

Dynamics of Cultural Landscape on Idjen Boulevard as an Icon of Heritage Street Corridor in Malang City - Indonesia

Lisa Dwi Wulandari¹, Noviani Suryasari¹, Salsabila Larasati²

¹Lecturer at the Department of Architecture, Faculty of Engineering, Universitas Brawijaya, Indonesia

²Student at Department of Architecture, Faculty of Engineering, Universitas Brawijaya, Indonesia

Email: lisaromansya@ub.ac.id

Abstract

The dynamic development of the city has brought about significant physical and environmental changes in Malang City, impacting the increasingly blurred identity of heritage areas. One such area is Idjen Boulevard, representing an icon of the heritage road corridor in Malang City. To comprehend the evolving nature of these heritage areas, it is essential to conduct studies documenting their past conditions and dynamics across various historical periods: the Colonial period, the Old Order period (the beginning of Indonesian independence), the New Order period, and the Reformation period. This comprehensive approach aims to understand the changes that occurred in each time periodization within each zone/road segment. These insights are crucial for determining future development control steps through targeted regulations. The research employs the Interpretive Historical Urban Landscape method, focusing on thirteen components that constitute the Cultural Landscape. This method involves analyzing the results of observations, both from literature and field sources, supported by tools such as CAD Mapper, Google Earth, Google Street View, GISTARU (an interactive urban spatial detail plan), and SketchUp. These tools are instrumental in obtaining findings about the hierarchy of changes in cultural landscape components and the dynamics within each zone of the specified observation unit.

Keywords: Cultural Landscape, Dynamics, Hierarchy.

The city of Malang, affectionately known as Paris van Java, boasts a distinctive landscape surrounded by mountains. Malang City harbors numerous historical relics with unique local characters, preserving their identity since colonial times, exemplified by Idjen Boulevard. This elite housing, constructed in 1924/1925,

was integrated into Bouwplan V during the 8th stage of Malang City's development in the Dutch East Indies era, with meticulous consideration given to the potential of the surrounding nature in its design.

The contemporary wave of globalization in urban environments has led to the erosion of

cultural values, particularly as government focus in design and development shifts away from local potential (local wisdom) towards prioritizing economic value (Mulyadi et al., 2020). The evolving demands for regional space and lifestyle changes among Idjen Boulevard residents have instigated transformations in this region. Such changes are a logical outcome of the growth and development of life along Idjen Boulevard. The absence of clear regulations for preserving the area has also contributed to the alterations, despite its significance in the current regional arrangement. The original design of this area meticulously considered environmental potentials as a key element (Wikantiyoso, 2005).

While globalization can alter the character and locality of architectural and urban planning, incorporating local aspects in city design can mitigate these changes (Muljadinata et al., 2017). To identify and fortify the character of a heritage area, it is essential to analyze the dynamics of regional order in both past and present contexts. This approach ensures that ongoing developments do not obliterate the region's unique characteristics, as emphasized by the research conducted by Prima et al. (2022). Idjen Boulevard serves as a prime example of a cultural landscape with strong characteristics that necessitates preservation and protection from future changes. Consequently, research is imperative to comprehend the evolving dynamics of the cultural landscape on Idjen Boulevard in Malang City over time.

LITERATURE REVIEW

2.1 Theory: Cultural Landscape and Its Dynamics

Landscape as a spatial layout outside the building is a landscape with certain characteristics that can be enjoyed by all human senses (Simonds & Starke, 2006), has forming elements (Ashihara, 1996) which include soft scape elements (vegetation, water and animals) and hardscape elements (paving, fences, sculpture, pergolas, garden benches, ponds,

garden lights, trash cans, flower pots and other park furniture elements).

In a landscape, there is a dynamic that generally shows that the landscape is not permanent, which is to experience changes in several things, such as quality, configuration, shape, function, size, and others (Wishart, 2011). The background of the causes of historical development in landscape landscapes is also important to anticipate the future. In measuring historical values, a series of historical data can be derived from digital maps of landscape characteristics obtained over several periods (Turner & Gardner, 2015).

A Cultural Landscape has characteristics that include physical and non-physical elements, the characteristics of a cultural landscape consist of thirteen components as a benchmark (Page et al, 1998, p. 53), namely:

1. Natural Systems and Features: Natural features that affect the development of landscapes and the resulting forms of nature in areas (geomorphology, geology, hydrology, ecology, climate, local vegetation).
2. Spatial Organization: arrangement of elements that create the base, vertical, and roof planes that form and emphasize the spatial system on a site and area scale.
3. Land Use: The organization, shape, and formation of landscapes are related to land use.
4. Cultural Traditions; activities that affect the use and pattern of land division, building form, and material use.
5. Cluster Arrangement: the location of buildings and other structures within the area.
6. Circulation: the spaces, features, and materials that comprise the movement system.
7. Topography: three-dimensional configuration of landscape surfaces characterized by the formed structure and its orientation.
8. Vegetation: Original or new plants in trees, shrubs, vines, grasses, and herbs.
9. Buildings and Structures: three-dimensional constructions such as public buildings, roads, houses, and bridges;

10. Views and Vistas: natural or artificial features that can create view control.

11. Constructed Water Features: Artificial features and water elements for functional and aesthetic purposes.

12. Small Scale Features: The combination of function and aesthetics with detailed elements provides diversity.

13. Archeological Sites: The area in which there is a relic of the past that is of historical value.

METHODS

Referring to the theory of the components of the cultural landscape (Page et al., 1998), this research stage begins with literature observation (to obtain data on the history of regional development, documents and historical maps of the past) and field observation (to obtain physical and non-physical conditions of the locus of study in the present). With the approach of the Interpretive Historical Urban Landscape method, qualitative description is carried out supported by CAD Mapper, Google Earth, Google Street View, GISTARU – interactive urban spatial detail plan, and sketch-up is carried out in support of the analysis stage to strengthen the cultural characteristics of landscape at the locus of research in four time periods, namely the Colonization Period (1925-1945); Post-Independence Period/Old Order Period (1945-1966); New Order period (1966-1998); Reformation Period (1998-present).

Analysis of landscape components to determine the dynamics that occur, including internal and external analysis:

- External: comparison of changes in the 13 Components of Cultural Landscape to each zone segmentation.

- Internal: comparison of changes in 13 Cultural Landscape Components in each zone segmentation against 4 time periods in tabulations of each component. This analysis is aided by using a tabulation format

RESULTS AND DISCUSSION

4.1 Identify 13 Components of Idjen Boulevard Cultural Landscape

There are 13 components identified to determine the dynamics of the cultural landscape of Idjen Boulevard, which includes physical and non-physical elements in the past and present based on Page et al. (1998) to find changes in elements in each time periodization set in four zones as observation units.

4.2 Natural Systems and Features

Gunung Sleeping Beauty is a vista of Malang City, which consists of a collection of 3 mountains, namely Mount Butak (head and hair down), Mount Kawi (body), and Mount Panderman (feet), which form sleeping women. The following is a comparative table of system dynamics and natural characteristics on Idjen Boulevard:








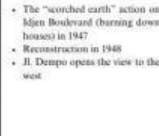












Colonization Zone	Keyplan	Colonization Period	Post Colonization	The New Order	Reform
Zone I		 <ul style="list-style-type: none"> The Mount Carmel Cathedral Church is oriented towards the northwest, maximizing the view of Mount Sleeping Beauty In the 1930s there was a Horse Racing Arena as a green open space which opened views to the west 	 <ul style="list-style-type: none"> The "scorched earth" action on Idjen Boulevard (burning down houses) in 1947 Reconstruction in 1948 Jl. Salak opens up a view of the landscape on the east-west axis. 	 <ul style="list-style-type: none"> Massive revitalization/development RTH becomes a built-up area Sleeping Beauty Mountain is not as clearly visible as before. 	 <ul style="list-style-type: none"> Multi-storey buildings and shade trees block the view to the west. Changed landscape (vegetation, pavement and landforms)
Zone II		 <ul style="list-style-type: none"> Jl. Dempo maximizes views to the west In 1935 the boulevard seemed monotonous and empty 	 <ul style="list-style-type: none"> The "scorched earth" action on Idjen Boulevard (burning down houses) in 1947 Reconstruction in 1948 Jl. Dempo opens the view to the west 	 <ul style="list-style-type: none"> Revitalization of pedestrian, boulevard parks, pavement, vegetation, lighting View covered by shade trees 	 <ul style="list-style-type: none"> Changes in boulevard landscaping, vegetation and pavement
Zone III		 <ul style="list-style-type: none"> Stereopark (RTH) to maximize the view of Mount Sleeping Beauty Built swimming pool (1938) During the Japanese colonial period it became Tanaka Park with its fish pond 	 <ul style="list-style-type: none"> The "scorched earth" action on Idjen Boulevard (burning down houses) in 1947 Reconstruction in 1948 	 <ul style="list-style-type: none"> Indrakila Park (RTH) is partly a museum Massive revitalization/development RTH becomes a built-up area Sleeping Beauty Mountain is not as clearly visible as before. 	 <ul style="list-style-type: none"> Revitalization around the Melati Monument (point of interest) The barrier was replaced with a boulevard park with park benches
Zone IV		 <ul style="list-style-type: none"> The Kawi intersection maximizes views of the north-south and east-west axes Jl. Kawi is a green open space 	 <ul style="list-style-type: none"> The "scorched earth" action of 1947 Anti-Chinese movement destroys Chinese houses Reconstruction in 1948 	 <ul style="list-style-type: none"> Large green open space development into a commercial area View covered by buildings and shade trees 	 <ul style="list-style-type: none"> RTH becomes a built-up area The view to the west is not optimal

Figure 1. Identification of Natural Systems and Features

Based on these identifications, it is known that system components and natural characteristics underwent significant changes during the New Order Period, namely when there was a large-scale development on Idjen Boulevard, such as the change of green open space (RTH) into a built-up area. Zone segmentation that undergoes natural systems and characteristics changes in Zone I, III, and IV.

4.2.1 Spatial Organization

Amid globalization, namely the development towards a more modern Malang City, some areas must be conserved to preserve heritage/cultural heritage areas. Malang City has an icon or landmark that is part of the city's identity formed from the Colonization Period to the Reformation Period, namely Idjen Boulevard, with its strong image of survival. The image of Idjen Boulevard looks stronger with its colonial-style architecture during the current Reformation Period due to the development of more modern surrounding areas.



Figure 2. Spatial Organization on Idjen Boulevard

Each area on Idjen Boulevard has its characteristics, with various plot designs dominated by garden processing. This causes buildings' magnitude, orientation and shape to have relatively diverse designs (Wikantiyoso, 2005).

4.2.2 Land Use

Land use on Idjen Boulevard has changed in several zone segmentations from the Colonization Period to the Reformation Period, dominated by elite housing.

Periodization Zone	Keyplan	Colonization Period	Post Colonization	The New Order	Reform
Zone I		 Keterangan: Ruang Terbuka Hijau (publik), Perumahan, Rumah Tinggal (privat)	 Rumah Tinggal (privat), Fasilitas Umum (bangunan penting), Ruang Terbuka Hijau (publik)	<ul style="list-style-type: none">The Horse Racing Arena (RTH) was transformed into elite housing and educational facilitiesResidential homeBoulevard ParkPublic facilities (church)	 Keterangan: Ruang Terbuka Hijau (publik), Ruang Terbuka Hijau (privat), Fasilitas Umum (bangunan penting), Ruang Terbuka Hijau (publik)
Zone II		 Keterangan: Ruang Terbuka Hijau (publik), Perumahan, Rumah Tinggal (privat)	 Rumah Tinggal (privat), Fasilitas Umum (bangunan penting), Ruang Terbuka Hijau (publik)	<p>There is no change in land use, Zone II functions as a residence and boulevard park</p>	 Keterangan: Ruang Terbuka Hijau (publik), Ruang Terbuka Hijau (privat), Fasilitas Umum (bangunan penting), Ruang Terbuka Hijau (publik)
Zone III		 Keterangan: Ruang Terbuka Hijau (publik), Perumahan, Rumah Tinggal (privat)	 Rumah Tinggal (privat), Fasilitas Umum (bangunan penting), Ruang Terbuka Hijau (publik)	<ul style="list-style-type: none">Indrakila Park (RTH and expo)Residential homeBoulevard ParkPublic facilities (Brawijaya Museum and Malang City Public Library)	 Keterangan: Ruang Terbuka Hijau (publik), Ruang Terbuka Hijau (privat), Fasilitas Umum (bangunan penting), Ruang Terbuka Hijau (publik)
Zone IV		 Keterangan: Ruang Terbuka Hijau (publik), Perumahan, Rumah Tinggal (privat)	 Rumah Tinggal (privat), Fasilitas Umum (bangunan penting), Ruang Terbuka Hijau (publik)	<p>There is no change in land use, Zone IV functions as a residence and boulevard park</p>	 Keterangan: Ruang Terbuka Hijau (publik), Ruang Terbuka Hijau (privat), Fasilitas Umum (bangunan penting), Ruang Terbuka Hijau (publik)

Figure 3. Land Use Identification

Changes in green open space into built-up areas occur in Zones I and III, namely the Racetrack into elite housing and educational facilities, Smeroeupark/Indrakila Park into elite housing and the Brawijaya Museum. Significant changes occurred during the New Order Period triggered by the needs of the surrounding community.

4.2.3 Cultural Traditions

Several activities are carried out periodically until they become a cultural tradition on Idjen Boulevard. These activities develop and change along with the surrounding community's times, lifestyles and needs.

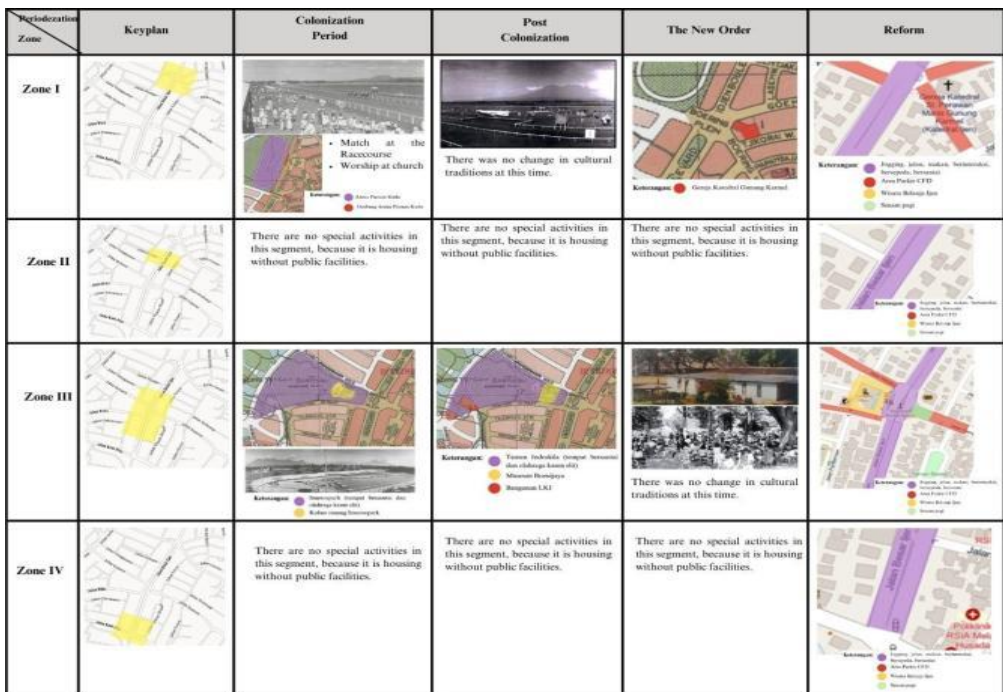


Figure 4. Identify Cultural Traditions

Cultural traditions on Idjen Boulevard underwent significant changes from the New Order Period until the Reformation Period, and the lifestyle and needs of the surrounding community influenced existing activities. Previously, in the colonial period, the elite who occupied housing watched matches at the Racecourse and swam at Beatrixpark; until during the New Order Period, people carried out expo activities, and during the Reformation

Period, there were Malang Tempo Doloe and Car Free Day activities.

4.2.4 Cluster Setup

The areas on Idjen Boulevard are divided or grouped based on existing functions and activities, such as clusters for residential/residential houses, pedestrian roads (pedestrians), main roads for vehicles (2-wheeled bicycles and 2 and 4-wheeled motorized vehicles), and boulevard parks. These clusters are limited by markers, materials, or spaces, in

contrast to the Colonial Period to the Post-Independence Period, where the Idjen Boulevard environment was still very natural without

sidewalks, granite, or asphalt but limited by natural materials such as soil and grass (groundcover).

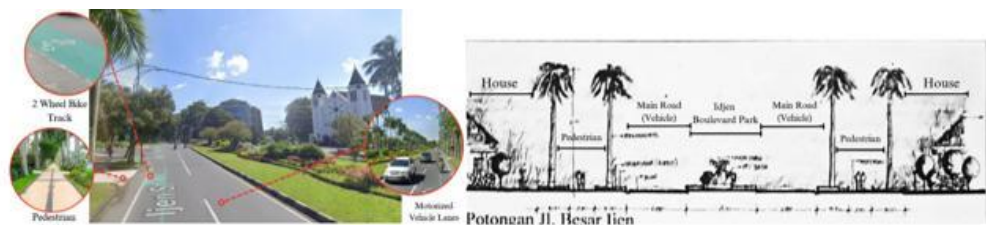


Figure 5. Cluster Setup at Idjen Boulevard

4.2.5 Circulation

Malang City has a main circulation with a character or characteristic, namely circulation adjacent to the residential area of the Dutch

government in the past. Road attributes in the form of special vegetation that functions as roadsides or boulevard parks are a sign of circulation (Wulandari, 2012).

Periodization Zone	Keyplan	Colonization Period	Post Colonization	The New Order	Reform
Zone I				<ul style="list-style-type: none">The horse racing arena was dismantled and converted into elite housing and educational facilities, this affected the circulation in Zone I (not dense).Circulation between users is limited by materials such as grass, paving blocks, sidewalks and asphalt.	
Zone II				<p>The absence of public facilities means that Zone II does not have an intense movement system compared to other segments and is more private.</p>	
Zone III				<ul style="list-style-type: none">Zone III has a high intensity movement system, because this segment is surrounded by several road intersections, so its location is strategic.There are several public facilities that cause the circulation to become congested.	
Zone IV				<ul style="list-style-type: none">The meeting between the north-south and east-west axes which forms an intersection (Jl. Kawi – Jl. Ijen) influences the circulation intensity.The construction of green open space into a built-up (commercial) area increases pedestrian movement.	

Figure 6. Circulation Identification

Circulation on Idjen Boulevard tends to be stable from the Colonization Period to the Reformation Period, the meeting of the north-south and east-west axes that form intersections, creating pedestrian and vehicle movements. The road corridor on Idjen Boulevard uses vegetation in the form of King Palm Trees as its greenbelt, which limits circulation between vehicles and pedestrians.

4.2.6 Topography

Malang City is located on a plateau with an altitude of 440-667 meters above sea level. Malang City has landscape potential and is often a tourist destination in East Java. Several mountains surround Malang, including Mount Arjuna in the north, Mount Semeru in the east, Mount Kawi and Panderman in the west, and Mount Kelud in the south.

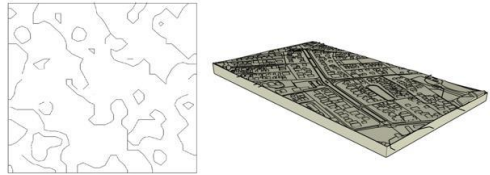


Figure 7. Topography on Idjen Boulevard

The topography of the land on Idjen Boulevard and its surroundings are flat, making it suitable for housing and trade areas.

4.2.7 Vegetasi

On Idjen Boulevard, vegetation is classified into trees, shrubs, ground cover, and vines. Vegetation is neatly arranged and patterned, such as shade trees on the edge of pedestrian roads and ornamental trees planted on boulevard parks and green open spaces around Jalan Ijen.



Figure 8. Vegetation on Colonization Period, Post Colonization and New Order

The vegetation on Idjen Boulevard underwent significant changes during the New Order Period until the Reformation Period. The

vegetation type and patterned and regular arrangement on boulevard parks and pedestrian roads are more diverse.



Figure 9. Vegetation on Idjen Boulevard

4.2.8 Buildings and Structures

Idjen Boulevard, a historical area protected by the Malang City Government, is an elite housing built since the Dutch colonial period and has many historical values that must be preserved, including buildings. There are several historical buildings on Idjen Boulevard since colonial times to those that still survive today.

There was a significant change during the New Order Period, which was when large-scale

development. Several buildings have been demolished and repurposed, and some green open spaces have been turned into built-up areas. During the Reformation, several residential houses changed due to renovations, some of which were renovated into modern facades, and some retained the characteristics of the colonial style.



Figure 10. Buildings and Structures on Idjen Boulevard

4.2.9 View and Vista

On Idjen Boulevard, a combination of natural and artificial elements creates view control, namely the King Palm Tree planted along Jalan Besar Ijen as a greenbelt, shading the pedestrian

road for pedestrians. The existence of the Melati Monument, which is the center of the boulevard park, also raises the distinctive view and vista of Idjen Boulevard.



Figure 11. View and Vista at Idjen Boulevard

The symmetrical arrangement of the boulevard park and the looping pattern in the boulevard park gives the impression of monotony, so the Jasmine Monument is placed in the middle of the boulevard park as the center (center) and focal point, which is a concentration breaker of the existing uniformity. In addition to functioning as a focal point, the monument serves as a landmark of Idjen Boulevard. Tugu Melati Monument, pedestrian paths to boulevard parks provide unity and harmony of views and vistas that combine natural and artificial elements.

4.3 Features of Artificial Water

On Idjen Boulevard, there are artificial water features in the form of ponds built for functional and aesthetic purposes. From the colonial period to the reform period, there were changes in artificial water features in the Idjen Boulevard area. The artificial water features are the Smeroeppark Swimming Pool, Tanaka Park Fish Lake, Jasmine Monument Water Pool, and Brawijaya Museum Pool.



Figure 12. Features of Artificial Water on Idjen Boulevard

The Smeroeppark swimming pool is located in Smeroeppark/Beatrixpark, which has now been turned into the Brawijaya Museum; in addition, there is an artificial water pool on the entrance stairs to the Brawijaya Museum and water pools on both sides of the Melati Monument.

4.4 Small-scale features

On Idjen Boulevard, there is a small-scale feature in the form of a Jasmine Monument located in the middle of Idjen Boulevard as a center and landmark; the location is at the T-junction of Jl. Semeru - Jl. Ijen, which is right in front of the Brawijaya Museum.



Figure 13. Small-scale features on Idjen Boulevard

3.5 Archaeological Area

Several past remnants on Idjen Boulevard have been historically valuable since the colonial period. The historical heritage on Idjen Boulevard, in the form of a distinctive and characterful regional order, as well as the integration of historical elements with existing

landscapes, enrich the historical and aesthetic value of the region.

On Idjen Boulevard, there are also historical buildings that act as landmarks of Idjen Boulevard and icons of Malang City, some of which are the Melati Monument, Brawijaya Museum, Malang City Public Library, and

Cathedral of the Blessed Virgin Mary of Mount Carmel. Some of these buildings were built during the Colonization and New Order Period.




Figure 14. Archaeological Area on Idjen
Boulevard

3.6 Analysis and Findings of Cultural Landscape Dynamics

Based on the results of the comparison of each zone segmentation with 13 Components of Cultural Landscape by Page et al. (1998), the following is the Hierarchy that has undergone the most changes (Dynamic) to the most static in the characteristic components of the cultural landscape and also developments in each zone/segment of the road corridor:

Table 1. Result: Hierarchy of Dynamics of Cultural Landscape Components and Development Zones

Change	Cultural Components	Landscape	Road Corridor Zones/Segments			
			Highly Dynamic	Dynamic	Quite dynamic	Static (tends not to change)
Highly Dynamic	Cultural Traditions		Zona I, II, III, IV			
	Vegetasi		Zona I, II, III, IV			
	View and Vista		Zone I	Zone III	Zone IV	Zone II
	Natural Systems and Features		Zone I	Zone III	Zone IV	Zone II
	Buildings and Structures		Zone I	Zone III		Zone II and IV
	Land Use		Zone I	Zone III		Zone II and IV
	Features of Artificial Water		Zone III			Zone I, II, day IV
	Small-Scale Features		Zone I	Zone III		Zone II and IV
	Spatial Organization		Zone I	Zone III		Zone II and IV
	Archaeological Area		Zone I	Zone III		Zone II and IV
	Cluster Setup					Zone I, II, III, IV
	Circulation					Zone I, II, III, IV
Static (unchanged)	Topography					Zone I, II, III, IV

The dynamics occurring in the cultural landscape components are determined by

referencing the component with the greatest number of changes, i.e., those occurring in all

segments. Simultaneously, the component experiencing the least change exhibits the fewest alterations among the four zones, with a number of changes equal to 0 or remaining static.

The segmentation of zones that underwent the most changes can be observed through the dynamics of each component characteristic of the cultural landscape from the Colonial Period to the Reformation Period. The result indicates that Zones I and III experience the most change, while Zones II and IV tend to remain stable. Among all segments, Zone III stands out as the segment with the strongest cultural landscape character since it encompasses almost all components of cultural landscape characteristics. This makes Zone III the focal point of Idjen Boulevard, capturing the most attention due to its prominent features.

Overall, Idjen Boulevard's cultural landscape dynamics underwent significant changes during the New Order Period, marked by large-scale development and revitalization. The most dynamic component is cultural tradition, influenced by changes in the lifestyle needs of the surrounding community. Conversely, the components with the least change, remaining stable, are Topography, Circulation, and Cluster Arrangement. These three components are interconnected, with Idjen Boulevard serving as a meeting point for the north-south and east-west axes, forming intersections and featuring a typical cluster arrangement resembling a boulevard. The landscape of Mount Sleeping Beauty in the west blends natural and artificial elements, creating unity within the cultural landscape's character.

This concept aligns with Thomas Karsten's initial planning, which adapted the Garden City concept in Bouwplan V. It involves maximizing the surrounding landscape as a view, prioritizing pedestrian-friendly cluster arrangements with shade trees, incorporating boulevards, and

ensuring accessibility that connects the city axes (east-west and north-south).

CONCLUSION

Based on the changes that occurred from one period to another, namely from the Colonial Period, the Post-Independence Period/Old Order, the New Order Period, and until the Reformation Period, it can be known the components of the cultural landscape that have undergone the most changes and components that have survived to this day, where these components are connected with the concept of design and initial planning during the Colonization Period by Thomas Karsten as the designer of Bouwplan. The component that has undergone the most change of the 13 characteristic components of the cultural landscape by Page et al. (1998) is Cultural Tradition, while the component that has survived is Topography, Circulation, and Cluster Setup. Changes in the components of cultural traditions are influenced by the times and the needs of the surrounding community in the form of traditions or special activities carried out periodically, such as races on the Racetrack in the Colonization Period, which during the New Order Period changed to housing and education areas, and now during the Reformation Period into Malang Tempoe Doloe (MTD) and Car Free Day (CFD) activities. The cultural landscape of Idjen Boulevard has undergone significant changes from time to time, especially during the New Order Period. Still, there are components of the cultural landscape that survive as a characteristic of the historical landscape in Malang City. The sustainability of these three components in future city planning concepts must be considered an essential aspect of the urban heritage concept, especially in the cultural landscape context.

WORKS CITED

- Ashihara, Yoshinobu, 1996. *Perancangan Eksterior dalam Arsitektur*. Bandung: Penerbit Abdi Widya.
- Baskara, M. (2003). *Evaluasi Keindahan Lanskap Jalan Utama Kota Malang dengan metode Scenic Beauty Estimation*. Malang: DPP Fakultas Universitas Brawijaya.
- Budiyono, D., Nurlaelih, E. E., & Djoko, R. (2012). *Lanskap Kota Malang sebagai Obyek Wisata Sejarah Kolonial*. Malang: *Jurnal Lanskap Indonesia* Vol 4 (1).
- Handinoto. (1996). *Perkembangan Kota Malang pada Jaman Kolonial*. Surabaya: *Jurnal Dimensi Petra*
- Muljadinata, A. S., Antariksa, S., & Salura, P. (2017). *Peran Aspek Lokal Dalam Perancangan Arsitektur Kota Karya Karsten*. Bandung: *Seminar Heritage IPLBI 2017*.
- Muljadinata, A. S., Antariksa, S., & Salura, P. (2019). *Dominasi Konsep Lokal pada Rancangan Karsten*. Semarang: *Jurnal Lingkungan Binaan Indonesia* 8 (1), 1-9.
- Mulyadi, L., Witjaksono, A., & Fathony, B. (2020). *Karakter Kawasan Dan Arsitektur Kota Malang Jawa Timur*. Malang: CV. Dream Litera Buana.
- Page, R. R., Gilbert, C. A., & Dolan, S. A. (1998). *A Guide to Cultural Landscape Reports: Contents, Process and Techniques*. Washington DC: Government Printing Office.
- Prima, L., Ulfa, A., Afyah, I. N., Mutiara, C., & Putri, M. A. (2022). *Lalu dan Kini: Identifikasi Tatahan Kawasan Heritage di Kawasan Talang Semut Kota Palembang*. Palembang: *Jurnal Arsitektur dan Perencanaan* Vol. 2 (1).
- Quinn, C. P., & Ciugudean, H. (2018). *Settlement placement and socio-economic Priorities: Dynamic landscapes in Bronze Age Transylvania*. *Journal of Archaeological Science: Reports*, 19, 936-948. <https://doi:10.1016/j.jasrep.2017.05.046>
- Schaik, V.A. (1996). *Malang Beeld van een stad*. Purmerend: Asia Maior.
- Simonds, J. O., & Starke, B. W. (2006). *Landscape architecture: A manual of environmental planning and design*. New York: McGraw-Hill, Fourth Edition.
- Suryorini, A. C. S. (2010). *Karsten dalam Perencanaan Kota dan Pemukiman di Kota Malang*. Yogyakarta: NALARs Vol. 9 (2).
- Turner, M.G., & Gardner, R.H. (2015). *Landscape Ecology in Theory and Practice, Pattern and Process* Second Edition. New York: Springer.
- Wulandari, L.D. (2007). *Konsep Metafora-Ruang pada Ruang Terbuka Perkotaan Studi Kasus: Alun-Alun Kota Malang*. Surabaya: Institut Teknologi Sepuluh Nopember.
- Wulandari, L. D. (2012). *Karakter Lokal Lanskap Perkotaan di Kota Malang*. Malang: *Sticks and Carrots*.
- Wikantiyoso, R. (2005). *Ulasan Disain Urban Kawasan Idjen Boulevard*. Malang: *Group Konservasi Arsitektur & Kota*.