The spatial phenomenon of Kin’s settlements in the UNNES campus area: study of activities and the meaning of spaces

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Abstract. The development of campuses on the outskirts of the city is forming new satellite cities, including the Universitas Negeri Semarang (UNNES) expanding its new campus in Sekaran Village, Gunungpati sub-district. The existence of this campus has a major impact on regional development, and affects land use. The characteristics of the countryside with local wisdom still seem to color the socio-cultural life of the people of Sekaran, and also affect the space and environment of the settlements where they live. This phenomenon indicates that there is a strong kinship among the sedentary groups. This study aims to: (1) explore the spatial phenomenon of kin’s settlements; (2) revealing the activities and meaning of spaces. In order to achieve the objectives, this research uses a phenomenological approach. The results of the study illustrate that the setting of kins settlements is formed by internal aspects, namely: the location of inheritance land, orientation between dwellings, access between dwellings, kin’s activities and the influence of the UNNES Campus which encourages the formation of new functions in kin’s settlements that have economic value. The existence of space and activities together strengthens the meaning of shared space in kin’s settlements.

1. Introduction
The city of Semarang as the capital city of Central Java Province becomes a connecting city between regions in Java with infrastructure support which is influenced by factors including: geographical conditions, location, city functions, history and culture of the city, as well as the stages of city development. [1]. Rapid urbanization causes the flow and agglomeration of regional production factors as a cause of changes in the urban-rural system and changes in urban-rural spatial patterns [2]. The development of suburban development is the impact of existing developments in the city center and gives rise to new growth centers with factors of influence: location close to the city center, cheaper land prices and a more comfortable environment compared to the city center, accessibility that is well connected to the city center, as well as complete facilities [3]. The development of campuses on the outskirts of the city is one of the impacts of this growth, and one of them is Universitas Negeri Semarang (UNNES) which is expanding its new campus in Sekaran Village, Gunungpati District. The existence of this campus has a major impact on regional development, and affects land use, especially settlements.

The suburbs are the locations for mixed settlements, namely: planned settlements, unplanned settlements, and autonomous settlements [4]. Settlement is a housing group as a unitary house that has the main function as a dwelling or a place to live with the support of facilities and infrastructure. Spatial settlements are formed by the layout of the houses in them according to the factors that form them [5][6]. Rural characteristics such as in Sekaran Village with their local wisdom still color the socio-
cultural life of the Sekaran residents, and also affect the space and residential environment in which they live. The existence of settlements formed from several dwellings can be referred to as small communities with the following characteristics: (a) residents still know and interact with each other; (b) residents have many characteristics in common; (c) residents understand and live their lives well [7]. Looking at the existing conditions, there are clusters of settlements formed by the kinship system. This condition is interpreted as a kins's settlement, with the understanding as a collection of dwellings where the original inhabitants still have kinship relations. A person is said to be related to someone if they have a "blood relationship", either through his mother or father [7]. This study aims to: (a) explore the spatial phenomenon of kins settlements; (b) revealing the activity and meaning of space.

2. Sub-urban Area
A suburban area is an area that lies between two areas, namely an area that has an urban appearance on the one hand and a rural area on the other [8]. Definitively, the boundaries of suburban areas are difficult to trace because their understanding involves physical and non-physical aspects [9]. An area can be called a suburban area, it must have four characters that are used as the basis for classification [10]. These characters are: (a) Previously it was a rural area with land use dominated by agricultural land and rural communities; (b) The target area for urban development attacks and becomes an arena for developer speculation to cultivate land; (c) Invasion area of urban population with urban social character; (d) Areas where conflicts occur between migrants and local residents, between urban and rural residents and between farmers and developers. In general, the development of big cities has an influence on suburban areas as a form of urban agglomeration which can be seen in 3 aspects, namely: (a) Population aspect: people's livelihood shifts from agriculture to non-agriculture; (b) Socio-cultural aspects: the formation of acculturation of indigenous people with immigrants; (c) Spatial aspect: land use change from agriculture to settlement, trade and industry [11]. The spatial pattern of suburban settlements was originally formed by the activities of farmers in rural areas, and most areas are characterized by agricultural land, which led to the formation of urban spatial patterns [10]. The spatial patterns formed are: (a) a pattern of spatial concentric; (b) a pattern of spatial dispersion. Figure 1 below is a form of settlement pattern in suburban areas.

![Figure 1. Spatial pattern of suburban settlements](image)

3. Context of Campus Area
The existence of the campus cannot be separated from local government policies in order to create an embryo for regional growth, especially in suburban areas. This means that the presence of the campus affects the spatial structure of the area in order to support the activities in it [12] [13]. The influence on the spatial area is the morphology of the area [14] and space pattern [15]. The growth of the campus area also affects the spatial along the road corridor to the campus with the emergence of buildings and infrastructure to support growing economic and transportation activities [16]. The growth of settlements in the campus area is a necessity, both the expansion of existing settlements and the emergence of new settlements. The existence of the campus does not only have an impact on the spatial settlements, but also social, economic, activity and population demographics [17]. The existence of campuses that are located on the outskirts of the city will tend to form an urban character, from what was previously rural. The physical character of the city space can be recognized through the basic
elements of the environment, the form of space and the quality of the value of a place that can form an identity by understanding the meaning of cultural values, uniqueness, characteristics of a place.

4. Settlements
In the process of establishing settlements, human intervention and supporting aspects are very decisive. According to ekistics (settlement science), the formation of settlements has five elements as a very complex system, namely: nature, humans, society, protection and networks. Elements of nature, humans and society can be seen in economic, social, political, technological and cultural aspects [18]. Settlements are divided into 5 principles, namely: (a) Maximizing human potential in contact with elements of nature, other people and human works; (b) Minimize efforts to achieve actual and potential interpersonal contact; (c) Optimization of human protective space, to maintain contact with people; (d) Optimizing the quality of human relations with their environment (nature, society, protection, and tissue) of animals, or other objects; (e) Humans organize their settlements in an effort to achieve optimal synthesis.

![Figure 2. Principles in settlements](image)

Spatial settlements are formed by the layout of the houses in them according to the factors that form them. The spatial development of settlements is related to the residential environment, residential houses, building forms that are formed due to factors that develop in the community. This spatial is not only related to physical space but also community activities [19].

5. Kinship and Local Wisdom
Settlement as a place to live certainly cannot be separated from social consensus, including the order in the kinship system and the existence of local wisdom in the area. Local wisdom that exists in settlements through collaborative interactions between three groups of entities: those living in housing, rural settlements, and autonomous settlements [4]. Spatial relationships are strongly related to non-spatial connections, which indicates that social relationships are kinship stable [20]. Even social relations can serve as a safeguard for environmental entities [21]. A stronger form of social relationship is kinship. A person is said to be related to someone if he has a "blood relationship" with someone, either through his mother or father [7]. Spatially, settlements that are bound by kinship have local characteristics, such as access to links between houses and shared spaces, housing arranged in groups with a certain pattern. [22] [23] [24], setting [25], transparency [26], and can form a place identity [27]. Local wisdom can be conceptualized as local wisdom, local genius [28] which can be interpreted as a process of cultural character, namely the development of a phenomenological process to a cognitive trait [29].
6. Methods

6.1 Qualitative Research Methods. Qualitative research has the goal of gaining a thorough understanding of human and social problems, not just describing a reality on the surface like quantitative research. [30]. Researchers try to provide an interpretation of how a subject gets meaning from the surrounding environment, as well as how that meaning influences the behavior of the subject. Qualitative research is conducted in a natural setting and not as a result of the engineering of the variables involved. Qualitative research methods are focused on qualitative methods-with a phenomenological approach. Phenomenological research is a qualitative strategy in which researchers identify the essence of human experience about a phenomenon as described by participants in a study [31].

6.2 Determination of Research Model. Phenomenological research has the assumption that every individual experiences a phenomenon with full awareness. So that this research has the aim of exploring the deepest awareness of the subjects about their experiences in an event. Phenomenology is based on four truths, namely: sensual empirical truth, logical empirical truth, ethical empirical truth and transcendental empirical truth [32]. There are important procedures in carrying out phenomenological research [33], namely: (a) The researcher determines the scope or scope of the phenomenon of the object of research by trying to understand the philosophy of the approach used; (b) The researcher compiles a list of questions to reveal the meaning of the experience of each individual object of research; (c) The researcher collects data from each individual who experiences the phenomenon by means of in-depth interviews; (d) The researcher analyzes phenomenological data; (e) The researcher describes thoroughly the meaning and essence of the experiences of the subjects; (f) The researchers reports research results that provide a good understanding for readers of the phenomena that occur in research in terms of experience.

6.3 Research Scoop. The scope of the research is the administrative area of Banaran Hamlet, Sekaran Village, Gunungpati District, Semarang City. This area is located on the north and west sides of the UNNES Campus Area. The information unit is the kin’s settlement cluster, the majority of which are inhabited by the Bani Kamad’s family, which is made up of 24 kin’s dwellings and inhabited by more than 36 kins. The land in the cluster is the inheritance land of the Bani Kamad. In this cluster live the second generation to the fourth generation. Indications of the existence of kinship are shown by the existence of spatial relationships with accesses in the form of environmental roads and hallways, use of shared spaces, use of shared terraces, use of shared gates and activities of kins together at certain times. In terms of function, the 24 existing dwellings can be broken down as follows: (a) 2 fully rented dwellings; (b) 7 dwellings have additional cost functions; (c) 13 private dwellings; (d) the rest are private dwellings with the addition of a stall/workshop function.

6.4 Data Collection Process. Qualitative research has the main data source from the words and actions of informants, while the others are documents, pictures, photos and so on. Thus, the researcher must understand the words of the informants in their context. The researcher must also engages as closely as possible with informants without intervening, to maintain the naturalness of the context [32]. Approaches that can be taken by researcher in the context of data collection or data recording [34], namely: (a) observations; (b) interviews; (c) documentation; (d) audio-visual materials.

6.5 Research Inductive Process. Empirical themes that exist in the information units are a unified whole, so a process of categorizing similar and different themes is needed in order to recognize the uniqueness of the cases in them in order to build concepts. The uniqueness of the case can be exemplified by the existence of local terms or referred to as specific terminology as a form of local views. The existing cases are material in building abstractions. The categorized concepts become the basic material in building local theories which are then dialogued with relevant theories. It aims to determine the position of research and the contribution of research findings.
7. Results

7.1. Indications of the Existence of Kin’s Settlement The settlements in Banaran Hamlet show indications of still strong social relations and the existence of kinship ties. Among the many large families of 1 descendant (bani) in Banaran Hamlet, namely Bani Kamad. There are 154 kins of Bani Kamad, with details: 1st Generation: 1 person; 2nd Generation: 5 persons; 3rd Generation: 22 persons; 4th Generation: 69 persons; 5th Generation: 55 persons; and 6th Generation: 2 persons. In the course of time, not all descendants of the Bani live in Dusun Banaran and live outside the hamlet, for several reasons: following their husband/wife, occupying inherited land outside the hamlet, selling land and other reasons. The spatial pattern of kin’s settlements is spread out, meaning that each of the non-intact kins occupies an area with certain boundaries. However, they are separated according to the location of the inheritance land which is also scattered. In addition to the location of the inherited land, the distribution of the Bani settlements is also due to the sale of kin's land to other people outside the Bani’s, especially immigrants (non-Banaran people). The concept of no fences and borderless appears dominantly in the settlements of the Banaran peoples. This condition allows every people to access from one dwelling to another without having to go through a fence gate, even on some sides the land is left open and connected directly. Likewise, the existence of a connecting door between kin’s dwellings.

7.2. Setting of Kin’s Settlement. The kin’s dwellings occupy plots of land according to inheritance boundaries. They are managed by kin who has inheritance rights, where in each dwelling can consist of: the heirs, husband/wife, children, and other kins with boarding status. The boarding kins consist of old kins who are being cared for and young kins who do not yet have the ability to manage housing/inherited assets. Old kins are the parents of one of the kins who live in one of the children who are trusted to take care of. The scope of housing is also clustered close to each other between siblings. In the Kin’s Settlement Cluster, kins live in groups according to the 2nd Generation hierarchy, namely the KA group (first child), KB (second child), KC (third child), KD (fourth child) and KE (fifth child). Kin’s dwellings form a grid pattern with different areas. Some of KD's inherited assets have been sold to other parties, so that the dwelling blocks that make up the grid do not look intact. The relationship between dwellings is shown by a straight line (strong relationship) and dashed line (weak relationship), namely the ease of access between dwellings. One of the kin’s cluster settlements is Cluster A with a spatial configuration that can be seen in Figure 3 below.

![Figure 3. Relationship between dwellings](image)

Kin's settlement in Cluster A have access and orientation ties between kin’s dwellings. Phenomena in the field show kinship ties, including: common gathering rooms, hallways as access between dwellings, paths that connect between the back or side doors of kin’s dwellings, door orientation and direction towards other dwellings, installation and use of shared terraces, use of turnstiles/gates together, the connector building is in the form of a kitchen room and yard access stairs that are used by kins together. There are certain spaces that are also used as a gathering place for kins, especially by female kins. The place is usually located on the terrace, a family room that tends to be close to the
outside area. How to gather more often with lesehan and is relaxed (klesedan) or by sitting together on long chairs outside the dwellings. The spatial phenomenon in Cluster A can be seen in Figure 4 below.

![Figure 4. Spatial Phenomenon](image)

According to the function of dwelling, kin’s settlements in Cluster A consist of the following functions: private dwelling, private dwelling + boarding house, private dwelling + laundry, private dwelling + workshop, private dwelling+ shop, boarding house, and tradisional shop. Figure 5 below is the distribution of dwellings in Cluster A of kin’s settlements according to their function:

![Figure 5. Distribution of residential functions in Cluster A](image)

7.3. Kin’s Activities. The community life of kins are shown by the common activities carried out in certain spaces, both spontaneous and planned. The involvement of kins can also be seen from the scope of the family environment. Here are the kin’s activities:
a. Klesedan. Klesedan means a relaxing activity for kins to gather with other kins in their spare time. This activity is usually done by lazing / sleeping. Kins use one of the spaces that are considered comfortable to use as a means of relaxing and lazing. This activity was attended by kins who have very close relationships, both socially and have joint businesses. Kins do klesedan in one of the rooms they feel comfortable in, namely on one side of the laundry room when not in use. The setting of klesedan room is illustrated in Figure 6 below:

![Figure 6 Illustration of klesedan room setting](image)

b. Kroyoman. Kroyoman is a relaxing activity with closest kins. This activity is generally carried out in the morning, afternoon or evening after they carry out work/routines every day. According to the informant, kroyoman is held almost every day with various sub-activities in it, namely: chatting with kins, both kins in one dwelling and kins living in the nearest dwelling. Other sub activities are babysitting, ndulang children or just sitting around enjoying the atmosphere of the afternoon before sunset. On certain days (eg weekends), kroyoman is attended by distant kins who do not live in Banaran. This activity is carried out on one of the terraces of kins’ dwellings, areas that are connected between kin’s dwellings, and the yard. In kroyoman there is a custom of gathering, where usually the eldest kins sit on chairs on the terrace, while the other kins are in other seats, including the steps on the terrace. Figure 6 below illustrates the setting of the kin's kroyoman area:
c. **Tedak Siten.** Javanese society in general has a distinctive tradition in the management of life, both social and spiritual. The tradition is packaged in certain procedures that have a certain philosophy. **Tedak siten** is one of the traditions that is still strong in the Javanese community, especially the Banaran peoples. **Tedak siten** is a tradition for babies who are about seven or eight months old to start walking, as the words **tedak** and **siten** mean. **Tedak** means stepping and **siten** means land or earth. This tradition has a philosophy of readiness of a child to face a successful life in the future. Figure 8 below illustrates the setting of **tedak siten** area:

**Figure 7. Setting of Kroyoman area**

**Figure 8. Setting of tedak siten area**
8. Conclusion
The friendly nature of the Javanese society as the basis of the culture of life has formed the distinctive customs of a particular region. It also determines how they live and determines the form of settlement in which they live. The lives of kins around the UNNES Campus form clusters of kin’s settlements that are in accordance with the internal aspects of their formation, including: location of inheritance, orientation between dwellings, access between dwellings, and kin’s activities. The external aspects are the influence of the existence of the UNNES Campus, namely residential growth by adding new functions that have economic value. In general, the new function is boarding houses. This new function will affect physically (settlement setting), economically (relatives’ income), and socially (interaction between migrants and kins). The existing spaces have the meaning of togetherness between kins in their various activities. The settlement setting illustrates that there is no private outdoor space, so every outdoor space is a shared space for relatives.

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