

A STUDY OF PREDICATE FUNCTION IN VERNACULAR ARCHITECTURE GRAMMAR CASE STUDY: TIRTOSARI VILLAGE, SAWANGAN DISTRICT, CENTRAL JAVA PROVINCE, INDONESIA

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Abstract

As a grammar in natural language, architectural grammar has a set of rules to communicate. Architectural grammar is the composition of space where each space has a function in the arrangement. As in natural language it is known the functions of Subject, Predicate, Object and Adverb, where predicate have the most important function. Predicate in architecture is a space that has strong characteristics of controlling the composition of space and generative – to be able to derive a number of arrangement of space according to space and time.

The discourse is how to find a predicate in the grammar of vernacular architecture in the study area. Approach is done through linguistic theory, analogize the language with architecture. Object of the material under study is the vernacular residential artifacts of rural communities in the village of Tirtosari, Sawangan District, Magelang Regency, Central Java Province, Indonesia.

The research results are first, a discovery of spaces which have predicate characteristics and second, a conceptual model of spatial grammar which shows the position and role of space as a predicate.

Keywords: architectural grammar, generative, predicate.

1. INTRODUCTION

Grammar is a basic provision of rules governing word in order to have meaning. The meaning is required for communication. The equal number of elements (lingual units) occurs because the elements are linearly related and associative. The linear relationship occurs because of the timeline in which each element is arranged in sequence. All relationships in the timeline are called syntagmatic relationships [Wedhawati, et.al., 2016: 45]. In Javanese natural language the sequence follows the linear pattern and its placement according to the function of each element (lingual unit) such as Subject / Predicate / Object / Adverb, S-P-O-A. In the structure of the core sentence there are at least subjects-predicate and predicate is the most important function. Predicate in semantic concepts is part of a proposition *which* states situation, process and identity. Predicate explains the subject.

Architecture has a grammar with the structure and system equivalent to the sentence. To explore structures and systems in architecture it can be approached architectural analogy with linguistic theory. Preziosi [1978: 67] says that this analogy is not like comparing apple to apple. Physical architecture cannot be separated from the existing context. The values of life that grow in the local community also

influence the formation of spatial arrangements and include determining the space that serves as a predicate.

The attempt to discover the functions of predicate in architectural grammar is done by integrating a study of the value of life and a study of the basic space - the order and the grammatical meanings. A review of the value of life is done through in-depth interviews and observation. Analysis of physical objects is conducted by exploring artifacts that exist on the object of research. The selected object is residential community mostly in rural areas based on the objective to get the concept of a society with minimal foreign influences including the architect (architecture without architect).

1.1 Discourse

The discourse of this study is how to get a space with predicate characteristics in the grammar of residential architecture of rural Java society?

1.2 Object of Research

The object of the research is the space in the vernacular house in the village of Tirtosari, District Sawangan, Magelang regency, Central Java province, Indonesia.

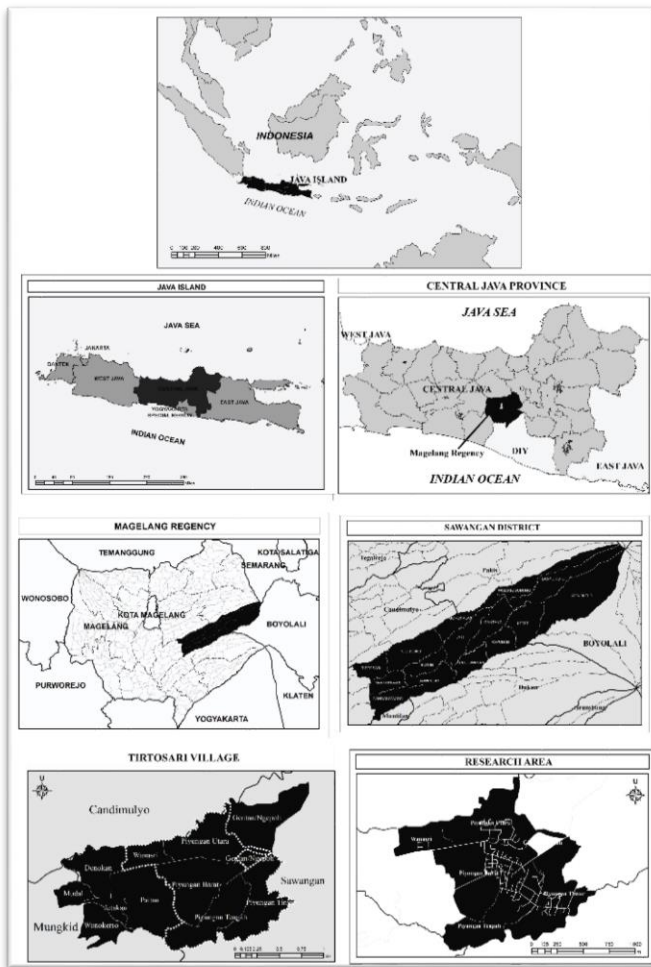


Fig – 1: Area of research

The selected village is an agricultural village located in the rural area which is still able to maintain the traditional architecture. The samples were taken by stratified random samplings. The twelve traditional houses are vernacular houses which have the characteristics of rural Javanese architecture.

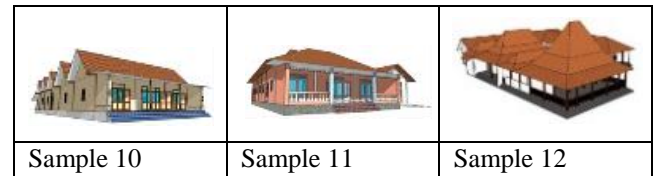
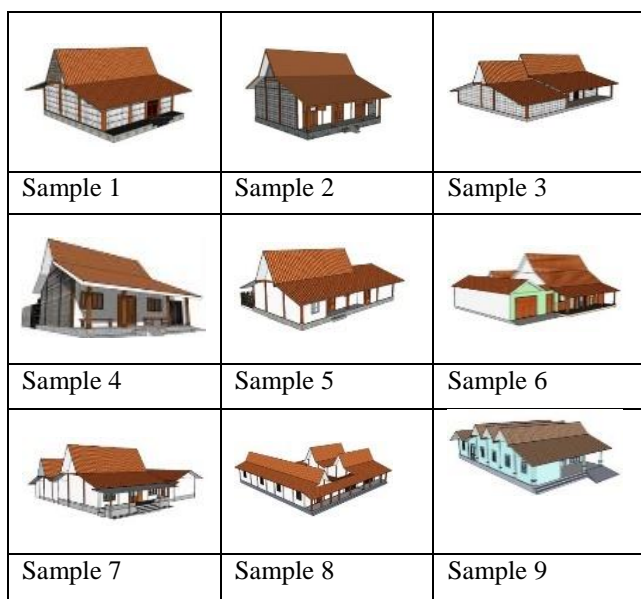


Fig – 2: Samples of Research

2. ANALYSIS

This research is influenced by the idea of structuralism, a movement in the 20th century which examines language and symbols according to strict rules and formulations. Language is a condition for culture because the materials used to form both are the same. These materials are logical relations, opposition, correlation and so on (Lévi-Strauss in Ahimsa-Putra 2012: 5). Language and culture (in this case architecture) is the result of various activities of the same principle. The relationship is aligned (Salura 2008: 10). The architectural nature of architecture shows a harmonious relationship between interrelated and interdependent elements. Herman Hertzberger - a Dutch architect - stated that structures provide close bonds between each element in harmony; Structure is harmony, cohesion: it is how things work or fit together. (Herman Hertzberger, 2015: 32). The approach of the study is the analogy approach of architecture with linguistics. The parallels between language and architecture have been proposed reviewed by Christopher Alexander [1968], Preziosi [1979] and Salura [2010]. The study is based on two premises namely the first strong allegation that the architectural grammar is formed by the arrangement of space. Second, Spatial arrangement is thought to be influenced by life values. There are three main elements to discuss the basic elements, the composition of elements and grammatical meanings. In parallel, the architectural grammar also deals with basic space, ordering space and grammatical meanings. The space in the discourse is the basic space that has the potential to affect the composition of the space. The basic composition is the smallest arrangement which has meaning, while the grammatical meaning is the meaning arising from the arrangement of these spaces.

The discussion begins with a study of the values of life that underlies the arrangement of spaces. This study to find the dominant values and the space that accommodates them is done by observation, measurement, depiction and in-depth interviews. The philosophy of life which much affects the life of Javanese society is Sangkan Paraning Dumadi, Manunggaling Kawula Gusti and Hamemayu Hayuning Bawana (Wisnumurti, 2012: 263). The results of the study indicate that the values that affect the lives of rural people remain influenced by the local philosophies. These three philosophies essentially teach the harmonious relationship between man and man, nature and God. Some of these teachings still developing in the research village are respectful, mpan-papan (conscious place), harmony and empathy.

To find the basic space, a typomorphology study was done. Through this study, it is expected first, to obtain the most

important spaces and become the core and second, to obtain information of transformation process. Type refers to the classification of elements, events, settings- which have a certain characteristic (Roderick J. Lawrence in Frank, Karen.A., 1994: 271). Through this study, it is obtained the type of space, space category and space formation. Of all the 15 samples, the basic typology of outer space is the road, the front yard and the house. Everyday frontyards are used by residents, neighbors and even passers. Frontyards are used to dry grain, play activities and for ritual activities such as funerals, marriages and other rituals and cultural events. The frontyard has a very strong relationship with the kitchen. Everytime there is an event in the yard, then the serving is the pawon or obor-obor 'a traditional kitchen. Space in the core, is a space that is limited to the structure of 16 poles. Activities in the core are daily activities such as receiving guests, eating, watching TV, sleeping and other odd jobs such as sewing or trading. In small home samples, the kitchen is usually in the core room but in a large house the kitchen is made separately in the back. Nevertheless, the kitchen has a very close relationship with the living room, the space to watch tv and the lounge (gandok). It is interesting that a traditional kitchen called a pawon or obor-obor is preserved. Pawon or Obor-obor is an important space to maintain togetherness. The core is equipped with supporting space. Activities in the supporting space such as activities to relax, cook and bathe, store rice and other service rooms. Supporting spaces can be developed in all directions.

To find the basic order, it is done by syntactic study. In natural language, syntax is the arrangement and relationship between words with larger lingual words or lingual units with other lingual units (Kridalaksana (1983: 154). In the study of space syntax, the most important is the sequence and interconnection or interdependence between spaces, cohesion and space permeability so as to recognize the structure, system, category and function of space in the composition. From the study of space syntax, it is obtained strong spatial arrangement to determine grammatics. Some of the arrangement of spaces which are identified to have a strong relationship is the arrangement of road -frontyard-terraces, the arrangement of the living room - dining room - kitchen / pawon/obor-obor; arrangement of room to watch TV which is known as living room with kitchen. The most important outdoor space arrangement is the gandok (living room) and pawon / obor-obor / kitchen. Ritual activities such as funeral, marriage and other celebration require Pawon/Kitchen/Obor-obor. The most important arrangement indoor spaces is the kitchen And relaxed spaces (gandok) where important decisions are made in by parent - approval to marry of their children, sending their children to study in university level - and so on. Besides that in everyday activities usually mother cook and father is in the lounge / gandok nearby.

In order to reveal the grammatical meaning, a study of semantics is needed. Grammatical meaning is the meaning caused by the arrangement of space. To get the meaning of the core arrangement then conducted a study of syntagmatic

and paradigmatic. This study will find space in an arrangement which can or cannot be substituted. Thus it will get predicate which affect grammar in architecture. The outdoor space arrangement is the 'yard' arrangement with the 'kitchen' pawon / obor-obor. The basic arrangement of the inner space is a 'living room' with 'kitchen' pawon / obor-obor.

Model

In contrast to the grammar in natural language which is linear-a single axis, the architectural grammar is spatial grammar following multi axes. The predicate position is on each axis. Conceptually the spatial grammatical model driven by the predicate may change its shape following its axis. Changes that occur in accordance with the capacity of the existing value content in the respective axis. Predicate will control the form of conceptual thinking as illustrated in the following figure:

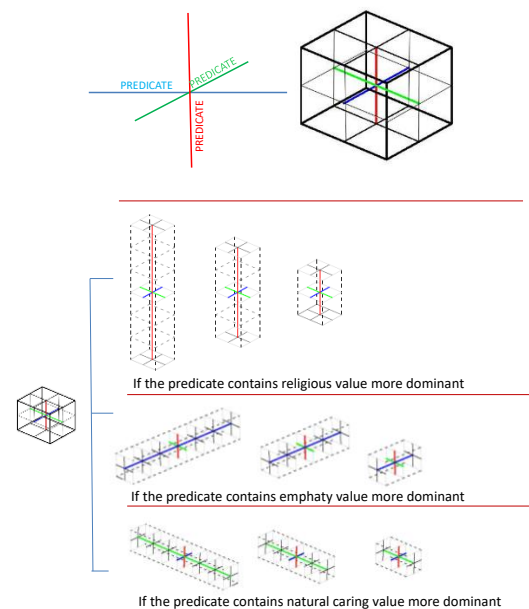


Fig – 3: Conceptual Model of Predicate Role

3. CONCLUSION

The answer of the research question of how to get a space with predicate characteristics in the grammar of residential architecture of Java rural society can be explained as follows:

First, the architectural grammar of rural society is the spatial grammar which follows the multi axes of the axis of human relationships with others, nature and God.

Second, the weight of the predicate on each axis determines the shape of the conceptual diagram. The weights on the predicate will determine the identity of the home owner : individual or community.

The content of the values on each axis may differ so that the conceptual form is different.

Third, the characteristics of space which serves as a predicate is an active space, high intensity, has a strong network in the organization of space. In the case of the village of Tirtosari, the space with the main predicate function is the pawon / obor-obor / 'traditional kitchen'.

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