



## Riverine Culture in Urban Context: Spatial ethnographic of urban floating kampung in Tumok Manggis, Sambas City, West Kalimantan

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### Abstract

Waterfront might be conceived as an entry to places where urbanity evolves. The physical process arises from the socio-political and economic development of its society. It entails a complex social and ecological processes constantly occur and how they interfere with each other. This paper analyses the ethnography of place in Tumok, a traditional floating kampung in Sambas, in the perspective of socio-ecology. This study is in an initial part of an ongoing Ph.D research on the urban political ecology of river settlements. Up to this stage, research findings have shown that becoming such a part of the past riverine culture in the context of present land-oriented urban culture has raised a new insight about how to view the urban waterfront.

*Keywords: riverine culture; socio-ecological process; spatial ethnography; urban kampung*

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### 1.0 Introduction

The concept of community living along the water is, in fact, a part of human culture which defined by the ecology. As well as living on the land, living on the water is a way of life or culture, which is now slowly diminishing. This water-based living is a form of adaptive mechanism and the most expressive form of relationships between human and water. Water space or water body is a natural physical element that forms the earth's landscape in addition to the mainland. The water bodies consist of several forms such as oceans, rivers, lakes, and so on. Further in this paper, I limited explanation on the river course.

As a space for living, river is naturally determined by its hydrological patterns and characteristics. River space and land space have a reciprocal relationship. In this case, water can be seen as a steering factor for the development of human settlement along the river, but dynamically water is also affected by the settlement activities. As stated by Cabello (2015), "centuries of social-ecological evolution shaping waterscapes through traditional water management practices have influenced the eco-hydrological functioning of the basin."

History has recorded that rivers are the sites where the civilizations begin. As a source of life, river is useful for various purposes of society's livelihood. In addition to the balance of natural ecosystems, river also benefits humans to meet household needs, for economic activities, transportation, and so forth. In some regions, particularly those with large rivers, rivers can give strong influence and often be the determinant for the community who live in the surrounding areas, which thus forming a riverine culture.

Along with modernization, civilizations around the water's edges continued to grow in many different aspects of life. The development was characterized by the increasing concentration of population and activities on the river banks. Some of them grew and developed into cities. Concentrated development around the river was marked by many establishments of community centers, especially those related to the economic and industrial sectors. This was further supported by the function of the river as a mean of

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transportation that accommodates the activities of the distribution of commodities among regions, where so many ports were built along the river.

The increased economic activities around the river bank also accompanied by population growth and the expansion of human settlement along the river. This rapid expansion of settlement did not only happening along the river banks but also extended to the mainland, which was introduced by Europeans who built roadways for the purposes of defense and security, as well as for strengthening the economic activities. The establishment of roadways was followed by the rapid development of infrastructures and other strategic buildings along the roads. The riverside areas were left abandoned, which was slightly influenced the condition of the settlement that already existed. In some major cities along the rivers particularly in developing countries, rivers had turned as the 'backyard' and often became sites for waste disposal and became the primary cause for the decline of the environmental qualities. Numerous attempts had been carried out to preserve the old city, but as stated by Prompayuk, "preservations of cultural heritage community often found that the heritage buildings and surroundings are carefully preserved while the way of life and socio-economic structure are not". (Prompayuk, 2016).

Although most of the waterfront settlements in all parts of the world are experiencing changes toward the land, in some places, which are not many in number, there are settlements that still traditionally maintain the patterns reflecting riverine culture as their legacy. One form of riverine culture that remains is 'lanting' or floating houses. This paper is a preliminary result from ongoing Ph.D. research about urban political ecology (UPE) of river settlement, which takes place in three locations in upstream, middle stream and downstream, which representing different hydrological characteristics of the river. Most of urban and architectural studies regarding waterfront cities often put less attention to see rivers as integrated water bodies from upstream to downstream with their hydrological characteristics that actually have significance impacts to the development of urban forms. However, a small portion of architectural researches has shown some efforts to study the linkage between cities and rivers in more comprehensive approach, such as done by Silapacharanan (2013) who studied about the transformation of water-based communities into land-base settlements along the major rivers and canals in Thailand which scattered from the upstream to the mouth of rivers.

In this paper, I highlighted one location of floating houses, the Kampung Tumok, in Tumok Manggis Village, Sambas City. Using spatial ethnographic approach, the result shows the understanding of the everyday lives of people who lived there, the social-ecological process between the community and the river, and how this traditional settlement interact with the urban culture that is increasingly dominant in the land.

## 2.0 The importance of spatial ethnography

In this study, I used ethnography, especially spatial ethnography as a primary method, which was also supported by the participant observation and in-depth interviews. Ethnography is the strategy of scientific research that is often used in the social sciences, especially in anthropology and some branches of sociology, also known as part of the science of history who studied communities, ethnic groups and the formation of other ethnic groups, ethnogenesis, composition, resettlement, characteristics of social welfare, also their material and spiritual culture. Ethnography is often applied to collect empirical data about human society and culture. It aims to explain the circumstances of the community learned through writing.

Spradley and McCurdy (2005) defined ethnography as "the task of describing a certain culture." Generally, ethnography is the primary method used by cultural anthropologists to study a relatively primitive culture. However, ethnographic methods may also be utilized in a complex society such as community groups in the city that has its subculture groups. Since the purpose of ethnographic methods is to describe a particular culture, ethnography has only a few hypotheses and no structured questionnaires. In fact, according to Flood (cited in Hermawan, 2011), researchers who use an ethnographic study are not required to formulate the theoretical framework first, because since they do not know exactly the outcome of a study, they are able to show new theoretical statements during the stages of the research.

Spatial ethnography, or ethnography of space and place, is a part of ethnographic studies that seeks to reveal the everyday lives that happening in some places. According to Low, the development of ethnography of place was the result of many types of research related to the environmental studies, geographic information system/GIS studies, urban studies, migration studies and other fields related to space, places and territories (Low, 2017:14). Low also argued that ethnographic studies of space and place are very important to understand the daily life of the community "whose homes and homelands are disrupted by globalization, uneven development, violence and social inequality." (Low, 2017:13). In the field of architecture, ethnographic studies of places are increasingly important, as convinced by Kirsten Weir in the following statement:

*"Even in the field of architecture where built form and spatial relationships often are determined by formal design principles disconnected from user experience and preferences, there has been a renaissance of thinking about space from a cultural point of view while place concerns are reflected in the emergence of "placemaking" courses and programs in architecture and design schools". (Weir 2013 cited in Low 2017:15).*

Ethnographic research has advantages as well as disadvantages. One of the most valuable aspects resulting from the ethnographic research is its depth. Because the researchers stay for quite a long time, they have a better looked at what people do and what they say. Researchers can gain a deep understanding of individuals, organizations, and the broader context. Knowledge gained about what is happening in the field can provide valuable information for the formulation of research assumptions. On the other hand, ethnographic studies have some weaknesses. One of the main weaknesses is that it takes much longer than other forms of

research. Not only take a long time to do field work but also take a long time to analyze the material obtained from the research. For most people, this means extra time. Another disadvantage of ethnographic research is that the scope of this research was not extensive. An ethnographic study is usually observing only one culture organization. Even this limitation is a general criticism of ethnographic research; this study only leads to an in-depth knowledge of context and particular situation.

Some research regarding water-related culture were also done using ethnographic method. Research conducted by Sharif (2015) in several wet markets in Malaysia also used ethnographic methods to look at everyday life of local businesses, by relying on data from participant observation techniques. Chuapram (2012) also explored the relationships between community ecosystems and ways of life which manifested through the changing physical characteristics of communities in vernacular houses around Songkhla Lake Basin, in the context of modern development. In addition to ethnographic method and participant observation, my study also asked the perception of residents. Some perception studies conducted by other researchers often use quantitative techniques with a number of samples, such as done by Chin (2013) who studied about residents' perceptions of water-related problems in the Mailiao Area, Taiwan. In my research I used qualitative method to gather and analyze the resident's perceptions with limited amount of respondents, since perception study was not primary in my research but more as just supporting data.

### **3.0 The 'lanting': floating houses**

Lanting is a type of wooden house floating on the water. Floating settlement is a collection of lantings that scattered along the river banks or in the lakes. The word 'lanting' itself is derived from Banjar (South Kalimantan), which means 'raft of arranged bamboo.' The lanting is also a representation of the human activities, where it accommodates the life of a family, such as eating, sleeping, playing, raising children, and doing social life as well. In general, people choose to live on the water with some considerations. First, they do not own the land to build their properties. Second, most of the lanting residents do activities that relate to the water for various needs of everyday life. For the lanting community, rivers are their best friends and sources of life (such as water, fish, forest products, etc) and as transportation for connecting cities and villages along the river. In other words, rivers are the life blood of the community, from upstream to downstream. (Mustansyir, 2013). In the following description, I would give an overview of the history of the development of floating settlements from time to time in various parts of the world.

#### **Ancient times**

Since thousands of years ago, in some regions of Southeast Asia, people are living in floating shelters, such as floating villages in Cambodia, Vietnam, Thailand, Indonesia, and China. One of the oldest settlements on the water that has already existed for centuries is the fishing village in the province of Siem Reap, Cambodia. The fishing tribes had built a complete floating hometown along the river bank and in a small part in the center of the Tonle Sap Lake. Tonle Sap is a vast water body that consists lakes and rivers. These floating villages are not only moving up and down following the fluctuation of water heights, but in Tonle Sap Lake, they also switch places from one spot to another to adjust the changing seasonal conditions. These floating houses continue to exist for several centuries until now. In another place like China, people have lived in boat houses for over a thousand years ago. (Keskinen, 2006)

#### **South America: from past to present**

On the border of Peru and Bolivia located one of the highest lakes in the world inhabited by the Uros people since the time of the Incas to the present. They live in houses built on a large raft made of reeds. Since many centuries ago, the Uros people make their rafts with size almost like a small island, to prevent attacks from the Incas and the Collas, their aggressive neighbors. To maintain the continuity of this raft island, once every three months they replace the reeds with the new ones because the grasses at the bottom are rapidly decay. This artificial island can last up to thirty years.

#### **China: from 7th century to the present**

In China, the most famous floating village is Aberdeen, which is located in the port of Aberdeen in the south of Hong Kong. The residents are from the Tanka ethnic, the majority were fishermen, who arrived in Hong Kong from the 7<sup>th</sup> century until the 9<sup>th</sup> century. Floating settlements grew in number when the British government built port and settlement, namely the Aberdeen, on the Hong Kong island. At that times, Chinese merchants also lived in floating village. The total population of the village was estimated to be 2000 inhabitants in 1841 and increased to 40,000 in 1982. As in Vietnam, hut-shaped floating settlements were built on rafts that do not apply wood as the material, but utilizing casks and jerry cans for the floating construction.

#### **Western Europe: 17th Century**

Since the 17th century, the Europeans have started living in boats and ships in many European cities, particularly Amsterdam. The publication entitled "Mooring Site of Amsterdam" which was written by Kloos and Korte in 2007 (cited in Koekoek, 2010) depicted the history of water life in Amsterdam. The paintings in the City Government's archives showed the presence of floating settlements in this city. At the end of the 19th century, wooden ships were replaced by iron/steel ones, so that many wooden ships converted into home/dwelling. In 1918, the Dutch government issued regulations for the floating settlements. The economic crisis in 1930 led to a lot of people moved to the floating houses, for not being able to purchase a regular homes on land. After the second world war, the number of floating homes increased due to the scarcity of housing supply. At the end of the 20th century, the number of floating homes in the Netherlands was estimated to reach 10,000 units. But the chaotic conditions and lack of policies to regulate had lowered

the popularity of floating settlements. In recent decades, the floating occupancy is introduced in the Netherlands, in particular, to address the problem of flooding and sea level rise, as well as the scarcity of land for housing in this country. (Koekoek 2010)

#### North America: modern times

In the early 1980's, the technology of floating houses had developed sophisticatedly in Canada when the International Marine Floatation Systems Inc. introduced a new technology to build real estate on the water, with the use of Expanded Polystyrene (EPS) and concrete. This system allows a shorter development process and can be applied to relatively shallow water. These technologies provide opportunities for the development of large-scale floating settlement in the city of Seattle and Vancouver in North America.

#### 4.0 Sambas the city of three rivers

Sambas is the capital of Sambas District in West Kalimantan, which cover the area of 246,56 km<sup>2</sup>. Total population in this city is 45.993 inhabitants (per-2011), and the density is 186 people/km<sup>2</sup>. The person who first established and developed the town of Sambas was Sultan Muhammad Tajuddin I (Raden Bhima, the Sultan of Sambas II) wherein about 1683 had relocated the Sultanate of Sambas from Lubuk Madung to Muare Ulakkan, which then evolved into Sambas City today. So the development of the city started from the center of the Sultanate of Sambas that is precisely located at the junction of three rivers, the Sambas River, Teberau River and Subah River.

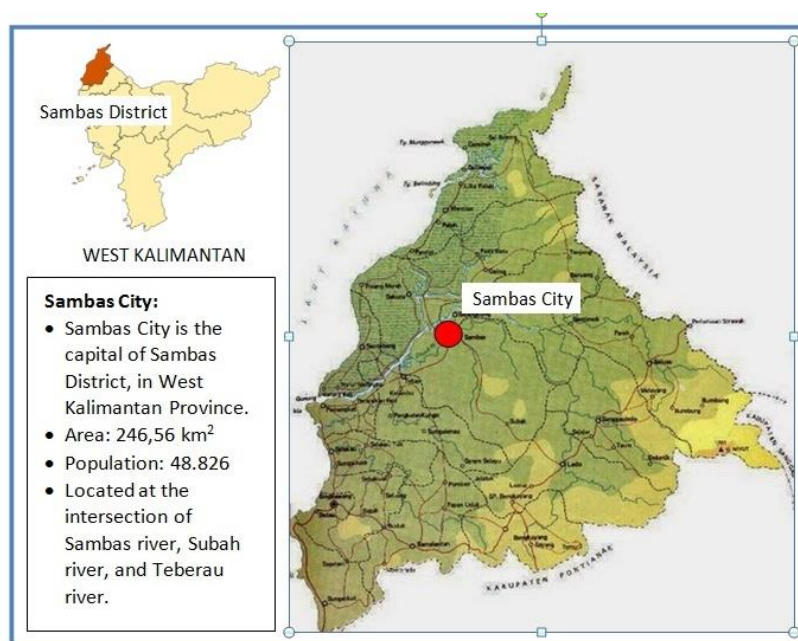


Fig. 1. Map of Sambas District with the information of Sambas City and the rivers

The growth and development of the city center of the sultanate were triggered by several factors. Among others, was the kingdom's central location at the downstream of the rivers, which was closely related to the commercial traffic. According to Charles M. Cooney (cited in Anita, 2004), the bustling commercial activities in river's downstream in the past had triggered the rapid growth and transformation of the kingdoms into the embryos of cities. As stated by Choudhury, "The need for multiple usages through the river creates a great networking system where the settlement grows." (Choudhury, 2016:120). It is similar to Sambas, where the location of the center of the 'Alwatzikhoebillah' Sultanate was right at the junction of three rivers, making the trade route increasingly crowded with the arrival of the ships from the archipelago and from foreign countries to the port of Sambas. The return of the ships carried a range of commodities from the interior of Borneo in the form of gold, wax, rattan, rubber, pepper, corn starch, gambier, areca nut, copra, coconut, tallow, and others, which were then marketed to the other islands such as Sumatra, Jawa and Sulawesi, as well as to the other countries (Veth 1854 and Fleming 1926, cited in Anita, 2004). Not a few outsiders who then attracted to settle in Sambas for reasons of economic potentials. Each ethnic group was given a separate location to build a residence, which was called 'fondachi' by the Portuguese. They established settlements or 'kampung' after obtaining permission from the Sultan. So at that time, many kampungs were named according to their homeland, such as Kampung Bugis, Kampung Jawa, Kampung Pasar Melayu, and so on. The immigrants who settled in Sambas then gradually attracted more and more people from their homelands to come and settle in the city.

Large rivers are the main roads for commercial activities. They have several tributaries that serve as traffic routes that connect settlements in the downstream with agricultural areas in the upstream. The settlement patterns were generally denser and clustered, following the river curves. (P.J. Veth 1854, cited in Rahmayani, 2015). In the early period of Sambas commercial networks, the river was the main route for the traffic of goods brought from inland to the coast, and vice versa. Therefore, it was very important for the

Sultanate of Sambas as a holder of the monopoly of the trade, to dominating the river course. Rivers continued to play such a great role even to the end of the 19th century. The rulers of the region always tried to control the entire network of rivers that exist within their territory to implement their political hegemony.

Commercial transactions were taken place nearby the river, even on the boats. The merchants opened their stalls to sell daily necessities such as rice, salt, which were regularly purchased in Java. The boats used for trade activities were then gradually transformed into a floating house or lanting. It has marked the growing of floating settlements in Sambas river and the surroundings.

## 5.0 Life in floating houses

### Types of lanting

There are several types of lanting houses which can be found in the Sambas River and the surroundings. *First*, the *lanting jamban*, a small building on the water used for bathing, washing and toilet facilities. The form of jamban is tiny and simple. The toilet is made to be used by several families. Thus, the construction, as well as the maintenance, are also undertaken together by the community. *Second*, the lanting house or *rumah lanting*, a dwelling house where a family settled and doing such activities similar with those settle in landed house. Rumah lanting consists of several rooms such as the kitchen, bedroom, and living room, but there is also a simpler type in which the house only has a kitchen and a living room that also functioned as a bedroom and workspace. *Third*, the *steher*, is a dock for motorboats and sampans, that also functioned as fuel station for water traffic. *Fourth*, the *lanting kadai* or *kedai*, is lanting used as kiosk/stall for selling goods of daily needs, coffee shops, food stalls, and others. (Mustansyir, 2013)



Fig. 2. The area of floating houses in Kampung Tumok, in the heart of Sambas City.

### The lanting community

Nowadays, floating settlements still exist in some regions of Sambas and surroundings. Lantings can be found in Kampung Semako'an, Kampung Sumber Harapan Baru, Kampung Melayu, and Kampung Manggis. The following explanation is based on preliminary findings of my research, which up to this stage focused in Kampung Tumok, Desa Tumok Manggis, which located in the heart of Sambas.

The number of lanting houses in Kampung Tumok is about ten houses. Across from Kampung Tumok which is on the other side of the river, namely Kampung Pasar Melayu, there are still about ten to twelve lanting houses. Most of the lanting residents are Malays and Chinese who have lived there for generations. They run kiosks, small-scale businesses, or as ferrymen carrying the passenger across the river with their sampans. The stalls usually sell goods of daily necessities and fuel (gasoline/diesel). There are also lanting houses that functioned as temporary containers for raw materials from inland areas, such as rubber, resin, and wood. In general, the livelihoods of lanting residents are varied, from trader, coffee maker, grass jelly (cin cau) maker, and others.



Fig. 2. (a). The steher, lanting used as fuel station that selling gasoline/diesel for motorboats. (b). Grass jelly cans dried on the wooden path, in one of lanting owned by the local businessman whose operate his business in his lanting house.



According to some of respondents I have interviewed, living on the water is generally similar to those living in landed houses. But there are several things that distinguish lanting with common landed house. One of them is the limitation of room space. In order to float well, lantings should not be made too large and heavy, which give consequences to limited living space. Generally, the spaces are multi-functional. Yard or terrace is also very limited, even many lanting houses do not have terraces at all. The tides, current, and water levels also affect the behavior of living on the water. At the time of high tide or low tide, lanting occupants should not be less aware to loosen or tighten up the rope that ties the lanting house, to prevent the building from becoming stranded or tilted. Besides the tidal, wave disturbances caused by motorboat and speed boat passing also requires residents to always be aware that their homes do not sink or leak by such disturbances.

### Story of a lanting dweller

Bang Adi, a ferryman, is one of the lanting owners in Kampung Tumok I have interviewed. Adi told me that he has been living at the lanting house since his childhood, with his parents and other family members. When the family's economy had improved, Adi's parents decided to move to landed-house while the old lanting house was given to their son. Adi then rebuilt the old house using materials from old buildings that still can be used. In the new lanting house he then married and raised children, with one hope that one day when they have enough savings, they would buy a landed house and sell their lanting home. The family initially planned to stay a maximum of five years in their lanting, before purchasing a new house on the land. However, ten years have passed unnoticed; even their oldest son have become a teenager in high school, and they still stay in their lanting home.

The economic factor was the main reason for Adi and his family to remain to stay in their lanting house, which is much cheaper than the landed house. Since his work as a ferryman only enough to meet their daily needs and to pay for their children's school, then the desire to buy a landed house has never been fulfilled. However, Adi also admitted that being at lanting house strongly supports the ease of his work as a ferryman, although the other family members are always doing activities on the land for daily routines, such as going to school, shopping to the market, or visiting family/relatives.

### Spatial connectedness

Although the width of the Sambas River is not too large, only about 40-50 meters wide, apparently there is no strong connectivity between lantings in Kampung Tumok with those in Kampung Pasar Melayu, where both are facing each other in the river. In Kampung Tumok where the predominant land use is residential with majority populated by Malay people, almost all lanting also serves as a residential and populated by Malays. While in Kampung Pasar Melayu, the commercial area across the river, the lanting residents are mostly traders or small businessmen, and the majority of the residents are Chinese. Although both settlements are in a close riverscape, apparently the river is not playing a unifying role but more as a separator. This may be understandable in the conditions of the river which has a sufficient width as large as the Kapuas River (400-700 meters wide). This suggests that although they are still living on the water, they have a stronger spatial connectedness to the landed-kampung behind the lanting houses. In other words, although the people still living on the water, the influence of urban culture in the land is stronger than water-based culture, as in the past.



Fig. 3. Floating houses in Kampung Tumok. On the back are stilt-houses that are connected to each other using wooden pathways

### The government's plan and development

Nowadays, the existence of lantings is almost seen as a remnant of the past glory when Sambas still had a high reputation as waterfront city in West Kalimantan. The lanting occupants are facing the fact that their survival is not getting adequate support from local government. On the contrary, they have to deal with the government's plan to remove all of the houses that have been considered as slums, without regards to the lantings' historical values that contribute to the development and the shaping of modern Sambas City. As stated by Ujang and Zakariya (2015), "urban regeneration within traditional settings has transformed places and constructed meanings embedded in the existing social and cultural settings. Thus, the social and emotional meanings, attached to or evoked by the elements of the urban environment were at least as important, often more so than the structural and the physical aspects of people imagery". (Ujang & Zakariya, 2015).



Fig. 4. Various types of floating houses in Kampung Tumok and its surroundings

While over three to four hundred units were maintained in the past, now there are only about thirty units remained. In 1990's, about fifty units of lanting houses were evicted by the government in order to organize a Musabaqoh Tilawatil Qur'an (MTQ), a provincial event that held in Sambas. The lanting dwellers were relocated to the landed houses. The eviction continued back in 2006 when the Sambas District Government organized sampan/boat race, which was attended by participants from neighboring countries like Malaysia and Brunei Darussalam. The lanting dwellers had received some compensation, and they had to find by themselves their new homes in the land.

Meanwhile, people's life in the river continues in the midst of the process of urbanization that is increasingly oriented towards the land, and they are in the transition between the riverine culture and urban land-oriented culture. Research on raft houses in Thailand conducted by Denpaiboon (2002) also reveals the everyday lifestyles of the raft house inhabitants in present days, which are situated between water-based and land-based development and how they have developed through the modernization of Thailand.

## 6.0 Conclusions

Culture is naturally dynamic, not static. It means that it always changes in a variety of motions, whether slowly or rapidly. Culture is a learning process so that human survival requires a process of cultural inheritance for generations. Changes in the social and natural environment that demands continuous adaptation is a process of cultural dynamics.

As an ethnographic study on the everyday life among the lanting dwellers in Sambas waterfront has shown in this study, it is clear that becoming such a part of the past riverine culture in the context of present land-oriented urban culture has raised new insights about how to view the urban waterfront itself. Today, the design and development of waterfronts in many cities tend to modernize the physical spaces by disregarding the historical values, or, at least better than the former, by romanticizing the past glory in the form of heritage tourism. However, both of these actions often brings consequences of eviction of people living on the riverbanks that actually have been there for generations.

This study was not intended to polarize between water-based culture in the past days with the present days land-based culture, nor to romanticizing the past glory, but rather to illustrate vividly the problems and challenges experienced by the people who live in the remained traditional water settlements, which are still prevalent in many modern cities.

The better understanding of people's story of places, or, the ethnography of places, hopefully will bring more discussions especially in the field of architecture, about how architects can learn from the community in certain places and how they can work together with the community to design and develop a better neighborhood for promoting better quality of life.

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