Original Paper

Development of Residential Space for the Tokaili Community in Central Sulawesi, Indonesia

Zaenal Siradjuddin[1]

[1] Departemen of Architecture, Technology Faculty, Universtas Tadulako, Indonesia

Abstract

Central Sulawesi (ToKaili) is one of the provinces in Indonesia which has unique residential wisdom. The development of settlements affects the uniqueness of the evolutionary process of housing and housing provision regarding culture, technology, and knowledge that develops over time. This study aims to reveal what is behind the phenomenon of providing shelter and its formation from time to time. This research uses qualitative methods and a phenomenological approach. It is based on a development process. An analysis of several themes of the settlement period, from nomadic to permanent, then forms a hierarchy of agricultural settlements. According to the community, the territories included showing a vital role for local wisdom in influencing their formation into ideal accommodations. The results of this study reveal a hierarchical settlement pattern formed by the part of local knowledge in developing an excellent harmonious settlement from time to time.

Keywords

Evolution, Development, Settlement, Customary Rules, ToKaili

1. Introduction

This research is based on facts about the uniqueness of local wisdom possessed by the tribes in Indonesia. The diversity of local knowledge and its essential role in finding harmony in the life of these tribes is unique. The Indonesian nation, which is known for its collection of islands, which are inhabited by hundreds of different ethnicities and have so many identical but different cultures, is one of the uniqueness that needs to be studied and made into shared knowledge so that the existence of ethnic differences does not become a source of division, even as a unifying tool. A nation that is only known through a diverse Indonesian country (different but still one).

Various current researchers have not studied several existing *Antik*, and one ethnic group that has not received sufficient attention to be researched is the *ToKaili* ethnic group in Central Sulawesi Province.

This uniqueness underlies the research conducted and the efforts to reveal it to enrich the compilation of the development of vernacular residential architecture in Indonesia.

The influence of globalization on the development of architecture in Indonesia is so significant that its architecture tends to be neglected and causes various local wisdom owned by each tribe that cannot face the influence of global culture to become extinct.

Existing local wisdom, as a degraded cultural heritage of the Indonesian nation, has even been abandoned by its adherents because the owner neglects it and needs to be explored/reviewed so that local wisdom can be taught to future generations in Indonesia and globally. It can still be found. So that future generations can respect their own culture.

Vernacular architecture in Indonesia generally develops in rural areas. But along with the development of increasingly advanced knowledge and technology, its identity is getting lost due to the entry of foreign cultures that marginalize the understanding of the values of customary rules.

The presence of a global culture that brings new values in society creates many new problems in the life of rural communities,

Whereas in the past, local wisdom on settlements has given birth to various forms and patterns of agreement, such as settlement patterns and structures found in mountains, valleys, coasts, and other tribes, which have resulted in agreed and agreed-upon local wisdom. It has become a way of life in life, as evidenced by a shift in knowledge, with new tribal settlements in Indonesia that are far from leaving the culture passed down from their ancestors, local from the past. The phenomenon of local wisdom and the application of customary rules related to housing throughout Indonesia require categorizing and deepening various forms of local knowledge for ideal settlements.

Based on the views of rural communities and how the values attached to them and the development of importance in the current postmodern era show the neo-vernacular concept's birth, namely efforts to develop and maintain customary rules or local wisdom. The combination of global culture and local culture forms a new culture that is currently penetrating the countryside.

The combination of local and global culture to preserve the ancestors' customs and the influence of global culture on rural communities should not eliminate local traditions such as architecture that characterizes people in various villages.

The mixing of cultural characteristics must maintain the local architectural landscape so that efforts to integrate local culture with global culture require in-depth knowledge of the various regional cultures possessed by each ethnic group,

So this research is intended to provide insight into what lies behind a local culture that is needed to preserve the existence of local wisdom and adapt it to global culture. Investigating the To Kaili settlement's evolutionary process is an effort to build a deeper epistemology (knowledge) and understanding of local culture, starting from how *Toaili* determines the ideal place to settle in each of their cultural developments. This is done by studying various evolutionary processes, from nomadic to settling. Knowledge of this process shows patterns of behavior and procedures that continue to develop

and are grounded in developing their experiences and technology and culture.

Thus, this research finds knowledge about the evolutionary patterns, forms, and ways of life in harmony with the *ToKaili* society from development to the present.

This knowledge must then be used to develop future sustainable settlement patterns that demonstrate the uniqueness of each tribe.

The diversity of Indonesian ethnic groups can be preserved and becomes the identity of Indonesian ethnic settlements that can be seen in the life of every ethnic group in Indonesia because of their adaptability. Based on these thoughts, research on the evolution of the To Kaili community is fundamental.

2. Library Review

The knowledge possessed by each tribe in Indonesia has many identical conditions,

So it cannot be compared with the understanding of each community with each other. To start this research, researchers have the background knowledge that can help researchers see the various points of view of each concept/theory, especially regarding the tribe's object of research.

This research intends to make the literature as a background for researchers' knowledge, which includes: Local Wisdom, vernacular architecture, Settlements of researchers' ability, which provides for Local Wisdom, vernacular architecture, Settlement, cultural canalization in society, to be the fundamental knowledge of researchers used to capture various phenomena in the field according to needs. From this study. The concept of sustainable pragmatism planning

2.1 Local Wisdom

The local wisdom tends to be a dominant, attractive, or magnetic element that has an attachment and becomes the glue between the two. A settlement is a large area that functions as a community residence with specific natural characteristics and spatial structures. Spaces equipped with natural elements, for example, topography with rocks, plants, and water, and essential orientations such as the relationship between location and light, weather, and natural conditions, are part of the living space.

Housing and settlements exist because there are people with a culture and social or cultural civilization they have. The house's construction and shape are considered a manifestation of the community's cultural values.

Human behavior responds to homes differently and changes depending on the conditions of the place. In traditional society, the house is associated with several aspects, such as social, cultural, religious, and physical aspects. So, homes and villages are part of the area where residents, as part of work activities, interact with fellow settlers in a community who meet various needs of life through activities (Rapoport, 1969).

2.2 Vernacular Architecture

As architecture without architects or local architecture, Vernacular architecture describes local forms full of cultural and environmental elements, including the local climate, manifested in physical

37

architectural forms, such as layout, structure, ornate details. Vernacular relates to economic potential and local resources, and local wisdom. Vernacular is related to the growing primitive architecture such as the use of space, orientation, construction, natural influences, and human behavior (Rapoport, 1977). The uniqueness of the vernacular is expressed through growing traditions, knowledge, and methods, according to the needs, habits of the community, and adaptation to the surrounding natural environment; vernacular architecture is still encountered today. The characteristics of vernacular architecture consist of 5, namely (Zaenal, 2016):

a) Not using architectural principles and theories,

b). Adapt to the environment,

c). Following the community's abilities (engineering and economy),

d). Born from the culture of the people

e). Open to natural resources around and can always accept changes so that they can last a long time.

The conditions of vernacular architecture are created to meet unique needs and accommodate the growth of the culture that influences them.

The vernacular architecture was born from a group of people who live together and form groups community. Kinship and homogeneity are challenges of living together from a community.

Skills that are acquired from generation to generation and become a tradition so that society is called a collection of traditional institutions.

Communities that form a typical settlement, where architects also work as workers. This community gave birth to a small settlement located in the interior and adapted to local customs and culture.

Organized groups tend to settle down from generation to generation, so they consider it a place of birth. The incarnation of the dwelling and all the facilities are determined more by process than by product. The residential area in a community is always based on the development of woodworking technology. In carrying out the process, initiation is required at every stage and made aware of the community's traditions; for example, before starting the activity, it begins with salvation, which shows the strength of traditional ties in their lives.

Architecture is not only a tangible form but can be a social space, a symbolic space, which reflects the created space and the culture of its inhabitants (Oliver, 1987).

The processes that give birth to vernacular architecture are carried out from generation to generation or follow local culture, and the results are not necessarily the same. Vernacular architecture describes three things, namely a place, people, and period. The vernacular architecture contains local wisdom and becomes the keyword. Settlements filled with vernacular architecture are called local settlements because they can grow, naturally assimilate, and continue to this day.

Vernacular architecture that grew out of an ethnic community into a place of residence with traditional characteristics; and in line with the principles of cosmology, outlook on life, lifestyle, and distinctive appearance as a reflection of creative innovation, syncretic, and electrostatic approaches. Its architecture shows anonymous, original, naive, primitive, crude, spontaneous, accessible, local, or

38

community-based forms. The roles of norms, customs, culture, climate and economic potential that receive "recognition" are based on the long experience of community groups (trial and error).

2.3 Human Settlements

Human settlement is defined as the topography and the point of life and a place of contact (interaction) between humans and humans, humans and nature, and humans and natural rulers to form human settlements and physical containers where humans live.

An agreement that makes a place or area a place for people to gather and live together, to build houses and facilities needed in human life, to form a colony consisting of a collection of residences inhabited by residents, creating a residential community, a place to work and a place to communicate. It doesn't have to be described in three dimensions. But it must be seen from four aspects: the dimensions of life, the human size, the dimensions of character change, and the cultural dimension in units of time (Dioxides, 1971).

There are five elements of settler formation (human settlement), the points are as follows:

1) Nature as an element is a container or village container formed or regulated by environmental factors. A colony is a collection of houses inhabited by residents, developing residential communities, workplaces, and communication places.

2) Humans as components, namely people who live in nature and carry out activities, such as biological activities, sensations, perceptions, emotions, and morals related to values and norms held by humans or groups of humans.

3) Society as an element of a group of people living together forms a residential environment, such as developing social strata, forming culture (civilization), and forming administrative areas.

4) As an element, a protector (shell) is a place where resident human, such as lodging, community services, trade centers, leisure containers, commercial containers, offices

5) Social networks or capital as elements, namely systems formed naturally or artificially and social events for settlements, such as a water supply system for the needs of settlers, access to transportation, drainage, communication networks, and electricity, as well as all others physical needs.

The five components of the solution must be studied to find the ideal solution (Healey, 2009).

Analyzing settlements must be connected between the past and the present so that settlement growth is dynamic and evolving all the time and requires innovation to stay alive. Payments will die if they no longer provide services for human needs, so that a typical society must provide comfort, security, tranquility, and security for humans.

Humans resolve to move in a specific space within-population boundary. Therefore, the settlement creates a physical environment and an institutional environment. It occurs due to the process of modification (evolution) which one of the factors that extend the life of the order.

The evolutionary procedure can be analyzed by clarifying the size of the object of observation (settlement, residential units, occupancy, living space), population, and area. The relationship between groups or diversity or morphogenetic diversity depends on the availability of biological data and

39

non-physical factors, including social, economic, political, administrative, technological, and aesthetic considerations (Healey, 2009).

Resolution is a place to live in an environment with clear boundaries or areas, places that consist of "inside" and "outside" having a residential boundary (Schulz, 1985). The Village is a house and a broader environment, so the Village must have "inside" and "outside" elements.

The colony is unique and is an exciting point with an outline that tends to be a dominant, attractive, or magnetic element, so people will have an attachment that becomes the glue between them. The Village has characteristics through the physical condition of the environment and non-physical conditions such as culture, the social life of the community, and a stable system, patterned at a place related to the history of the Village.

Another survey about settlements is part of a large area within an area, which functions as a group center and interprets a location, land, or plot and transformation of the place where people live. The environment, which has natural characteristics and specific spatial structures, is referred to as plains, valleys, and ponds (basins). Spaces equipped with natural elements, e.g., topography with stone, vegetation, and water. They are equipped with significant orientations such as the site's relationship to light, weather, and natural conditions in the microclimate.

2.4 Sustainable Pragmatism Planning Concept

The development of the concept of planning pragmatism is increasing in the planning dimension. Some of these opinions reveal the idea of pragmatism, including showing the influence of pragmatic philosophy on the development of theories about the nature, objectives, and methods of planning. The contribution of critical pragmatism from practical and "neo-pragmatic" philosophers and efforts to identify the influence of pragmatism on the early concept of planning as a rational process.

Friedman, Lindblom, and Schon; associated with the development of Forester's "critical pragmatism" Forester's "critical pragmatism"; show the contribution of planning theory in the 1980s - 1990s. This perspective identifies the importance of pragmatic ideas in emphasizing the dimensions planning is a practical social learning activity, which must take advantage of human capacities and encourage the ability to transform transformative systemic critical work in the public sphere (Dalsgaard, 2014).

Some of the existing contributions to design have been drawn from the concept of pragmatism. The arguments presented suggest the first degree of convergence between a practical perspective and design understanding.

Pragmatism offers well-developed and coherent articulation crucial attention to designing pragmatic thinking and attitudes that can be of value at both theoretical and practical levels. At the conceptual level, it can inform and inspire the development of discourse about design. At a reasonable level, pragmatic concepts can be used to inform and guide concrete plans and help understand and manage the design process (Holden, 2008).

Decoding thinking can obscure the construction of a holistic and actionable paradigm from a holistic planning paradigm to develop sustainable planning that makes multiple approaches to sustainable

development planning and policy.

The dichotomy is a classic that was recognized more than a century ago by the hard-minded, soft-minded pragmatic philosopher William James, or for that matter, those who believe more and better information on addressing sustainability challenges and those who rarely on power. Then argued that the sustainable development approach was based on a philosophy of pragmatism that links hard and soft perspectives to sustainability planning, policy, and action. After detailing how those who think hard and soft among sustainability advocates translate into different insights and initiatives, a pragmatic framework of holistic sustainability planning and a set of proposed policies is essential.

A framework based on a pragmatic theoretical understanding of truth and rationality is the integration and essential process of action and human experience to test public values and work priorities.

This opinion contributes to developments that draw on a pragmatic philosophy, linking it to many works with environmental philosophy highlight the usefulness of pragmatism in building a philosophy of sustainable development. Suppose planners and members of democratic societies can reach a general understanding that communication and interaction are continuous between citizens and experts that need to be sustained to promote sustainable development. In that case, that knowledge must be generated and publicly tested context and that stories have stood side by side with scientific models and statistics, an important step towards sustainability can be made in the planning profession as a whole (Doyle, 1986).

2.5 The Classical Theory of Social Change

The classical sociological theory makes sociology the underlying theory. Among the hypotheses that arise related to idealism, materialism and economic systems, surplus value, and the dynamics of social change affect the idea of social evolution from the forms of rationalism that are owned. Groups that form specific interests define class, status-based and social interests. Considered, realistic, thought four different perspectives about the model that exists among people. Among considering questionable rationality, it can also be a reference for people in their lives (Thomas, 2000).

There are four reasons expressed as follows:

• Traditional rationality

Traditional rationality aims to fight for values derived from the traditions of public life (so that some people claim to be non-rational).

Every action is associated with the orientation of life values. The norm of living together feels more dallied on; for example, marriage ceremonies are directed in almost all ethnic groups in Indonesia.

• Value-Oriented Rationality

Rational values are understood as life potential, even if there is no real everyday life supporting them. This use is supported by human life's behavior and becomes a belief or belief and culture rooted in life (tradition); for example, humans raise capital for family burial ceremonies.

• Affective Rationality

Affective rationality boils down to deep emotional relationships and is related to connections that are

41

unique and unlikely to be outside the circle. If one party makes a mistake, then the other party always tries to help.

• Aimed rationality or instrumental rationality

Med rationality is the highest kind of rational consideration of logical choice elements about the purpose and means of action chosen. In every culture, community, there are many elements of rationality that are owned and explained. However, in many cases, rationality is prevalent, only one followed by many people. For example, economic rationality is often the first choice in many communities. Furthermore, this is an ordinary social change that changes individual behavior contextually.

2.6 Modernization Theory

In general, modernization theory is expressions a perspective (vision), main analytic models related to human factors in society. Modernization is becoming a commodity among people, which puts mentality as the cause of change.

Human mentality increases if the community has capital practiced to boost local economic production. Modernity is the result of western civilization associated with the presence of science and technology. Modernity has become an unquestioned accurate assumption because the modernization theory is positioned as a standard science in compiling science development (Thomas, 2000).

The theory of modernization can be understanding from an economic and non-economic point of view. The problem of underdevelopment is due to the lack of capital that accompanies it. Developing countries that want to advance must find additional money, both from within and from abroad.

Meanwhile, from a non-economic (Max, 1971) states that: the values of his beliefs shape human dynamics. That gave birth to economic growth (trust in finance), ethical theories of high moral delivery, and birth capitalist attitude towards animation. Ethical understanding becomes a universal value, which may be outside the argument itself; for example, capitalist positions convert to expectations of cultural values.

In terms of psychology, Mc Clelland (1961) showed his desire to reason and work hard between individuals perfecting everything in their position globally, which is a continuation of Max Weber's theory. The concept of the need for achievement is a raw spirit that ideally deals with work, then encourages success tendencies. Encouragement not only receives material rewards but achieves inner satisfaction. Poverty and underdevelopment in society because our environment is not infected with the virus needed to excel.

3. Method

This study uses a qualitative method with a phenomenology phenomenological approach with the following stages and processes of analysis:

3.1 Research Stages

The investigation is carried out in several stages: the mini-tour stage and the grand tour stage. The

42

mini-tour stage focuses on uncovering phenomena that affect the evolutionary process of settlements in the *Kaili* community. The disclosure of this phenomenon to find themes that affect change, the next step is to conduct a grand tour to deepen the related pieces and become factors that contribute to the development of housing or housing and settlement problems "*ToKaili*" the process of developing the themes developed which are then reduced to form several articles that have a role and are closely related to "factors that cause evolution," this was found through an unstructured interview process with respondents who knew based on age over 50 years. And as a customary leader and agreed by *Totua* (*adat* leader) in a regular meeting. *Totua* appointed as respondents were carried out by drifting to find data until it was saturated (no more new information). After the data was considered saturated, the researcher carried out a categorization and reduction process to find several themes correlated with pieces.

The themes found to correlate are expected after analysis explains the relationship between the settlement and building the ideal house and the solution from time to time.

The data found and categorized to form correlated themes are then archived into a manuscript showing data collection and categorization.

3.2 Analysis Stages

The phenomenon analysis procedure uses various saturated data and themes generated and becomes the source of truth in this study.

Because this research makes the researcher one of the research instruments, the nature of the researcher's subject matter cannot be avoided. To minimize the researcher's subjectivity, the process is determined by revealing the truth about the researcher's awareness process.

Such awareness depends on tracing the initial phenomena, followed by an in-depth search through various forms of understanding used, such as Identification awareness, on finding themes. Correlation awareness is used to find bonds between pieces to find concepts, and structural awareness is used to carry out recognition. Institution for the basic idea of an institution which is expected to answer the questions and research objectives and efforts to reveal the role of the ToKaili community in developing the concept of settlement from time to time.

4. Results and Discussion

4.1 Results

She *ToKaili* settlement research process shows that the settlement they have formed through a long process in its formation shows this process's findings having the following stages. The analysis results showed that several findings in *Kaili's* settlement period, giving birth to the type of living space, living procedures, customary rules, and settlement patterns, were determined as the main findings of this study. The discussion focused on the evolution of space formed to achieve life balance or find harmony in life.

The basis used to find the period of settlement in the *ToKaili* community began with the people's

43

beliefs and beliefs in the *Kaili* region, its expression through the classification of the universe that made the *ToKaili* people for generations try to find a balance. The world's category consists of the upper, middle, and lower planes, which are defined as realizing *ToKaili's* life beliefs.

The world above is considered a place for spirits of ancestors who have good behavior throughout their lives. They occupy the upper realms of here. The existence of an ancestor's top fields is believed. A source of community decrees so that rules prohibit people from entering the area.

Nature is considered a place where humans develop their lives in contrast to the world, where humans are given the freedom to cultivate an environment for the necessities of life. So that nature is maintained, agreed by *Totua* from several indigenous tribes who become shields in punishing community members' activities that can interfere with ecosystem balance to cause disaster.

The underworld or the underworld believes to be the home of an ancestral spirit that, during its lifetime, is poorly behaved; a vision rejected in the upper realm indicates that the mind is not received in heaven. The existence of courage in the underworld can interfere with humans in everyday life and in the spirit of the ancestors and other creatures such as Jinn and demons who occupy the underworld. The position of nature is lower in any water area, such as swamps, rivers.

He believed in the division of three realms, shows the harmonious manifestation between humans and the natural ruler (the upper field), so that in the beliefs of *Kaili* in the high sphere as a source of their sustenance and protectors and the top nature divided into three spaces is a space for natural rulers *(wanangiki)*.

They are believed to be a place of spirits and angels that are good. The space between the top and middle of nature, which is a dense forest that humans forbid to enter *(Wana)* and area, is a transitional space between middle and upper life called *Pahawa Pongko,*

This human can take forest products in the form of animals contained therein. The wood used to make settlements with various conditions, for example, to take tree trunks are not allowed to cut at the base of trees, but must miss at least above the head of a human head, so for that purpose, a bench (*Pongko*) is needed as a place to stand when cutting down.

Later the upper domain consists of three spaces and has different functions; *ToKaili* believes that humans occupy the middle area to navigate their lives, so the central part is called *Oma*.

The belief in the intermediate nature as a place where humans live their lives causes the world to be divided into three spaces. Namely: are used first as a place to move in a movement (Nomad) called *Oma Ntua*, in this space humans live and live in trees or caves - the surrounding area can still be found in several places and called To *Wana*, After they have the knowledge they move from *Oma Ntua* to *Oma Ngiki* in the subsequent development is a space called *Oma Nguku*, in this case, the place to stay while *ToKaili* has a more extended stay time compared to the two the area before. They had known the group leader but even lived on a journey; in this area, *ToKaili* developed a residence called *Bolanoa* as the residence of their leader. *Bolawo* was the residence of the community they led. The next stage is the underworld. In understanding, according to belief, *ToKaili* is an area inhabited by evil spirits of their

44

ancestors and other creatures such as demons and jinn's.

In the early days of *ToKaili* made the underworld a restricted area for their groups, but in its development with higher cultivation and technology, which it possessed, the hell was used as a settlement which was completed and followed by various customary rules to protect community groups from multiple disorders and influences of evil spirits or demons and Jinn's.

4.2 Periodization of ToKaili Settlements

The development of the community's culture, knowledge, and technology make *Pengataa* an embodiment of settlement. It is essential to know because, in the development phase of life, behavior and efforts to meet the needs of the *ToKaili* community from time to time continues to increase; it is characterized by a process that occurs within *Tokaili*; initial.

ToKaili was a very community individual and grouped in a tiny number (this family) and spread everywhere. Experience develops into a larger group and forms a community, so determining the place or *Pengataa* becomes very important for them. The changes in each period of development show an increase in a culture that allows the entry of other cultures into society. So, the *Kaili* community's periodization is the evolutionary process of the P*engataa*; this process shows the various conditions of humanity from a closed society to an open organization. So *Pengataa* is a settlement pattern that can be explained as follows.

4.3 Early Period Starts Knowing the ToKaili Community Settlements

The analysis shows that the *ToKaili* community believes to be the basis of dividing the territory in nature. The land division consists of three parts: The upper realm or the high realm is a space that is believed to be a source of virtue and sustenance so that this space is always kept away from human intervention through customary rules agreed upon.

The middle room is a space that is understanding as a place where humans organize and manage to meet their needs during their lifetime.

The lower area or the underworld is a space that always brings disaster; therefore, in this space, humans believe in the abode of the spirit besides humans and evil spirits who are rejected in the upper realms and spaces that tend to disturb humans.

The division of nature into three in the belief of *ToKaili* is express by agreeing to various territories. In each region, the upper or upper areas consist of a mountain peak or "*Wanangkiki*" as explained above. Likewise, "*Wana*" or wilderness and "*Pangale*" are areas that allow *ToKaili* to enter the forest to extract forest products without damaging the environment. Simultaneously, a space called "*Pahawa pongko*" is a space that allows logging in conditions that must use "*Pongko*" or bench.

The adjacent space is the living room, which *To Kaili* believes is the center of nature, which is a place where humans live and fulfill their needs, in this space consisting of two parts of the area, namely.

The basement is an area called the "*Balingkae*" area, a transition area from the middle to bottom; this area is not a *ToKaili* settlement area. Furthermore, this area is a valley area associated with a river or lake or crater, which is an area runny all year round and is believed to be a dwelling place for spirits

45

such as Jinn's; and demons that always disturb humans, but with the development of *ToKaili* culture which has been intervened by cultures outside of *ToKaili*, changing that understanding has made the "*Balingkae*" area a residential area of *ToKaili* residents with various customary rules which must be adjusted to use.

The conventional rules agreed by *ToKaili* are bases on the view of *ToKaili*, who believes that "*Balingkae*" is a place inhabited by spirits so that people who will occupy the area must perform various forms of ritual as a form of permission to hold together and not interfere one another.

4.4 Development Period of the ToKaili Settlement

The colony in the perception of *ToKaili* is a container by *ToKaili* is used to meet their needs individually or in groups with various requirements and is a step to develop *Kaili* culture. Close to live or say that have used can be categorized based on the development of the *ToKaili* culture.

Kaili culture, in its development, experienced a variety of influences that occur, consisting of internal controls and external forces. Inner power focuses on how *ToKaili* builds a relationship between humans and humans *(Hintuvu)*, gives birth to social networks, and is a social capital for the *ToKaili* community in determining the proper placement for housing location *(Pengataa).* The social network that initially worked was a network of small family groups and was exclusive or closed. T*oKaili's* social capital and external influences pushed *ToKaili* to develop into more significant and forming larger groups with a continuing pattern—growing. However, in some groups, there are still groups of people who maintain their exclusivities, such as the "*Wana*" tribe or small indigenous groups in the mountains around the valleys in Central Sulawesi. The evolutionary procedure of the *ToKaili* culture gave birth to several settlement patterns, namely, a fixed pattern of passive movement, a model of semi-permanent / shifting, a pattern of settling.

Thus, this evolutionary period is a *ToKaili* attempt to enter a period of settlements with various development needs that characterize and demand to establish an ideal settlement location. This period of development was marked by a shorter rotation period and length of stay in relatively longer settlement locations and villages that tended to approach the valley or forbidden zone and the shape of the house that developed into *Bolawo* for group leaders and *Bolanoa* for indigenous peoples.

4.5 Period Stay Staring

Dwelling Ontogeny from the long *ToKaili* Settlement gave birth to several periods of settlement that continued to experience changes due to cultural, knowledge, and technological developments. In the previous period, the basis for development was a change in perspective and changing needs, initially a primitive view that assumed nature by natural rulers who could turn things around. Hence, humans had to believe in their existence.

They were what became known as the traditional epistemology. A rational area which is still influenced by classical, so that the development of settlements is more on efforts to fulfill basic needs and avoid disasters that are believing to originate from the time of natural rulers as a result of human behavior so that the period of developing customary rules becomes indispensable as a *ToKaili* living framework.

46

In the era of settling, some characteristics that can be arranged as a form of change, customary rules are increasingly sophisticated. They bind all communities within the scope of usual regulations. Group life grows so that knowledge and culture, and technology also increase. This procedure gives rise to new episodes that prioritize rationalization, the emergence of a culture of peace or war between groups that shows a struggle for power between groups so that in a society, it is maintained into two groups, namely the *Madika* group (capable group) and the *Watau* group less fortunate or slaves. During this period that the *Kaili* people knew the culture settled and began to build community groups that began by making *Sou* (houses consisting of 5 to 10 building units), then some people formed a ball (Village) in this phase *Totua* started to establish which is a leader through customary agreements and also built *Totua* orb which is representative of the families of each ball, formed *Ngata* (Village), and some *Ngata* formed *Ngata Bete* or a large that has traditional leadership consisting of Jagugu as a spiritual leader, Tina Ngata as a ruler who has a dwelling, *Maradika* as the executor of leadership in the community and the Speaker as the spokesperson that connects leaders and the residence and is equipped with *Totua Ngata* as the institution that controls administration.

After this, the traditional leadership phase has developed into a new leadership influenced by the entry of culture and knowledge from outside. It introduces new forms of leadership and strata of society, which teaches charitable groups in *Kaili* society. This development then gave birth to 7 kingdoms in the west and eight kingdoms in the eastern region of *Kaili* in Central Sulawesi. Hence, women inherit immovable property in the form of houses and land, and men inherit property in the way of pets.

4.6 Discourse

The research findings show that settlement's evolutionary process takes place over a very long period, starting with the nomadic housing, which according to Zaenal (2014).

The nomadic pattern occurs in 3 phases: The first phase in which *ToKaili* moves around the mountains for 25 years to be able to return to their original place, The second to the relatively small number of *ToKaili* communities and one hundred percent dependent on nature.

In the second phase *(OmaNtua)* of *ToKaili* moving around the mountain for 15 to 25 years to return to the same place, changes in this period caused an increase in *ToKaili* communities. They have pure knowledge to survive and manage land simply. They move further down compared to the first phase *(Omangiki)*, and the third phase of *ToKaili* runs around the mountain for 5 to 15 years; this is because more and more people and the higher the amount of land area which is controlling more broadly. Compared to the previous phase and called *Omanguku*. In this phase, the knowledge intervention is intensive because of the influx of immigrants from outside the Sulawesi island and the entry of immigrants from neighbors in the Sulawesi region. The bearing of these immigrants had a strong influence on ToKaili's life. The knowledge culture and technology below have an impact on changes in the behavior patterns of the ToKaili community in building up a model of settled settlements that they do and influencing some *ToKaili* people to pay in the mountains no longer but instead move to the valleys with various customary rules agreed upon in developing their residential environment. The

47

growth of knowledge, culture, and technology in the To *Kaili* community has different responses so that there were two groups of *Kaili* people.

They were: people who rested on the mountain and the people who lived in the valley, those who remained mountainous were generally closed and unable to compete, whereas those living in the valleys are those who accept the advances in knowledge, culture, and technology that immigrants bring. The growth of knowledge and technology and culture gave birth to the table, and the non-capable groups, the delivery of the two groups was caused by the emergence of competition among groups of people who gave birth to a culture of war between groups of people called the wading culture (Zaenal, 2020).

The winding culture makes the able group *(Madika)* have power over the incapable group *(Watau* or slaves) caused by losing the war between groups. Changes status from ready disadvantaged groups slaves due to losing the battle and all of the possessions are taken over by those who win. The losers must pay a fine so that if they are unable to, then their status changes to become a slave of the winning leader and can only change if they can afford to pay the price for his defeat.

The waving culture makes the *ToKaili* community split into several residential districts that all claim to be the *Kaili* tribe but have different community names. Still, the difference lies in the language they profess. Still, the meaning of the name of the community is the same, namely "no," from the twelve community groups *Kaili*, for example, *Kaili Ledo, Kaili and, Kaili Tara, Kaili Daa*, and eight other *Kaili* all mean no so that the language of each community is disputed with style no. When *ToKaili* settled permanently, its development underwent stages according to Mattulada (1988).

Revealing that: settled settlements begin with a vale at a height (lore) called a tomboy, those who reside at a valley in the middle or lower mountains are calling with *Sou* and those in the valley close to the beach *Watau*.

The conflict in names is due to different communities, as described above. The appointment is the designation of the existing community dwellings, so *ToKaili* consists of 12 large sub-ethnic; the house's classification also consists of 12 types, the same as the language used.

The subsequent development is to become a *Boya* or a group of houses in a family consisting of 5 to 10 homes in one boat, then get into a camp or *Ngata*, a collection of several families or *Boya* united to form *Ngata*. *Ngata* is a collection of *Boya* that is not situated close to each other. When they agree to establish *Ngata*, Ngata's administrative are*a* covers all the domains owned by the *Boya* enclosed therein. Further developments took shape in a large village consisting of several *Ngata* who agreed to become large villages *(Ngata Bete)*. So *Ngata Bete* is a small town with an extensive area because all the domains owned by each *Ngata* are incorporated into the *Ngata Bete* region. In terms of leadership in the *ToKaili* community, the leadership pattern is based on Tate's guidance (the person or group of people who are taken in the community). *Boya* is a minor settlement consisting of 5 to 10 folks, which become *Totua* are.

5. Conclusions and Suggestions

5.1 Conclusion

The research indicated that the transition process that occurred in the *ToKaili* community was taking a long time. The spirit of a non-permanent resident (nomadic) with life as a resident (roving) indicates the formation of a *ToKaili* settlement phase. In the habit of wandering life, he makes cultural changes and records the progress of science through experiences passed through various agreements; this also applies to immigrants. Changes in changing patterns of interaction in society provide opportunities for the entry of new cultures and new experiences equipped with immigrants' technology.

Changes in settlement patterns occurred due to modifications after identifying several habits that hurt *ToKaili's* life by agreeing on a modified procedure to determine the location of resettlement or *Pengataa*. The new life process began to develop.

Pengataa is a procedure for developing knowledge and customs related to the *ToKaili* settlement's development from time to time.

Pengataa also shows the *Kaili* community's epistemological process, starting with the epistemological description and freedom from the war between groups.

The provision of a place to live based on the wording results in a new habit of supplying building materials in logs. The provision of this wood material gave birth to a logging culture: *ToKaili's* effort to obtain settlement material that would be used with an ideal settlement pattern through several testing and completion processes based on experience so far.

The emergence of creative efforts in *Totua's* creativity in finding customary rules was carried out through acculturation to create a harmonious settlement pattern.

The results of the developing community's cognitive operations are the evolution of culture and knowledge possessed by the community so that in discussing local wisdom requested by each community or group with interest in development, local customs can continue to be implemented properly as well as the immigrant culture that influenced it can be assimilated.

Therefore, it is not wise to develop community development by eliminating local wisdom as an ancestral heritage and replacing it with foreign culture. Efforts to make cultural acculturation in the community are carried out to produce a mix of local and global cultures that lead to a harmonious life needed now and in the future. In this way, local wisdom does not disappear but changes its form in forming a new culture based on the past's local wisdom.

5.2 Suggestion

This research is a preliminary study, so the results of this study must continue to be developed with a variety of related research that must be carried out in other indigenous peoples or other tribes so that knowledge is found about the diversity of settlement patterns that are characterized in developing community settlements in Indonesia, which do not leave their true identity in the past.

ANONYMOUS TERMS

1. To Kaili: The Kaili people

2. Kaili = The name of a tribe in Central Sulawesi

3. Wanangiki = mountain top

4. Wana = Core forest

5. Pangale = intermediate forest area

6. Pahawa Pongko = forest area where the results can be taken by using benches

7. pongko = bench used for cutting wood

8. Oma = the area designated for living

9. Oma Ngiki = the highest residential area

10 Oma NTua = semi-nomadic settlement area

11. Omah Nguku = permanent residential area

12. Bolanoa = home for traditional leaders

13. Bolawo = a home for a community group

14. Pengataa = place designated for housing

15. Bal Frames = watery lowlands

16. Madika = Well-off community groups

17. Maradika = community leader

18. Totua = elder person in society

19. Jagugu = leader of the ritual

20. Sou = home in general

21. Boya = group of houses in one family

22. Ngata = Village

23. Ngata Bete = Big Village

24. Vaya = Customary rules

25. Mogane = investigation of a violation of customary rules

26. Digane = reconstruction of the results of the investigation

27. Digivu = Customary Totua Pustisan determination

28. Disompo = Execution of punishment

References

Dalsgaard, P. (2014). Pragmatism and Design Thinking. *International Journal of Design*, *8*(1), 143-155.

Dioxides, C. A. (1971). *Logistics, Introduction to Human Settlements Science*. Printed in Great Britain on beau blade Cartridges paper by Anchor Press.

Doyle Paul Johnson. (1986). *Theory Sociology Classic and Modern*. Translated by Robert MZ *Lawang*.

Healey, P. (2009). The Pragmatic Tradition in Planning Thought. *Journal of Planning Education and Research*, *28*, 277-292. https://doi.org/10.1177/0739456X08325175

Holden, M. (2008). The Tough Minded and The Tender Minded: A Pragmatic Turn for Sustainable Development Planning and Policy. *Journal of Planning Theory and Practice*, *9*, 475-496. https://doi.org/10.1080/14649350802481371

Mattulada. (1988). *ToKaili*. Penerbit Untad press.

Max Weber. (1971). *Wisdom and Science in Sociology, Luis Schneider, Universities Of Texas at Austin*.

Mc Clelland, David, C. (1961). *The Achieving Society*. Princeton NV. Van No strand (1961) (OCoic) 579772875, Book.

Oliver, P. (1987). *Dwellings, The House A Cross the World*. Phaidon Press Limited, Little gate House, St Ebbers's, Oxford.

Rapoport, A. (1969). *House Form and Culture*. Englewood Cliffs, N.J.: Prentice-Hall.

Rapoport, A. (1977). *Human Aspect of Urban form*. Pergamum Press, Oxford.

Thomas Kuhn. (2000). *The Road Science Structure: Philosophical essay, 1970-1993, with Autobiographical Interview, Universities of Chicago*.

Zaenal. (2014). *Hintuvu* Concept on Settlement *ToKaili* in Central Sulawesi. In *International Conference on Sustainable Environmental Architecture* (p. 17). Makassar: Department of Architecture Faculty of Hasanuddin University.

Zaenal. (2016). *Re Articulation of Indigenous Bajo in Build Home, Case Village Kabalutan. In International Seminar on Vernacular Settlements* (p. 18). Makassar: Department of Architecture Faculty of Engineering at Hasanuddin University.

Zaenal. (2020). "*Pehakovia*" and House Forming Strategy and *ToKaili* Settlement in Central Celebes Indonesia. *Journal Advances in Anthropology*, *10*, 1-16. https://doi.org/10.4236/aa.2020.101001

Zaenal. (2020). Local Wisdom as a Planning Strategy and Sustainable Settlement Development Into Kaili Traditional Central Sulawesi. *Journal Review of European Studies* (RES), *12*(2), 107-119. https://doi.org/10.5539/res.v12n2p107

51