

# Bandung City Features Characteristics based on Cultural Geography

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**Abstract-** City features become an important component in the identification of city characters. The character of a city is formed by a long process and involves many forming factors. The character of the city is a differentiator between one city and another. It is leaving a distinct impression for the residents and visitors of the city. Culture is an important aspect that plays a role in forming the image of a city. Urbanization and globalization can fade the identity of the city and eliminate the boundaries of distinguishing characteristics of cities. Bandung is the third major city in Indonesia with a long history and known as a heritage city. In this context, the character and feature of Bandung city in the cultural sphere is identified by applying the principles of cultural geography. The character features of the city analyze with multi-level analysis, describe the forming factors and the challenges faced in the preservation of the city's character features.

**Keywords-** cultural geography, city characteristic, heritage city.

## I. INTRODUCTION

The identity and characters of a city are the results of the representation of natural, cultural, and other human-made components in the city. The phenomenon of globalization and urbanization are things that significantly affect the environment and character of a city. Increasing urbanization directly makes the need for land and resources in the city also increase, resulting in the possibility of changes in land and building functions that have historical value and identity of the city. Ease of access to information and technology makes the boundaries between cities and even countries begin to fade. This condition also allows for many similarities in the development of cities. These conditions can lead to the crisis of identity and character of the city.

The character of the city is flexible and develops following the changes that occurred. In a multicultural and ethnic condition need efforts to manage the identity and character of the city to make it sustainable [1]. City character is determined by some elements, such as the natural, geographical, and artificial environment. Buildings or architectural works are part of the city's identity that can provide continuity, transfer the identity and memory of the city to future generations [2]. The formation of city character is also influenced by physical, cultural, socio-economic, historical, and other forming factors, including the people and their lifestyle.

Culture is something that is owned, shared, accepted, and endowed in society. The features included in culture are those that are spiritual, material, intellectual and emotional that characterize a

social group or community, such as lifestyle, art, traditions and beliefs, and value systems [3]. Culture involves meaning (human attribute to objects and concepts) and practice (the way people perform actions) [4]. The components of culture are values, beliefs, and material cultures, such as creative expressions, clothing, foods, buildings, and occupations [5].

Culture is divided into two main components, namely the material component and non-material culture. Non-material culture is what defines society, which consists of values, beliefs, symbols, and language. Material culture is a culture in the form of physical objects in society. Material and non-material cultures are interrelated with each other in the development of a civilization at various regional scales and become a cultural carrier for the next generation.

Geography is a field of knowledge that studies the distribution of features and objects that exist on the surface of the earth, while cultures that vary geographically due to diverse interactions between people in their geographical areas in various ways [6]. Cultural geography is related to how the distribution of different cultures in the form of material and non-material in various areas of the world or region can be characteristic of the site and make it different from other regions. The concept of cultural geography was focused on landscape, and now also developed to social science [7]. In mapping cultural geography, several things are the focus of attention, among others: the concept of regional culture, cultural diffusion, cultural landscape, cultural ecology, and cultural interaction [8].

Indonesia is an archipelago country that stretches from west to east, consists of more than 17,000 islands with diverse geographical and cultural conditions [9]. Before the Dutch came, Indonesian cities had no cultural concept; that's mean the basis of culture was weak and confusing [10]. It happened because Indonesia has a very long history, starting from the Hindu-Buddhist kingdom, the Islamic empire, until colonialism. These conditions become the forming factors of the identity of civilization in Indonesia. So, the issue of the character of urban features is essential in Indonesia.

This paper aims to understand the forming factors of Bandung city characteristics. By applying the principles of cultural geography and multi-level analysis (macro, meso, and micro) to identify the characteristics of Bandung city, which makes it different from other cities in Indonesia. Also, the purpose is to know the challenges faced in the preservation of the city's characteristics.

## II. MATERIAL AND METHOD

The identification of characteristics and features involves the history of the city, culture, physical condition, and spatial character of the city. The scope of this research is the city center of Bandung. Using study literature to obtain data about Bandung city history and development. Collect some previous-related researches in the scope of Bandung city to support the data obtained. The detailed and in-depth literature study conducted to get the characteristics of the features, forming factors, and identity of Bandung city.

Besides the literature study, the data needed are the map of Bandung city and some documents from the city government and related agencies, for example, the list of material and non-material cultures that exist in Bandung city. The map of heritage buildings distribution also obtained from the Department of Culture and Tourism in Bandung City Government. Field surveys conducted to observe the factual condition of building units that showed on the map. Photographs obtained from field observations are used as materials for research. The short interview also conducted with the local government to get the general and specific introduction about Bandung city's cultural aspect and the efforts to maintain it that has done by the government and communities in Bandung city.

The data obtained analyzed in three scales (macro-meso-micro) to understand Bandung city characteristics comprehensively from a broader scope to detail (unit). Combination of these material and method are capable of providing the comprehensive result of character identification in a city, especially in the cultural aspect.

## III. RESULT AND DISCUSSION

### 3.1 Bandung City

Bandung is the third-largest city in Indonesia, which is located at an altitude of 700 m above sea level in West Java Province. Bandung is surrounded by volcanic mountains that make this city has lower temperature compared to other cities in the tropics <sup>[11]</sup>. 52% of Bandung city is used as a settlement <sup>[12]</sup>. Bandung is one of the activities centers during the Dutch colonialism era. In the formation of Bandung city morphology, the colonialism era played an important role <sup>[13]</sup>. At that time, the northern Bandung area was more developed with much luxurious housing owned by the Dutch colonizers, while in the southern part, the condition was inversely <sup>[14]</sup>.

In brief, important events and developments in the history of the formation of Bandung City can be seen in the following table 1 <sup>[15]</sup>.

Table 1. Important Events and Development of Bandung City History

Period	Explanation
9th century to 16th century	Bandung area and its surroundings are under the authority of the Hindu Kingdoms (Tarumanegara, Kuningan,

	Galuh, and Sunda Pajajaran Kingdoms).
1615 - 1677	The influence of Islam and Islamic culture began to spread in the mountains area of Bandung by the Cirebon Sultanate and then the Kingdom of Mataram.
1677 - 1799	The area of Bandung and its surroundings is controlled by Vereenigde Oostindische Compagnie (VOC) or the Dutch East Indies Company.
19th century	The VOC went bankrupt, and the Bandung area was taken over directly by the Dutch Government.
1905	Bandung's population is 47,500, with details: 2,200 Europeans; 3,800 Chinese, Arabs, and non-Asians.
1906 - 1940	At this time, Bandung became the independent Municipality by implementing a decentralized government structure.

In terms of population, Bandung city is inhabited by several kinds of religions and tribes. Data from the Central Statistics Agency shows that the community of Bandung city is 91.798% Muslim, 5.398% Protestant Christian, 2.228% Catholic, 0.071% Hindu, 0.493% Buddhist, 0.007% Confucian, and the rest are other faiths <sup>[16]</sup>. The majority of tribes who inhabit Bandung city are Sundanese, followed by migrants, namely Javanese, Chinese, Arabic, Indian, and other ethnic groups from outside the region. The diversity of tribes and religions makes Bandung City heterogeneous. Related to spatial aspect in Bandung, the need for space has a significant influence on the transformation of buildings and land-use, when compared with historical, cultural, and religious factors <sup>[17]</sup>. Besides, changes in land ownership also affect changes in the function of the building and land <sup>[18]</sup>.

### 3.2 Cultural Identification of Bandung City

The culture of Bandung City can be identified by classifying various types of culture that exist into two big groups, namely culture that is material and non-material.

The non-material culture that exists and develops in Bandung city <sup>[19]</sup>, among others:

- Oral traditions: hereditary stories, fairy tales, rhymes, folklore, myths, legends, and other forms of oral traditions that are transmitted from generation to generation orally;
- Customs: certain values in the community, such as cooperation, *ngaronda*, *jamasan pusaka*, *marak lauk*, *babarrit* tradition and *hajat sasih*;

- Rite: procedures for carrying out a ceremony or activity which is passed down from generation to generation and containing specific values, such as procedures for the commemoration of death, birth, marriage, and other religious rituals;
- Traditional knowledge: knowledge of methods or procedures for the development of material culture, for example, knowledge of craft making, traditional clothing, traditional medicine methods, special foods and drinks, and traditional fabrics;
- Art: the results of human creativity and activities that have a beauty value and are closely related to certain ceremonies or rituals. The types of arts that developed in Bandung city, among others: *karawita* art (sound art that is produced from vocals and instrumental), dance, theater, visual arts, and so on;
- Languages: Sundanese, Sundanese youth language, Indonesian, and English;
- Folk games: usually played in spare time, can be played with or without equipment; and
- Traditional sports: *pencah silat*, *hadang*, stilt, sack races, *debus*, Sundanese *jati* fitness, and so on.

The material culture that exists and develops in Bandung city, among others:

- Manuscript: cultural heritage in the form of ancient texts that record the history of Bandung city and neatly stored in museums in Bandung.
- Traditional techniques: efforts to solve the problem of the lack of equipment in agriculture, so traditional technologies are made to support the sector. The results of conventional technology used in the city of Bandung are hoe, ax, *baliung*, *patik*, rake, and so on.
- Cultural heritage: cultural heritage in the form of physical objects in Bandung city is divided into several categories, namely: cultural heritage buildings, cultural heritage sites, cultural heritage structures, and cultural heritage areas.

### 3.3 Spatial Distribution of Bandung Culture

The non-material culture of Bandung City is spread evenly throughout the Bandung City area and is still being preserved by the local government and its people. One of the efforts made by the local government is to provide one working day in one week to use traditional clothing and interact with each other using local languages, and this is applied in all government agencies in the working area of Bandung city.

The spatial distribution of culture in Bandung City that is included in material cultures can be analyzed based on three levels, namely macro, meso, and micro levels.

#### 3.3.1 Macro-level Analysis:

At the macro level, Bandung city is thoroughly analyzed to see how the overall cultural distribution is. In Bandung Mayor Regulation No.921 in 2010, Bandung City is divided into six major regions, namely region I (Historic City Center Area), Region II (Chinatown/Trade Area), Region III (Defense Area and Security/Military), Region IV (*Sunda* Ethnic Area), Region V (Villa and Non-Villa Residential Area), and Region VI (Industrial Estate). Each region that divides the city of Bandung into six parts has its characteristics, which can be seen from the type of building,

environmental conditions, and community activities in each region. The division six areas cannot be separated from the history of the past when the new city of Bandung was established.

Region I cover the Alun-Alun area, Asia-Africa street, Bandung City Government Office, Braga street, *Pakuan* Building, and Railway Bureau Company. In this region, many historical heritage buildings, the center of community activities, and tourist attractions. In Region II, which includes the Temple area and *Pasar Baru* (New Market), is a trading center in Bandung city, where the site is dominated by shophouses, the majority of which are ethnically Chinese, with strong buying and selling activities and Confucian religious activities at the Temple. There is no limit between Chinese and native residents in this region because they are used to living together <sup>[20]</sup>. Region III is a defense and security/military zone, which during the Dutch occupation period, was also a vital area with the same function. Many historical heritage buildings seem sturdy and strong with sharp building angles. Around this area, there is also a broad field that is used as a place for military training and other social activities. Region IV is often referred to as the Sundanese ethnic area with a densely populated area. *Tegallega* Square is included in this area, which is the center of Bandung's community activities. Area V (Villa and Non-Villa Housing) is a residential area which is dominated by typical buildings of valuable cultural heritage, some of them were works of famous architects during the Dutch occupation. This area is located in the northern part of Bandung city that is highland making it very comfortable as a residential area. This region was the most preferred area for Europeans because of the lower temperature than other places. The last site is Region VI, which is an industrial area that is dominated by buildings that function as support in the production process as well as the location for production goods sales.

#### 3.3.2 Meso-level Analysis:

At the intermediate level (meso), the cultural heritage of Bandung city is analyzed in a more specific scope that is quite representative of some of the Regions mentioned at the macro level. The meso level analysis was chosen in the Bandung downtown area, which became the concentration of community activities. Several cultural heritage buildings have been recorded by the local government, which is then mapped on the map of the distribution of cultural heritage buildings in Bandung city in Figure 2.

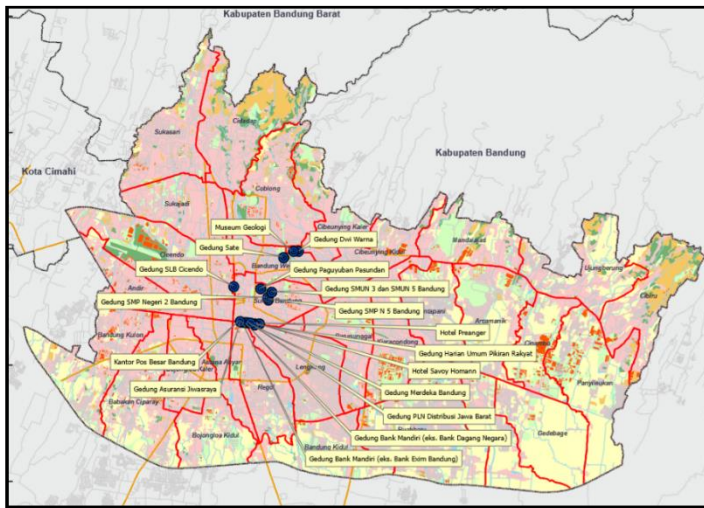


Figure 2. Distribution of Cultural Heritage Building of Bandung City in 2016


(Source: Bandung City Culture and Tourism Office, 2016)





Based on the map of the distribution of Bandung's cultural heritage buildings in 2016, described 17 units of cultural heritage buildings had been recorded that are scattered in several areas of the cultural heritage of the city of Bandung. From the analysis, it was found that the cultural heritage buildings that were successfully mapped were in Regions I, III, and V.

### 3.3.3 Micro-level Analysis:

The micro-level analysis chosen in this study was 17 units of cultural heritage buildings scattered in Bandung city center according to the map of the distribution of cultural heritage buildings in 2016 from the Department of Culture and Tourism of Bandung City. Analysis at the unit level of this cultural heritage building aims to see how cultural products made by humans are influenced by the colonial architectural style or even combination with the traditional style that developed in a certain period. The analysis explains each building's name, built year, and architectural style. Besides, the explanation also describes building appearance, location, and features.

Table 2. Building Unit Analysis

No	Picture	Explanation
<b>Region I</b>		
1		<p>Name: <i>Cicendo SLB</i> Building (built-in 1930)</p> <p>Function: School for disability (deaf)</p> <p>Style: Art Deco</p>

		Description: Buildings with concrete walls and high roof to facilitate air circulation, and wall colors that tend to be soft with black natural stone ornament on the exterior.
2		<p>Name: Hotel <i>Preanger</i> (built-in 1929)</p> <p>Function: Hotel</p> <p>Style: Art Deco</p> <p>Description: Concrete as a building material, flat roof, streamlines domination on the exterior, with unique ornaments on the outer pillars.</p>
3		<p>Name: <i>Pikiran Rakyat</i> Daily Building (built-in 1920)</p> <p>Function: Daily Newspaper Office</p> <p>Style: Neo Classic</p> <p>Description: Shield roof (helmet roof), flat and symmetrical facade with neat, elegant lines, and the color of the building is predominantly white with beige and black accents.</p>
4		<p>Name: <i>Savoy Homann</i> Hotel (built-in 1880)</p> <p>Function: Hotel</p> <p>Style: Art Deco</p> <p>Description: Facing the main street. The streamlined exterior with a curved section on one side of the building, a flat roof, and a single tower with a color that matches the color of the main building.</p>
5		<p>Name: <i>Merdeka</i> Building Bandung (built-in 1926)</p> <p>Function: Museum</p> <p>Style: Art Deco</p> <p>Description: Flat roofed, precise geometric shapes building facades. Square and rectangular windows, smooth building surface combined with gold-colored ornaments on the front (central pillar).</p>

6		<p>Name: PLN West Java Distribution Building (built in the early 20th century and inaugurated in 1939)</p> <p>Function: Office of the State Electricity Company</p> <p>Style: Modern Functional (Art Deco Geometric)</p> <p>Description: A multi-story building. Stacked roof, rectangular windows shape, light gray building color, with a circular ornament on the top of the building.</p>
7		<p>Name: Bank <i>Mandiri</i> Building (ex. State Trading Bank) (built-in 1915)</p> <p>Function: Bank Building</p> <p>Style: Neo-Classical (Art Deco Ornamental)</p> <p>Description: Located at the crossroads of the main, has a single big clock tower in the corner with an entrance, triangle roof and frame ornament on the outside of the window, and white as the dominant color of the building.</p>
8		<p>Name: Bank <i>Mandiri</i> Building (ex. Bandung Import-Export Bank) (built-in 1912)</p> <p>Function: Bank Building</p> <p>Style: <i>Indische</i> Empire Architecture / Neo-Classical / Romanticism</p> <p>Description: This building is a typical Greco-Roman royal building style that Equipped with a pair of giant pillars that united into the walls of the building. It has thick walls with high ceilings, equipped with large iron-lined windows and vents, and the color of the building is white with gray accents.</p>
9		<p>Name: Bandung Great Post Office (built-in 1928)</p> <p>Function: Post Office</p> <p>Style: Modern Functional (Art Deco Geometric)</p> <p>Description: It has an expansive front yard, rectangular roof with two small towers on the corner, equipped with ornament lines on the exterior. The building is predominantly white with the combinations of orange as post office typical color.</p>
10		<p>Name: <i>Jiwasraya</i> Insurance Building (built-in 1914)</p> <p>Function: Insurance Office Building</p> <p>Style: Neo-Classical (Art Deco Ornamental)</p> <p>Description: A multi-story building with a symmetrical façade appearance. Concrete as a building material, equipped with several pillars that united into the walls of the building, many windows, and vents on the walls, high roof, distinctive ornaments on the edges of windows and doors. Beige is the dominant color in this building.</p>
Region III		
11		<p>Name: <i>Paguyuban Pasundan</i> Building (built-in 1913)</p> <p>Function: Sundanese Cultural Organization Building</p> <p>Style: Western Traditional</p> <p>Description: Classic-style building, equipped with a pair of lamp decorations on the left and right side of the entrance, dominated by white with a combination of green at the top of the curve vents. This building seems luxurious, equipped with stairs leading to the door, making the building's position higher than its surroundings.</p>

12		<p>Name: SMUN 3 and 5 Bandung Building (built-in 1953)</p> <p>Function: Senior High School</p> <p>Style: Modern Tropic</p> <p>Description: Kind of tropical building with high walls, a pyramid roof, with tall rectangular windows on the wall, has a large yard in the front, and building color is beige.</p>
13		<p>Name: SMPN 5 Bandung Building (built-in 1920)</p> <p>Function: Junior High School</p> <p>Style: <i>Indisch</i> Style</p> <p>Description: Has a pair of towers on the entrance sides, piled roof, and multiple facades aiming to create a cool building. Beige is the dominant color of the building.</p>
14		<p>Name: SMPN 2 Bandung Building (built-in 1948)</p> <p>Function: Junior High School</p> <p>Style: <i>Indisch</i> Style</p> <p>Description: The color of the building is dominated by light green. The building walls and supporting poles are separated by long hallways, have many windows, and plenty of air ventilation, with high and piled up-roof.</p>
Region V		
15		<p>Name: Geology Museum (built-in 1928)</p> <p>Function: Geological Museum</p> <p>Style: Art Deco</p> <p>Description: Flat wall surfaces and sharp edges, showing precise geometric shapes with rectangular windows. The building is predominantly white, with window tints typical of wood.</p>
16		<p>Name: <i>Gedung Sate</i> (built-in 1920)</p> <p>Function: Office of the Governor of West Java Province</p> <p>Style: Modern Dutch Indies, New Indies Style</p> <p>Description: This building is a harmonious blend of European, India, Chinese, Islamic, and Sundanese style traditional buildings <sup>[21]</sup>. The walls of the building are dominated by white, with typical Hindu ornaments, with <i>Meru</i> roof (multi-level roof) like Pagoda. The building has pillars connected by arches at the top as characteristic of Roman style.</p>
17		<p>Name: <i>Dwi Warna</i> Building (built-in 1940)</p> <p>Function: Regional Office of the Directorate General of Treasury, West Java Province</p> <p>Style: Modern Colonial</p> <p>Description: Has a pyramid roof, the position of the building is more backward than other buildings (large front yard, has high walls and a terraced roof, equipped with round pillars on the facade. <i>Dwi Warna</i> Building is dominated by a soft beige color.</p>

From the microanalysis, it can be seen that the architecture works in Bandung adheres to the style of colonial architecture because most of it is the work of architects from the Netherlands <sup>[22]</sup>. Architectural buildings in Bandung are the result of the acculturation of western and local cultures that pay attention to the aesthetics and comfort of its users <sup>[23]</sup>. As one of the cities in the tropics, various adaptation efforts have been carried out in the design of architectural buildings in Bandung, for example, by making walls and roofs higher and make many windows/air ventilation to facilitate air circulation and increase comfort in buildings. Besides, make layered facades (shading façade) as solar heat buffer and beautifying buildings <sup>[24]</sup>.

These 17 buildings that analyzed in the micro-scale can be representative of Bandung city characteristic in the form of material culture, because of its strategic location, unique features, and long history behind them. But as a heritage city with various kinds of buildings, consideration of extended sample units in micro-scale analysis can be used in further research, which can cover different types of constructions, locations, and functions.

It is essential to highlight that non-material cultures in Bandung city mostly influence by the traditional or local tribes that were living in the area of Bandung city. The existence and maintenance of non-material cultures are supported by local government and communities in their daily activities. Interestingly, in the aspect of material culture, especially heritage buildings, the influence of traditional and local tribes precisely not as strong as in non-material cultures. It proves in the colonial-style that implemented in observed heritage buildings. Another interesting finding is the colonial-style buildings also take the local condition in consideration of building construction. It can provide a style that can not be said as traditional or colonial. The combination style becomes the fundamental characteristic of Bandung city.

Efforts that have been made by the government and the people of Bandung city to maintain and preserve their culture is to make regulations relating to culture and cultural preservation. Besides, carefully inventorying all forms of culture in Bandung city, support the community to carry out activities that help cultural conservation. Re-function historical buildings that are scattered in the area of Bandung city to maintain, restore, and revitalize historic buildings without removing or changing their original shape. But on the other side, functional changing of buildings and land without regard to the initial conditions that still often occur in Bandung city can also eliminate the historical and cultural values contained. Also, the number of cultural heritage buildings that are not entirely recorded and mapped results in an inventory effort, not going well enough.

#### IV. CONCLUSION

The city and its identity can leave an impression on residents and city visitors. In this paper, we presented Bandung city characteristics by applying cultural geography principles. Bandung as heritage city is the result of acculturation of diverse cultures and backgrounds harmoniously integrated that shape all forms of cultural products, from customs to architectural buildings. The long history of kingdoms, colonialization era, location, natural and social condition become the forming factors of Bandung city characteristics.

The results of this investigation show that Bandung city characteristic in cultural aspect is divided to non-material and material culture. Non-material culture spread in the city evenly. Non-material cultures are used and maintained by residents in their daily life. On the other hand, material culture as the physical objects analyzed in macro-meso-micro scales. In this context, material culture focuses more on heritage buildings in Bandung city. In macroscale, Bandung city is divided into six regions. In mesoscale, the scope is narrowed by three areas; then, in microscale, each building unit described. The significant finding shows the character that becomes a feature of Bandung city is the combination of colonial style that adapts to the surrounding environment and location. It shows the strong influence of the colonialization era in Bandung city identity.

Various types of culture can develop well in urban areas supported by the local government and society. It is expected in the future; all the cultural heritage in Bandung city is not only recorded but also can be mapped in detail to facilitate the promotion of tourism. Besides, the application of non-material culture in residents daily has to be more encouraged to face the modernization challenge. The rapid development of the city need considers the existence of cultural potentials. Also, the preservation of heritage buildings must maintain originality and historical value. This research has the potential for applications in city identity identification and assessment. In future work, the extensive and various samples can be used; it also can be applied in another study area.

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