

Bukittinggi City Space Transformation Based on Tourism Development

Rinaldi Mirsa¹, Muhammad², Fidyati¹, and Gustika Rahayu¹

¹ Department of Architecture, Faculty of Engineering, Universitas Malikussaleh, Lancang Garam, Lhokseumawe 24355, Indonesia

² Department of Chemistry, Faculty of Engineering, Universitas Malikussaleh, Bukit Indah, Kuta Makmur, North Aceh 24355, Indonesia

*Corresponding author: rinaldi@unimal.ac.id

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Abstract

Bukittinggi City is a city in West Sumatra Province that is one of the popular tourist destinations for the public and tourists. The existence of tourist objects around the city center greatly affects the structure of urban space, in the use of space itself, it is very visible from the distribution of tourist facilities locations that spread around tourist objects that can attract hospitality and trade activities that spread to the downtown area in Bukittinggi. This study aims to determine how the spatial transformation of Bukittinggi City is based on tourism development from 1984 to 2021 and the factors that influence the development of the space. The method used in this research is qualitative. This study found that the City of Bukittinggi when viewed from the area of development of the City of Bukittinggi reflects a concentric pattern, this can be seen from the location of the city of Ngarai Sianok which limits the development of the city to the west and north. Based on the performance agreement letter from the Public Works and Spatial Planning Office of Bukittinggi City in 2020, the percentage of suitability for spatial planning and utilization is 37.50%. The building mass in a developing tourist attraction has a heterogeneous textured area texture, where the shape of the mass and space configuration have different sizes, shapes, and densities. The high density of building mass only occurs in the core area of the city with a percentage above 80%. The Bukittinggi City Regional Spatial Plan article 28 paragraph 2 explains that there are 5 types of road networks, namely primary arterial roads, secondary arteries, secondary collectors, local roads, and freeways. The road network in Bukittinggi City is growing rapidly towards the city center and in several residential areas. The distribution of tourist facilities is generally located in the city center and a small part is spread along Jalan Soekarno Hatta and Jalan Sudirman. The distribution of tourist objects has formed a concentric space in the city's core area with local and regional service scales.

Keywords: Transformation, City-forming Elements, tourism, tourist attraction, Bukittinggi City

1. Introduction

Cities with experienced planners often draw on the responses that they have always pursued innovative projects [1]. The transformation is the process of total displacement from a certain form into a new form which can be interpreted as the final stage of the change process, as presented by other [2]. Spatial transformation is a new method used to develop social, morphological, and, in some cases, economic impacts. generated by urban development projects as proposed by Builes-Velez (2021) [3]. The changes are influenced by the new system resulting in sustainable urban transformation, and social, economic, and environmental factors [4].

The creation of the urban spatial structure occurs through various processes in a certain period. A city experiences growth and development that produces a form of the city that we see today. Geographical factors are a marker of the establishment of a city to create the physical form, function, and character of the city [5]. There is a certain potential that will further improve the image of the city. Small towns far from the city center will experience slower development compared to cities close to urban centers. Tourism is seen as having a very important role in the growth and development of the city [5,6].

Bukittinggi City is a city in West Sumatra Province that is one of the popular tourist destinations for the public and tourists. The City of Bukittinggi was inaugurated as a City of Tourism on March 11, 1984. The Government of the City of Bukittinggi together with agencies or the local community has built facilities and infrastructure, both supporting facilities and other facilities for the development of tourist attractions in the City of Bukittinggi [7]. As a tourist area, this area has many tourist objects with natural and cultural beauty. The city of Bukittinggi is called the "Tri Arga City", because it is surrounded by three mountains, namely Mount Merapi, Singgalang, and Sago which seem to be the

pillars to strengthen the City of Bukittinggi. In addition, the City of Bukittinggi is also equipped with relics of natural and historical tourism such as the Japanese Hole, Gadang Clock, and others [7].

The development of the tourism sector in Bukittinggi is very rapid because of its very strategic location, making this city a center for trade, industry, services, and handicrafts [8]. In addition, Bukittinggi has another potential in the form of stunning natural conditions, very cool air, and various historical heritage sites. This strategic position makes the City of Bukittinggi a tourist visit area in West Sumatra with the tourism sector being its flagship.

Based on data from the Central Statistics Agency (BPS) of Bukittinggi City, the number of tourists has increased from year to year, both visits from foreign, domestic, and foreign tourists. The tourism object that develops in the City of Bukittinggi is very influential on economic growth and regional growth. The existence of tourist objects around the city center greatly affects the structure of the Bukittinggi city space [7].

The use of Bukittinggi city space is very visible from the distribution of tourist facilities locations around tourist attractions so that they can attract hospitality and trade activities that spread to the downtown area in Bukittinggi. Research on spatial transformation in the City of Bukittinggi was carried out to see the process of developing the city structure from the beginning of tourism to the present. This thesis was proposed by the researcher because there is no research on the transformation of urban space in Bukittinggi related to the development of tourism [8].

Other studies have conducted related to the pattern and structure and their relation to the spatial developments on the city [9,10]. It was concluded that those aspects affect the tourism development. This study aims to explore the pattern and structure of spatial development of Bukittinggi city on its tourism facilities.

2. Materials and Methods

The method used in this study is a qualitative approach, where this research is observing and understanding the interactions that occur in the surrounding environment, as presented by others [11,12]. The qualitative research methods produce data in the form of written words from the observed behavior and traits [12]. In this study, all data in the field will be described in detail to make it easier for researchers and readers to find out the problems in this research. Referring to other results, the descriptive method aims to describe, research, and explain an object. In this study, some facts are observed compared to answer the causes and effects of the object to be studied [13].

Qualitative research is research that is used to examine the condition of natural objects. In this study, we divided into 4 periods, namely:

1. Period I (1984), where tourism in Bukittinggi was just inaugurated.

2. Period II (1994), where tourism in Bukittinggi was just established because previously tourism in the City of Bukittinggi was a branch of the Tourism Office of the Province of West Sumatra.

3. Period III (2003), where the condition of the economy in Indonesia, especially in Bukittinggi, began to stabilize because Indonesia experienced a monetary crisis in 1998 that caused a decrease in the number of tourists visiting Bukittinggi.

4. Period IV (2021), which is a period where many tourist objects have developed and the Bukittinggi City government will fix and build new tourist objects by implementing health protocols and increasing the attractiveness of tourist objects.

The purposive sampling technique is a sample selection technique based on research objectives and observations made in the field which consists of 12 developing tourist objects, so the sample of this research is 12 tourist objects. In this case, the researcher looks for complete data and sources that are directly

related to the object to be studied, including direct interviews, observation, and direct search for documents and data about tourist objects in Bukittinggi City. The descriptive research method contains a systematic and accurate description of the facts that are directly related to the problem to be studied, as on Table 1.

Table 1. Variables of the study

Variable	Sub Variable	Parameter
1. Spatial arrangement.	Transformation:	Sights.
	1. Addition 2. Deduction	
2. Building Mass	Transformation:	Sights.
	1. Addition 2. Deduction 3. displacement	
	3. Street/linkage	
3. Street/linkage	Transformation:	Sights.
	1. Addition 2. Deduction 3. displacement	

Source: [8,14].

Data collection techniques was using the methods of observation, interviews, and document analysis as follow:

1. Observation. Observation directly to the object of research to look directly at the object of research to be studied. In this study, the researchers conducted interviews with the Bukittinggi Culture and Tourism Office, the Kinantan Cultural Wildlife Park Management Staff, the Head of the Bukittinggi City Public Works Division, visitors to tourist attractions, and the community around the location of the tourist attraction.
2. Interview. Conducting the interview with respondents or interviewees to obtain in-depth information.
3. Documentation. Documentation in the form of photos taken by taking pictures of the object of research using a mobile phone camera taken during the field observation process.

3. Results and Discussion

In this study, we have conducted some interviews with the Bukittinggi Culture and Tourism Office, the Management Staff of the Kinantan Cultural Wildlife Park, the Head of the Bukittinggi City Public Works Division, visitors to tourist attractions, and the community around the location of the tourist attraction, as in the following information.

3.1 Spatial Planning

Spatial planning determines land requirements through the provisions stipulated in the Spatial Planning Law /SPA/ and the Regional Development Law /RDA [5]. The implementation of the embodiment of spatial planning is very visible in the accuracy of the policy that has been running very effectively, the government's involvement in the implementation of spatial planning has been very good because it is carried out following the provisions that have been regulated in the spatial plan of the City of Bukittinggi.

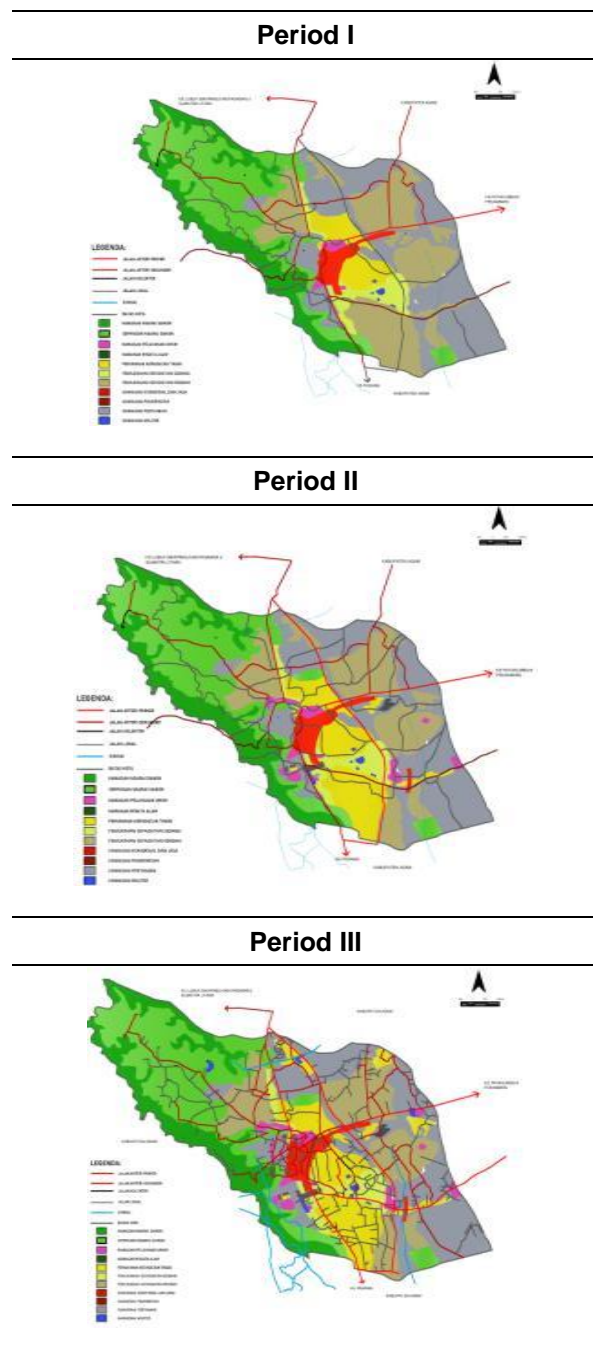
Deficiencies in planning and design can change the socio-spatial fabric, alter traditional cultural paths, and create unusable urban spaces so which raises big questions about how the space responds to people's wants and needs [15]. A planning is understood as a process of change into spatial (urban) transformation to secure controlled change [12]. Spatial planning is understood as a form of policy adaptation, belly land use and development have a significant impact on city vulnerability [9].

A particular urban space will tend to host informal activities determined by several factors that are social, economic, or environmental, depending on the context, the city, and the users themselves [16]. The implementation of the embodiment of spatial planning is very visible in the accuracy of the policy that has been running very effectively, the role and involvement of the government in the implementation of spatial planning is very good because it is carried out following the provisions that have been regulated in the

spatial plan for the City of Bukittinggi [8].

However, at this time, community involvement is still very lacking, there are still some people who have not obeyed the existing regulations. The following is a pattern of spatial planning transformation in Bukittinggi City, as on Table 2.

Table 2. Transformation of spatial arrangement



Period IV



The spatial plan for the City of Bukittinggi is a form of program to advance the City of Bukittinggi to realize the City of Bukittinggi as a tourist city with the largest wholesale trade center in West Sumatra.

3.2 Building Mass

The speed of development of new urban areas has an impact on changes in spatial planning and land use, as presented by others [17]. In general, the shape of the old building mass with the new building does not dominate each other, due to the shape and materials used. The gradual reconstruction will give rise to taller buildings. Economic transformation, and the increase in land prices is the most critical trigger for the renewal factor [15]. When viewed from the pattern of building mass arrangement applying the form of cluster mass where there is a grouping of building masses by developing tourist objects.

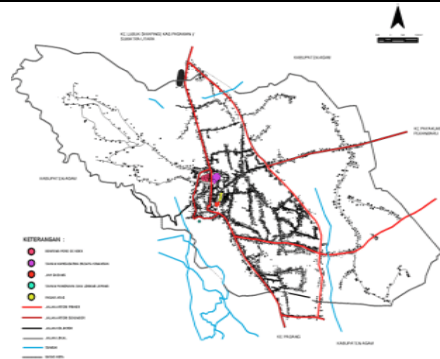
Quantitatively, the existence of buildings in the form of buildings or settlements in the city is still not balanced with an adequate percentage of public space. In the first period, namely 1984, the mass of buildings in the City of Bukittinggi only spread around the city center and followed the direction of the road network. Several locations along the outskirts of the areas prone to natural disasters, especially landslides [18].

The currently developing residential area is in the suburbs. The following is a pattern of

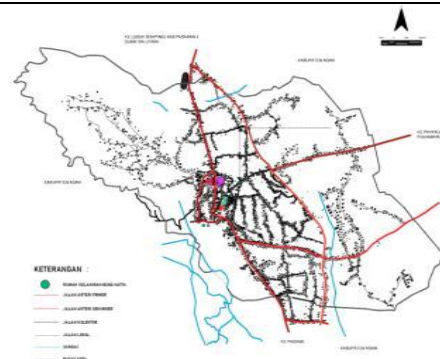
building mass transformation in Bukittinggi City, as on Table 3.

Table 3. Transformation of building mass

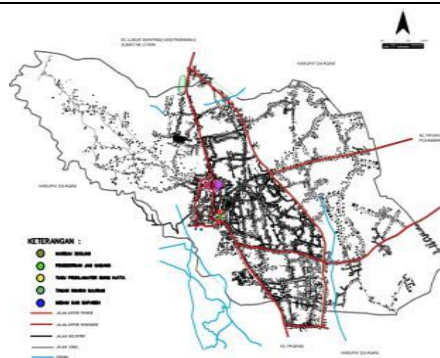
Period I



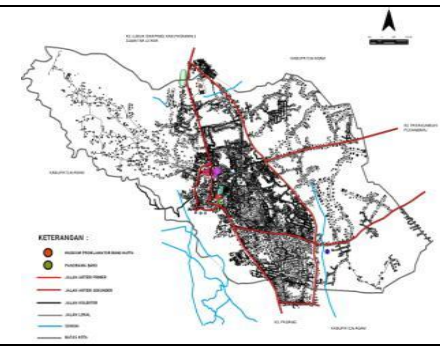
Period II



Period III



Period IV



The layout of the building mass by the pattern of activity and circulation paths that occur around it. The building mass in a developing tourist attraction has a heterogeneous textured area texture, where the shape of the mass and space configuration have different sizes, shapes, and densities. For high-density building mass only occurs in the core area of the city with a percentage density above 70%, as also mentioned elsewhere [19].

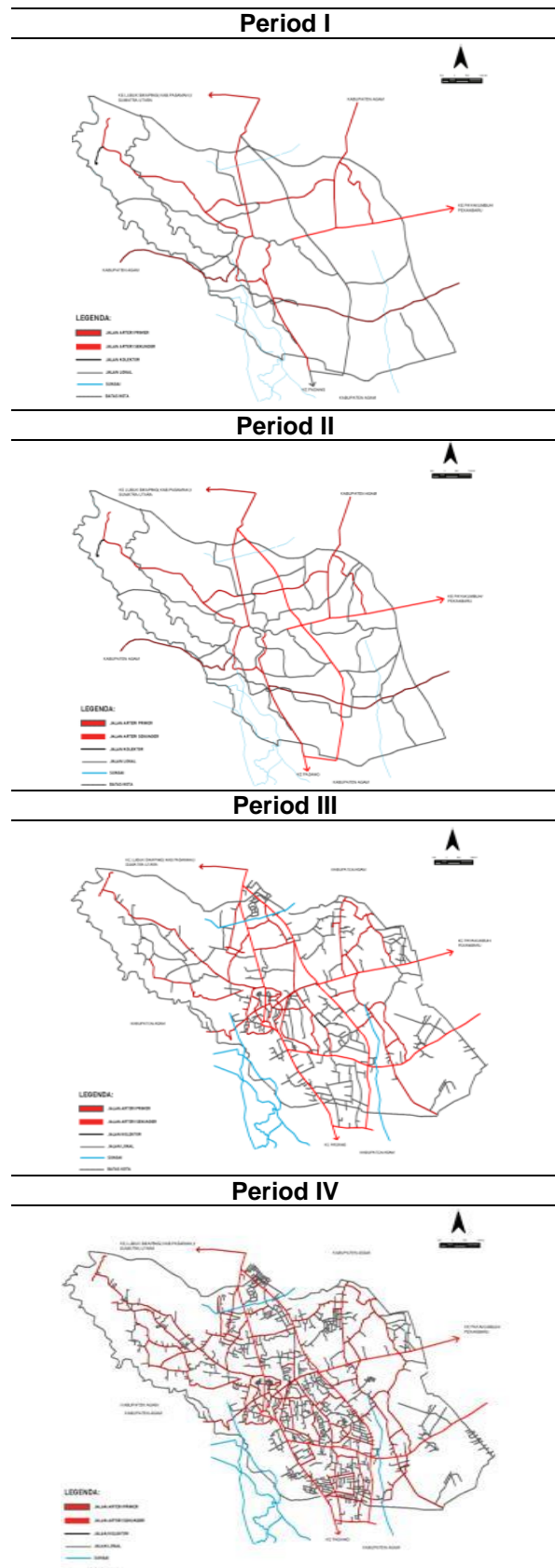
3.3 Linkage Road

The road network is considered one of the keys to the regional development of a region. The development of the road transport system has a significant relationship between the level of connectivity of the road transport system and the development of the network in the region. The Bukittinggi City Regional Spatial Plan article 28 paragraph 2 explains that there are 5 types of road networks, namely primary arterial roads, secondary arteries, secondary collectors, local roads, and freeways [9].

The road network in Bukittinggi City is growing rapidly towards the city center and in several residential areas. The city of Bukittinggi has a major road/artery. There are 3 major roads, namely Jalan Sudirman, Jalan Jenderal Sudirman, and Jalan Veteran. These roads connect Bukittinggi with the surrounding cities. These three roads meet on the ring road in the city center. This main road is also the main road in the city. This main road forks again.

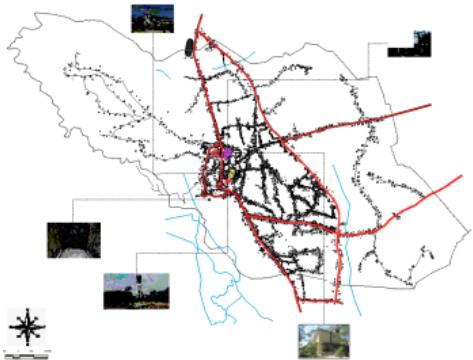
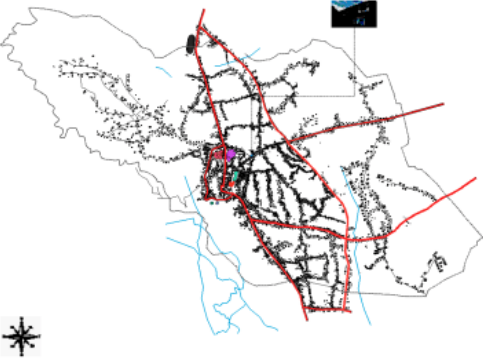
These branches make more branches, the majority of which are in the form of culdesacs. However, on the outskirts of the city, the shape of the road in the form of a grid has begun to appear. From the physical form seen, the shape of the road pattern is more directed to an irregular system pattern, namely irregular. The following is a picture of the Bukittinggi City road pattern, as presented in the table 4.

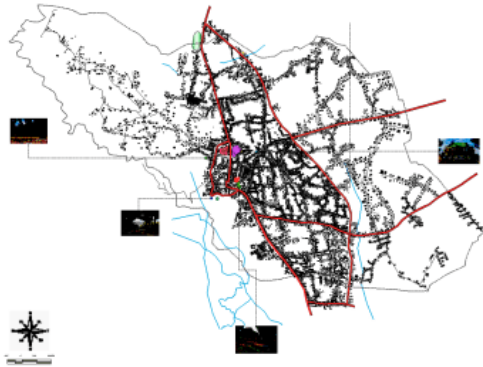
Table 4. Road transformation




The distribution of tourist facilities is generally in the city center and a small portion is spread along Jalan Soekarno Hatta and Jalan Sudirman. The distribution of tourist objects has formed a concentric space in the city's core area with local and regional service scales. Access is a very important component of tourism. The road network has connections between tourist attractions and other accommodation centers. From the results of the study, generally, tourist attractions in Bukittinggi City have excesses that are easily reached by tourists, as on table 5.

Table 5. Bukittinggi city space development pattern based on tourism development

Period I

<p>Description</p> <p>Tourist attractions that developed in the period I are Pasar Atas, Fort Ford De Kock, Lobang Japan, Jam Gadang, and Kinantan Cultural Wildlife Park.</p>
Period II

<p>Description</p> <p>Tourist attractions that developed in the second period are Hatta Birth House.</p>

Period III

<p>Description</p> <p>Tourist attractions that developed in the third period are Hatta Monument Park, Zoology Museum, Medan Nan Bapaneh, and Maaram Canyon Park.</p>

Period IV

<p>Description</p> <p>Tourist attractions that developed in the IV period are Taman Panorama Baru and Hatta Proklamator Library.</p>

Tourism has become a very influential factor in the development of the City Bukittinggi. The emergence of a new tourist attraction will be the main attraction for people to live there. This situation will cause transformation in the urban space or a where the object appears. Several factors influence changes in the spatial structure Bukittinggi City, especially with the development of tourism, namely spatial planning, building mass, and roads/linkages, also concluded by others [19,20].

4. Conclusion

The most transformed tourist attraction in the spatial planning section is Bung Hatta's proclaimer library, because the spatial planning section itself is an unorganized vacant land by the city's spatial planning rules. In the regional spatial plan, article 22 paragraph 2 letter a Bung Hatta Proclaimer's library is a new development area that functions as a city development to the north. In 2021, this area will develop as a city development area to the north which is starting to be filled with residential buildings and government buildings. The tourist attraction that most transforms the mass of the building is the jam Gadang area. At the beginning of the development of this area, there were many old buildings such as the Bukittinggi City Tourism Market building, stalls along the Janjang warehouse road, there were Janjang 40, Upper Market, and several other tourist facilities. Along with the development of this area, tourism facilities have developed, such as hotels located in the southwest part of the Jam Gadang area, as well as the revitalization of the area and the jam Gadang area. Meanwhile, the tourist objects that have been most transformed on the road are the Jam Gadang area, Pasar Atas, Kinantan Cultural Wildlife Park, Forde Kock Fort, Zoological Museum, and the Bung Hatta Proclaimer Library Area.

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