Comparative Understanding of Traditional Architecture based on Literature Review: Refining the Definition of Traditional Architecture

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Abstract. Traditional architecture is often a topic of discussion in the literature as well as in academic discussions and the architect's profession. However, sometimes we also encounter differences in understanding due to different points of view and the literature used. Therefore, this paper aims to re-find the definition of traditional architecture by comparing literature review. The research method used is qualitative descriptive analysis method with comparative approach to journal literature reviews. There are 10 national journals and 9 international journals that passed through the selection process and become research samples. The results show that the majority of journals explain that traditional architecture is closely related to the culture of the people in a place that identical to the region or ethnicity. Residential houses as a form of architecture are one of the cultural products of hereditary heritage which are motivated by cultural aspects such as religion, customs, beliefs, philosophies, building process rules, and social aspects to show the social stratification of society through symbols and ornaments. Architectural physical aspects studied in traditional architecture include spatial patterns, structures, materials, main access, space boundaries (walls, roofs, floors), window door openings, orientation, and ornament symbols. In addition, there are also some differences in perception between the contents of the journal in several ways that can be discussed further.

Keyword: local wisdom, tradition, traditional architecture

Received 5 September 2021 | Revised 6 October 2021 | Accepted 8 October 2021

1 Introduction

The background of the author in conducting research related to the understanding of traditional architecture, because of differences opinion regarding the definition of traditional architecture itself, both orally and writing in several journal articles. This has been a topic of discussion for a long time, everyone has their own point of view and reference. Research related to traditional architectural objects is often viewed from the point of view of ethnography, anthropology, and

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humanities. Octavia and Prijotomo consider this situation to be worrying because it is a cultural domain and not an architectural material [1].

Traditional in language means hereditary, which is something that is passed down from generation to generation. However, this hereditary understanding needs to be seen from the physical and non-physical aspects of architectural objects. So that, the definition of traditional architecture can be seen from physical and non-physical characteristics based on the results of research that has been carried out by authors related to the topic of traditional architecture. The purpose of this study is to find similarities and differences in understanding the definitions and characteristics of traditional architecture based on a review of the journal literature. Do the writers who raise the topic of traditional architecture have the same understanding or the differences? This research is the first step to find the differences and similarities between traditional, vernacular and archipelago architecture, because the understanding between the three terms also leads often to differences of opinion. To reach this stage, the writer starts by looking for similarities and differences of opinion among journal writers regarding the understanding of traditional architecture topics.

2 Literature Review

Comparative Studies

Comparison according to Indonesian Dictionary is a *perbandingan* (comparison). In the context of research, comparison is one way that can be done to find answers to fundamentally about cause and effect by analyzing the factors causing the emergence of a phenomenon [2]. Comparative research aims to find similarities and differences about various things such as objects, ideas, people, groups, common views and changes in views [3]. The characteristics of the comparative method has two or more objects under study, each independent and separate has the same pattern or way of working. The object being compared is clear and specific, has a standards and comparison measures [4].

Literature Review

Literature review is library research or literature studies (literature review, literature research) is a research that examines or critically reviews knowledge, ideas, or findings contained in the body of academic-oriented literature, as well as formulating theoretical and methodological contributions for a specific topic, Cooper [5]. Literature review is a systematic, explicit and reproducible method for identifying, evaluating and synthesizing research results and ideas that have been produced by researchers and practitioners [6]. The journal analysis of the results of this literature review uses the critical appraisal method. Critical appraisal is a journal analysis process that is used as a theoretical basis regarding the differences, similarities and shortcomings of journals that are used through the following stages: (a). Compare: find
similarities between several literatures, (b). Contrast: finding differences between several literatures, (c). Synthesize: compare the findings, (d). Criticize: give their own opinion based on the sources read., (e). Summarize: make a summary of the findings [7].

### 3 Methods

The research method used is a qualitative method with a comparative research approach through literature review looking for similarities and differences in understanding traditional architecture based on the results of previous studies that have been published in scientific journals. The literature data used in this study are architectural scientific journals with the following criteria (Table 1).

| Criteria       | Indicator                                                                 |
|----------------|---------------------------------------------------------------------------|
| Topic/Title    | Traditional architecture (meaning/features/elements, etc.)                |
| Time Period    | Not limited in time, because it will be seen in terms of the history of the development of the theory itself |
| Journal        | National and international architecture                                   |
| Data base      | Through the official web journal or architectural scientific journal portals that have full text |

The selection of literature data to be analyzed is carried out using the snowball sampling technique, which is a technique of taking data sources that are initially small in number, serves to provide initial information that can open the door to obtain wider data from other more valid sources [8]. Journal search procedures through journal databases that meet predetermined criteria (Figure 1).

![Figure 1](image-url)
The selected journal articles will be analyzed using the critical appraisal method by finding similarities and differences of opinion between each journal, comparing the findings, providing opinions, and drawing conclusions descriptively.

4 Results and Analysis

Journal List

Based on the search results of journals that match the criteria and screening process that have been determined, 10 national journals and 9 international journals that discuss the topic of traditional architecture are selected, the following is a list of journals used as research data (Table 2).

| Journal Code | Author/ year of publication | Journal Title |
|--------------|-----------------------------|---------------|
| N01          | Gatot Suharjanto (2011)     | ComTech Vol.2 No. 2 Comparing Traditional Architecture Versus Vernacular Architecture: A Case Study of Minangkabau and Balinese Buildings |
| N02          | Febrianto, Susanti, & Istiqoma (2018) | Pawon Vol. II No. 02 Reading Traditional and Vernacular Architectural Spatial Systems With Ethnographic Research Strategies |
| N03          | Octavia, & Hematang (2017) | Mustek Anim Ha Scientific Journal Vol. 6 No. 3, Adaptation of Forms and Functions of Traditional Bugis Makassar House Architecture in Kumbe Village, Merauke |
| N04          | Firzal (2018) | Seminar on Indonesian Association of Built Environmental Researchers (IPLBI) 2 Vernacular and Traditional Conceptions in the Context of Urban Architecture |
| N05          | Octavia & Prijotomo (2018) | Indonesian Journal of the Built Environment 7 (4), Archipelago Architecture is neither Traditional Architecture nor Vernacular Architecture |
| N06          | Sumardiyanto (2018) | NATIONAL SCAN SEMINAR The Future of Traditional Architecture in the Flow of Modernization |
| N07          | Hatta & Sudradjat (2020) | ARTEKS : Journal of Architectural Engineering, Volume 5, Issue 1 The role of sanro bola in the tradition of building traditional Bugis houses in Soppeng, Regenc |
| N08          | Marwati, & Andriani (2017) | Nature Vol. 4 No. 2 Typology of Openings in Bugis Traditional Houses in Somba Opu Fort Makassar |
| N09          | Rambe (2019) | JAUR, 3 (1) Architectural Analysis of Toba Batak Traditional Houses in Toba Samosir |
| Journal Code | Author/ year of publication | Journal | Title |
|--------------|-----------------------------|---------|-------|
| N10          | Santi, & Syukur (2010)      | Unity Journal of Architecture Volume 1 No. 1 | Adaptation of Traditional Balinese Architecture in Balinese Houses Outside the Island of Bali |
| I01          | Akande (2020)               | IAFOR Journal of Cultural Studies Volume 5 – Issue 2 | Manifestations of Ori (Head) in Traditional Yorùbá Architecture |
| I02          | Suyoga, Widyatmika, & Juliasih (2020) | International Journal of Interreligious and Intercultural Studies (IJIIS) Volume 3, Number 2 | Bali Traditional Architecture: Sustainability from the Perspective of Capital Concept |
| I03          | Endika & Sholihah (2017)    | Journal of Architectural Research and Design Studies Volume 1 Number 1 | The Identification of Kutai Kartanegara Traditional Architecture Identity Based on Comparative Analysis |
| I04          | Ulusoy & Kuyrukc (2012)     | Procedia – Social and Behavioral Sciences 47 | The meaning and importance of the traditional architecture in architecture education; Gonen winter school model |
| I05          | Samalavičius & Traškinaitė (2021) | Journal of Architectural Design and Urbanism, Vol 3 No 2 | Traditional Vernacular Buildings, Architectural Heritage and Sustainability |
| I06          | Okoye & Ukanwa (2019)       | International Journal of Scientific & Engineering Research Volume 10, Issue 11 | Igbo Traditional Architecture: A Symbol of Igbo Cultural Identity |
| I07          | Xingyu Ma, Tianchi Wang (2020) | Journal of Social Sciences 8 | Research on the Traditional Architecture Types of Huai’an Canal |
| I08          | Zulkifli H.Achmad (2019)    | LOCAL WISDOM, 11 (2) | Typology of Bena Traditional Architecture, Flores |
| I09          | Ajaj & Pugnaloni (2014)     | IACSIT, Vol. 6, No. 4 | Re-Thinking Traditional Arab Architecture: A Traditional Approach to Contemporary Living |

All of the journals listed in Table 2 will be identified, grouped and analyzed based on the focus of the discussion. Finding differences and similarities in the discussion, comparing, criticizing, and making final conclusions.
Identify the contents of the journal

The following is the identification of the focus of the selected journal contents Table 3.

**Table 3** Identify the contents of the journal

| Journal Code | Results / findings related to traditional architecture |
|--------------|--------------------------------------------------------|
| N01          | Traditional architecture is identical to vernacular architecture, which is oriented to the aspects of locality, culture and history of the time span of its existence. Vernacular architecture is a very specific form of original work with very strong local content and philosophy and is contextual in nature according to its era, while traditional architecture is a vernacular masterpiece that has been recognized by acclamation and handed down from generation to generation for a long and even very long time. Both come from the same root, if vernacular architecture can be repeated from generation to generation then it will become traditional architecture. [9] |
| N02          | Comparing traditional architecture with vernacular from 5 aspects. The definition of traditional architecture is seen from these 5 aspects, such as building designers (local people, not traditional); basic development (based on non-customary functions); the concept of development (prioritizing how to regenerate); building techniques (prioritizing local knowledge or local materials) and building settings (made based on the environmental setting in which the building was erected). [10] |
| N03          | Based on the literature used in this journal, the author explains the position of traditional architecture as an element or cultural product of a society or tribe that grew up in Indonesia such as the Bugis-Makassar Tribe which was used as the object of research. It is closely related to the values, habits, rules and customs of the local community which are passed down from generation to generation. The architectural aspects studied include space, appearance and decoration. [11] |
| N04          | Traditional architecture is architecture with a cultural identity background, local or local flavor that can be used as a city image identity but can cause cultural side effects. [12] |
| N05          | The author criticizes traditional architecture so far not from the point of view of architectural science, but from the perspective of anthropology, geography and ethnography which is the realm of cultural knowledge, not architectural material. Then the writer concludes that traditional architecture is knowledge related to culture and humanities, not architectural knowledge. [1] |
| N06          | In a literature review conducted by the author, it was found that traditional architecture is part of the study of anthropology and cultural science, architecture formed by traditions and habits passed down from generation to generation by community groups from time to time. Its characteristics are not based on theory and science but are ritual, spiritual, magical and religious, materials are taken from nature, processed simply without involving many parties. [13] |
| N07          | Based on the study conducted, it can be concluded that traditional architecture is a product of local culture that is believed to be hereditary. The relationship between culture and architecture cannot be separated, because architecture is a form of culture. In the context of the object under study; Bugis traditional houses have a cultural heritage in the form of philosophy that used as a guide in building a house through the role of a sanro bola as a leader to choose materials, choose good times and days, orientate houses, build houses, and apply philosophy. [14] |
| N08          | The typology of ornamentation or opening elements on the facade of replica of traditional Bugis house in Makassar shows the social status or stratification of the owner of the house. So that, traditional architecture is considered include social aspects of the community. [15] |
| N09          | The architecture of Toba Batak traditional house is the result of the culture of Toba Batak people in Samosir viewed from an architectural point of view, has a rules |
| Journal Code | Results / findings related to traditional architecture |
|-------------|-------------------------------------------------------|
| N10         | Traditional Balinese architecture is an embodiment of culture based on the concepts of religion, customs, and art through the philosophy of the *Tri Hita* and *Tri Angga* concepts as a form of balance between humans and the universe and the natural physical environment. [17] |

**International Journal**

| I01 | Arsitektur Yorùbá's traditional architecture is the product of a well-structured cultural and religious system. Every aspect from the selection of materials, the style of the building, even the construction system designed with the main consideration for families, communities, and beliefs. The conclusion is the roof in Yorùbá architecture is a metaphorical object of the original ideology of the local community. [18] |
| I02 | The sustainability of traditional Balinese residential architecture in the Balinese era is being influenced by social stratification in the context of capital ownership, in Pierre Bourdieu's generative structural theory (economic, cultural, social and symbolic) which influences the appearance of traditional Balinese houses with ornaments or without ornaments. [19] |
| I03 | Identification of traditional Kutai Kertanegara architecture done by comparing the variables of architectural aspects, namely layout, main access, structure, walls, roof, ornamentation, and function of the object under study. [20] |
| I04 | Students conduct field studies to the residential environment of Gonen Village to recognize the culture and architecture of their unique environment. The houses studied are interpretations of traditional architecture in Gonen Village. [21] |
| I05 | There are semantic differences between 'traditional' and 'vernacular' architecture, but in this article the author uses the terms traditional and vernacular as synonyms. Because, basically they both come from the same root, which is made by local residents themselves. This article focuses on vernacular residences in different parts of Europe: southern Italy and Lithuania which have their own traditions. [22] |
| I06 | Traditional Igbo architecture as a means to promote culture, utilize local building materials, construction methods and take advantage of the local climate as well as emphasize aspects of material culture that reflect the beliefs, values and religion of the Igbo people. [23] |
| I07 | Huai'an canal traditional buildings are divided into three main types based on their function: residential buildings, public buildings and hydraulic buildings. This traditional building has become an important physical material for studying canal culture, urban history, and social development. [24] |
| I08 | Traditional architecture is the design and development that has been carried out the same since several generations without significant changes, in order to meet the space requirements for carrying out certain activities. [25] |
| I09 | Traditional Arabic architectural components can be applied to contemporary contexts are circulation patterns, orientations, philosophies, blankets and building materials, building components (walls, openings, roofs), natural circulation, shading, natural cooling. [26] |

**Focus group discussion**

Based on the results of identification of journals, several groups were found based on the focus of the discussion. There were 5 groups of findings from the journals studied, as follows, (Table 4).
Table 4 Focus Group Discussion

| Journal Code | Focus discussion |
|--------------|------------------|
| N01, N03, N04, N05, N06, N07, N09, N10, I01, I04, I06, I07, I08 | Of the 13 journals, they agreed regarding the definition of traditional architecture, that traditional architecture is a cultural product of the local community which motivated by various aspects (physical and non-physical) such as religion, beliefs, customs, philosophies, habits, rules, building processes, and local materials, ornament or symbol. These aspects are applied from generation to generation |
| N02 | The contents of this journal provide a different opinion that traditional architecture is not related to the customs, but only emphasizes local people, knowledge, and materials |
| N08, I02 | These two journals discuss more about the social aspects of the community related to the owner's social strata that affect the appearance of traditional houses |
| I03, I09 | These two journals focus on architectural components or elements found in traditional architecture, such as layout, main access, structure, walls, roof, ornamentation, function, circulation pattern, orientation, philosophy, blankets and building materials |
| I05 | The author explains that traditional architecture comes from local residents, it is vernacular, this vernacular house architecture has its own traditions |

Discussion of findings

Based on the results of grouping the focus of the discussion, several things were found as follows:

a. Journals N01, N02, and I05 link traditional architecture with vernacular architecture. Journals N01 and I05 say that traditional and vernacular architecture are different but identical and come from the same root, while journals N02 compare but conclude that they are different.

b. Journal N02 has a different opinion from most opinions regarding the definition of traditional architecture that traditional architecture is not related to culture and customs. Matters related to customs, culture, beliefs and cosmology are aspects of vernacular architecture.

c. The journal N05 explains that traditional architecture is a cultural product and comes from cultural science, ethnography or anthropology, but criticizes that traditional architecture should be viewed from the science of architecture as an architectural material. It needs further explanation from the author related to the architectural point of view in question, because the author says that traditional architecture is knowledge related to culture, but the author of the journal N05 also criticizes if traditional architecture is discussed from the point of view of cultural science. This is different from the journal N07 which says that the
relationship between culture and architecture cannot be separated, because architecture is a form of culture.

d. The object of research used in each of the journals studied is in the form of a local resident's house, but in journal I07 there are other types that classified as traditional architecture, such as public buildings and hydraulic buildings.

e. The research objects studied in journals whose research locations are in Indonesia, are all residential houses that are identical to regional or ethnic groups in the area such as the Balinese, Minangkabau, Bugis-Makassar, Kutai and Toba Batak tribes. Other locations in Africa, Arabia, the Caspian Coast of Iran, China, and Turkey also show the same thing.

The following is an explanation of the background and process of the emergence of traditional architecture based on the findings of the discussion of the journal literature reviews that have been carried out, to achieve a traditional architecture it must start from a place, a community group, a building is formed from local knowledge, technology, and materials that influenced by it. by the intangible socio-cultural aspects of the community, it continues to be repeated until it goes through a trial and error process and is passed down from generation to generation and able to be maintained and endured for a long time, until it eventually becomes a tradition (Figure 2).

| Locus | Tribe, local, native | Social society and culture | Socio-cultural products |
|-------|----------------------|---------------------------|------------------------|
|       |                      |                           |                        |
| Tangible |                      |                           |                        |
| Space patterns, structures, materials, space boundaries, openings, ornaments and symbols | Traditional architecture: | Local wisdom, locality, tacit knowledge, technology and local materials |
|         | Building, dwelling/residential house | Knowledge of building methods and processes | Intangible |
|         | Local wisdom, locality, tacit knowledge, technology and local materials | Religion, belief, ritual, customs, legal norms, philosophy, social strata, power, mythology, cosmology |
| Tradition | : becomes a tradition if it is repeated and passed down from generation to generation, it is closely related to time and place. |

**Figure 2** The process of the emergence of traditional architecture

### 5 Conclusion

Based on the results of the reviewing the contents of the journals that have been carried out, it can be concluded that the majority of journals explain that traditional architecture is closely
related to the culture of the community in a place that is identical to regional or ethnicity. Residential houses as a form of architecture are one of the cultural products of hereditary heritage which are motivated by cultural aspects such as religion, customs, beliefs, philosophies, building process rules, and social aspects to show the social stratification of society through symbols and ornaments. Architectural physical aspects studied in traditional architecture include spatial patterns, structures, materials, main access, space boundaries (walls, roofs, floors), window door openings, orientation, and ornament symbols. The physical aspect of the architecture is closely related to the socio-cultural aspects of the community where the traditional architectural building stands. The differences in perceptions that arise, may be from different perspectives and the literature used, so further discussion is needed to expand the development of traditional architecture itself.

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