

THE SPATIAL CHANGES BASED ON THE ECONOMIC ACTIVITIES AS AN INDICATOR FOR THE SETTLEMENT INTEGRATION

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ABSTRACT

One of the characteristics of the growth of Jakarta's metropolitan city is the emergence of large-scale planned settlements outside the city that previously had the character of rural areas. Although physically there is a spatial separation between the indigenous settlements and large-scale planned settlement designed by developers very firmly, but the indigenous settlements still exist today, and they can be integrated with the planned settlement. The purpose of this study is to find out how residents of indigenous settlements can survive in the face of changes with the pressure of the emergence of large-scale planned settlement vicinity. The research uses a case study method, with observation units covering one indigenous settlement, while the analysis unit takes the form of social interaction based on economic activities both routinely and incidentally. The results of this research showed that there are formed integration between indigenous settlement and new town was greatly influenced by the emergence of opportunities to obtain additional family income through changes in space in their houses that were used as business houses and rented houses. The changes in the function of the building gave rise to socio-economic characters because the residents still maintained the values of closeness even with migrants. This condition produces a spatial character called socio-economic spatial formation, and supported by aspects of access that continue to connect between the two settlements.

Keywords: Planned Settlements, Indigenous Settlements, Socio-economic Spatial, Settlement Integration

INTRODUCTION

The phenomenon of the growth of large cities in almost the entire world that leads to the extension of urban space towards the periphery area is in a theoretical context known as the urban sprawl phenomenon. This phenomenon can be observed and felt directly through the growth of large cities in almost all major cities in the world (Michelini & Pintos, 2016; Noorloos & Steel, 2016; Pozoukidou & Ntriankos, 2017) including the major cities in Indonesia (Buchori, et al., 2017), especially around the metropolitan city of Jakarta (Soetomo, 2009; Firman, 2009; Winarso, et al., 2015).

One form of urban sprawl that occurs around major cities in Indonesia is characterized by the emergence of large-scale settlements (Diningrat, 2015). This is in line with Stan's (2013)

thinking which states that the existence of large-scale planned settlements is basically a necessity related to the growth trend of cities around the world. One form of large-scale settlement as intended above is in the form of new towns development (Alexander, 2009), whose emergence was also triggered by the involvement of large developers, one of which occurred in the Tangerang region. The construction of new towns around major cities is basically a very logical choice in response to the development of the city center which further decreases the quality of life of its inhabitants (Alexander, 2009).

But in its application, many problems arise that are caused by things that involve physical and non-physical levels. Physical levels appear in the form of planning and design of new towns by developers who pay less attention to the existing spatial and landscape structures. (Firman, 2004; Dupras et al., 2016), there were floated social and economic problems between new towns and indigenous settlements pre-existing (Gebregziabher et al., 2014; Michelini & Pintos, 2016; Pozoukidou & Ntriankos, 2017). These problems reveal the occurrence of disintegration between new settlements as an illustration of the influence of urban characters, with indigenous settlements as a description of a pre-existing rural environment and having special spatial characteristics. One of the characteristics of urban growth and expansion in rural areas always involves the private sector who has a role as a developer, where in planning new settlements more think about the interests of the market without thinking about the possibility of integrating regional planning involving pre-existing indigenous settlements (Firman, 2009; Güzey, 2014; Diningrat, 2015; Noorloos & Steel, 2016). Nevertheless, several studies with the theme of urban growth in the rural direction have found indications of the potential to integrate these two settlement entities through social capital owned by indigenous settlements (Critelli & Musella, 2016), or potential spatial factors to integrate social differences that are always formed in the suburbs (Cordova, et al., 2016).

In the context of urban spatial structure, integration is emphasized in the context of discussing the physical spatial structure between two parts of the city. Integration that occurs in a city can be observed through social interaction, environment, and infrastructure design (Soyinka, 2018), or by looking at space interactions, where space interactions are influenced by economic activities and social activities of the people in the two regions (He et al., 2017). Whereas according to Scott et al. (2013), Integration includes three scales, namely sectoral, territorial, and organizational. Sectoral includes the integration of public, private and voluntary sector activities in a region. Territories include the territorial boundaries of the activity's actors, and organizational includes organizations that represent the territory of the activity's actors.

The forming component of integration between two urban areas can vary, such as spatial proximity and public space, and mixed use areas (Peuramaki-Brown, 2013), or space-transport development planning, (Ambarwati et al., 2014), connected pedestrian networks and space accessibility (Mohamed, 2016; He et al., 2017), or can be seen from an integrated infrastructure system through two or more transportation infrastructure systems, energy, water and wastewater, solid waste, and information and communication technology (Saidi et al., 2018). In terms of criteria for the occurrence of integration, Omer & Goldblatt (2012) concluded that urban spatial integration was assessed from spatial configuration between several residential environments with the character of socio-economic life. Whereas Cao et al. (2016) argued that the integration model of two or more urban areas with a multi-center concept, each region had a different main designation, and each was associated with integrated access. A different view is expressed by Azhdari et al. (2018), which states that integration can be seen from the connection of a

residential area to important services such as schools, health centers, and major roads. Whereas, Fisher (2009), simply states that integration can be observed if there is an intensive relationship and interaction between residents of an environment with visitors.

From the results of research related to the integration of the structure of urban space, no one has examined the integration between new settlements in the form of new towns with indigenous settlements in the form of enclave settlements, which are focused on the socio-spatial forms that occur in indigenous settlements. Therefore, this research is intended to in more detail examine the potential for the formation of integration between two settlement entities which are based on the formation of socio-spatial economic activities. Thus the novelty of this research is the achievement of the integration of the spatial structure between large-scale settlements (new towns) and the indigenous settlements, by exploring the socio-economic spaces in indigenous settlements.

MATERIALS AND METHODS

The Study Area

The study area is an indigenous settlement that is in the category of enclave settlements, located in Curug Sangereng Village, Kelapa Dua District, Tangerang Regency. At present the research locus has a position in the middle of the new town of Gading Serpong, and is separated from the other indigenous settlements. The territorial condition occurs because the land acquisition process by the developer for the construction of the new town of Gading Serpong uses a market mechanism and takes place sporadically. Land and home owners who are willing to sell to developers then move to other areas, while land and house owners who remain because they did not sell it to developers have been creating the enclave settlements in the middle of new town areas (Ischak et al., 2017).

The Study Method

This research was carried out using a case study method, by setting an enclave settlement as a unit of observation. While the unit of analysis is in the form of social interaction activities, triggered by business buildings in enclave settlements. The data needed includes quantitative and qualitative data (Yin, 2003). Qualitative data is obtained by observation and interviews with informants who are residents of enclave settlements. While quantitative data is obtained by observation, interviews, and questionnaires on the perpetrators of social and economic activities in and around business buildings, especially in buildings that function as food stalls, both actors who are residents of enclave settlements and actors originating from new towns.

RESULTS

The regional character inherent in the locus of research is strongly influenced by the construction of new towns as a reflection of urban expansion in rural areas. The vast process of land acquisition by new town developers with the market mechanism resulted in the research locus becoming an enclave settlement in the middle of the land of developer of the new town of Gading Serpong. As a result of the development of the region, at present the study locus is very close to various building designations in the Gading Serpong new town area, which includes the

allocation of expensive housing (4 clusters), education (3 universities), class B Hospital (2 units), hotels (4 buildings), hypermart (2 buildings), offices, and commercial (shopping centers and shop houses).

The proximity of the indigenous settlement to the centers of activity in the new town area directly affects the change to the spatial structure of indigenous settlement. These changes are in the form of a tendency to increase buildings that function as economic buildings of the community, namely business buildings. The allotment of buildings used as business premises is very large in number and spread throughout the indigenous settlement area.

Architecturally, there are two types of business buildings at the study area. First, the building from the beginning was designed by the owner or tenant as a place of business, such as food stalls and workshops. Second is a place of business which is a modification of a residence or utilizing the front room of a house (terrace) as a place of business. The changes in the designation of this building has been going on for at least ten years and is carried out both by residents of the indigenous settlements and by tenants who are not residents of the indigenous settlement.

Thus, the phenomenon of the emergence of business building designations shows a direct link with the growth of new towns around. Distance proximity factors and the access from new towns areas to indigenous settlements are the trigger for changes in economic activity changes.

The occurrence of changes in the environment due to the existence of a new town, resulting in two economic opportunities for the residents of indigenous settlement by providing business buildings, namely internal and external economic opportunities. Internal economic opportunity is an economic opportunity caused by the needs of residents of the indigenous settlements. While the opportunity for external economics is an economic opportunity that is caused by the needs of actors who are involved in areas outside the settlement.

No	Economic Opportunities	Building Function	Total	User Scope
1	Internal	Basic food stalls	5	Settlement
		Pulses stalls	11	Neighborhood
		Small food stalls	14	Neighborhood
		Vegetable stalls	5	Neighborhood
		Tailor	2	Settlement
		Motorcycle repair shop	2	Settlement
		Material shop	2	Settlement
	Sub total		41	
2	External	Great food stalls	3	Other settlements
		Car repair shop	5	Other settlements
		Rented house	18	Other settlements
	Sub total		26	
	Total		67	

Activities that occur in and around the business building are the beginning of socio-economic interaction that produces specific spatial formation. There are three levels of spatial

formation that are influenced by the actors of socio-economic interaction activities, namely neighbour socio-economic spatial scale for neighboring social activities, settlement socio-economic spatial scale for settlement resident activities, and cross settlement scale socio-economic spatial scale for activities that scale involving areas outside settlements specifically involving new town areas. The socio-economic spatial characteristics formed can be seen in Table 1.

Another phenomenon that shows the influence of Gading Serpong new town on economic activities in indigenous settlement is the increase in the number of rented houses. There are 24 mass rented buildings that contain 164 rooms which are occupied more by families (73%). Most residents of rented houses work in the new Gading Serpong city area, both as formal and informal workers. Details of rented house residents are listed in Table 2.

No	Type of Work	Total	Status	
			Single	Family
1	Employee	56	24	32
2	Small food / beverage traders	72	11	61
3	Landscaper	12	4	8
4	Worker outside Gading Serpong area	24	5	19
	Total	164	44	120

Factors that cause occupants to choose to live in rented houses located in study locations at least with consideration: close to workplaces (42%), low prices (32%), safe (12%), and friendly residents (18%).

DISCUSSION

On one side, buildings that function to accommodate the economic activities of residents of settlements are triggers of social spatial formation because they are the nodes of social interaction, likewise for rented house buildings. Interaction is a reciprocal relationship between individuals and individuals, individuals with groups, and groups with groups (Soekanto, 2010). Whereas according to Setiadi and Kolip (2011), social interaction is a dynamic social relations related to individuals, groups of groups, and individuals to groups or vice versa. Thus the meaning of interaction in the research context is the relationship between individuals and individuals or groups in a space or place, and with certain purposes. On the other hand, interaction is a very thick character that lives in the community of indigenous settlements (Figure 1).

The existence of business buildings can be seen as a form of response to changes in the environment due to the existence of new town. This phenomenon can be used as an indication of the direct relationship between indigenous settlements and the new town of Gading Serpong in a socio-economic spatial context. Thus, this phenomenon can be used as an indicator of the formation of integration between indigenous settlements with new towns which is shown through socio-economic spaces triggered by the existence of business buildings. In that context, socio-economic spatial appears in three levels (Figure 2), namely:

1. Micro socio-economic spatial, involving economic activities by actors in neighboring territories, resulting in economic opportunities as income enhancers.
2. Mezzo socio-economic spatial, involving the perpetrators of activities in the sphere of the resident of the indigenous settlement,
3. Macro socio-economic spatial, which involves economic activities by actors within the indigenous settlement area and economic activities by actors in the new towns area.



FIGURE 1
INTERACTIONS THAT ARE STILL INTENSE OCCUR BETWEEN RESIDENTS OF SETTLEMENTS (STALL OWNERS, BUYERS, AND NEIGHBORS (a), AND AMONG RESIDENTS OF RENTED HOUSES OR INTERACTIONS WITH INDIGENOUS SETTLEMENT RESIDENTS (b))

Although explicitly in the form of a master plan designed by new town developers it does not show integration directly with indigenous settlements, but in land allotment it has actually shown the integration in the form of new functional developments in indigenous settlements with the emergence of new buildings that function as business buildings like food stalls. In the context of macro spatial planning, developments that occur in indigenous settlements are actually one indication of the formation of integration by referring to the theory stated by Cao et al. (2016), that the integration model of two or more urban areas with a multi-center concept, namely each part of the region has a different main designation, and is associated with integrated access. The emergence of the functions of business buildings, especially food stalls, signifies that allotment functions cannot be separated from the existence of new towns, thus indirectly demonstrating integration in the form of mutually beneficial connections between new town and indigenous settlements. The functional integration model that occurs at the research area can be discussed as seen in Figure 3.

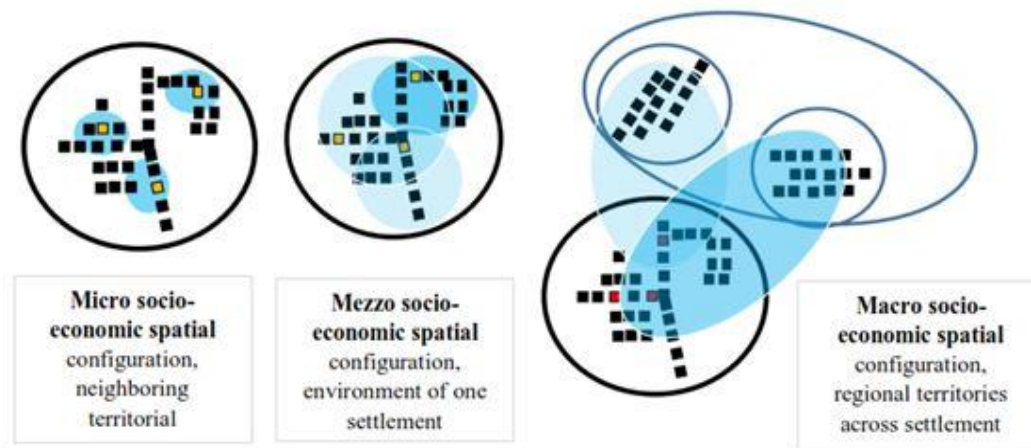


FIGURE 2
SOCIO-SPATIAL HIERARCHY SCHEME DUE TO THE EMERGENCE OF BUILDING DESIGNATION AS A BUSINESS HOUSE

Based on an analysis above, it was concluded that there was the need to integrate two settlement entities formed with two different backgrounds and concepts, namely new settlements which are planned settlements designed by developers, and indigenous settlements that grow naturally and already there before. Integration is a process that occurs as it is without being designed by anyone, and appears in the form of mutually beneficial relationships through the functions of business buildings, so that the integration formed is functional integration.

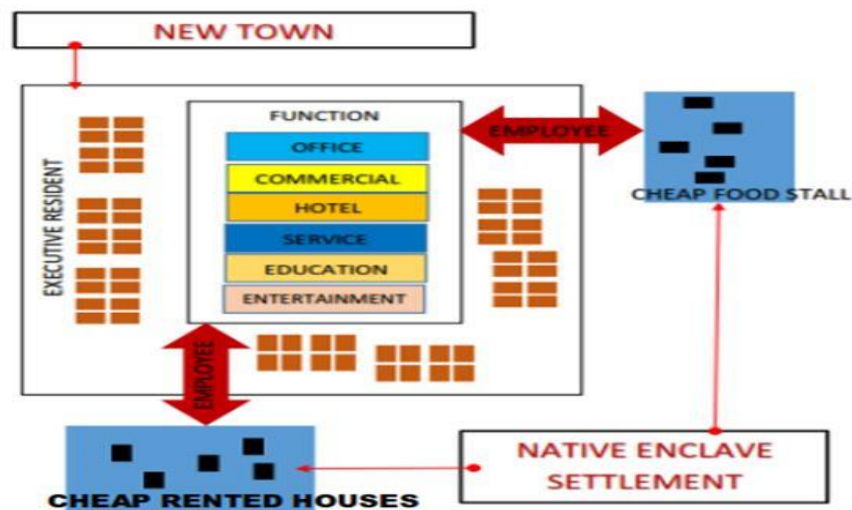


FIGURE 3
THE SCHEME FOR FUNCTIONAL INTEGRATION BETWEEN INDIGENOUS SETTLEMENT AND NEW TOWN

CONCLUSION

Functional integration reflects the emergence of new functions in the indigenous settlements, namely the function of food stalls which basically accommodates needs not provided by new town. The supporting aspect of the formation of functional integration is the aspect of access in the form of a circulation path that directly connects new towns with indigenous settlements.

This means supporting the results of research conducted by He et al. (2017), which states that the integration between two regions in urban areas can be measured by looking at spatial interactions, where spatial interactions are influenced by economic activities and social activities in the two regions, and can occur through the connection of the circulation path. Thus if the discourse, the integration occurring triggered by the formation of economic socio-spatial supported by accessibility aspects, can be described as shown in Figure 4.

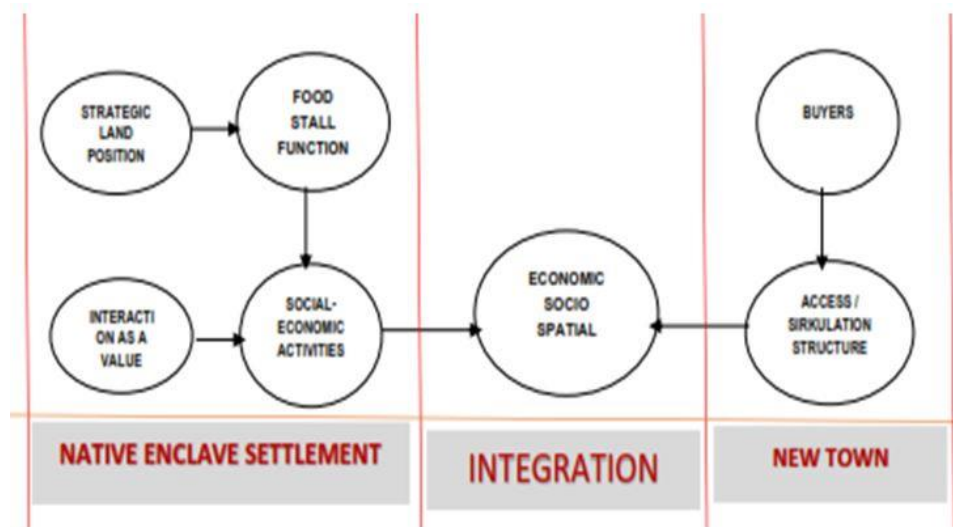


FIGURE 4
SCHEME OF FORMATION OF INTEGRATION TRIGGERED BY BUSINESS BUILDINGS

The research findings about the shape and forming aspects of the socio-economic spatial configuration in economic spaces basically contain the meaning and form of interaction. Likewise, in the context of the relationship with the formation of integration; interaction is an indication of the formation of integration between indigenous settlements and new towns. Thus, artifacts and spaces formed in the context of socio-economic activities basically indicate the formation of interactions that occur in people's lives that directly contribute to the formation of integration.

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