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Structuralism perspective to read the patterns and meanings of vernacular architectural Patterns and meanings are one of the formal architectural objects commonly studied by academics and practitioners. However, the philosophy, theory, and concept of structuralism underlying architectural patterns and meanings as a complex and diverse issue have not been conducted. Therefore, it is important to carry out in-depth studies in the context of structuralism on these objects.

This theoretical study reveals the relationship between vernacular architectural patterns and the influencing philosophical, theoretical, and paradigm factors using the literature review method. Based on the notion of structural thought elaborated with architectural theory in the context of form, function, and meaning, three approaches were formulated, namely a formalist, genetic and dynamic structural approaches to reading architectural patterns and traditional meaning forms.

The results showed that this study has succeeded in presenting a new reading tool to parse the patterns and meanings of a relatively complete vernacular architecture starting from the philosophical, theoretical context to the underlying paradigm. These results are expected to be useful as a new reading tool for vernacular architectural patterns. Similarly, the expected implication is as a modern architectural design method.
Keyword: Forms, Functions, Meanings, Patterns, Structuralism

INTRODUCTION Architecture is believed to be one of the cultural artifacts, regularly influenced by the times, knowledge, and the development of ideological values (Clarissa, 2016; Salura et al., 2020). This phenomenon is reflected in the architectural formation, especially in public buildings that do not consider the context of climate, environment, and culture (Budiharjo, 1997; Djarot Purbadi et al., 2020).

One of the impacts is that architects often imitate architectural formations from developed countries by frequently embedding a certain architectural style on the building's appearance. According to Salura (2013), the uniformity and architectural appearance of building's change the character of place identity, and cultural signs (Salura, 2013). For example, the appearance of the wedding chapel is dominated by classical style, while government buildings are designed similar to the Parliament structures abroad.

Generally, the single phenomenon of architectural buildings is caused by the designer's inability to understand the ideal expression of a building's function (Salura & Clarissa, 2018; Lake, 2020), and inadequate knowledge of local architecture as a design source (Salura & Fauzy, 2012; Salura, Clarissa, & Lake, 2020). Therefore, a strategy capable of analyzing local conditions and the role of climate globalization is needed to avoid the persistent use of a single architectural form from abroad (Salura, 2012).

According to Salura (2007), the more global the appearance of architectural forms, the stronger the local role in character (Salura, 2007). The emergence of the local role for creating architectural characters is in line with Naisbitt's concept of global-paradox, which predicts that the forces of globalization tend to shift and focus on local characters (Naisbitt, 1994). Over the past two decades, globalization has attracted the attention of scientists and academics as a natural threat and an opportunity to develop local culture through the design of modern and postmodern architecture buildings.

Departing from this phenomenon, this study aims to elucidate the application of Sundanese vernacular architectural concepts to the design of a modern building. In addition to being able to explicate the suitability of the building's architectural expression to its nature and local cultural traditions, this study also explored how the building can accommodate new types of function. However, vernacular architecture still exists because it is not easily eroded by time.

Papanek (1995) stated that it is an original architectural product built by the local people, which accommodates the natural and cultural values of the community (Papanek, 1995). Vernacular architecture is always associated with the ethnic traditions of local communities, which is in line with cosmological understanding, passed down

from one generation to another, hence its existence is not eroded by the impact of development (Wiranto, 1999). The existence of vernacular architectural works grew from local knowledge of the people and developed through the configuration processes of culture despite the internal and external pressures due to civilization (Wiranto, 1999).

Papanek and Wiranto's thoughts reinforced the statement that the existence of vernacular architecture has been regularly tested in accordance with its climate, surrounding environment, and context. The potential of vernacular architecture keeps getting stronger because its presence in practice does not damage the associated culture, environment, and values. Studies on the traditional settlements of Lawalu, East Nusa Tenggara (Bebhe et al., 2019), and Naga village (Anwar et al., 2018) proved that the concept of vernacular architecture is ecologically appropriate with ecological design principles.

The ecological concept is inherited through the tradition of building houses, linkages with the environment, and collective relationships between communities (Bebhe et al., 2019; Yatmo & Atmodiwirjo, 2021; Sastrosasmito, 2020). The role of vernacular architecture is becoming increasingly important because it is part of the history and civilization traces that record its people's lifestyle and cultural heritage (Pearson, 1994). Therefore, it is very valuable when each building element has a name/designation/attribute typical of the local language containing a certain meaning in the form of signs, symbols, and patterns.

An initial review of a study on architectural concepts showed that architecture is always influenced by the community's way of thought, which develops in line with creating new dynamic patterns (Rachmawati, 2010). Therefore, architectural concepts can be traced through patterns, while the meanings of the vernacular architectural tradition are believed to be important to examine. The importance of architectural identity character; and knowledge of vernacular architecture in the context of change is significant in addressing uniformity and diversity.

This theoretical study aims to determine the aspects influencing architectural patterns and meanings in the context of philosophy, theory, and paradigms. The results are arranged in a new conceptual framework as a tool for reading patterns and meanings of vernacular architectural traditions. This study is expected to be able to enrich the treasury of the theory of patterns and meanings of architectural traditions generally and in vernacular architecture particularly.

It produces a method to read and determine patterns and hidden meanings of vernacular architectural traditions. The results are expected to understand important

aspects that need to be considered in producing patterns and meanings of modern building design. CASE STUDY AND METHODS This theoretical study reveals the issue of the patterns and meanings of vernacular architecture, which are purposively selected based on the philosophical studies influencing architectural patterns and meanings. It is also selected based on a paradigm that is in line with the issue of patterns and meanings in architecture, especially regarding the relationship between the principles of architectural arrangement.

Lastly, architectural theories are in line with aspects of patterns and their relation to the meaning of vernacular architecture. The three scientific perspectives, namely philosophical, paradigm, and theoretical influencing issues associated with vernacular architecture, are used as case studies. The first is the philosophical context of Plato (427 – 347 BC) on platonic forms (Plato, 1941). The second is the context of the structural paradigm of Levi-Staruss (1963), from the book entitled: The effectiveness of Symbols (Lévi-Strauss, 1963).

The third is the theoretical context of the architecture underlying architectural patterns and meanings, namely the theory of pattern language by Christopher Alexander (1936) to determine patterns and meanings in the context of containers , typological theory by Aldo Rosi (1982) related to patterns in the context of place, systems and unit theory by N. John Habraken (1928) regarding patterns and meanings in the context of function, and the theory of structuring principles by Purnama Salura (2010) to reveal patterns and meanings in the context of space.

The study started by explaining the meanings and understanding of the thoughts associated with architectural patterns in epistemology, ontology, and axiology according to the context of the selected case study. Second, it classifies architectural theories relevant to understanding thought and keywords from the issue of patterns and meanings of vernacular architecture. Third, the step is continued by building an elaboration framework between the notion of structural thought and the approach of selected theories.

Furthermore, it is used as a tool to critically explain all architectural patterns according to the context of function, form, and meaning. The results are operationalized into the context of container and place (form), activity and space (function), as well as an existential and conception (meaning). RESULT AND DISCUSSION Architectural patterns and meanings in a philosophical context The history of architectural knowledge describes the pattern interpreted in various ways and in accordance with the design.

According to Sutrisno & Verhaak (1993), the pattern has long been revealed in the time

of Plato (427 – 347 BC), during the ancient times for humans to respond to the surrounding environment (Sutrisno & Verhaak, 1993). Peters (2017) stated that Plato revealed fundamental objects in every reality (Peters, 2017), known as platonic forms, which are called patterns in modern times (Alexander, 1979). In ancient Greece and Rome, the application of ornaments, decorations, and building designs with geometric patterns was produced for symbolic, theological, and philosophical purposes of the people in these two areas (Gombrich, 1981).

From classical times to the early Renaissance, geometric patterns influenced the thought of Vitruvius (80 – 15 BC) and Leonardo da Vinci (1452 – 1519). According to Vitruvius, architecture is an imitation of nature, therefore, the pattern proportions of the human body and nature are used as the basis for its creation. Leonardo da Vinci's statement is in line with the definition of Vitruvian Man, which is described based on geometric patterns of the cosmic order, as a translation that the human body is written in circles and squares (Wetmore et al., 1916).

Patterns are also the basis for the development of Islamic architecture due to the influence of the Nizam's metaphysical concepts, calligraphy motifs, aesthetic creation, and epistemological and ontological communication forms. In Islamic philosophy, wisdom (tawhid) is understood as the patterns and meanings of tradition (Bellos & Broug (Illustrator), 2015). The present patterns are understood as a system or process of identical elements (Garcia, 2009). In today's daily life, patterns are synonyms, habits, mimesis, templates, motifs, configurations, organizations, arrangements, figures, agreements, and textures.

The diversity of understanding patterns is directed at the role associated with its creation, reproduction, evolution, and spatial processing methods (Garcia, 2009). Since the emergence of books on architectural patterns in the 15th century in Europe, patterns have become very important in producing space. Besides, its understanding in architecture started to increase in the late 17th, 18th, and 19th centuries, due to the emergence of the industrial revolution.

It also became a reference in the production of industrial problems and influenced several theorists, architects, and designers. The emergence of patterns in the first period of the industrial revolution was used in taxonomy and morphological study. Furthermore, Darwin and Linnaeus' theory of evolution influenced the pattern theory of the 18th and 19th centuries. Darwin used the pattern of changes in organisms from one generation to the next to process genetic mutation and natural selection (Garcia, 2009).

In the 20th century, patterns were reclassified as art due to the nature of repetition or

transformation (Hersey, 1980). In the modern period, patterns are used as the basis of psychological theory in accordance with the basics of observation, namely gestalt. Gestaltism is based on a positivist creationist notion that initiated a curiosity on the shape of material objects. The basic observations of the gestalt are the foreground and the background, as a camouflage pattern. Gestalt laws or principles influence patterns, especially in architecture (Boedojo et al., 1986).

Furthermore, a literature review on the understanding of patterns in architecture produces two important points used as the basis for this study. First architectural patterns aim to produce a composition of fixed basic forms, which is better in the process of change, thereby creating new forms, functions, and meanings. This process traces basic forms for no apparent reason, rather it studies and critically synthesizes architectural concepts, principles, or elements.

Second, architectural patterns have a fixed basis of form in the conceptual realm, however, they do not end in only one property or composition of architectural elements. The patterns and meanings of architecture in the structuralism context Structural thought is appropriate in the study of architectural tradition patterns. A previous study was defined as a theoretical building underlying all realities that humans do, think, and feel.

Gilles (2002) stated that the notion of structural thought originated in the linguistics and sociology realms since the 1900s in Europe (Gilles, 2002). The notion that influenced linguistics was coined by Ferdinand de Saussure (1857-1913) and Charles Sanders Peirce (1839-1914). Saussure and Peirce raised the notion of structural thought to an epistemological and methodological level through the dyadic concept structures, namely "langue-parole" and "significant-signifies," as well as the concept of triadic structure, known as "sign-object-interpretant" (Salura, 2005).

The important terminology coined by Ferdinand de Saussure is semiology and binary opposition, which is a system dividing various realities into two related categories, such as dark and light, black and white, left and right, up and down, etc. At the beginning of its emergence, the notion of structural thought was interpreted as a counter-theory that opposed mimetic and expressive theories (Yulianto, 2011). According to the history of the philosophy of science, structuralist characteristics focus on describing the actual state of objects through the visible investigation of the hierarchy or arrangement, components or elements, and clear and specific models (Roen, 2011). The emphasis on actual objects through a hierarchy or arrangement influenced the thought of Levi-Strauss (1958), which emphasized more on the overall concept or totality of cultural-anthropological scholarship as the main structural characteristic.

In the 20th century, structural thought grew to influence psychological theory with the foundations of gestalt reality. This process is traced from a structure analogous to language, therefore, this statement becomes the basis of structural thought developed by Jean Piaget (1986), which is divided into totality, transformation, and self-regulation (Piaget, 1968). Structural concepts re-emerged and got stronger in cultural anthropology due to Levi-Strauss' dissatisfaction with phenomenology and existentialism, such as Malinowski's (1992) concrete understanding (Adimihardja & Salura, 2004, p. 42).

Levi-Strauss's understanding was similar to Radcliffe-Brown's (1963), however, it differed with the use of structure to express abstract and concrete functions. Levi-Strauss structuralism is a paradigm in anthropology used to reveal cultural phenomena that occur, including architecture as part of cultural products (Levi-Strauss, 1963). Levi-Strauss (1963) also found that the existence of structural concepts in anthropology creates an understanding of form or gives shape in a dynamic society, which contains three main elements, namely totality, transformation, and self-regulation.

In a book by Levi-Strauss (1975) entitled "Trites Tropique," it was stated that language is very close to human culture, therefore, a linguistic model is needed for its performance. The logic of language is used in structuralism, and its thought influences cultural analysis (Levi-Strauss, 1992). The basic principle of the structure of Levi-Strauss theory focuses on the word forms closely related to society's social structure. This is because the language used by society is a (1) reflection of the overall culture, (2) part or elements of culture, (3) condition of culture (Ahimsa-Putra, 2006, p. 79).

Based on the structural theory of language, Levi-Strauss managed to observe that there are no longer visions or missions behind the appearance of human works, rather there were values or meanings that have unconsciously shaped peoples' ideas, opinions, or thoughts. The structural thought used in a study on architectural patterns is Levi-Strauss' structural understanding (Ahimsa-Putra, 2006, p. 69). According to Adimihardja & Salura (2004), there is a universal forming structure in all cultural diversity (Adimihardja & Salura, 2004, p. 46).

Moreover, there are orders and regularities in various activity phenomena analyzed to determine the meanings of a language or set of signs and symbols to convey a certain message. The existence of order and regularities as part of the pattern allows the abstraction of the activity phenomenon to reveal the abstract rules that lie behind it, similar to a code or grammatical arrangement. Therefore, Levi-Strauss' structural thought is in line with the issue of architectural patterns and the meanings of tradition

as a cultural product.

The presence of Levi-Strauss' structural thought in modern times has drawn a lot of criticism from an epistemological perspective. The validation has been challenged in the modern era, especially by anthropologists, namely linguistic and cultural studies. Mary Douglas stated that Levi-Strauss used analytical concepts by forcing the data to fit his thought. Douglas further stated that the method of structural thought is inappropriate and depends on the observer (Ahimsa-Putra, 2006, p. 162). This means that the role of the subjectivism element is very close to the structural thought by Levi-Strauss.

Therefore, to reconcile the criticism against the reaction of structural thought in the study of architectural patterns and the meanings of tradition, emphasis on the relation of subject and object becomes very important and relevant. The subject-object relation is influenced by psychological thought; therefore, it becomes a social phenomenon internally linked and regulated when associated with structural thought. The idea of reconciling the structuralism of Levi-Strauss and Douglas is in line with the structural approach put forward by Salura (2010).

In the subject, there is always the meaning of the principle of order on balance and orientation based on the essence of man and nature (Salura, 2010). Theories in line with the notion of structural thought and psychology lead to post-structural understanding in the architectural realm. Therefore, they are globally translated into three types of approaches to express the concepts of forms, functions, and meanings.

These approaches referred to are the understanding of formalist, genetic, and dynamic structural thought, as shown in figure 1. _ Figure 1: Mapping of structural paradigms and their relationships with post-structurlism (subject and object relationships) Architectural patterns and meanings in the context of form The term formalism comes from the Latin word forma which means form or shape (Saleh & Fatulloh, 2014). Formalist structuralism believes that the basic form or patterns are accepted by everyone and contain a universal basic nature like a language structure.

According to Harland (2006), words are substitutes for ideas and concrete objects (Harland, 2006). The consequence of formalist structural thought is that it overrides the meaning contained in the basic pattern of forms. Furthermore, without a reference to a word, language becomes meaningless (Harland, 2006). In architectural scholarship, the significant influence of the selected formalist structural thought is determined in the movement theories of Christopher Alexander (1936) and Aldo Rossi (1982) through a form.

Christopher Alexander's (1977; 1979); 1987) language-pattern approach, and Aldo Rossi's (1982) typology were selected to read the issue of patterns in architecture from the concept of form as well as the understanding of formalist structural thought. The pattern-language approach is significant in determining the architectural pattern phenomena that are identified as the context of the container concept. The typological approach is relevant and used to describe the pattern phenomenon in architecture into the context of the place. Elaboration for the study of architectural tradition patterns in the concept of form is shown in figure 2.

_ Figure 2: Elaboration of formalist structuralism paradigm towards the approach of pattern form theories and architectural meanings The language-pattern process presented by Christopher Alexander is a refinement of the previous super-rational approach (Salura, 2005). According to Christopher, the forms are created in accordance with the most innovative patterns of the context. The dramatization of formalist structural understanding with a typological approach expressed by Christopher Alexander was later raised and further interpreted by Aldo Rossi with emphasis on the creation of primary and other elements present in every object (Salura, 2005). Rossi interpreted these typological architectural structures in the book "The Architecture of the City" using urban artifacts (Rossi, 1982).

Rossi also revealed the transformation of these elements that make up the city's architectural structure, which tends to occur in non-primary elements. This is because primary elements tend to have a high permanence, especially from layout patterns, circulation, and building appearance. Furthermore, Aldo Rossi also distinguishes primary elements in an area of the built environment that tend to survive, which is also known as permanence and become monuments amid the complexity of the development of a built environment and their relationship with other elements that also form the architectural structure of the city (Rossi, 1982).

This study further showed that there are various levels of internal and external structures, such as the driving element, which become a generator of change in the surroundings. According to Rossi, genetic structures are easy to find in a built environment, both on a city scale and in traditional settlements, because both are built from individual treasuries that are always developing dynamically. Architectural patterns and meanings in the context of the function Lucien Goldman first formulated the concept of the theory of genetic structural thought by explaining the aspects of linguistic study.

Goldman abstracted genetic structural thought from three basic traits possessed by humans, namely significance, consistency, and transcendence (Goldmann, 2009). This

concept comes from the fact that humanity consists of individual and collective subjects. Several linguistic, cultural, and anthropological studies have been conducted to determine the presence of meaning in objects and the development of structural thought as a bridge between formalist structuralist and semiotic theories. These studies are similar to the dynamic structural with varying emphasis on genetic structures relating to the origin of text or objects.

Structural dynamic emphasizes structure, signs, and reality, while the understanding of genetic structural thought have a separation between subject and object, with the subjects realized by understanding the presence of objects. Understanding genetic structural thought associated with architectural theory leads to efforts needed to determine the basic permanence form that survives and exists. It theoretically constructs something from an architectural material object. One of the architectural theories of the notion of structural genetic thought was raised and interpreted further by N. John Habraken (1928).

John produced the thought of architectural theories that lead to architectural design methods due to the influence of the natural relationship between residents and the surrounding environment (Habraken, 1962). As an architect and author, N. John Habraken has published several books on architectural design methods and theories. The first book published in 1962 was entitled "Support: An Alternative to Mass Housing," which contained studies on the terms structural support and infill in residential unit design as a case study (Habraken, 1962). N.

John Habraken separated the two method terms based on the perception that architectural building forms are a form of technical control and design responsibility. The purpose of the term architectural design method is to express the relationship between the form of the environment and its inhabitants. In essence, N. John Habraken views architecture as a system created from small units in an orderly manner and arranged with their respective functions.

The elements of transformation of the built environment consisting of systems and units are also believed by Purnama Salura (2001) and used to measure the boundaries of the elements of the scope of space with the firmer as an architectural form (Salura, 2001). Therefore, the form of physical architectural entities occurs due to the combination of 'space' and 'enclosing elements', which becomes permanent. In the book "Architecture That Makes Stupid," Purnama Salura (2010), describes the basic theory of the physical form of architecture produced through the principle of arrangement.

Salura put forward the theory of structuring principles, in accordance with the thoughts

of Francis D. K. Ching (1979). These principles are regarding the communicative sketches in six main ideas, namely axis, symmetry, hierarchy, rhythm and repetition, datum, and transformation (Ching, 1991). Furthermore, Salura also described Clark's thoughts, by analyzing sixty-four famous buildings graphically in eleven guiding principles of arrangement, namely structure, natural-lighting, mass-forming, plan-section-elevation, circulation, unit-whole, repetition, symmetry, geometry, hierarchy, and addition-subtraction. Therefore, these two thoughts became the basis that influenced Purnama Salura (2005) to classify the theory of structuring principles into two, namely balance and orientation (Salura, 2005).

Salura (2010) believed that the architectural composition needs to be balanced between its encompassing units. The state of balance requires the right architectural, structural concept between units and systems (Salura, 2010). The following points describe the principle of balance in architecture according to Purnama Salura (2010) studies: 1. The principle of balance in architecture needs to consist of more than one element. 2. The parts and whole need to be divided into a more complex system by applying the principle of balance to create an imaginary axis used to express the state of symmetry. 3.

The parts and the whole become one system in the architecture due to the binding element in the form of a line or plane unit, this binding is called a datum. 4. In the overall composition, the parts of the built environment are classified or grouped based on the variety of similarities, therefore it becomes a composition of repetition of similarities and eventually creates rhythm in architecture. Purnama Salura (2010) described the principle of orientation in architecture into three based on identification and orientation, as follows: 1.

The difference in quality and quantity of a built environment becomes a composition in architecture that demands the creation of a top-bottom principle, which forms the basis for determining the private-public hierarchy, sacred-Provan, low-high, etc that apply in a built environment according to its character. 2. The front-back principle is created due to the varying functions in several areas of the built environment. This principle is the basis for the orientation and identification of an architectural form that needs to be displayed and hidden based on differences in function. For example, public areas in front – service areas in the back. 3.

Movement or circulation also determines the difference between the principles of architectural orientation and identification. The goal is to ease the process of achieving the architectural object. Areas categorized as far away are private, while those that are close and easy to reach are usually public. Based on the differences in the function of the movement and its achievements, this is the far-near principle. The arrangement is

usually very basic in designing architecture, containing activities or functions.

The main principles of the arrangement need to be communicated synchronously between the plan (two-dimensional) and the visible (three-dimensional), with emphasis on forming a space capable of accommodating various activities. Therefore, the structural concept of the built environment is determined. The principles of architectural patterns described by Habraken (1962) and Salura (2010) were used to describe the systems and units (Habraken, 1962; Salura, 2010). The Habraken approach is used to describe the phenomenon of traditional patterns in the context of the concept of function and creation activities that take place from the case study.

Meanwhile, the theoretical approach to the principle of Salura arrangement is relevant in the study of architectural patterns. This is because it is more detailed for disclosing material objects in the context of architectural patterns and the meaning of traditions that lead to the empiricism of the architectural space. Elaboration for studying architectural patterns in the concept of function is shown in the following diagram (see picture 3).

_ Figure 3: Elaboration of the paradigm of genetic structuralism against the shorting of the theories of pattern function and architectural significance Architectural patterns in the context of meaning Architectural material objects consisting of function, form, and meaning are unified and difficult to separate. Therefore, to reveal their entire relationship, a search is carried out separately for each aspect. The approach used as the theoretical basis of architecture to read aspects of meaning on the issue of patterns in architecture and the meaning of tradition.

Structural dynamics is a theory of structural thought that visualizes reality as part of the communication and cultural process presented by the subject. Furthermore, this understanding is a bridge between the theory of pure structural thought and semiotics. This is because as an expression of communication the characteristics need to be understood and realized as a sign that is meaningful when interpreted by other subjects. The theory of structural dynamics does not completely abandon pure structural thought. This is because the theory was born out of dissatisfaction with the structural understanding, which does not allow getting out of a structure in it because it is unified. Structural dynamics is associated with pure development.

This theory recognizes the subjective awareness of the subject, its historical role, and social environment. Therefore, there is a relationship between the presence of the subject and the object in the understanding of structural dynamics. Several prominent architects acknowledged the truth of this structural dynamics, such as Nikos A.

Salingaros (1999) and Christian Norberg-Schulz (1960s). Nikos A. Salingaros presented two terms in architectural theory due to the influence of Christopher Alexander, such as pattern and form languages (Salingaros, 2000). Nikos A.

Salingaros stated that architecture is divided into two languages, namely pattern and form languages (Salingaros, 2006, p. 220). A pattern language is conditioned as an interaction between humans and their environment, which determines how and where they naturally walk, sleep, enter and move into a building, enjoy indoor or outdoor spaces, and feel comfortable or not in a garden. Furthermore, it is a set of solutions that optimizes the built environment that tends to improve human life and well-being. It is also a combination of geometric shapes and social behavior patterns that accommodate human activities.

Each pattern language is different in every way of life and behavior and is influenced by climate, geography, culture, and tradition. Meanwhile, language is purely a geometric form, which consists of elements such as floors, walls, ceilings, partitions, and all architectural components, that represent a certain shape and style of a building. Furthermore, Salingaros stated that a good built environment is a combination of pattern and form languages. The standard use of the built environment is not necessarily suitable for its users.

Form language in one place tends to fulfill the wishes of its users in that place, and when applied in another, it does not necessarily fulfill their wishes. Therefore, it is necessary to have an adaptive design method by combining patterns and form languages that complement each other (Salingaros, 2006, p. 222). Nikos A. Salingaros stated that based on the analogy of patterns and languages assisted by statistical data, comparisons of cultural elements were made between one culture and another.

Furthermore, patterns are relatively the same or follow one another during the formation process (Salingaros, 1995). These patterns contain elements of psychology and cultural structure. Salingaros also stated that patterns are applied in reality before their existence (Salingaros, 2014). The analogy presented by Nikos A. Salingaros applies to human behavior with many patterned because they follow one path to another. Architectural patterns of an architectural form are derivations of existing patterns that are valid expressions of architectural objects in small sizes. The presence of objects is important for the subject to reveal the patterns of architectural traditions.

The theoretical approach of Nikos A. Salingaros with the slogans of adaptive patterns and form languages are elaborated or used to support the relation of Christopher Alexander's theoretical approach to the formalist structural realm due to its influence.

Awareness of the relation of object and subject became the forerunner associated with the rise of phenomenological and structural understanding. One of the leading architects closely associated with the revival of phenomenology in architecture since the early 1960s is Christian Norberg-Schulz. Christian Norberg-Schulz carried out this process using analytical and psychological approaches.

However, the gestalt theory influenced by psychology became one of the basics for reclassifying patterns as art in the 20th century (Garcia, 2009, p. 9). This is in accordance with in-depth studies carried out by Christian Norberg-Schulz (1965) in the book entitled Intention in Architecture (1965, MIT Press) and Existence, Space and Architecture (1971, Praeger Publisher) (Norberg Schulz, 1965; Brenner et al., 1971). Furthermore, in 1980 through the Rizzoli publisher in New York, Christian Norberg-Schulz started a milestone in the study of architectural phenomenology in the book entitled Genius Loci, Towards a Phenomenology of Architecture.

Through this book, Christian Norberg-Schulz (1991) emphasized the relationship between topography (soil surface), cosmology (sky and light) as well as the symbolic and existential meanings inherent in culture as the basic pattern of living activities (Norberg-Schulz, 1991). Christian Norberg-Schulz also puts forward elements of form-technics and building tasks to reveal the spatial pattern of architecture. This explicitly led to a description of the types of functions known as a building task. The building task consists of physical control, functional frame, social milieu, and cultural symbolization.

According to Norberg Schulz (1965), the building task is the phenomenological understanding of the meaning of place as a symbol or sign of the characteristic pattern of tradition (Norberg Schulz, 1965, p. 111). In 2000, Christian Norberg-Schulz published his last book entitled "Architecture: presence, language, and place," which narrows down the architectural theory of the book using pattern theories that emphasize centralized and dynamic or flowing patterns. Christian Norberg-Schulz (2000) further stated that the theory of architectural patterns is motivated by a gestalt phenomenological approach, which presents the relationship of meaning between objects and subjects in terms of nodal points, routes, and boundaries (Norberg-Schulz, 2000). The nodal point is a two-dimensional converging spatial pattern with a vertical nodal point development, which predominates to form a prism dome.

Routes are continuous motions from one node to another, and the rhythm of its movement forms a linear space. Meanwhile, boundaries are the limits of the range of centralized, elongated space and the meeting point between the two. The study of Christian Norberg-Schulz's spatial patterns was later interpreted by Purnama Salura

(2010) by stating that the concentration, flow, and the relationship between the two are individual archetypes that continuously develop into the collective archetype of humans. The spatial manifestation as the basis of architectural form is influenced by collective patterns. Therefore, all architectural formations on the earth's surface are always based on these patterns (Salura, 2010, p. 34).

The elaboration of the approach to structural thought, especially dynamics and phenomenology is used to reveal the meaning of objects, which brings the view that a 'sign-culture' or 'sign-architecture' has an internal relationship between an 'object with an existential context' and an 'object with a conceptual context'. Therefore, the meaning of architecture is revealed based on its position against the traditional patterns of subjects and objects in a unified system. Elaboration for the study of patterns in architecture from the concept of meaning is shown in the following figure 4.

_ Figure 4: Elaboration of dynamic structuralism paradigm against the shortness of architectural pattern meaning theories CONCLUSION In conclusion, architecture is formed from the socio-cultural pattern of the community, the human mindset to respond to nature and the surrounding environment, as well as the pattern of sustainability from one generation to another. Changes and continuity of architectural development are unavoidable because it develops in line with human life. Furthermore, before now, the existence of architecture that always survives in any condition is vernacular because it has a strong structure to last from one generation to another.

The search for sustainability strategies for vernacular architecture is important. Therefore, it is important to carry out studies on the patterns and meanings of vernacular architectural traditions both etymologically, philosophically, and ontologically is for its sustainability and continuity towards modern architecture. Patterns and meanings are closely related to the cultural context and anthropology of vernacular architecture.

The results of the study in the philosophical realm showed that Levi-Strauss's structural thought was used to read and express the issue of architectural patterns and meanings as formal objects because it is inseparable from anthropological scholarship and functions as human behavior. Meanwhile, further elaboration of the notion of structural thought requires the elaboration of architectural theories to read the issue of patterns and meanings of vernacular architecture in the realm of material objects, associated with three main factors, namely the theory of form, function, and meaning. Therefore, form, function, and meaning theories are contextualized with formalist, genetic, and structural dynamics.

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