

ADAPTIVE REUSE AS AN EFFORT TO PRESERVE AN HISTORICAL DISTRICT: A CASE STUDY OF THE BRAGA CORRIDOR IN THE CITY CENTRE OF BANDUNG, INDONESIA

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ABSTRACT

Cities are constantly evolving from time to time which can be identified from the development of the buildings. In city centres as the embryo of the city there are still many old buildings which is part of the history and inheritance. In big cities in developing countries such as Indonesia, old building are considered old fashioned, incompatible with time, and destroying them is preferred. Generally, the buildings will be left uninhabited, not well maintained until it becomes obsolete and dangerous. Thus, for security reasons dismantling them will eventually be allowed. This paper describes the development of old buildings in the Braga corridor, an old commercial district in the city centre of Bandung. By applying adaptive reuse method, the style and shape of the shop houses are maintained, while there are some changes and additions in the inside of the shops adjusted to the new functions. Similarly, on the corridor are some changes and additions of the elements that create unique characters of the district, old buildings with modern atmosphere. Since there are many activities can be carried out in Braga corridor, the new appearance of the corridor has attracted many people and become one of the tourist destinations. By exploiting the potency of the city, adaptive reuse can be proposed as a form of technology in development while maintaining old buildings as a cultural heritage. It is expected that the intervention of the local government in the supervision and implementation of the conservation laws can preserve the authenticity and existence of heritage building as cultural heritage.

Keywords: adaptive reuse, sustainable design, historical district.

1 INTRODUCTION

Reduce, reuse and recycle have been hot issues discussed lately. They are related to the decline of the environment quality, decrease of natural resources and damaged environment. Reduce, reuse and recycle could also be implemented to buildings by, for example, building fewer new buildings and optimizing the use of the existing ones, transferring function and reusing the available material.

At present, building function transfer has been generally performed to old buildings. The old buildings in this case were those that were built in the Dutch colonial era. These kinds of old buildings could be found in major cities of Indonesia, and some have been marked as cultural heritage. Not only buildings, but some areas have also been marked as cultural heritage, one of them is the Braga trade area in Bandung city.

The Braga area, also known as the Braga corridor, was constructed in the beginning of the 20th century as an elite shopping area for the Dutch and other expatriates. Thus, the buildings in this area were functioned as shop houses, and still are. This area stretches North to South and is divided into 3 segments, each segment has its own building type and style. The longest segment lies in the middle of the corridor, most of the shop houses in this segment have the Art Deco style. Nowadays, even though some shop houses have experienced some function and physical changes, the remains still illustrate the old area character.

This area used to be one of the prestigious shopping areas. Unfortunately, due to the increase of population, city expansion and growth of economics - which boost the



establishment of new and more modern trade centres - the Braga corridor economics were downgraded. Besides the lack of parking spaces, the relatively high leasing cost has been an obstacle for investors to run businesses in the corridor. As a consequence, some buildings could not be sold or rented, and eventually are left uninhabited. This condition had faded the image of the Braga corridor as an elite shopping area.

Numerous revitalization to attract more visitors had been attempted including developing a mall building, changing the shop functions, but the result was not so great. However, since the change of the city mayor in 2013, the attempts to revitalize the area has shown to have a better result. The revitalization performed by the mayor has not only been on the building functions but also on the road corridor, such as road material change and some additions to the street like benches and unique street lamps. In addition to the physical revitalization, more and more various street public events have been held on the corridor to attract people's interest to come and look at the corridor closer. These events are observed to attract investors as well, so even though some buildings are still uninhabited, many abandoned buildings in the area are refunctioned.

Observing the phenomena in this area, the present study sought an answer to a research question: Could adaptive reuse be one attempt to revitalize a historic area? To answer the question, the qualitative approach and field observation (to some selected adaptive reuse cases based on building type and its adaptation process) were employed. The results showed that an intervention of the local government is needed to supervise the development of the area, and with the adaptive reuse knowledge the existence of the buildings in the cultural heritage can be maintained. The success of the preservation in this area can become an example for other cultural heritages in Bandung city or other cities with similar history and area character.

2 LITERATURE REVIEW

2.1 Adaptive reuse

Adaptive reuse in this paper refers to a process of reusing an old site or building for a purpose other than what it was built or designed for and its approach towards conservation practice [1]. This process is believed to be one of the solutions to revive a historical district and to increase the sense of belonging of the urban community. This process preserves the district potential by maintaining the style and shape of the buildings. It is observed that the Braga corridor has survived for several decades by adapting itself towards modern architecture and different lifestyle. As a result, the corridor has successfully attracted many visitors. However, it still expects more visitors to come. So, what can attract people to the conserved area? According to Plevoets and Cleempoel [2], there are some strategic approaches that can be used: (1) Building within; (2) Building over; (3) Building around; (4) Building alongside; (5) Recycling material; (6) Adapting new functions; (7) Building style. These strategies are believed to lead to sustainability.

2.2 Sustainable design

Adaptive reuse is indeed a part of the principle design process in sustainability. The criterion of sustainability describes three basic human needs: (1) Environment, (2) Social and (3) Economy. While one of the embodiments of sustainable design is in connectivity. Thus, to strengthen the relationship between the sites of the area with the community (as the social aspect), the environment and the economy is by strengthening the value of the local



characteristics [3]. This connectivity could be built by the process of adaptive reuse. As in the case of the Braga corridor, which has strong identity of the place particularly as a historical or a conserved district, this potential will gain the corridor to be preserved for the next generation.

2.3 Historical district

A community needs historic preservation to reserve its historical identity, not simply in order to gain profit from tourism but to give strength and permanence to its local community [4]. Preservation is needed to maintain the identity of the place and the memory of the past. In the Braga area, the local Bandung government has a policy to maintain the buildings and its architectural elements, but it doesn't prohibit adding new elements to the buildings. In Bandung city, Braga is one of the six areas of the districts to preserve as it is a part of Kawasan Pusat Kota (the Downtown Area), according to Perda Bandung No. 19 Tahun 2009 [5]. The Six areas mentioned earlier are: (1) *Kawasan Pusat Kota Bersejarah* (the City Centre of Historical District); (2) *Kawasan Pecinan/ Perdagangan* (the China Town/Trading District); (3) *Kawasan Pertahanan dan Keamanan/ Militer* (the Military District); (4) *Kawasan Etnik Sunda* (the Sundanese Ethnic District); (5) *Kawasan Perumahan Villa dan non-Villa* (the Villa and Non-Villa Residential District); (6) *Kawasan Industri* (the Industrial District).

3 CORRIDOR BRAGA AS CASE STUDY

3.1 Location

The location of Braga Street is in the city centre of Bandung, the northern end of the street intersects with Perintis Kemerdekaan Street and the southern end with Asia Afrika Street as shown in Fig. 1. It is a corridor of Bandung that needs to be preserved and conserved, which until now has proven adaptive through time. Its strategic location and very open accessibility make it threatened as a conservation area in terms of sustainability and its existence. Therefore, it is necessary to get a picture of the characteristics of the sustainable design that can become a consideration in solving the problem and can be a guide strategic plan of its development as a region of historical values.



Figure 1: Braga district. (Source: Edited from Google map 2017.)

3.2 Historical background

Braga Street in Bandung was initially a small road in front of a fairly quiet settlement so called the Road *Culik* (kidnap road) due to its vulnerable condition at that time. This street was also known as *Pedati weg* (cart road). Early in its planning and construction (early 1900), the Braga area was designated as a shopping centre for Europeans residing in the Indies (Indonesia now). Braga Street became extremely busy by that time because many businessmen, especially the Dutch, opened shops, bars and entertainment venues in the area such as *Onderling Belang* shop. In the 1920s there were shops and clothing boutiques that took the model of the city of Paris, France, which was then a mecca of clothing models in the world. As a result, Braga area became the shopping centre and lifestyle of Europeans in the Netherland Indies at that time [6].

Braga, with its own characteristics, is shop house buildings composed two storeys high with a similarity of the façade composition. The buildings have a special typology and character which is the adaptation of the four seasons of the European origin buildings with the footprint in a tropical country of Indonesia. The buildings have Indo-European Architecture Style (*Indo Europeeschen Architectuur Stijl*) which is a combination between the European architectural styles and the local style. The typology of the Indo-European Architecture Style in Braga is a series or twined buildings with a height of two floors with a unity of roof and continuity of the visual elements on the building appearance (Fig. 2).

3.3 Present condition

Along the Braga Street are as many as 94 buildings from the south of the Asia Afrika Street to the north of the Railway Line (Fig. 3). The buildings are mostly located at the segment 2

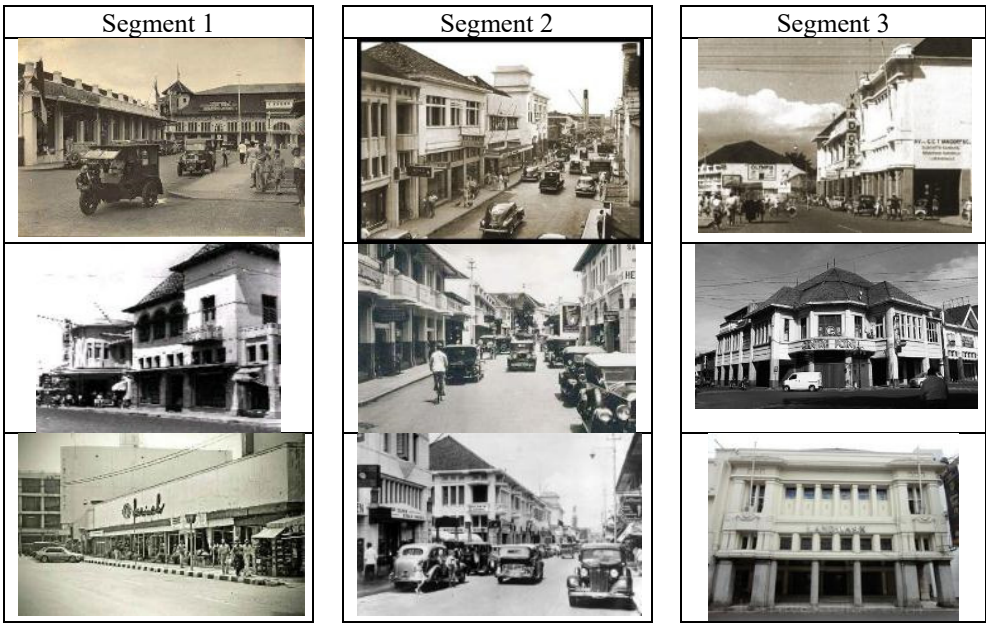


Figure 2: Braga in the past. (Source: David B Soediyono, 2017.)

which has 69 buildings in total. On the other hand, there are only 16 buildings in segment 1 and 9 buildings in segment 3. Buildings in segment 1 and 3 have a different axis than that of in segment 2. This makes segment 2 disparate.

As mentioned earlier, the Braga corridor has the *Indo Europeeshe Architectuur Stijl* (Indo-European Architecture Style) building typology as a Dutch heritage. Thus, the buildings on the foreground are dominated by 2 floor high elevation with shop house typology. In general, there are several building typologies which could be recognized by the front elevation such as: single elevation, double elevations, serial elevations and ensemble elevations.

In addition to the old buildings, currently there are 3 new tower buildings in the area, they are: Ibis Style Braga Hotel in segment 1, Gino Ferruci Hotel and Braga City Walk Hotel and Apartment in segment 2 (Fig. 4). These 3 towers occupy the rear part of the shop house row. The presence of the towers adds building typology that could be divided into 5 types: 1. Single front elevation; 2. Double front elevations; 3. Series front elevations; 4. Ensemble front elevations; 5. Modern front elevation. The Serial, Double and Ensemble front elevations were the initial planning and design idea for the Braga as a European corridor in the Dutch *Indische* [7].



Figure 3: The spread of the buildings on Braga segments. (Source: Edited from Google maps 2017.)



Figure 4: Three new tower buildings.


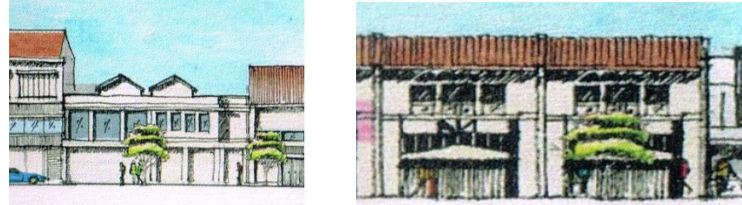
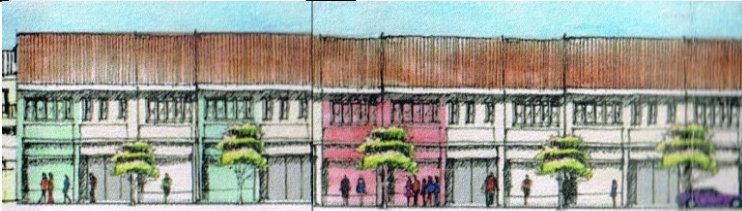


No.	Typology	Figure
1	Single Front Elevation	
2	Double Front Elevation	
3	Series Front Elevation	
4	Ensemble Front Elevation	
5	Modern Front Elevation	

Figure 5: Present's building typologies. (Source: UNPAR Magister Student, 2016.)

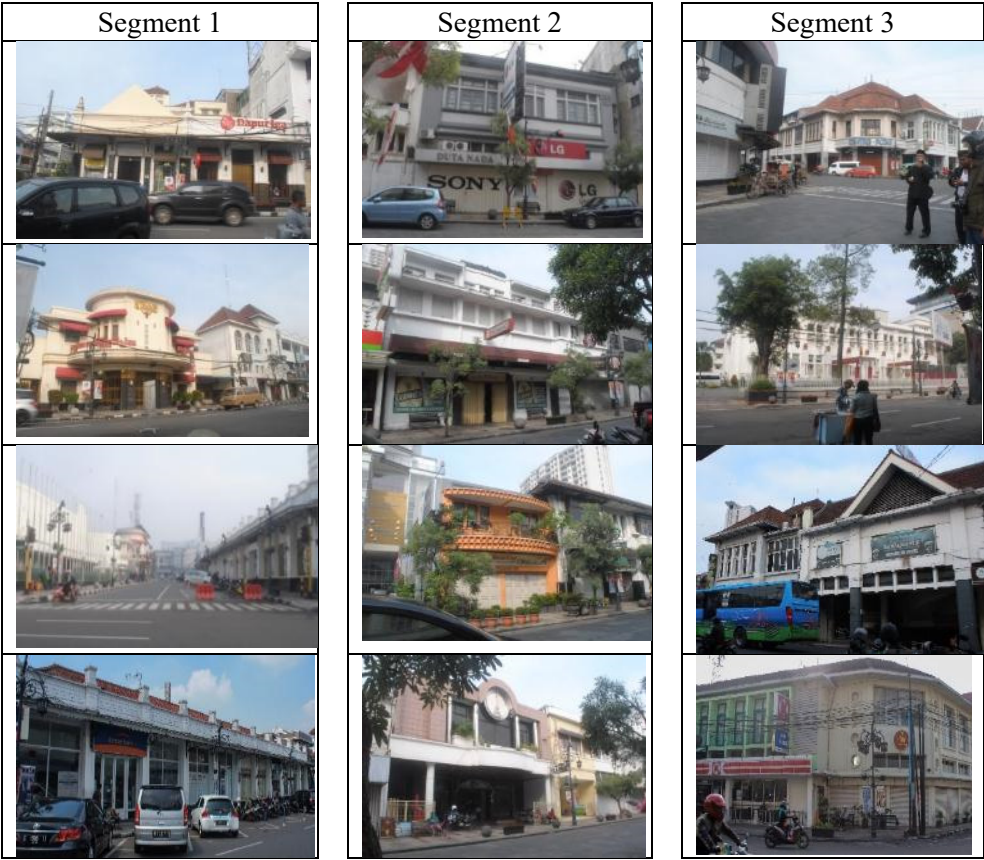


Figure 6: Braga at present condition.

4 ANALYSIS



4.1 The corridor

4.1.1 Street

Table 1: Analysis of activities at Braga.







Activities	Space: street	Captions
Vehicle circulation		<ul style="list-style-type: none">• One-way circulation from south to north• Street material change from asphalt to andesite stone

Table 1: Continued.

Activities	Space: street	Captions
Parking		<ul style="list-style-type: none">One site of the street for a parking lot
Culinary	 (Source : Tribun,2014)	<ul style="list-style-type: none">An event is held once every two weeks on Saturday nights or on special occasions (e.g. Bandung city's anniversary).

4.1.2 Pedestrian

Table 2: Analysis of activities at Braga pedestrian.

Activities	Space: pedestrian	Captions
Sitting		<ul style="list-style-type: none">The sidewalk is dilated by 50cm to a total of 2 metersThe wide of the sidewalk is purposed to accommodate various activities.  <ul style="list-style-type: none">The placement of decoration elements, round stones (bollard), benches, advertising poles, flower pots and decorative lights to beautify the environment 
Waiting		
Selling		
Walking		

4.2 The buildings

This paper only discusses the buildings on segment number 2 considering the specific building style it has, especially on Series type buildings which makes it typical of Braga corridor.

4.2.1 The present condition

Table 3: Analysis of building at present condition.







Present Condition	Captions
Double Front Elevation	
<div></div>	<ul style="list-style-type: none">• Some buildings could be recognized as the initial shape.• Some have experienced physical and function changes• Physical building changes have eliminated the Serial building typologies which is one of the unique characters of Braga corridor.
Series Front Elevation	
<div><p>Series of 3 units</p></div>	<ul style="list-style-type: none">• On the still intact Serial buildings, changes occur in the inside according to the different functions of each unit.

Table 3: Continued.

Present Condition	Captions
 <p data-bbox="236 539 408 566">Series of 6 units</p>  <p data-bbox="232 867 404 894">Series of 8 units</p>	<ul style="list-style-type: none"> • The appointment of buildings and Braga corridor as a cultural heritage, changes to buildings should get permission from the Bandung city Cultural Heritage team.

4.2.2 The case studies

The results from the site observation and case study, it is believed that Braga corridor located in Bandung city centre still does have its own attractiveness, one is the enchantment of the buildings and the old environment. It cannot be denied that the history of Braga, once a well-known shopping centre in *Parijs van Java* still imprints so various revitalization attempts performed by the Local Government. The attempts have indicated to have a positive result, proven by the increasing numbers of investors and the fewer number of the unused old buildings.

Modernization and needs for business spaces, modification to old buildings is inevitable. Change is seen as a adjustment to the new functions, differ from the initial function at the beginning of the Braga environment (at the beginning of the 20th century). Applying adaptive reuse technique, the transformation could be under control so that the existence and authenticity of the cultural heriage buildings could be maintained whilst the demand of investors also could be fulfilled. In the meantime, the presence of 3 new tower buildings, contrast to the old buildings, is rated as complementary facilities in the Braga area as a commercial district.

At this moment, the Conservation Law is enacted so the Local Bandung Government requires all changes to buildings and the cultural heritage environment must have recommendation from the Cultural Heritage Team and the implementation itself is under the supervision of the City Government. This effort seems to have worked out, even though not completely 100%, but the Harmonization as a conserved corridor could still be precieved. The success to revive the Braga area is inseparable to the effort of the Government to liven up open spaces surrounding the area such as Alun-alun (city square plaza), Cikapundung River Side and the City hall garden. These efforts contribute to the increase of the economy

of the surrounding people. Therefore, it could also be concluded that the revitalization of this area has a close relation to the condition of the surrounding area.

Table 4: Analysis of case studies.

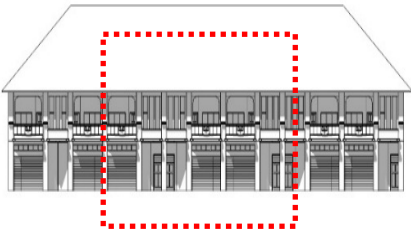


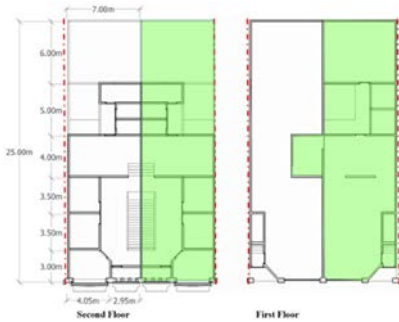
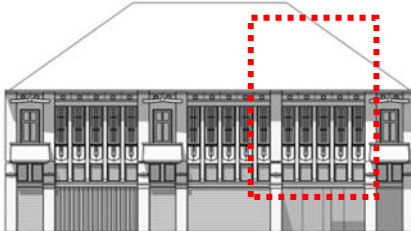

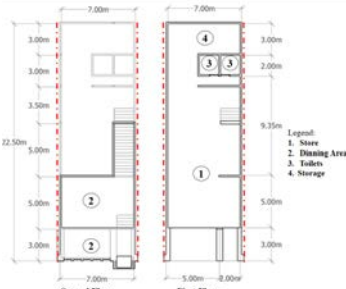
<p>Case 1: One part from Series of 8 units.</p> <p>The uniqueness of this type is that each unit is separated, even the first and the second floor are divided.</p> <p>Every 4 units has one join lobby leading to each unit.</p>	
 	
<p>Previous Condition.</p> <p>The first floor used as a shop house</p> <p>Second floor used as a Bank's office</p>	<p>Present Condition.</p> <p>The first floor used as Sugar Rush Café; The second floor used as an office.</p>
	
<p>Case 2: One part from Series of 3 units of shop houses</p>	
 	

Table 4: Continued.

<p>Previous Condition.</p> <p>It was used as a shop house. The first floor was for the shop and second floor was for the residential use.</p> <p>This unit has been rented several times so the initial condition is no longer recognizable.</p>	
	<p>Present Condition.</p> <p>One unit in the left side is still under construction for a restaurant use</p> <p>The unit in the middle is used as a bar which opens in the afternoon</p> <p>The unit at the right side is used as a mini market “Indomart”.</p>

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REFERENCES

[1] Cantacuzino, S., ReArchitecture: New Building/Old uses, New York, Abbeville Press Publisher, 1989.

[2] Plevoets, B. & Cleempoel, Adaptive reuse as Strategy Towards Conservation of Cultural Heritage; a literature review, In terme, C.B.a.L.B.C. (ed) Structural Studies, Repairs and Maintanance of Heritage Architecture XII, Italy, WIT Press, 2011.

[3] Wiliama, D.E., Sustainable Design, Ecology, Architecture and Planning, John Willey & Sons. Inc, 2007.

[4] Langenbach, R.B., A future from the Past, The Case for Conservaion and Reuse of Old Building in Industrial Communities, Washington.U.S Dept of Housing and Urban Development, 1978.

[5] Peraturan Daerah Bandung No 19 Tahun 2009 Tentang Cagar Budaya.

[6] Kunto, Haryoto, “Wajah Bandoeng Tempoe Doeloe”, Granesia, Bandung, 1985.

[7] Santoni, Transformasi dan Tipologi Bangunan Indoeuropeeschen Architectuur Stijl Kawasan Braga, Bandung”, E-Journal Graduate Unpar Part D-Architecture, 1(2), pp. 2355–4274, 2014.

