

Commercial Corridor's Walk-Through Analysis: Determining Place Identity by Physical Component Assessment

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Abstract- Nowadays, many cities, such as in Indonesia are experiencing rapid growth and development, which causes the change toward modernization. Although it has a positive impact, but it's also encourages homogeneity of city space and buildings, so the more unrecognized the values and uniqueness. To maintain its existence, the city or place must be able to maintain its identity, which is the actualization of the user's identity through the physical environment. Through identity, a region can build interest and attachment to human life in it. One of the strongest factors that affect the establishment of place identity is physical character of a space. This research explores an area that is part of a city artifact with unique characteristics, known as Kampung Cina in the past. Now Kampung Cina's identity began to fade and turned into a crowded and congested wholesale commercial corridor that caused physical change, so its character as a heritage commercial corridor is hard to recognize.

Accordingly, this research attempts to find the physical component of commercial corridors formation and finds the special character of these components by Walkthrough Analysis, where the researcher walks from origin to destination and evaluates the suitability of existing conditions in the study area with predetermined criteria. Corridor's components that are explored in this research consist of buildings form, figure ground, street space, and pedestrian way.

Index Terms- Corridor Commercial, Physical Component, Place Identity, Walkthrough Analysis.

I. INTRODUCTION

Place identity interpreted where people reflect themselves through the space, so that the existing space conditions reflect the inhabitants [1]. Place identity is a sub-structure of the human self-identity that contains the cognition of the physical world in which an individual lives [2]. In the formation of a space there are three interrelated components that can create its specific identity, (1) the physical component; (2) activities and functions; and (3) the meaning of individuals and groups created through the experience and

intentions of the people associated with the place (symbol or meaning) [3].

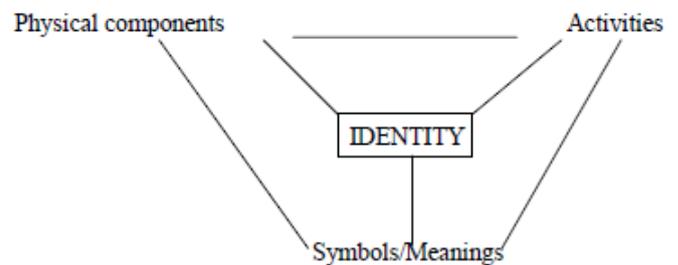


Fig. 1. Components of Place Identity [4]

One of the most influential components is physical component, which gives the strongest attachment to its inhabitants because every day it becomes a space where people perform their activities and experience their daily lives [5]. One of place identity case can be found in Bongkaran commercial corridor or called by Pasar Kain, Surabaya, Indonesia. The corridor consists of Slomporetan Street, Kopi Street, and Bongkaran Street. This area is part of the Surabaya's city artifacts, which was called Kampung Cina or chinatown [6]. From this cultural heritage area, we can review the journey or values that growth in Surabaya from pre-colonial era until now. In the development of period, with many function changes, the renewal is more focused on the new development that makes the heritage area's existence be forgotten little by little. This has an impact on the decline of the quality of the area and the fading of identity as a city artifact.

This study focuses on the physical components of the commercial corridors, which are divided into four, buildings form, figure ground, street space, and pedestrian way [7]. One feature of an urban commercial corridor is marked by its role as the main passage for vehicles within the city. This corridor form starts from commercial areas to urban centers in the form of office building complexes and trade service centers formed along corridors, along with solid activity conditions.

In this study, buildings form define as faces or looks and forms of buildings that exist along the corridor. The face

and shape of the building is the overall footprint of a corridor that able to realize its identity and image. Things that look from this sub-aspect are scale, proportion, style of architecture / style, accents, and building rhythm [8]. Figure ground define as land use relationships of the buildings's mass and open spaces, consisting of two main elements, built area (urban solid) and open space area (urban void). These elements form a dense cavity pattern of urban space that clearly shows the urban space structure. Street space define as roadway movement of vehicles equipped, parking area, street furniture, signage, and vegetation arrangements that blend into the environment, and pedestrian way define as a pedestrian area in a shopping center that create connections between one store to another, and allows viewing to open areas where other activities are located.

II. METHODOLOGY

This research is included in descriptive research with qualitative strategic. Descriptive research is a research that aims to make description in a systematic, factual, and accurate about the facts and the characteristics of a particular population or region [9], where the aim of this study is defining the characteristic of physical component that form Bongkaran area's identity as corridor commercial.

Initial phase of this physical component analysis is survey and assessment of physical setting with walkthrough analysis. Walkthrough Analysis is an assessment of urban quality that's done by walking through the area with the observation and see the impression which felt along the way, through recording or taking of pictures existing. In this technique used graphical methods, especially for the observation at the time of the object [10]. This technique can help establish the level of the design problem so as to generate design criteria. Assessment is done through observation and interpretation by researchers.

Observation processes is done by taking pictures in serial and linear. Serial view is a technique used to describe sequential views in one direction / one path to obtain clarity information of physical components composed from the starting point (focal point building) to end point of movement, in other words is a visualization tool that gives the user a chance to interact and provide clarity of movement along certain paths. Whereas, Linierside View is a technique used to describe the atmosphere of an area through the path that explain how the pedestrians move forward, and looking towards the right and left side to enjoy and see the front view of building.

The steps of this analysis are:

- Direct observation of physical aspect in study area using walkthrough technique.
- Analyze evaluatively the suitability of existing conditions in the study area with the general criteria of literature review based on observation.
- Elaboration of evaluation results per segment to get the general character of the region



Fig. 2. Serial View technique

III. DISCUSSION AND RESULTS

This research is explore Bongkaran's physical component by three corridors as samples. These are Slompretan Street, Bongkaran Street, and Kopi Street. There is the results :

1. Slompretan Street

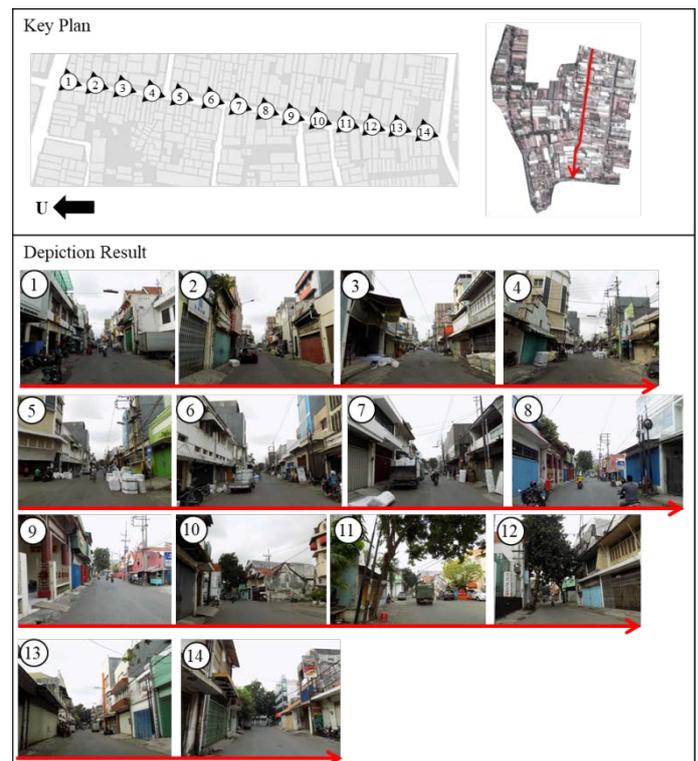


Fig. 3. Slompretan's Walkthrough Analysis

Buildings Form. The building series consists of 1-3 floors. Old and new buildings have balance proportion, where they has a Chinese-style with colonial and 'nusantara' style combination, seen in the use of large dimensions column, flat and saddle roof style, and large opening elements.

Buildings rhythm is less harmonious. There are many buildings that have changed, whether color, some material, the adding of new elements, even there a total change, it is widely seen in the office or bank so that bring contrast in this segment.

Building series in this segment have unique facade with usage of various colors folding doors in each store, iron or wooden trellis in each opening such as doors, windows, and

vents. Buildings's basic color disturbed by store signage or banners that covering the facade. Some stores present a solid and lighless impression from outside, that make visitors can't see through and not interest to visit it.

In this segment there are 2 buildings that have potential as focal point:

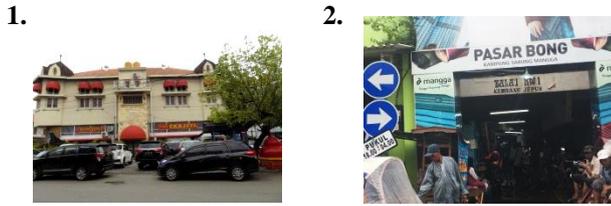


Fig. 4. Slompretan's Focal Point

Building 1 (fr.10) has a neo-classical style (indische empire style), which is shown by repetition of opening elements, columns, and towers. The changes seen in the original color of the building. The symmetrical shape of the building gives a formal impression. The building has good visual clarity because there is no object that obstructs the observation and its location which is at the end of the segment. The tower elements in the object add the uniqueness and visual strength of the building. The object has a monumental scale because of the significant altitude difference compared to the building on the left of the right.

Building 2 (fr.4) is Bong Market. On visual aspect, this building is not prominent, but Bong Market has the potential as a center of attractions and crowds in Bongkaran area. Bong market entrance is an alley, where the inside of Pasar Bong has a courty yard that shown the one charateristic of Chinese building.

Figure ground. The solid elements are dominate this segment, caused by many buildings that look crowded. There are some void which is quite extensive, potentially as open space. Buildings frontage of this segment is not synchronized. This led of other activities such as street vendors, stalls and stockpiles in.



Fig. 5. Slompretan's Figure Ground

Street space. This segmen has one way system, with 5-6 meters street space. The buildings setback are 0-1.5 meters. Active trading activities make this segment feels narrow and uncomfortable.

The roads have asphalt material with enclosed drainage that border of cement or paving material. This segment has lack of greenery, that only trees at the beginning and the end of segment. There are on street and off street parking area which is dominated by motorcycle, car, and truck. Also seen some pedicab base, especially around Pasar Bong.

Pedestrian way. There is no pedestrian path in this segment, so the pedestrian must use the road or building

setback area. The building that maintains the arcade element were on frame 1st-7th. Arcade is functioned for pile the stuffs up and some used by street vendors as seen in frame 1st, so it does not work optimally.

2. Bongkaran Street

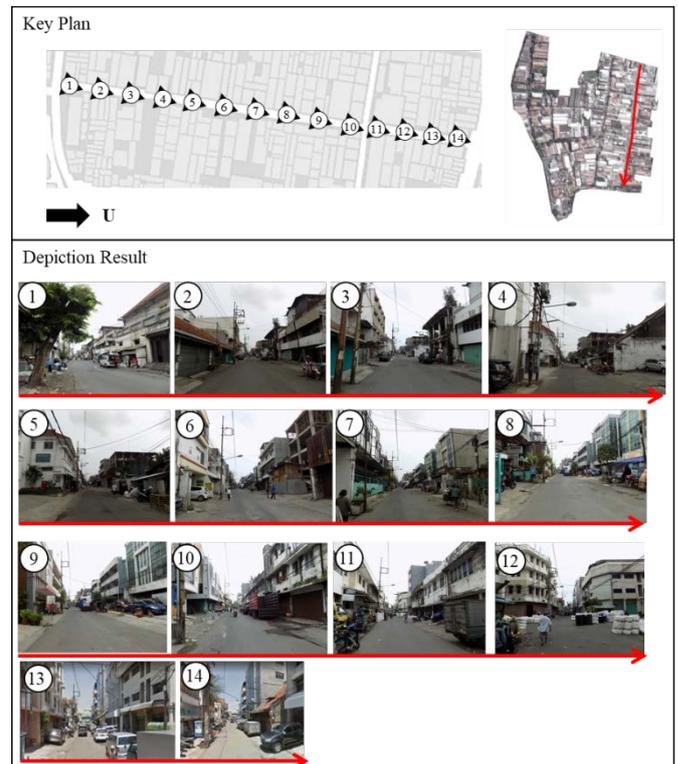


Fig. 6. Bongkaran's Walkthrough Analysis

Buildings Form. Building series in this segment has a massive scale with a height of 2-4 floors. The buildings are dominate by Chinese-style with colonial and 'nusantara' style combination stores, seen in the use of large dimensions column, flat and saddle roof style. The existence of this uniformity make a good rhythm of the building series in this segment.

Openings or other elements have square geometry that present a solid impression. There are many buildings that have been renovated with the use of glass and metal materials, so that present a modern appearance. The new and old building scale and height are aligned, so make a harmonious building series. The buildings's scale same as the road, too, so that present the normal scale for users.

Despite having fairly wide openings, some stores present a solid and lighless impression, so that seems closed to visitors. This indicates a lack of transparency element in the building.

In this segment there are 2 buildings that have potential as focal point:



Fig. 7. Bongkaran's Focal Point

Building 1 (fr. 9) has a combination of Chinese and colonial style, with massive scale and thick walls. The building has a smooth texture with white plaster walls. The building has good visual clarity because there is no visual obstruction, but it has a very close proximity to the road so that the observer can not see the whole building and it's the factor that can eliminate the special impression on the building.

Building 2 has a normal scale with a unique style, which is a mixture of Chinese and Nusantara architecture style. The building has contrast colors, ie orange and green. Its deep jutting position makes it invisible in serial view. Somehow, this inward position gives a strong look and feel for the observer.

Figure ground, Solid elements dominate this segment, with rows of large-dimensional buildings. There are some void, which is quite extensive and potentially as open space or off street parking area.



Fig. 8. Bongkaran' s Figure Ground

Frontage buildings are aligned enough that show the harmonious building series, with contrast at some point. This trigger the other activities such as street vendors, stalls and stockpiles use that void area.

Street space, This segment has one way system, 6-8 meters street space, and 1-2 meters area as building setback. The road space is wide enough so many pickup or large vehicles choose to pass this way. The road has asphalt material with closed drainage. There are on street and off street parking area in this corridor and the street furnitures neither complete nor maintained well. The lighting element are available only at some point on a considerable distance.

Pedestrian way, There is no pedestrian path in this segment, too, so that the pedestrians use the side of the road and the terrace section of building. There is an arcade element along the buildings series but does not function as well as a circulation area, because it is used to pile the store's stuff up or as parking area. The arcade element is formed by the space below the 2nd floor.

3. Kopi Street

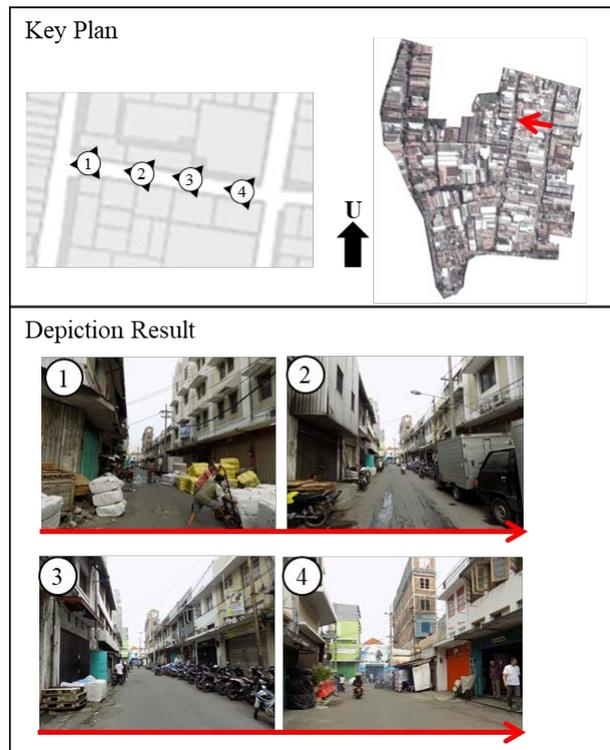


Fig. 9. Kopi's Walkthrough Analysis

Buildings Form, This segment is the shortest in this area. The building series are consist of two stories building. Building form in Kopi Street has an unchanging typology from the colonial era. The renewal just done by repainting and material changing of some elements.

The building series have folding door, which is the typical of shophouse buildings in various colors. This creates a harmonious proportion of the building form. The building series have a balanced rhythm with flat roofs typology and repeated square's opening elements.

With the function as fabric or carpet stall, many stores are displaying and piling the wares in front of their building, thus affecting the appearance of building facades, too. The building series on the left and right side have the equal building setback that present a good serial vision. Besides that, the narrow road and two stories building of this segment cause a unbalancing scale for user. There is no building with potential as focal point in this segment.

Figure ground, Solid elements are dominate this segment. From the figure ground's map below we can see that the building in this segment has a massive size which is divided for the existing activity, then.

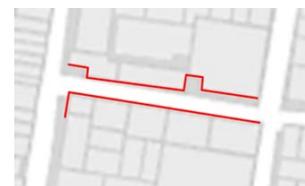


Fig. 10. Kopi' s Figure Ground

Void elements are formed by building setback, which in the existing are functioned as on street parking area.

Street space, This segment has one way system, with 4-5 meters street space. Active trading activities make this segment feels too narrow. There is not many greening elements in this segment. On street parking area is dominated this segment. This street space is used for loading activity, too, which trigger a traffic jammed and make this road uncomfortable. Besides that, there is no street furniture in this commercial corridor.

Pedestrian way, This segment has no pedestrian paths, so pedestrians must use the same area as the vehicle path. There is an interconnected arcade, which has 1 meter width, but this area is used to place the store stuff, so the arcade element not functionalized well.

IV. CONCLUSION

The results of this research are place identity of Bongkaran area as commercial corridor that be observed by its physical component with walkthrough technique, which are:

- The building series of Bongkaran area are formed by the combination style of colonial buildings, Tionghoa, and Nusantara, that make an interesting corridor impression.
- There are many heritage buildings that are changed in appearance with contemporary style, thus disrupting the alignment in the form of buildings series and make it lost its uniqueness.
- Many buildings have the potential as a focal point of the region but have not been optimally processed in their appearance or function, so this area does not have a strong element as landmark in each segment.
- The figure ground is dominated by solid element, where void are not functionalized well, so that create the impression of a dense area.
- The building series has a parallel frontage, so it has the potential to form a good serial vision in each segment
- Street space is more narrowed by the use of roads for loading and unloading process, street vendors, and on street parking area.
- The boundaries between buildings and the street space are unclear and seem to mingle. Bongkaran area has no pedestrian way, complete and arranged street furniture so prevent more activities, such as recreation, strolling, and window shopping.
- The corridors in the Bongkaran area have an arcade element as a potential unique commercial area, but not yet maximally utilized (not as a circular space).

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REFERENCES

- [1] Hauge, Åshild Lappegard (2005) , *Identity and Place*, Environmental Psychology, Faculty of Architecture and Fine Art, University of Trondheim, Norway
- [2] Proshansky, Harold M.; Abbe K. Fabian; Robert Kaminoff (1983), *Place-Identity:Physical World Socialization Of The Self*. Graduate School and University Center The City University of New York, U.S.A.
- [3] Sepe, Marichela. 2013. *Planning and Place in the City-Mapping Place Identity*, Routledge, Taylor and Francis Group, London and New York
- [4] Taylor, Ken, *Landscape and Memory: cultural landscapes, intangible values and some thoughts on Asia*, Paper to 16th ICOMOS General Assembly & International Symposium, Quebec, Sept 29-Oct 4, 2008
- [5] Darjosanjoto, Endang Titi Sunarti, Nugroho, Setyo, Danardi, R. Winton, "Design Criteria in Revitalizing Old Warehouse District on the Riverbank Area of Surabaya City", *Journal of Visual Art and Design*, ITB Journal Publisher, Vol.7, No.1, 2015.
- [6] Handinoto (1999), *Lingkungan Pecinan Dalam Tata Ruang Kota di Jawa Pada Masa Kolonial*, Staf Pengajar Fakultas Teknik, Jurusan Teknik Arsitektur, Universitas Kristen Petra
- [7] Lee, Fangyu (1996), *Shopping Malls For Contemporary Lifestyles: A Study Of The Complex Spaces For Commercial And Leisure Goals*. Master Degree Of Architecture, The University Of Arizona
- [8] Cullen, Gordon. 1961. *Townscape*, The Architectural Press., London.
- [9] Darjosanjoto, ETS. 2012. *Penelitian Arsitektur di Bidang Perumahan dan Permukiman*. ITS Press.
- [10] *Urban Design Toolkit, Third Edition*. 2006. Ministry For the Environment.

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