

# Revisiting Architectural Structuralism: Archi-Cultural Pattern as a Method to Read the Meaning of Tamkesi Vernacular Architecture

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The widespread tendency to combine vernacular with modern architecture has led to the need for an in-depth understanding of the concepts that underlie the form of vernacular architecture. Unfortunately, there has been no systematic and rigorous research method aimed explicitly at reading the architecture of vernacular settlements that do not have written data on local traditions and culture. This study puts forward the theoretical-methodological steps to read the meaning of architectural patterns in the context of vernacular settlements by elaborating Levi-Strauss' structural analysis of myths with Salura and Alexander architectural theory. This study resulted in structuralist-inductivist steps to describe, analyse, and interpret vernacular architecture. The methodological framework consists as three significant parts: Firstly, to describe the activity and form of vernacular architecture in-depth based on the anatomical scope and architectural composition-properties. Secondly, to explore the surface structure of local myths, activities, and architectural form. Thirdly, to disclose the deep structure that underlies the relationship between local myths - activities - architectural form. These steps can be applied to read the meaning of vernacular settlements with no written sources on cultural traditions. Thus, this research contributes to the development of the theory and methodology of architectural scholarship. This research also acts as a source of knowledge for architectural practitioners and a significant input for the survival strategies of vernacular architecture.

**Keywords:** *Architecture, Meaning, Pattern, Research methodology, Structuralism, Vernacular*

## 1. INTRODUCTION

It is widely known that human beings are homo significans, or meaning-makers. Since the beginning of the civilisations, men never ceased to interpret the natural-cultural environment surrounding them (Salura, Clarissa, & Lake, 2020a; 2020b). It is also believed that human thought was never static but always dynamic. Historical records show that a paradigm of knowledge will be replaced with another that seeks to refine or even negate the former paradigm (Kuhn, 1996). This tendency is evident in the contemporary phenomenon of architectural practice around the world. As a reaction to the monotony and uniformity of architectural forms typical of International Style, practitioners are now making many efforts to re-discover the value of local wisdom so that it can be applied to the design of contemporary buildings (Al-Lahham, 2014; Sholihah et al., 2019).

Unfortunately, the research on the performance of the building which attempts to combine vernacular and modern architecture, actually shows that the vernacular concept has not been appropriately implemented but is merely rhetorical (Salura & Fauzy, 2013). The practice of adopting vernacular forms without an in-depth understanding behind these efforts will only lead to the problem of "frozen vernacular architecture" and inflicting on the degradation of the original meaning. Thus, the rise of intention to return to vernacular architecture must be balanced with a significant quantity of scientific publications discussing vernacular architecture in-depth.

Hitherto, research discussing vernacular architecture can be classified into two: Firstly, the studies aim to translate ancient texts related to the tradition of building in specific vernacular societies (Priyotomo, 2005; 2010; Roesmanto, 2004; Daniardi et al., 2019) . Secondly, the research seeks to explore the concepts that underlie the architecture of vernacular society (Purbadi, 2010; Hermanto, 2015; Hermanto & Hendriani, 2018; Sutrisno, 2020; Salura, 2005; Fauzy, 2013; Sumardiyanto, 2016). The first group generally does not aim to clarify the main concepts that underlie the architectural form but tends to be a mere narrative or documentation. Thus, the usefulness of these studies in the context of contemporary architectural practice is questionable.

This research belongs to the second classification, which explores the concepts that underlie the architectural form. Through an in-depth understanding of the concepts that underlie the forms of vernacular architecture, it is believed

that the spirit of vernacular architecture will persist even though it uses modern materials and has an expression that is in line with the zeitgeist. All existing studies have been conducted on vernacular villages in the context of change or already have a written cultural tradition. None of them discusses the architecture of vernacular society by focusing on understanding cultural patterns, which is carried out in vernacular settlements that are homogeneous, enclosed, and do not have a written tradition of their culture. The lack of research results in the scarcity of research methodologies that can be used to interpret vernacular architecture. Whereas in Asia and specifically in Indonesia, many vernacular settlements with persistent cultural traditions have not been informed by the literacy culture. Academic publications that contain an in-depth understanding of architectural form in these vernacular settlements can actually be used as a repository of knowledge that is useful for the development of contemporary architectural practice.

Based on this phenomenon, this research is positioned to fill the scarcity of research methodology that can be used to read vernacular architecture, especially in vernacular settlements which tend to be homogeneous and do not have written data about their cultural traditions. Specifically, this research will focus on the research methodology for reading vernacular architecture in one of the enclosed vernacular settlements on the island of Timor, East Nusa Tenggara, namely the Tamkesi community.

In line with the research objectives, this research contributes to the development of architectural knowledge by enriching the substantive and methodological aspects of architectural research. This theoretical understanding can be helpful as a specific input for practitioners who wish to integrate the concept of vernacular architecture into their design. The results of this study can also be helpful for stakeholders and decision-makers as an initial understanding of establishing the strategies for the survival of vernacular architecture. As for the general public, this research acts as a source of knowledge and provides insight into the appreciation of vernacular architecture.

## 2. MATERIAL AND METHODS

This study raises the issue of architectural research methods that can be used to read vernacular architecture, especially in vernacular settlements which are relatively homogeneous and do not have a written tradition. In line with

the research issue, this study discusses some significant literature works that are applied as a case study. The literature used as a case study was determined purposively based on the following criteria: Firstly, it focuses not only on aspects of form, function, or meaning separately but focuses on each of these aspects and their relationships. They are secondly, discussing architectural patterns and cultural patterns in depth. Thirdly, these theories are written in books, dissertations, or reputable international journals that contain detailed arguments about their aspects and relationships.

Based on these criteria, the following theories were selected: Alexander's theory of pattern language and Salura's theory of architectural anatomy and property - composition. Both of these theories will be elaborated as a tool for reading architectural forms. However, the theory of pattern language and anatomy and composition properties still tends to be value-free. Therefore, this study put forward another study that also discusses how to analyse cultural patterns that affect architectural activities and forms. This third theory will be based on the anthropological-cultural approach of Levi-Strauss regarding the 'myth', which is believed to always underlie every activities in vernacular society.

The theoretical analysis consists as follows:

Firstly, conducting an in-depth discussion of the context of scientific phenomena at the time the theory was written and the context of the thought or philosophy behind it. This initial step is essential so that other researchers who will implement or elaborate this operational framework can determine the suitability of the philosophical paradigm that in line with the selected research issue. This step initiates a systematic effort in qualitative research methods.

Secondly, comparing and selecting all aspects of existing theories. The analysis will also emphasise the possibility of operationalising each theory to read specific vernacular architectures.

Thirdly, elaborating all these theories to formulate a theoretical and methodological framework that can be operationalised to describe, analyse, and interpret the meaning of vernacular architecture.

### **3. RESULTS AND DISCUSSION**

#### ***3.1 Philosophical paradigms underlying the research of vernacular architecture in Indonesia***

Hitherto, studies that attempt to understand the concept behind the form of vernacular architecture in Indonesia generally depart from the two main paradigms in philosophy, namely structuralism and phenomenology. Basically, these two paradigms believe in the existence of a universal principle that underlies human life, which is then known as the essence. However, the phenomenology initiated by the philosopher Edmund Husserl seeks to find the essence of experience, while the structuralism put forward by the linguist Ferdinand de Saussure believes that the essence lies in the relationship between its aspects (Gelernter, 1995; Klassen, 1990; Zahavi, 2003; Harris, 2007). These two paradigms can be an option to explore the architectural pattern of vernacular society, because the pattern itself refers to the regularity of 'order' that lies behind every phenomenon.

The phenomenological approach to understanding vernacular architecture in Indonesia is generally carried out to explore the fundamental concepts that underlie empirical experience (Hermanto, 2015; Purbadi, 2010; Sutrisno, 2020). The research steps consist of a description of empirical themes, clarifying the theoretical concepts, and the process of theoretical dialogue conducted at the end of the research process. This approach focuses on reducing empirical themes to arrive at the fundamental theme. The results of this study are the concepts that underlie the relationship between human and every aspect of the natural-cultural world. Thus, these studies actually tend to resemble the focus of structuralism-based research.

Salura first conducted Structuralism-based research in his doctoral dissertation on the architecture of the Sundanese people. In the following period, other studies based on structuralism were carried out by Fauzy to examine the vernacular architecture of the northern coastal communities of Java, and by Sumardiyanto to examine the vernacular architecture of the Javanese people (Fauzy, 2013; Sumardiyanto, 2016). Departing from Salura's research, Fauzy and Sumardiyanto's research also aims to explicate the deep structure, namely the concepts that underlie human relations with every aspect of existence. This relationship consists of human relations with God, nature, and society. Similar to the steps of phenomenological research, the structuralist approach also focuses on reducing the recording of activities and forms empirically, tracing concepts, revealing surface structures, and revealing the deep structures (Salura & Fauzy, 2012; Salura, 2018a). Thus, the deep structure is the essence of vernacular life.

Both phenomenology and structuralism are actually rooted in almost similar views of research methodology. Both emerged as a reaction to positivism which assumed that the meaning of reality was outside the human mind, while these two paradigms held that meaning was not an objective reality that came from outside of humans but was the result of human interpretation of reality. In line with their similarity in interpretive nature, these two approaches also have almost similar challenges when applied as a methodological basis for architectural research, namely the distance between the researcher and the case study and the accuracy in reducing empirical experience to theoretical concepts.

The first criticism is generally directed against the structuralist approach by the phenomenological approach. On the other hand, the second criticism is directed against the phenomenological approach by the structuralist approach (Kultgen, 1975). The research method put forward in this study seeks to provide solutions to these two criticisms, though: Firstly, although the structural paradigm has never explicitly emphasised the importance of experience, structural anthropologists in the 1930s had actually departed from empirical observations and experiences about specific society researched. However, at that time, interpretations tended to be highly subjective because they were only carried out by the researchers themselves, without considering the auditability of the research by the wider academic community or seeking to find other explanations from local society. This may be because structuralist research usually is a verificative study, so the researcher's world-view is already highly influenced by pre-existing theories. As a solution, a structural-inductive approach can be used, which does not depart from existing data regarding the condition of the local community but is based on experience and empirical observations made by the researchers themselves on the research object. While related to inter-subjectivity, interviews must be conducted with informants who have the highest hierarchy in the vernacular society, as well as at least four other residents who also hold specific roles in the vernacular society.

Secondly, the accuracy in reducing empirical observations to the abstraction result can be obtained through systematic, rigorous, and layered analytical steps. In this case, Salura's research method which is based on structuralism has more systematic and layered analytical steps than the phenomenological approach, which tends to emphasise lengthy descriptions and abruptly formulate theory at the end of the

research process. This layered method allows other researchers to audit the interpretation made by the researcher so that they can provide feedback on the research method and the data and findings produced.

As stated in the introduction, the method produced by this research is intended to read the vernacular architecture of the Tamkesi community, which has a relatively homogeneous culture. Preliminary observations show that natural conditions and cultural traditions strongly influence local people's lives passed down from generation to generation. Seeing that the activities and architectural forms in Tamkesi are relatively constant from time to time, it is deduced that the architectural forms have a very close relationship with the cultural aspects. The pattern referred to in this study cannot be separated from the relationship between the Tamkesi community and their natural - cultural world. The so that structuralism paradigm is seen to be suitable for the research. Meanwhile, on the level of research method, the structuralism paradigm refined at the analytical steps allows for a more accurate analysis based on empirical experience. Thus, the paradigm chosen for this research is the structuralism paradigm with further elaboration to reveal the meaning of vernacular architecture of the Tamkesi.

### ***3.2 Theories about archi-cultural patterns based on structuralism paradigm***

The term 'pattern' in architecture was first put forward by Christopher Alexander (Alexander et al., 1977; Alexander, 1975; 1979). Almost in line with the views of the interpretivist paradigm, Alexander's approach is intended as a critique of the mechanistic-positivist approach and a purely formalistic approach to design activities (Grabow, 1983). Alexander defines patterns as 'recurring solutions to a design problem'; 'solution containing the main principles of human cultural knowledge'. The patterns developed in Pattern Language, such as single-family home, driveway, medication, state, market, all contain the essence of collective experience that has been going on for centuries.

In line with structuralism, Alexander argues that a pattern becomes meaningful because it is related to other patterns. Thus, no pattern is an isolated entity. A building that has a timeless quality, which Alexander believes is embodied in the spirit of traditional architecture, always results from the integration between the pattern of activities and architectural forms as a place for activity. In other words, architectural patterns always contain dynamic integration among

several elements.

In architecture, the typological approach is still focused on classifying building types by focusing only on architectural material objects (building enclosure elements) while ignoring cultural aspects. On the contrary, the pattern approach can never be separated from the activities that are accommodated by the building. In a vernacular society that has a close relationship to the cultural tradition, the character of any activity carried out by the local community will always be influenced by cultural traditions. Thus, in contrast to the typological approach that seeks to isolate architecture from context, the aspect of activity - architectural form in the vernacular settlement requires an in-depth understanding of the respective cultural patterns. This understanding distinguishes the meaning of 'pattern' from other terms that often mean the same thing, namely 'type'.

Alexander formulated 253 patterns in total, ranging from the broadest level, such as the city to the most detailed level, such as ornamentation. Basically, these patterns contain the shape and material properties and their composition in the form of a diagram. However, this pattern is more suitable for designing houses, public buildings, or even urban areas based on the pattern of activities, rather than to read the meaning of vernacular architecture. Thus, there is still a need for another approach that can be used as a basis to describe in detail the character of activities and forms of vernacular architecture.

Salura's theory regarding the anatomical scope of buildings and architectural compositions - properties will be used to complement Alexander's theory (Salura, 2018c). This theory tends to be relatively up-to-date and formulated by considering other existing theories regarding ordering principles and architectural anatomy. The discussion of architectural anatomy does not only focus on the anatomy of the building, but also on the relation of the anatomy and the activities that the building must accommodate. Basically, the property-composition concept is a concept that results from two fundamental processes that collectively always exist in humans when interpreting a building, whether consciously or not. The first process is called the identification process, which allows us to identify an object; and orientation. We recognise an object by identifying its properties, i.e. the characteristics of an object. The properties themselves are then divided into properties that are attached to the object (external properties) and properties that arise from within the basic form of the object itself (internal properties). While the process of identification can be done

on one object, the orientation process tends to be only possible when we already recognise that the object being observed is in the context of other objects. The concept of orientation always includes the position and configuration (arrangement) of more than one object.

Both the pattern theory put forward by Alexander and the scope of architectural anatomy and composition - properties put forward by Salura still tend to be value-free. Reading through this concept will only result in knowledge of the character of the building elements, for example, these walls are white, they tend to be solid and massive, or where the building elements are positioned and how they are configured. However, when it is associated with the activities accommodated by the building, the reading of the expression of the building's form is no longer value-free. The composition-properties of building forms that accommodate different activities, must also have differences in the dominance of the composition-properties. In the context of vernacular society, activities are strongly influenced by local cultural traditions. Therefore, the theory of pattern language and architectural anatomy needs to be elaborated to interpret the meaning of culture.

Before the researchers were familiar with the phenomenological approach, it was structuralism that anthropologists initially used to understand the culture of a relatively enclosed and homogeneous vernacular society. Of all structural anthropologists, Levi-Strauss is the most influential. One of his theories that are most often used as a reference for researching the culture of a vernacular society that does not have a written tradition is his Theory of Myth (Levi-Strauss, 1963; Clarke, 1981; Ahimsa-Putra, 2006).

Levi-Strauss' structuralism thought was heavily influenced by the linguist Roman Jakobson, who introduced Saussure's structuralism. Basically, Levi-Strauss's thought was born as a critique to the behaviorist-psychological view, which states that human behavior is determined by stimulus-response, just as in animals. Nevertheless, Levi-Strauss also criticises the transcendentalism of the subject's role in Sartre's existentialism. In Levi-Strauss' view, the human mind is not a tabula rasa which only acts on a stimulus, but actively interprets meaning to their natural world through symbolic thought. On the other hand, symbolic thinking never applies to just one individual, but there is an order that is universally owned by every human being. The existence of these orders and regularities allows humans to abstract phenomena and reveal the abstract rules behind them. From this thought, it can be put forward the

existence of surface-structure and deep-structure. The kinship system, myth, ritual system, or residence pattern has its own structure, which is considered a surface structure. From the surface structures, a deep structure can be abstracted. In contrast to the surface structure which the human may be aware of, the deep structure lies at the unconscious level.

From all of Levi-Strauss' views on myth, important aspects can be put forward that can be used as a basis (Levi-Strauss, 1963; 1966; 1971; 1983): Firstly, myth in Levi-Strauss' view is not a representative form of certain facts or facts, but instead has a dialectical relation to the natural world. In this case, it is clear that Levi-Strauss adopted a fundamental view in structuralism, namely binary opposition. Binary opposition is the view that when the relation in the inner structure is further abstracted, it will result in two elements with opposite meanings and always come in pairs. Secondly, through a structural analysis of myths, it is possible to identify categories in human reasoning that are at the

unconscious level that have a collective nature. This precludes any inclination towards subjective intent. Thirdly, all activities in the vernacular community, especially ritual ones, are always based on myths prevailing in the local community. Therefore, the search for the pattern of activity must begin with an explication of the structure of the myth. Fourthly, the structural analysis of myths begins with determining the unit of analysis. In this case, myth needs to be distinguished from folklore and history. History always contains a conception of time, whereas myth is eternal. What distinguishes myth from the two is the understanding that myth is always a reconciliatory effort between the contradictory relations of human experience and the natural environment. Thus, tracing the syntax (composition) of sentences in myths is not enough to reveal the deep structure, as it must also rely on the ethnographic data of the local community. The theoretical framework consisting the relationship between these theories could be seen in figure 1

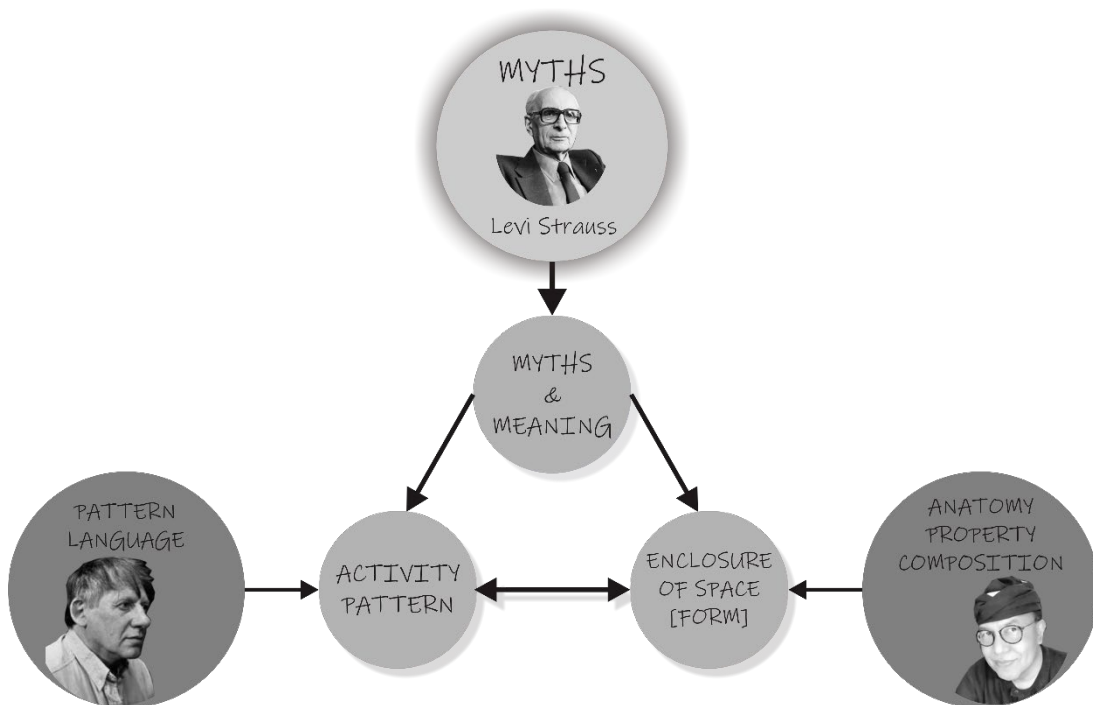


Figure 1: Theoretical diagram

### 3.3 Methodological framework to read the meaning of vernacular architecture

Based on the theoretical elaboration, methodological framework to read the meaning of vernacular architecture of Tamkesi could be seen in Fig. 2. Basically, the analysis process

consists of 3 major parts: the in-depth description of the case study, the exploration of the surface structure, and the disclosure of the deep structure.

The first step consists of documenting and redefining all the existing architectural forms in the case study. Parallel to the documentation of the activity-architectural forms, all the myths that

are still prevailing in the local community are recorded. In line with the Levi-Strauss method, a myth is identified by exploring local people's views on the natural world's contradictory, mediative, and transformative nature. Thus, the recording of ethnographic data, which includes the people's way of life, rituals, social, political, and economic conditions, is also carried out. The recording of the myth is done by conducting interviews with the tribal chief and at least four other people who have an important role in the settlement.

The next step is to describe the results of recording activities and forms in each anatomical scope in line with their compositions. Regarding the Tamkesi settlement, the anatomical scope discussed focuses on the scope of overall settlement, building's site and interior, and all structural, non-structural architectural elements

and ornamentation and figurative elements. In-depth description based on the principle of composition - property focuses not only on the architectural form (container of activities) but also on the activities performed.

The second step consists of analysing the concept of myth that influences the pattern of activities with the concept of myth that influences the architectural form. Based on this analytical steps, the surface structure, i.e. the relationship between the concept of myth - activity and the concept of myth - form could be disclosed.

The third step consists of interpreting the relationships that exist between the surface structures. Furthermore, it reveals the deep structure which is the relationship between patterns of activities - architectural forms - myths.

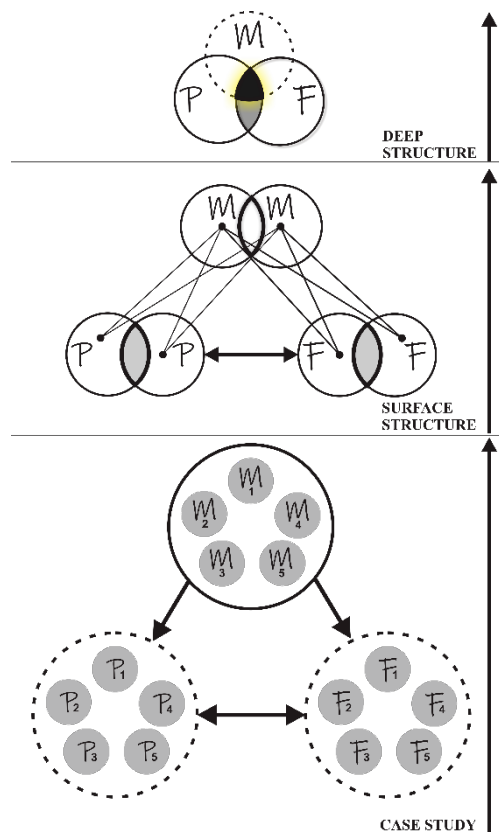


Figure 2: Methodological diagram

#### 4. CONCLUSION

Based on the analytical process, it can be concluded that:

Firstly, this research produces a theoretical-methodological framework that can be operationalised to describe, analyse and interpret the pattern of activity-form-culture in vernacular architecture. This framework is produced based on the paradigm of structuralism, through the

elaboration of Salura-Alexander's approach, which focuses on describing the character of activities - architectural forms and the Levi-Strauss approach to reading cultural patterns based on structural analysis of local myths. Thus, this approach can complement other approaches that generally only focus on describing vernacular architectural forms and traditions of how to build their architecture. Through rigorous empirical observations, this study also improves the structuralism-based research in general,

which were initially considered to be arbitrarily reductive.

Secondly, this study put forward the possibility of conducting research on vernacular architecture that does not merely describe ethnographic data, or "forcing" scientific concepts to read vernacular architecture, but instead formulates systematic interpretive steps to reveal the meaning of local cultural patterns that influence activity patterns. Thus, this research is an attempt to mediate the scientific view that emphasises objectivity and accuracy, with the need to create a general idea underlying society's interpretation of its culture. This dialectical view between the positivist-interpretive tradition is known as the fundamental problem in qualitative research.

Thirdly, the results of this study can be a source of inspiration for further and detailed research on vernacular architecture. The methodological framework allow the data obtained to be retraced by other researchers who have similar research issues. The theoretical-methodological framework can be applied to other vernacular settlements that have similar characteristics. It is believed that research aimed at complementing, refining, or even discussing the weaknesses of the application of this theoretical-methodological framework can actually be an important input that enriches architectural scholarship.

Fourthly, this research fills in the theoretical scarcity of architectural research methodologies, particularly on research methodologies that can specifically be used to read vernacular architecture, which is relatively homogeneous, closed, and does not have written data on their cultural traditions.

## 5. REFERENCES

- [1] Ahimsa-Putra, H. S. (2006). *Strukturalisme Levi-Strauss Mitos dan Karya Sastra*. Kepel Press.
- [2] Al-Lahham, A. (2014). Traditionalism or Traditiona-Lieism: Authentication or Fabrication? *International Journal of Architectural Research: ArchNet-IJAR*, 8(3), 64–73.
- [3] Alexander, C. (1975). *The Oregon Experiment*. Oxford University Press.
- [4] Alexander, C. (1979). The Timeless Way of Building. In *New York Oxford University Press*. Oxford University Press.
- [5] Alexander, C., Ishikawa, S., Silverstein, M., Jacobson, M., Fiksdahl-King, I., & Angel, S. (1977). *A Pattern Language: Towns, Buildings, Construction*. Oxford University Press.
- [6] Clarke, S. (1981). *The Foundations of Structuralism: A Critique of Lévi-Strauss and the Structuralist Movement*. The Harvester Press.
- [7] Daniardi, A. A., Ravsyah, R., & Putri, R. D. (2019). Rekonstruksi Bentuk Arsitektur Candi Padang Roco di Kabupaten Dharmasraya Sumatera Barat. *NALARs*, 18(2), 105. <https://doi.org/10.24853/nalars.18.2.105-118>
- [8] Djarot Purbadi, Y., Christophori Lake, R., & Eddy Arinto, F. X. (2020). The Symbolic Regionalism on The Architectural Expression Design of Kupang Town-Hall. *Journal of Design and Built Environment*, 20(3), 71–84. <https://doi.org/10.22452/jdbe.vol20no3.5>
- [9] Fauzy, B. (2013). *Dinamika Relasi Makna Fungsi dan Bentuk Arsitektur Rumah Tinggal Masyarakat Pesisir* [Universitas Katolik Parahyangan]. Unpublished Dissertation.
- [10] Gelernter, M. (1995). *Sources Of Architectural Form: A Critical History Of Western Design Theory*. Manchester University Press.
- [11] Grabow, S. (1983). *Christopher Alexander: The Search for a New Paradigm in Architecture*. Routledge Kegan & Pau.
- [12] Harris, R. (2007). *Saussure and His Interpreters*. Motilal Banarsidass.
- [13] Hermanto, H. (2015). *Konsep Tunggal Bagenen-Botolan Bentuk Pemukiman Masyarakat Dieng* [Universitas Gadjah Mada]. Unpublished Dissertation.
- [14] Hermanto, H., & Hendriani, A. S. (2018). Bagelen-Botolan sebagai Konsep Dasar Pembentukan Permukiman di Pegunungan Dieng. *Tesa Arsitektur, Journal of Architectural Discourses*, 16(2), 117–129. <http://journal.unika.ac.id/index.php/tesa/article/viewFile/1413/1093>
- [15] Hj Abd Latif, S. F. T. B., & Kosman, K. A. (2017). The Serambi of Negeri Sembilan Traditional Malay House as a Multifungsional space – Role in Custom (Adat). *Journal of Design and Built Environment*, 17(2), 37–50. <https://doi.org/10.22452/jdbe.vol17no2.4>
- [16] Klassen, W. W. (1990). *Architecture and Philosophy: Phenomenology, Hermeneutics, Deconstruction*.



- University of San Carlos.
- [17] Kuhn, T. S. (1996). *The Structure of Scientific Revolutions*. University of Chicago Press.
- [18] Kultgen, J. (1975). Phenomenology and Structuralism. *Annual Review of Anthropology*, 4(1), 371–387. <https://doi.org/10.1146/annurev.an.04.100175.002103>
- [19] Levi-Strauss, C. (1963). *Structural Anthropology*. Basic Books.
- [20] Levi-Strauss, C. (1966). *The Savage Mind (The Nature of Human Society Series)*. The University of Chicago Press.
- [21] Levi-Strauss, C. (1971). *Totemism*. Beacon Press.
- [22] Levi-Strauss, C. (1983). *The Raw and the Cooked (Mythologiques)*. University of Chicago Press.
- [23] Prijotomo, J. (2005). Pengkonstruksian Sektor Guru dari Griya Jawa: Tafsir atas Kawruh Kalang. *DIMENSI: Journal of Architecture and Built Environment*, 33(2), 99–111.
- [24] Prijotomo, J. (2010). *Re-construction of Javanese Architecture according to Kawruh Griya and Kawruh Kalang*. Institut Teknologi Sepuluh Nopember.
- [25] Purbadi, Y. D. (2010). Tata Suku dan Tata Spasial pada Arsitektur Permukiman Suku Dawan di Desa Kaenbaun di Pulau Timor [Gadjah Mada University]. Unpublished Dissertation.
- [26] Roesmanto, T. (2004). Rekonstruksi Arsitektur Istana Kota Piring. *DIMENSI: Journal of Architecture and Built Environment*, 32(1), 28–41.
- [27] Salura, P. (2005). *Dinamika Perubahan Konsep Bentuk dan Makna Arsitektur pada Masyarakat Sunda di Kampung Dukuh, Kampung Ciherang, Kampung Palasah*. Bandung Institute of Technology. Unpublished Dissertation.
- [28] Salura, P. (2018a). Siniger Tengah and Kaca-kaca as The Deep-Structure of Sundanese Architecture in Pasundan Land, West Java, Indonesia. *International Journal of Engineering & Technology*, 7(2. 14), 314–317.
- [29] Salura, P. (2018b). The philosophy of architectural ordering principles. *International Journal of Engineering and Technology (UAE)*, 7(2.9), 52–55.
- [30] Salura, P. (2018c). Anatomy of Architecture Based on the Creation of Space for Activity. *International Journal of Engineering and Technology(UAE)*, 7(2.14), 205–207. <https://doi.org/10.14419/ijet.v7i2.12.14675>
- [31] Salura, P., Clarissa, S., & Christophori Lake, R. (2020a). Reflecting the Spirit of Modern-Indonesia Through Architecture: The Icono-Symbolical Meanings of Jengki Architectural Style Case Studies: Bandung Polytechnic of Health Building and Bumi Sangkuriang Meeting Hall in Bandung, West Java, Indonesia. *Journal of Design and Built Environment*, 20(2), 13–26. <https://doi.org/10.22452/jdbe.vol20no.2.2>
- [32] Salura, P., Clarissa, S., & Lake, R. C. (2020b). The Application of Sundanese Vernacular Concept to The Design of Modern Building - Case Study: Aula Barat (West Hall) of Bandung Institute of Technology, West Java, Indonesia. *Journal of Design and Built Environment*, 20(1), 1–12. <https://ejournal.um.edu.my/index.php/jdbe/article/view/23634/11589>
- [33] Salura, P., & Fauzy, B. (2013). *Sintesis Elemen Arsitektur Lokal dengan Non lokal*.
- [34] Salura, P., & Fauzy, B. (2012). The Ever-rotating Aspects of Function-Form-Meaning in Architecture. *International Journal of Basic and Applied Scientific Research*.
- [35] Sholihah, A. B., Agustiananda, P. A., Junanah, J., & Setiawan, W. (2019). Traditional Architecture: The Role of Traditional Festival in Islamic Historic District to Achieve Local Community Wellbeing. *Journal of Design and Built Environment*, 19(3), 13–23. <https://doi.org/10.22452/jdbe.vol19no.3.2>
- [36] Sumardiyanto, B. (2016). *Persistensi Makna Zona Publik dan Privat pada Rumah Tradisional Masyarakat Jawa di Desa Jagalan dan Kelurahan Purbayan Kotagede Yogyakarta*. Universitas Katolik Parahyangan. Unpublished Dissertation.
- [37] Sutrisno, M. (2020). *Konsep Posi: Makna Ruang Kota Lama Palopo*. Universitas Gadjah Mada.
- [38] Zahavi, D. (2003). *Husserl's Phenomenology*. Stanford University Press.