is a spatial plan prepared within the scope of the province. This planning aims to regulate the use of space in each region in a province, including planning for strategic provincial areas and regional development in accordance with the RTRWN.

c. Regency/City Spatial Planning Plan (RTRW Regency/City)

On a smaller scale, spatial planning is also carried out at the district/city level. This RTRW regulates land use and spatial structure in each district or city area by considering local characteristics, economic potential, and the needs of the community in the area.

d. General Spatial Planning Plan (RUTR)

RUTR is a more specific spatial planning plan for regulating spatial functions in urban areas, including zoning for residential areas, trade, industry, and green open spaces. This planning is very important in maintaining the order of development and avoiding land use that is not in accordance with its designation.

e. Detailed Spatial Planning Plan (RDTR)

RDTR is a more detailed and operational form of spatial planning, including zoning regulations that regulate the use of each block in an area. RDTR is the main reference in issuing land and building utilization permits so that it can ensure that each development is in accordance with the established spatial planning policies [5].

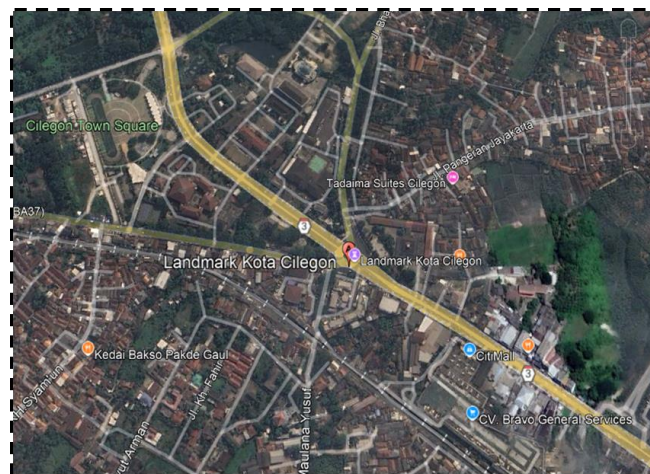


Figure 1. Research Boundaries
Source: Google Earth, 2024

Over fifty years ago, Kevin Lynch (1960) introduced the concept of city image as an approach to understanding how people perceive the urban environment. His work, *The Image of the City (TloTC)*, has become a classic reference in urban planning and remains relevant today [4]. In his theory, Lynch emphasized the importance of five main elements that build the image of a city [5], namely path, edge, district, node, and landmark. These elements form the basis for understanding how people perceive, navigate, and form relationships with a city. To support this theory, here is a factual analysis of each element in the context of Cilegon City, considering the research boundaries:

3.1. Path

Path is the most dominant element in the image of a city, as it is the main driver of a city. The route used by the community to move from one place to another [6]. The main road, Jalan Jenderal Sudirman, is the primary road that connects Cilegon with Serang and other areas, while also linking various important districts in Cilegon City, including residential, commercial, and community activity centers.



Figure 2. Maximum Volume of Road Vehicles
Source: Pradana, M. Fakhururiza, et al, 2015

Based on Figure 2 [7], this road plays an important role in intercity mobility. The area surrounding this road is the Cilegon Industrial Zone, which requires the circulation of heavy vehicles and freight trucks. The other roads are not main routes but supporting routes from Jalan Jenderal Sudirman. This path plays a vital role as a guide for the community's orientation in daily movements. Kevin Lynch emphasized that a good path is one that has clarity of direction, continuity, and connectivity. In the case of Cilegon City, this main route shows a clear network pattern, but the potential for congestion at major intersections can be a challenge. Therefore, spatial planning must consider the optimization of secondary routes to support transportation efficiency. However, main routes such as Jl. Ahmad Yani and Jl. Sultan Ageng Tirtayasa often experiences traffic congestion, especially at activity nodes like Cilegon City's landmark and Citi Mall. Additionally, the lack of alternative routes exacerbates the congestion.

3.2. Edge

Edges are boundaries between two regions, linear gaps in continuity. Edges are initial elements that humans recognize when they walk but are not paths [8]. The edge of Cilegon City within the research boundary includes clear physical boundaries such as railway tracks, steel industrial areas, and green open spaces. This edge separates certain functions, such as industrial areas from residential areas and the city center. Kevin Lynch describes edges as elements that delineate or separate specific areas while still defining urban space. In the context of Cilegon City, this edge provides a clear structure but often creates fragmentation in land use patterns. For example, industrial areas that are too close to residential areas can cause spatial conflicts. Solutions such as buffer zones or greening around the edges can help create balance and harmony in spatial planning. However, the lack of a buffer zone, and the absence of adequate buffer zones between industrial areas and residential areas, causes problems of air, noise, and visual pollution for residents around the industrial area. The lack of integration with the natural environment, such as green areas on the outskirts of the city, has not been optimally managed to support environmental balance and the quality of life of the community.



Figure 3, Cilegon City Mayor's Office
Source: Author, 2024

3.3. District

An area with certain characteristics that distinguish it from other areas. In the northern part of the research area, there are several city government offices in this sub-district, such as the Cilegon City DPRD office. In the typology of perception of Cilegon City, internal and external factors have interrelated relationships in identifying the image-forming elements of an area that has historical value [9]. Cilegon City Mayor's Office, Department Offices, and other government agencies, as well as industrial areas. In the eastern, western, and southern parts, there are residential areas. Lynch stated that a district is an area with a uniform and easily recognizable character, thus helping the community to understand the layout of the city. In the case of Cilegon City, the presence of commercial and industrial districts serves different functions, but they need to be enhanced in terms of accessibility and aesthetics. For example, the commercial district can be further developed with spatial planning that supports pedestrian activities and comfortable public spaces. However, disparities in district planning, especially in industrial areas that dominate land use, often overlook the development of commercial, recreational, and residential districts.

Many districts in Cilegon City lack green open spaces that can support social, sports, or recreational activities for the community. Lack of residential area planning; some residential areas develop unplanned, resulting in inadequate basic infrastructure such as roads, drainage, and utilities. All the development of facilities and infrastructure demanded by the community above certainly requires space, thus the thing that needs to be considered is how the limited land of Malang City can be managed in the context of implementing development. For the harmony of development and the environment or to strive for sustainable development, in general, a region carries out zoning or zoning of its land area. These lands usually have functions that are in accordance with the characteristics of the land [10].

3.4. Node

Nodes are strategic areas where activities in a city meet. A node is a place where people feel they are entering or leaving an area [11]. According to Kevin Lynch [5], a node is not only at intersections or circles at intersections but also focuses on activities, such as squares or important intersections.



Figure 4. Cilegon City's Node
Source: Author, 2024

In Cilegon City, there are nodes located in the city square and in landmark areas. Node is an important element that supports the movement patterns of the city. In Lynch's view, an effective node is one that can accommodate various activities and is easily accessible from different routes. Cilegon City has strategic nodes that can be further developed to enhance the city's appeal. For example, the arrangement of the Cilegon City landmark node can include green open spaces, adequate parking facilities, and integration with public transportation to enhance visitor comfort.



Figure 5. Cilegon City Landmark
Source: Good News from Indonesia, 2024

3.5. Landmark

Landmark is a type of external reference point, where the observer does not enter it. Usually, a landmark is a simple physical object such as a building, sign, shop, or mountain. Its use involves selecting one striking element among the various possibilities. Some landmarks can be seen from various angles and distances, stand out above the smaller elements around them, and are used as radial reference points. Such landmarks can be located in a city or far away, but still function as constant direction indicators, such as a tall tower standing alone, a golden dome, or a large hill. Even objects that move slowly and regularly, such as the sun, can act as landmarks. In addition, there are also landmarks that are local, only visible within a certain area and from a specific point of view. Thus, landmarks function as important elements in helping navigation and orientation in an area [12]. Cilegon City's landmark, known as the Steel Monument, is built from steel material, reflecting Cilegon's identity as the "Steel City." Built starting in 2015 and completed at the end of 2016, this landmark stands in a strategic

location near Cilegon Highway, which serves as the main route for vehicles and the public [13]. The basic design is in the shape of a wheel or machine rotation, symbolizing Cilegon as an industrial city. This monument is supported by eight pillars symbolizing the eight districts in Cilegon City, with a dome at the top representing the city's religious character. At its peak, there is a lighthouse, symbolizing Cilegon's role as a port city, while the bridge in the middle of the monument represents the vision of equitable development reaching the outskirts of the region. The Steel Monument is located at the three-way intersection, becoming an icon that characterizes Cilegon as the Steel City. At night, diverse lighting adorns this monument, creating a striking visual appeal.

Philosophically, the circular shape at the base of the monument symbolizes the industrial city, while the eight pillars beneath it represent the eight districts. The mountain element beneath the pillar becomes the silhouette of Mount Krakatau, symbolizing the potential and prosperity of the community. The bridge in the middle of the monument symbolizes equitable development efforts, and the monument's height of 25 meters is analogized to a tree trunk with six branches, symbolizing Cilegon's mission as an environmentally conscious industrial city [14][15]. The pillars of the monument are made from a series of IWF steel, reinforcing Cilegon's identity as the Steel City. Its prominent location makes the Steel Monument an instantly recognizable icon, providing a welcoming impression for visitors (point of view) and reinforcing Cilegon's identity as a steel industry hub. This monument also becomes the focal point at the main transportation hub of Cilegon City, with its prominent size compared to other buildings in the vicinity, showcasing how the city's hierarchy and skyline are formed.

Landmarks serve as visual elements that aid in orientation and strengthen the city's identity. Lynch explains that an effective landmark must be easily recognizable and have unique characteristics. In the context of Cilegon, the Cilegon City landmark has fulfilled this function, but efforts are needed to maintain its sustainability and appeal. The addition of lighting elements, surrounding public spaces, or cultural activities centered around the landmark can enhance its functional value as a focal point of the city.

4. Conclusion

The conclusion of the above research is to identify aspects that strengthen the city's image, such as the presence of landmarks, nodes, paths, districts, and edges, which have already implemented Kevin Lynch's city image theory and Cilegon City has various weaknesses in its urban planning, especially in terms of spatial fragmentation, traffic congestion, lack of green open spaces, and the impact of industrial areas. To address these weaknesses, more comprehensive spatial planning is needed, which integrates elements of urban image with community needs and sustainability principles. This can help create a more orderly, environmentally friendly, and comfortable Cilegon City to live in.

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