Urban square as a strip development revitalization element (case study: Dr Mansur street corridor, Medan City)

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Abstract. Indication of urban sprawl at the center of urban growth are characterized by strip development of residential-commercial zoning changes uncontrollably. One of the strip developments that took place in the city of Medan was Dr. Mansur street corridor. Changes in residential allocation functions become uncontrolled commercial places because of the dynamics of community activities and become a development degradation that requires efforts to revitalize the area. By uncovering the potential of urban square forming with direct observation in the field of social activities that take place in shared public spaces in this corridor, research raises the local wisdom of community behavior and potential places of interest that are bottom up development. The finding this research is the identification mapping of revitalization elements in the form of urban square (place and activity) for the complimentary of generic and organic revitalization models, which can later become a guide for the community and government in addressing changes from and by the community so that the negative strip development indication can be controlled.

1. Introduction
The development of urban public space shows indication of planned development as well as formal government spatial plans (over-management of public spaces) and unplanned growth (under management of public spaces) carried out independently by society [1]. The indication of over management is characterized by the loss of public space by the commodification and privatization of public space. On the other hand the under management model can be seen in the poor design of the open space, the increase in vehicle traffic, user segregation, the neglected of the percentage of open space, private ownership which results in the loss of "public life". The growth of strip development that occur the city center as an urban sprawl caused by the activities of changing private places into commercial places shows that urban public space needs to be considered as an important phenomenon of urban design. Facts showing that urban public space in the strip development area is often ignored in its design and accommodation functions. Urban public space is often referred to as urban public square. To become a public square according to Levy [2], citizens are not connected to manifestations of nature, but to the heart of urban culture, history and memory. The square is a public open space that serves as a place where the urban community carries out their leisure activities. The city square often functions as a civic space for the communities to gather, engage in leisurely pursuits, and celebrate various activities [3][4][5].
The development of the growth center in downtown Medan is also indicated by the dynamics of land use change. One of the city areas of Medan that experiences as under management of public space is Dr. Mansur street corridor in the campus area of the Universitas Sumatera Utara (USU). The condition of infrastructure facilities and infrastructure can not support commercial activities that occur. fast traffic vehicles, traffic congestion, parking vandalism, pedestrian lane malfunction, street vendors, the emergence of portable stalls and tent stalls on the roadside show degradation of Dr. Mansur street corridor with under management models as part of the indication of urban sprawl.

As part of efforts to revitalize the area, this research will reveal the potential of urban square in the Dr. Mansur street corridor by observing the ideal of an urban square that is successful, namely the potential to arouse social life and stimulate visitor creativity (attraction and destination), utilizing cool climate conditions, green open spaces, local activities (e.g. food), easy access, attractive and comfortable places for all people (amenities), imageability and identity, an effective place. In general, the potential to be revealed is that urban square is responsive, democratic and meaningful [6].

2. Literature review
The symptom of strip development that is sprawl (chaotic) has been obtained by a comprehensive review of its behavior, among others, from the perspective of behavior and respect for public space [7][8], the direction of control of zoning changes [9], factors influence zoning changes [10][11], and dualism commercial land use [12]. All point to the irregular conditions of the area due to regional developments and zoning changes that are not controlled.

Commercial strip development is the embodiment of urban sprawl that is development that exceeds available land capacity, development of built land increases urban sprawl degrees [13]. There are three types of development that are typical "urban sprawl", namely strip commercial development, leap frog development and low density, single dimension development [14]. Strip commercial development occurs if development thriving commercial area along a linear path along the two sides of the arterial road. As is usually the case with urban sprawl, this phenomenon is uncontrolled sporadic development, poorly visualized, each store has direct access to roads that cause congestion. Widespread indications of strip commercial development will form a fast-growing area that could potentially to trigger the development of leap frog development.

The impact of strip commercial development on socio-economic conditions in accordance with localities include environmental impacts, traffic problems, urban decline, the disappearance of community activity centers and the historic site. Development is characterized by high density, two-three-storey buildings with makeshift parking lots and rows of parking along the roadside. Some shops in strip development tend to be lifestyle centers and recreational shopping. This phenomenon influences the social capital to change the form of public space into a private place, public open space and outdoor activities are turned into activities that are walled in the inner space. This phenomenon erodes the quality of life of residential areas to be commercial.

3. Method
Disclosure of the potential for forming urban square is carried out by direct observation in the field of social activities that take place occupying shared public spaces in the Dr. Mansur corridor in Medan city. Identification is carried out by grouping potential places as urban square based on indicators of shared space use, places that become landmarks (main destinations), social activities in a climate-comfortable place, shade, windiness, orientation, crowds, completeness of facilities and infrastructure, typical local activity, safe and comfort accessibility, lifestyle place and imageability place as part of observing successful urban space [15]. Descriptive qualitative followed by iterations and triangulation to sharpen the results of observations by structured interview a number of users of the site. With such indicators, the place and activity mapping of quality places is obtained as a potential for the formation of urban square with local characteristics as a material for identification of revitalization elements for prioritizing the physical revitalization actions of Dr. Mansur corridor.
4. Results and discussions

As an area in Medan, Dr. Mansur street was originally named as the Universitas Sumatera Utara (USU) street. The road starts from the intersection Dr. Mansur street with Jamin Ginting arteria road, namely Simpang Kampus, to intersection at Tri Dharma street (Gate 4) of USU campus. However, with the increasing volume of road users, Dr. Mansur became the city's arterial road, becoming a link to the Setiabudi street Medan.

4.1. Intersection of Dr. Mansur - Jamin Ginting (Simpang Kampus)

This Simpang Kampus intersection area is a nodal of the Medan-Brastagi arterial crossroads (Jamin Ginting) by Dr. Mansur street. It is called the Simpang Kampus because it is close to the main entrance (Gate 1) to the USU campus. This intersection is a halte for students to riding city transportation from and to the USU campus. This condition makes the Simpang Kampus as a center of activity waiting for transportation, socializing, short meetings and landmarks. This place is very accessible as an unplanned stop by the city government (in fact the bus stops made by the local Transportation Office in Medan are actually not functioned by the community). In the morning and evening this place was crowded with noisy students and passed through the typical lifestyle style of students. Because this place is not well planned, shade facilities and infrastructure are not available. Simpang Kampus is a place for potential and routine activities but has not been anticipated by the design of urban square.

![Figure 1](image1.jpg)

Figure 1. The potential of Simpang Kampus area as urban square, Dr. Mansur corridor, Medan.

4.2. Gate 1 USU (Pintu 1)

Gate 1, or namely Pintu 1, is the main entrance to the USU campus marked by the presence of a gate building. In its function as an main gate / entrance, Pintu 1 is popular as a place marker for online motorcycle taxis and so on. The place as a meeting place. Visible rows of taxi vehicles parked and waited for passengers here. The nature of the activity is more temporary as a stop. This is supported by the presence of shade formed under the gate and such easy and convenient access that makes the Pintu 1 area quite potential as an urban square.

![Figure 2](image2.jpg)

Figure 2. The potential of Pintu 1 area as urban square, Dr. Mansur corridor, Medan.

4.3. Gate 4 USU (Pintu 4)

Gate 4, or namely Pintu 4, as is also a destination for students and the community as a stop and terminal place for local transportation. It is located at the intersection of the Tri Dharma and Dr. Mansyut corridor, making it a crowded nodal. The crowd invited informal street vendors (K-5) food and beverage merchants to enliven this place. As a landmark, Pintu 4, is quite famous as a place marker. This place is
shaded by lush trees that shade for those who act. The shadow of the gate building itself is the most desirable area for conducting social activities in its shade.

Figure 3. The potential of Pintu 4 area as urban square, Dr. Mansur corridor, Medan.

4.4. USU rectorate corridor – Selayang swimming pool
The corridor of the USU rectorate is a road lane Dr. Mansur street in front of the USU Rectorate Building. In this corridor, there are rows of informal food and beverage street vendors who trade in the shade of tree groves along the pedestrian street. The shading and cleanlines make this corridor a potential. Street vendors hold stalls while putting chairs on the sidewalk. A place with enjoyment of food stall and an attractive atmosphere of road traffic view. Even though it is illegal (informal) activities, this corridor is popular as an area with outdoor culinary activities. Other similar corridors are at the Selayang swimming pool, Perjuangan and Setiabudi street intersection. The whole occupies a room shaded by trees as a comfortable climate. This creates a busy activity as an outdoor restaurant culinary or lifestyle function.

Figure 4. The potential of USU Rectorate Building corridor as urban square, Dr. Mansur corridor, Medan.

4.5. Intersection of Indonesian American Friendship Foundation Building (Simpang YPPIA)
In the Dr. Mansur corridor, there are several places that are negative place [16], which are potential but do not get a touch of planning in the open space of consciousness, but being able to invite lively activities include in the Simpang YPPIA. The shade of the place is the main attraction for the community to use as a place for socializing and activities. Easy access, comfortable shade environment, as inter-circulation nodes and activities (generally street vendors) make some negative places able to appear imageable.

Figure 5. The potential of Simpang YPPIA as an urban square, Dr. Mansur corridor, Medan.
4.6. Intersection of Dr. Mansur – Setiabudi (Simpang Setiabudi)
This intersection is recognized by the monument at the crossroads. The roadside crowd of this area is colored by culinary and lifestyle trading activities. As a place to hang-out this intersection is quite popular even though there is not enough shade. The Syafiatul Amaliah School on the street is a magnet for this intersection. Activities to take students to school and transport activities make this intersection growth as a typical lively place where people have social activities.

![Figure 6. The potential of Dr. Mansur – Setiabudi crossroad as an urban square, Dr. Mansur corridor, Medan.](image)

4.7. Formation of urban square
Overall, the study of the potential of Dr. Mansur corridor as an attractive place for people to doing social activities makes some places like an urban square (which has not received a touch of urban design). The following is a summary of the spatial mapping and analysis of places and potential activities for the formation of urban square at Dr. Mansur corridor, Medan City.

| Urban Square Indicators | Social space / landmark destination | Comfortable surroundings / shade / infrastructure | Activities of local events | accessibility | Imageability / Life style Attractive sites | others |
|-------------------------|------------------------------------|-----------------------------------------------|---------------------------|--------------|----------------------------------------|--------|
| Simpang Kampus          | ✓                                  | ✓                                             | ✓                         |              |                                        |        |
| Gate 1 USU              | ✓                                  | ✓                                             | ✓                         | ✓            |                                        | ✓      |
| Gate 4 USU              | ✓                                  | ✓                                             | ✓                         | ✓            |                                        | ✓      |
| USU Rectorate Corridor  | ✓                                  | ✓                                             | ✓                         | ✓            |                                        | ✓      |
| Outdoor Restaurant Culinary | ✓                                  | ✓                                             | ✓                         | ✓            |                                        | ✓      |
| Outdoor Restaurant Lifestyle | ✓                                  | ✓                                             | ✓                         | ✓            |                                        | ✓      |
| Negative Place          | ✓                                  | ✓                                             | ✓                         | ✓            |                                        | ✓      |
| Sidewalk                | ✓                                  | ✓                                             | ✓                         | ✓            |                                        | ✓      |
| Simpang Setiabudi       | ✓                                  | ✓                                             | ✓                         | ✓            |                                        | ✓      |

![Figure 7. Mapping the potential of urban square on Dr. Mansur corridor, Medan.](image)

This distance between urban square potential is a distinct advantage for the next revitalization plan, namely the opportunity to plan for a sequential system and linkage paths for corridor users to improve the quality of the corridor as a successful public paths corridor. Character forming paths corridors is clearly found in all research area segments, marked by physical and user activities in the region. There is space utilization along the Dr. Mansur corridor for commercial and office activities as well as work
centers, in this case informally by street vendors and formally by owners of commercial buildings in this area, further strengthens the character of strip paths in this city corridor area [17]. In addition, the landscape in the front segment of the USU campus also forms a street corridor which provides convenience for its users as in the Strip Malls, City Trees, and Community Values reviews [18].

Theoretically according to Shrivastava [19], the condition of strip development can thus be overcome by regional rejuvenation concept called smart growth, which is a regional arrangement concept that comprehensively integrates the potential of local wisdom, social, cultural, and environmental in an integrated manner.

5. Conclusions
Strip Development is a indication that appears in the central area of the city's growth. Changes in residential allocation functions become uncontrolled commercial places because of the dynamics of community activities. The urban square potential in this research raises the local wisdom of community behavior and potential places of interest that called bottom up development. The finding this research is the identification mapping of revitalization elements in the form of urban square (place and activity) for the complimentary of generic and organic revitalization models, which can later become a guide for the community and government in addressing changes from and by the community so that the negative strip development indication can be controlled among others, by revealing the genius locus (place and character people activities) as an important element in the physical revitalization of the region.

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