

MEANING INTERPRETATION OF GORONTALO VERNACULAR ARCHITECTURE WITH SEMIOTIC METHOD

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ABSTRACT

As a cultural artifact, architecture tends to be something that has a symbol. Other than its decorative function, architecture is a way to communicate meaningful cultural values. The objective of this study is to interpret the meaning based on theory and semiology method within linguistic. Therefore, a study of signification in architecture and how it could be extracted as a symbol then read as texts. Furthermore, the study of semiology theory is used to explore the ideas and concepts, through theory adaptation and redefinition in the architecture system. Based on this approach, Gorontalo vernacular architecture defined as a case study which concepts are extractable. The result indicates the effectiveness of this approach in detecting and identifying architecture system. Moreover, this approach has an ability to deconstruct architectural texts. Research methodology of this study is qualitative based on descriptive analysis. The data is collected from field observation, interviewing the residents and important figures within the community, and literature review through valid documents.

Keywords: denotative, interpretation, conotative, semiotic, vernacular

I. Introduction

Architecture as a cultural product is a manifestation of value system and behavior of specific community. Architectural objects can be seen as a facility in which community demands of specific value system and behavior are able to fulfill. Building is a form of artifact, the object of a culture other than ideas and activities (Koentjaraningrat, 1990). Therefore, as a cultural artifact, architecture has a tendency to be something symbolic. Many symbols/signs are not just for decorative purposes, but also a way of communicating cultural value. Manifestation of building by a community surely will exhibit its social system. In other words, physical manifestation of architectural object both entirely and partially will be a symbol with specific meaning. Geertz (1973) stated that culture is a relative system which organize meaning and exhibit historical pattern and transmitting the meaning that contained within the symbols. This is a conceptual system that inherited in a symbolic form, where people communicate and develop their knowledge about living a life. Rapoport (1980) stated that house ought to be approached as a product, commodity, process, identity, social status, territory, personal space and behavior setting. Therefore, a house has several meaning for each individual which may related to significant events and experiences. In this definition, every person have their own way of living. There is also social definition which include community, Arias (1993:41). According to Francescato (Arias 1993:36), discussion of significance within communication perspective is not only transmitting information, but also interpreting it. Difference in interpretation will cause different meaning acquired within the same information, depending on experience, purpose, attention, objective and some other factors. Groat and Wong (2002) stated that semiology can be used to analyze informational archive and other non-verbal stuff which strengthen the proof in cultural study. Other non-verbal stuff which appropriate for semiology analysis are photograph, icon, advertisement, mural painting, etc. Some researchers utilize semiology application to interpret signs or symbols which represent cultural ideas that projected in Thailand architectural artifact (Sparkes, 2005; Thippathat, 2002; Wyatt, 2004; Brereton, 2006). Architecture is a visual language which able to communicate through its people figure. Communication meaning is very important to human's life, within architectural attachment through its visual language such as signs and symbols that bine at figure (Norberg-Schulz, 1984). House as identity and self expression media (Rainwater, 1966; Cooper, 1972, 1974; Appleyard, 1979; Rapoport, 1982).

Choice of house as a place for living are personalized by decorations and furnitures (Becker, 1977). Polikoff (1969) and (Gauvain, Altman dan Fahim, 1983) stated that house is intended to be substantial site of cultural activity and expression. At the same time, Altman dan Gauvain (1981) stated that house also depicting a person's individuality and their relation with the community. The notion of traditional house by Timbang (2010) about symbol as a whole part of Tambi and Baruga traditional architecture; Bayu (2010) on spacial meaning and many decorative symbolization of traditional structure in Ngadha, Kampung Bena; Koesmartadi (2010) on structural system and traditional construction meaning as a national architectural treasure; and symbolic interaction between traditional building and its resident by Said (2010).

Gorontalo vernacular architecture as a part of gorontalo local community culture surely has a symbolic tendency. To understand the meaning of gorontalo vernacular architecture as a communication system within gorontalo local culture, semiotic method is used. Through semiotic comprehension, architectural objects are not only created as its original intention, but also have communication purpose. Denotative and conotative meaning contained within gorontalo vernacular architecture will be identified through signs and symbols.

II. LITERATURE REVIEW

2.1 Meaning in Architecture

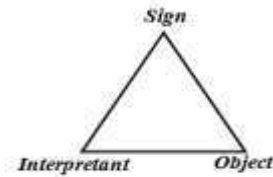
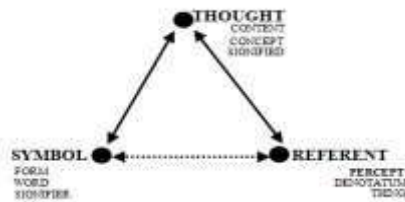
According to Rapoport (1982), Meaning occurred when people react and give a certain meaning to their environment. Moreover, Rapoport (1988) explained that meaning is a mechanism which necessary in connecting people and their environment. Every environment critically related to meaning where there are many ways they were created and utilized. Meaning is not only part of function, but also the function itself that is necessary to the environment. In this case, Rapoport (1998) classified three stages of meaning inside the artificial environment; high-level meaning related to cosmology, global opinion, philosophy system, etc; mid-level meaning delivers identity, status, wealth, power, etc. Also stated as laten function; low-level meaning related to instrumental, accessibility, motion, etc. Also stated as manifest function. In connection to the stages of level stated by Rapoport, Aries (1993) stated that meaning in relation to function is not only the communication process that is necessary, but also the utilization of the house. Hence it is divided into denotative and conotative meaning. Denotative meaning is related to function, whereas conotative meaning is the most relevant to certain people and culture within the time and space limit.

According to Rapoport (1982), signifiacny can be understood through three approaches. First, utilizing linguistic model based on semiotic. This approach developed by linguist and then translated by architect. Second, a study towards symbol which involves symbol translation. Third, anthropological approach based on non-verbal communication and people behavior. These three approaches are generally consist of senders and recipients; channels, message forms, cultural codes, topics; and contexts or landscapes.

2.2 Semiotic Theory

Semiotics was originated from Greek terminology "semeion" which means sign. That signs are delivering information so that it is communicative, representative for something else that which can be imagined (Broadbent, 1980). Signs are base of all communication medium. Sign is a representation of name, character, function, objective and desire that exist in human's life. Semiology is studying systems and rules that allows the sign to have a certain meaning (Sobur, 2003). There are three classifications in semiotic which divided into (1) communicative semiotic, that studying signs as a communication process both conotatively and denotatively; (2) conotative semiotic; (3) Expansive semiotic, an advanced development of conotative semiotic.

Saussure (1966) stated that Language is a sign system. There are some classification of signs which divided into Signifier, where a sign can be physically perceived (audio and visual) and Signified which likely to be defined as concept or meaning. These two entities of signs merged by social contact which related to culture and history. Every sign in the system has different meaning one to another. Sassure's idea developed by Ogden and Richards into semiological triangle (Broadbent 1980). Other than two elements that Sassure has stated, they add "referent" as the third element. Sign language consist of those three elements, which are symbol, thought of reference and reference or language, ideas, and reality (Jencks 1969). Symbol represents object or reference inside the thought of interpreter. According to Pierce, semiotics are action, influence, or colaboration of sign, object and interpretant (Littlejohn, 2001). The relationship of those elements can be seen in the illustration 1 and 2 below:



2.3 Semiotics in Architecture

Rapoport has studied meaning from the environment through anthropological approach and placed meaning to person instead of object or something. However, we can also get meaning from object which lead us questioning how could object give such meaning. In other words, how can meaning within object be coded so it can be translated? In architecture, signs are coding information from material, shape, and space so that signs became part of our way of communication. As formulated by Rapoport that physical substance in the environment will tend to communicate that character or picture defined as institution by certain community (Rapoport, 1982; 1990). In order to analyze architecture and signs, there is a question on how and where to extract and understand the meaning of signs in architecture. Norberg-Schulz said that signs in architecture found in the function and form of building (Norberg-Schulz, 1965). Role of the building purposely represent certain community behavior, whilst shape of building intended as architectural object entirely. Both aspects are essential when we analyze the meaning of sign in building, façade or object.

Based on semiotic, architecture can be read as text or language which has syntac, semantic, and pragmatic language structure (Sachari, 2003). Pragmatic signs exhibit the relation between signs and people behavior (Rapoport, 1982; 1990). The meaning of syntacsys signs originated from the position amongst every element. Architectural element formation related to arrangement which also following the pattern rule in the architectural syntacsys (Zahnd, 2009). Architectural syntacsys involves morphological aspects which are mass, space, function, and construction (Eco 1971; Fischer 1991). Semantical sign directly exhibit how something brings meaning to what have seen (Zahnd, 2009). Pierce introduces three sub-categories for semantical sign, which are index, icon and symbol (Zoest, 1978). Principally there are three relations which are related to sign, they are: (1) icon, which is similarity of appearance that can be recognized by the user; (2) index, which is the concrete relation of sign and object because its existency or phenomenal relevancy; (3) symbol, which is a relation that is already formed conventionally. Pierce's classification towards signs can't be seen as something small. Rapoport stated that a person is able to see environmental sign and analyze its meaning without getting into the entire signs problem which is quite abstract (Rapoport, 1982; 1990). Architecture is a visual language that can communicate through its figure (Norberg-Schulz, 1984).

III. Methodology

Semiotic triangle is utilized to interpret the meaning of gorontalo tribal house. In this triangle, the classification is based on architectural, socio-cultural, and environmental mechanism. Based on this approach, there are two points of architectural mechanism analyzed, which are spacial organization and physical form. Socio-cultural background of this user is investigated to get to know their beliefs and ideas in life. Architecture as part of culture is pointed to realize these abstract ideas. Through descriptive investigation between architectural mechanism and socio-cultural background analysis, architectural system that exhibit people's beleief in architectural structure can be depicted. Research methodology that is used was qualitative which based on descriptive analysis from field observation, interviewing the local figures and literature reviewing through a valid document. Semiology triangle can be depicted as in schematic below:

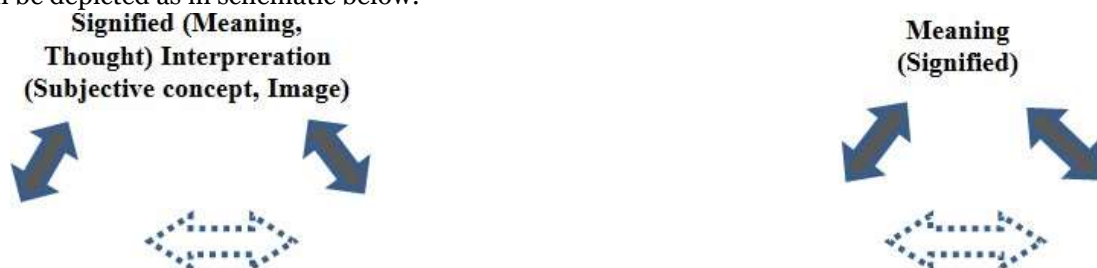


Figure 3. Semiotic triangle based on theory

IV. Result And Discussion

4.1 Social, Cultural and Environmental Aspect of Gorontalo People

4.1.1 Social Institution

Before the Nederland invasion, Gorontalo is formed by several kingdoms which ruled gorontalo traditional law. (Daulima, 2004). The union of these kingdom known as Duo Limo lo Pohala'a which means five kingdoms from two main empire (Gorontalo and Limboto). This terminology emerge after the agreement of the two created (Daulima, 2004). Classification at the age of empire affect the type of building and its shape, formation, dimension as well as the ornament (Daulima, 2006). The Netherlands invasion affects the material usage where wooden based material replaced by stone based material. The building also has wider opening with colonial style.

At the age of Eyato (1673) became the leader of the union, Islam also became the official religion. Tradition as the form of cultural system was similar to principal based from alquran called "Adati hula-hula'a to sara'a, sara'ahula-hula'a to kuru'ani". This terminology had been through historical process before came up (Baruadi, 2012). For people at the age of Eyato, syarak kitabullah understood and recognized as alquran and hadith based regulation. The Islamic traditional system also being implemented in such architectural way. The entry of Islam in gorontalo strengthen the cultural value including philosophy that underlies every shape, space arrangement, element structure and the tradition which follows building process (Daulima, 2006).

4.1.2 Social and Cultural Life

Factually, the willing of gorontalo people to living along peacefully with other group of community based on religion, race, identity, tradition, and culture has showed in u dulo wo limo lo pohala'a. Gorontalo people openness to other community is actually their effort to realize cosmic balance.

Dulohupa is a form of conflict management amongst people of gorontalo, which is to prevent any conflict both inside and outside the community. *Dulohupa* interpreted as follows: (1) their effort to prevent any conflict between human and any cosmical components. (2) Their form of responsibility to their ancestor, spirits, other human being and god. (3) Their high tolerancy to others and those who came into their environment. (4) Part of *dulohupa* which symbolize openness and appreciate diversity of race, religion and background. (5) A form of their obedient to tradition and values in their religion. They do not want to be called "*dila o adabu*" (bad-mannered human) (Tohopi, 2012). Moreover, there are some rules they had to prioritized, which is *mo potawu lotawu*, (respect others), *dahayi lipu odungga lo bala* (take good care of the neighborhood), *dahayi batanga wawu dilipata parentha lo Eyaa* (do what's your god order). Gorontalo people were encouraged to do a concept called *batanga/nyawa po maya* (human's physical and spiritual devotion), *lipu peyi hulalo* (develop the neighborhood), *agama potombulu* (religion as life guidance) which all of them were meant to motivate community activity promotion (Tohopi, 2012).

That theory also reflecting how important harmonization is in order to keep cosmic balance that obviously involved in community life. This mutual cooperation purposedly to help and share the load for one and another to face any kind of life problem or building a house and also involving broader community group in that area.

4.1.3 Environmental Aspects

Gorontalo is located near equator and it makes it has high temperature and humidity. Average minimum and maximum temperature is 23.20 and 32.60 degree celcius respectively. Has a relatively high humidity as high as 79.22% with the highest rainfall in March as high as 389 mm per 30 days of rainy days. The wind blows as fast as 1.00-3.00 m/s every month (BPS Propinsi Gorontalo, 2016). Climate affects the architectural structure of gorontalo vernacular house. The house has built 1.5 m above the ground so that the base can be utilized as storage. Other than that, it provides good air circulation and preventing risk of flood. The main terrace roof is made to be wider and has an opening underneath as an adaptation to humid tropical climate. Moreover, geologic and geographic condition of gorontalo cause the earthquake to occurred quite often so that material choice and construction structural system is created to prevent that risk.

4.2 Gorontalo Vernacular Architecture

Gorontalo vernacular architecture is a legacy which created through colonial and Islamic culture acculturation (Abdul, 2008). Tradition is not just interests or way of life that only exist temporarily, it is sustainable, comprehensive and the main element is religion (Nasr, 1973). Gorontalo vernacular architecture is a development of people architecture that has ecological, architectonist and natural value because it is referred to condition, climate and cultural potention, and environment. It is directly admitted by its people because it has grown through long trial and error. It begins when

gorontalo still in a form of ocean, then came up to be a land which populated by settler originated from north Sulawesi, Gowa and Bone, until the age of King Eyato at the 15-16th century. In the end, it was gradually adopted by the royal system of the century 18-19. This long history of gorontalo is what colours the gorontalo vernacular architecture which contains local genius and identity value that show variety. This architecture is close to local tradition which has grown amongst gorontalo people which in accordance to the statement of vernacular expert: *"Vernacular architecture is a generalized way of design derived from Folk Architecture, it uses the design skills of Architects to develop Folk Architecture (Allsopp, 1977).*

Gorontalo vernacular architecture is an environmental figure that born from tradition values and then developed through acculturation of outside (Nederland, Arab, Chinese, bugis-makassar, north Sulawesi) and local culture which expressed in the shape and utilization of ornament (Heryati, 2014).



Figure 5. The shape of Gorontalo Vernacular Architecture

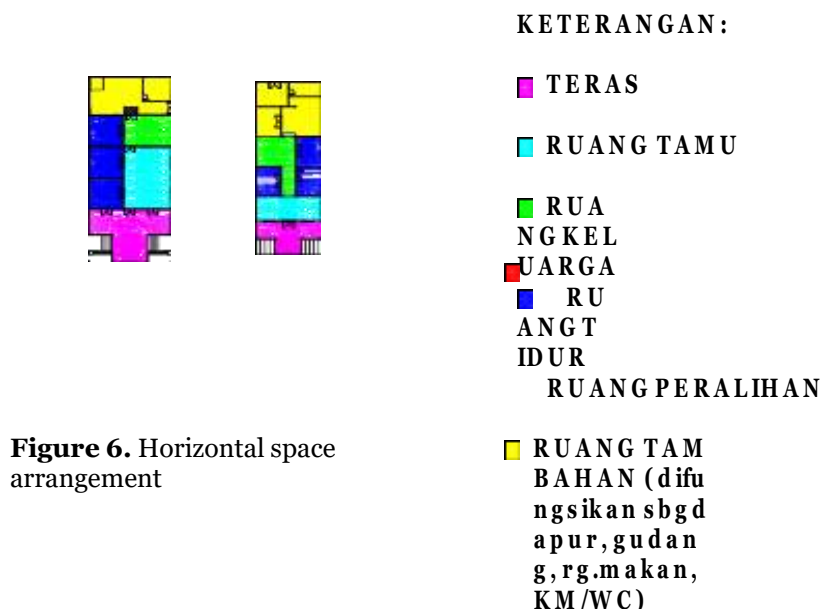
In the context of traditional house, local wisdom which follows the building process has arranged the harmonization of technology, material, design, positioning and natural ability. This harmonization is achieved by understanding the environment. They know the interaction between organism and its biotic and abiotic environment so that balanced life is created. This behavior gives a comprehensive description on how they act and it became their life philosophy towards all the meanings.

4.3 Interpretation of the Gorontalo Vernacular Architecture

In the study of the architecture, purpose placed as a major aspect in architecture other than function and form. Purpose is a fundamental part of human life, therefore human always put meaning on whatever is given to them (Capon, 1999). In the triangle of function-form-purpose relationship; the aspect of function is always related to the context, the aspect of form is related to the structure and purpose is related to the interpretation of the function and shape of the architecture. In relation to the explanation, the overall attitude of Gorontalo people bring forth the architectural form of Gorontalo house on stilts in which values and governs human relationships with God, nature, society and as person. Human relationships with God, nature, society and as individuals are each translated by the purpose implied in it. This purpose then embodied in the vernacular architecture of Gorontalo with all its scopes. The embodiment of the attitude of Gorontalo people to Gorontalo's vernacular architecture as a result of a translation of the implied purpose in each relation can be explained as follows:

1. How the people of Gorontalo relate to God which is the union of noble values towards the human self, so that the form of unification of these values is manifested in the form of a quadrilateral pattern of the four forces of nature which consist of water, fire, wind, and earth. There is no rule for the number of rooms except at the beginning of the construction of the house is not allowed to make more than 3 rooms except the noble house, the addition of the rooms done later after the house was inhabited. The number three in Gorontalo society has three-dimensional philosophical meaning of human life that is *tolo lenggota* system consisting of *lenggota bohuliyo* (first dimension) meaning "from none", *lenggota oluwoliyo* (second dimension) then "exist", and *lenggota otoluliyo* (third dimension) meaning "back to none". The essence of *tolo lenggota* is looking for the three honor to the Creator with three main sciences namely science of knowing yourself, science of knowing God (the creator of the universe), and the last is the science of knowing the nature of his creation.

In terms of layout, according to the accounts of the elders, in the past the women of Gorontalo (wife and children) should not accept male guests if the father or husband is not in the house because of fears of slander that may lead to rifts and chaos in the household so that the plot between the living room (*duledehu*) and the bedroom plot (*huwali*) is limited by a door as a hijab or barrier. The type of space that represents the life cycle and activities of the women is the bedroom and kitchen. The rule of not allowing male guests to enter the house (male guests on the terrace) is an Islamic teaching that does not allow non-muhrim to enter the house. This shows that the teachings of Islam have been applied as a custom in Gorontalo that should not be violated.



In association with the location of the rooms are placed behind the line or crossed position and facing each other, the position of the parents' bedroom or boys' are placed at the front and then followed by the girls' bedroom. Seen the picture, the bedroom is a very private room in the house so it is not justified (taboo) for the child to walk into the parents' bedroom and vice versa brother or father are not allowed to enter the child's or sister's bedroom. In the ancient societies, boys did not get a room at the house because since they grew older, they're required to work, study religion and live in the mosque or surau, even though there is room for them, the boys' bedroom is placed at the front and strictly prohibited to go adjacent to the girls' bedroom. Embodiments of other Islamic values are found in the function of the terrace. In this room both parents and grandparents gathered to advise children and grandchildren through fairy tales or other stories aimed at educating and planning tomorrow's activities. In the month of Ramadhan the front porch (*hihibata*) functioned as a place for adults. The discriminating of space functions is reinforced by the presence of *Pihito* in the form of a protruding beam on the floor that serves as a delimiter of space function indicating that the privacy aspect has become the main concern after the entry of Islam.

Philosophy of figure 2, 3, 5, 6, 7, 8 on the formation of a house. The application of these figures is found on 8 poles (*wolihi*) supporting the roof of the terrace, among these 8 columns there are 2 free standing poles (Code A) supporting the roof terrace on the left and right corners made of iron, and the other 6 (code B) With railing terraces made of wood, towards the back starting from the C code is a basic pole (*Potu*) with brick construction vary in number depending on the house; The number of rooms at the beginning of the construction of the house should not exceed 3 rooms except for the king's house; The philosophy of number 7 on structure and construction; the number of stairs varies depending on the height generally consisting of 3, 5, 7 steps; Two-tiered roofs, and the determination of the length and width of the house in the process of building a house.



Figure 7. The meaning number of poles on base pole composition and terrace roof supports

The number 2 on the two-tiered roof represents adat and shari'a. Roofs on the first layer which symbolizes tradition, where its implementation should start from the authorities of the country including the king and the stakeholders, the second tier symbolizes the Shari'a of the priests, judges and clerks of Personality, both of which should go hand in hand in the execution of daily life. The number five symbolizes the five pillars of Islam and the 5 principles of community life in Gorontalo, which consist of *Bangusa talalo* (guarding the descendants), *Lipu poduluwalo* (defending the country), *Batanga pomaya* (devoting themselves), *Upango potombulu* (sacrificing treasures), *Nyawa podungalo* (lives at stake). Beside of symbolizing faith harmony, number 6 also has the purpose of six main properties or characteristics of the society *lou dulowo limo lopahalaa* namely: (1) the trait of *tinepo* – tolerant, (2) the trait of *tombulao* – respect, (3) the trait of *tombulu* – devotion to the ruler, (4) the trait of *wuudu* – according to reasonableness, (5) the trait of *adati* – adhere to the rules, (6) the trait of *butoo* – obedience to the judge's decision. The number 7 means seven levels of lust that elevates human dignity, namely: *nafsu amarah*, *nafsu lauwamah*, *nafsu mulhimah*, *nafsu muthmainnah*, *nafsu rathiah*, *nafsu mardhiah*, dan *nafsu kamilah*. The philosophy of number 7 also applies to the structure and construction of the bottom (underneath), the middle (body) of the house, and the top (roof).

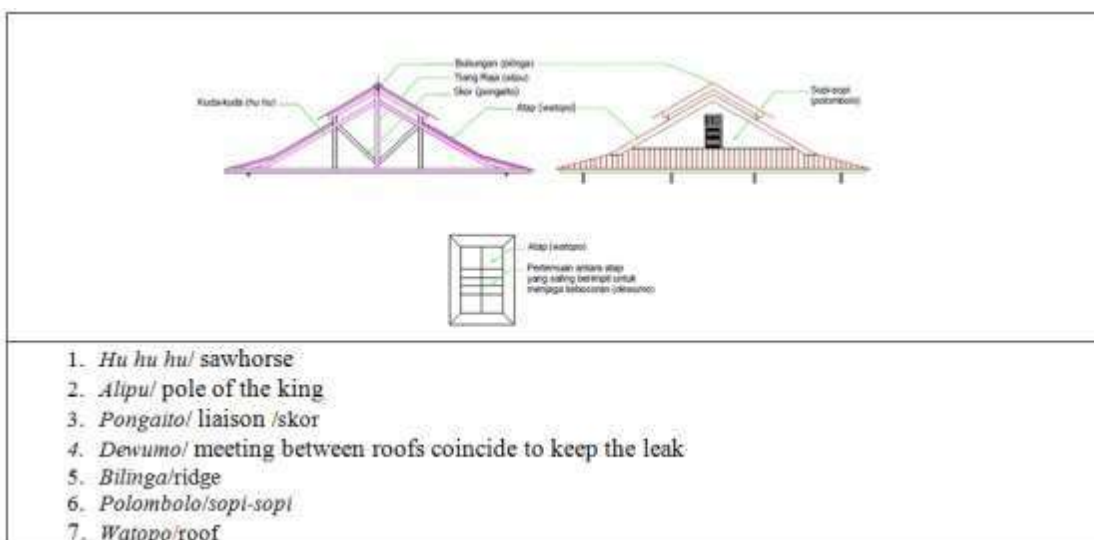


Figure 8. The Meaning of number 7 in the structure and construction of the roof section

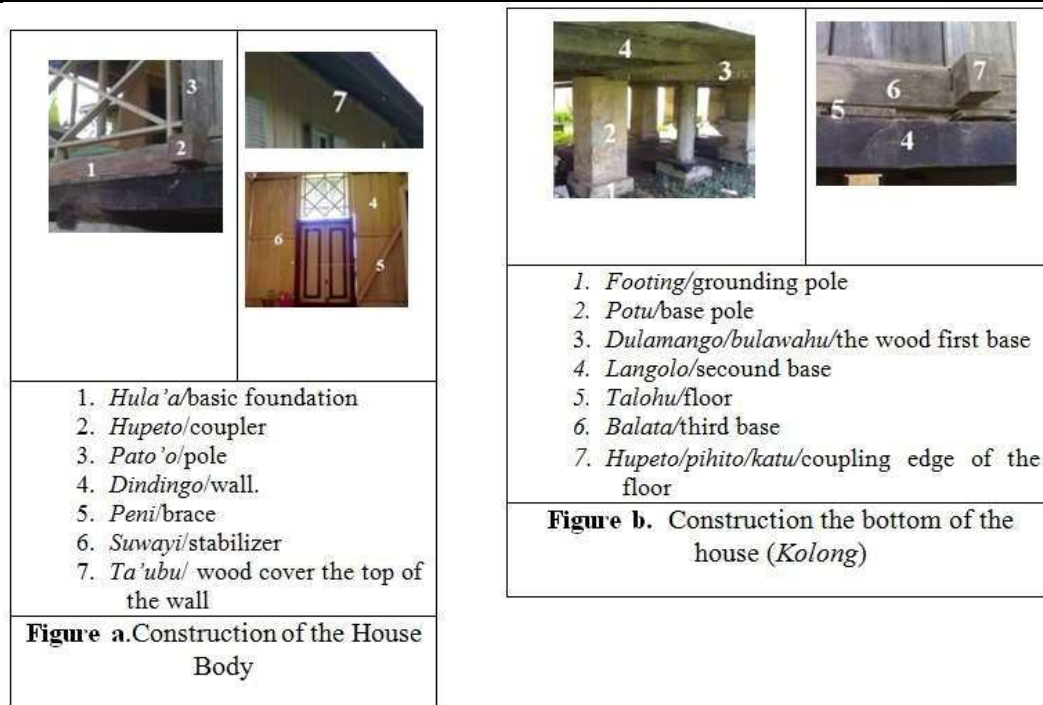


Figure 9. The meaning of number 7 in the structure and construction of the housing body (a), the structure and under construction (b)

2. How people of Gorontalo relate to nature is the purpose of the surrender of human self, the form of this resignation activity is manifested in the stage-shaped house as a form of adaptation to the environment that is often flooded, the use of materials adapted to the placement of the material on the structure (bottom and top), high and wide openings, roof on the outer core portion as a form of adaptation to tropical natural conditions, the layout of the building on the site-orientation of the building with nature, spatial-landscape, etc. All of these forms as an adaptation to the geology, geography topology, and climate of Gorontalo.



Figure 10. The meaning of natural relation

3. How the people of Gorontalo relate to the society is the unification of one purpose of noble values (goodness) towards the human self. The friendly culture that characterizes the people of Gorontalo is reflected in the word *matoduolo* (welcome) that reflects the friendly attitude to people who come to Gorontalo. The friendly culture is the cultural heritage belongs to people of Gorontalo that have been preserved, guarded and reflected by the people of Gorontalo today in social life, the form of unification of these values is manifested in the use of stairs in two directions (Figure 12a), the wide terrace used for welcoming guests before entering the house (Figure 12b) and the orientation of the house facing the street. Its two-tiered roof shape (Figure 12c); The first layer represents *buwatula bubato*; The princes of the land, second tier *buwatula syara'*; Priests, judges, and clerks'. While the floor which is the wider house body symbolizes the *buwatula bala*; Guards / officers and the people

aspart of the society most of which must be protected. This philosophy also underlies the form of Jalamba ornaments below (relings ladder or terrace).

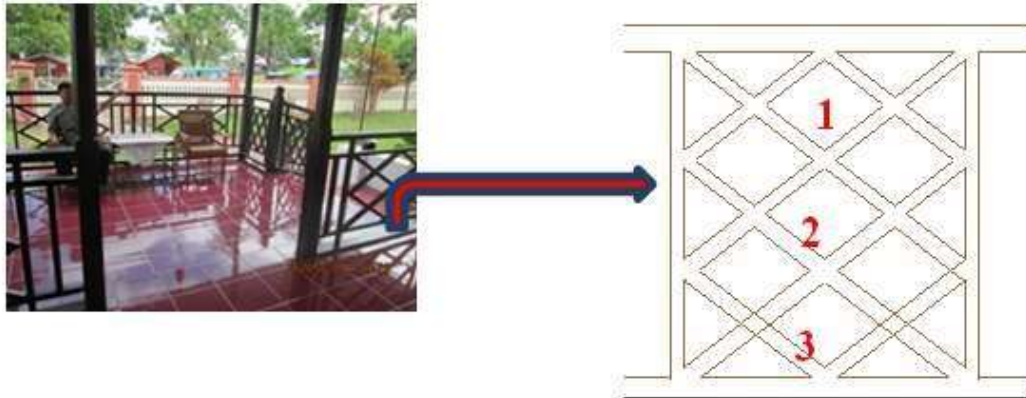


Figure 11. The meaning of number order of jalamba ornament

The philosophy value in the ornament of pakadangan is symbolized by lotus flower that looks like people holding hands as a symbol of togetherness of the people hand in hand to support the king (Figure 12d). The concept of relations with the community is also reflected in the culture of togetherness of the people of Gorontalo in the process of establishing a house done by mutual cooperation (*huyula*).



Figure 12. Relation meaning between people and elements of the house

4. How people of Gorontalo lives as a person, is a form of motivation determination in everyday activities performed at home, such as culture of courtesy, which reflected on the placement of the bedroom parents and girls, girls and boys. For bedroom boys are on the front and for girls are on the back. According to the people of Gorontalo, women are weak and must always be guarded and protected as well as the existence of space under the roof (attic) in ancient times as space for seclusion girls waiting to be proposed. This shows the high appreciation of women in the lives of past communities. This attitude is expressed in both vertical and horizontalspatial layout. About the existence of a separate kitchen from the main building is because the kitchen is a familysecret taboo that should only be entered by family members of the house, also intended that the slave or the workers do not have to pass the spaces in the main building when they are about to enter the kitchen. The location of the kitchen is separated by a bridge with the main / main building. Every guest who visits the house should not cross the bridge. Based on interviews with indigenous figures that the form of a separate motherhousewith a kitchen, horizontally from front to back is similar to the human form of analogy consisting of the head (terrace/*duledehu*), the body (living room, room space, transitional space), and feet (kitchen and serviced rooms). Another separate part of the main building and kitchen is restrooms.

There is uniformity in the proportion of the house, this is due to the philosophy associated with the size of the house both vertically and horizontally. To measure the height, width and width of the house by using the fathoms, with the one-fathom rule minus one span of the deductions divided by 8. The number 8 gives the meaning of the ever-present state of human beings: grace, woe, luck, loss, birth, age and charred. If the number ends on a bad one then it should be increased or reduced by one.

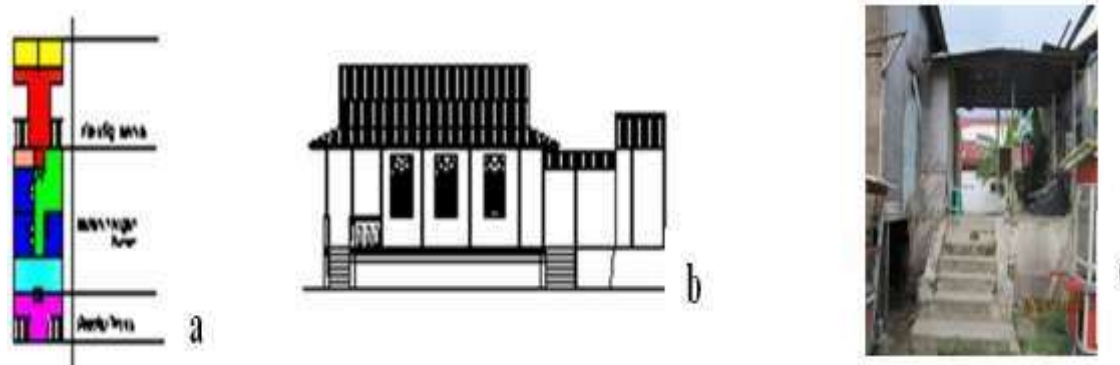







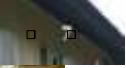



Figure 13. The meaning of relationships as personal beings on the shape of a house on stilts
(a) layout, (b) side view, (c) field documentation



If explored in depth the four relationships mentioned above essentially contain Islamic values as a mirror of the philosophy of life of the people of Gorontalo “Adati hula-hula'a to sara'a, sara'a hula-hula'a to kuru'ani”, meaning 'customs is based on syara', syara' is based on kitabullah (holy quran)'. The values of philosophy ranging from the process of building a house to the time of inhabiting the house, the influence of Islam in the feel of local culture remains reflected in the form of symbols such as the roof, stairs, system structure, spatial, ornament use and others. To evaluate the effectiveness of the use of the semiological approach model in the case study of Gorontalo's vernacular architecture, the sign analysis with purpose interpretation can be described in Table 1. In Table 1 shown the relationship between the mechanism of architecture (signifier), signified and socio-cultural background as a result of the use of semiological triangles based on a semiological approach in architecture. Furthermore, the basic concept presented in Gorontalo's vernacular architecture can be expressed in figure 14. The concept of space and form in Gorontalo's vernacular architecture has been understood from this interpretation.

Table 1. Interpretation of meanings with semiotics method

Interpretation of Meanings with Semiotics Approach			
Space Organization			Socio-cultural mechanism, environment
Mechanism Architecture /Signifier	Mean /Signified		Referent
	Denotative	Connotative	Socio-cultural, environment
	• Effectiveness	<ul style="list-style-type: none"> • Four rectangular planes of four natural forces: water, fire, wind, and soil. • The meaning of number three on the number of rooms • The number three in the Gorontalo community has a three-dimensional philosophical meaning of human life namely the towang <i>lenggota</i> system (3 dimensions of human life) • Spatial rules based on Islamic concepts. • The 3rd bedroom has the meaning of custom function & substance 	<ul style="list-style-type: none"> • Idea • Values
	Space Organization according to the functions and levels of privacy	<ul style="list-style-type: none"> • Adab's manners • Horizontal (front to back) and vertical human body analogy (bottom / up / roof), consisting of head, torso and legs 	<ul style="list-style-type: none"> • Values

Interpretation of Meanings With Semiotics Approach			
Physical form			Socio-cultural mechanism, environment
Mechanism Architecture/Signifier	Signified		Referent
	Denotative	Connotative	Socio-cultural, Environmental
<p>Stairs in both directions</p>  <ul style="list-style-type: none"> • Symmetry Façade shape   	<ul style="list-style-type: none"> • Stairs, circular connecting function ground floor and upstairs • Practical and effective Roof Arrange 'two' • Aesthetic • Ventilation Jalamba ornament: • In the window as ventilation and aesthetic • As a porch and staircase railing and aesthetic • aesthetic 	<ul style="list-style-type: none"> • Hospitality, inviting: 'matuduolo' • "Equality " or "justice" • Customs & Shari'a The first level of State magnates Second level Judge, Indigenous Stakeholder • Union symbol/ togetherness 	<ul style="list-style-type: none"> • Norms • Idea • Status • Identity • Physic and natural environment • Norms
Proportion	• balance	• Human existance symbolized with number 8	• values

Interpretation of Meanings With Semiotics Approach			
Physical form			Socio-cultural mechanism, environment
Mechanism Architecture / <i>Signifer</i>	Mean/ <i>Signified</i>		<i>Referent</i>
	Denotative	Connotative	Socio-cultural, Environment
<div style="display: flex; flex-direction: column; align-items: center;"> <div style="display: flex; justify-content: space-around; width: 100%;"> <div style="text-align: center;">□ □ □ □</div> <div style="text-align: center;">□ □ □ □</div> </div> <div style="display: flex; justify-content: space-around; width: 100%;"> <div style="text-align: center;">□ □ </div> <div style="text-align: center;">□ □ □ □</div> </div> <div style="display: flex; justify-content: space-around; width: 100%;"> <div style="text-align: center;"></div> <div style="text-align: center;">□ □ □ □</div> </div> <div style="display: flex; justify-content: space-around; width: 100%;"> <div style="text-align: center;">□ □ </div> <div style="text-align: center;">□ □ □ □</div> </div> <div style="display: flex; justify-content: space-around; width: 100%;"> <div style="text-align: center;">C C C C</div> <div style="text-align: center;">□ □ □ □</div> </div> <div style="display: flex; justify-content: space-around; width: 100%;"> <div style="text-align: center;">B B B B</div> <div style="text-align: center;">□ □ □ □</div> </div> <div style="display: flex; justify-content: space-around; width: 100%;"> <div style="text-align: center;">A B B A</div> <div style="text-align: center;"></div> </div> </div>	<ul style="list-style-type: none"> • Poles and construction elements under the house and body as structural functions • two-way staircase, distinguishing circulation up and down on customary activities / parties 	<p>Philosophy of number 2, 3, 5, 6, 7, 8, on house formation (Number of front pole, roof composition, construction structure component, number of steps:</p> <p>□ The number 2 represents adat and shari'a.</p> <p>□ Number 3, meaning three dimensions of human life '<i>tolo lenggota</i>' starting from nothing, there and back to nothing.</p> <p>□ Number 5 in addition to symbolizing the pillars of Islam and the five principles of life Gorontalo people, namely:</p> <p><i>Bangusa talalo, Lipu poduluwalo, Batanga pomaya, Upango potombulu, Nyawa podungalo</i>, Meaning descendants are kept, the country is defended, self is devoted, the treasure is represented/ sacrificed, the life of the stakes.</p> <p>□ Number 6 in addition to symbolizing the pillars of faith, number 6 also has 6 main characteristics or characteristics of society <i>lou dulowo limo lopahalaa</i> Namely: (1) the <i>tinepo</i>-tolerant nature, (2) the <i>tombulao</i>-respectful nature, (3) the nature of the <i>tombulu</i>-devotion to the ruler, (4) the nature of the <i>wuudu</i>-according to reasonableness, (5) the nature of <i>adati</i>-obedient nature of rules, (6)) The <i>butoo</i>-obedient nature of the judge's decision</p> <p>□ Number 7 means seven</p>	<ul style="list-style-type: none"> • Idea • Value • Values • Values

		<p>levels of passion that elevate human dignity, namely: lust of anger, lust of <i>lauwamah</i>, lust of <i>mulhimah</i>, lust of <i>muthmainnah</i>, lust of <i>rathiah</i>, lust of <i>mardhiah</i>, and lust of <i>kamilah</i>.</p>	
	<p>-Under: place to store - House body: occupancy - Top: warehouse</p>	<p>Analogy of the human body: Head, body, and Feet</p>	<ul style="list-style-type: none"> • Idea • Physical / Natural Environment
	<ul style="list-style-type: none"> • High and wide openings, wide roofs on the outer core portion as a form of adaptation to tropical natural conditions • Porch to receive guests, deliberation 	<p>Open: 'Dulohupo'</p>	<ul style="list-style-type: none"> • Natural environment • Kinship relationship

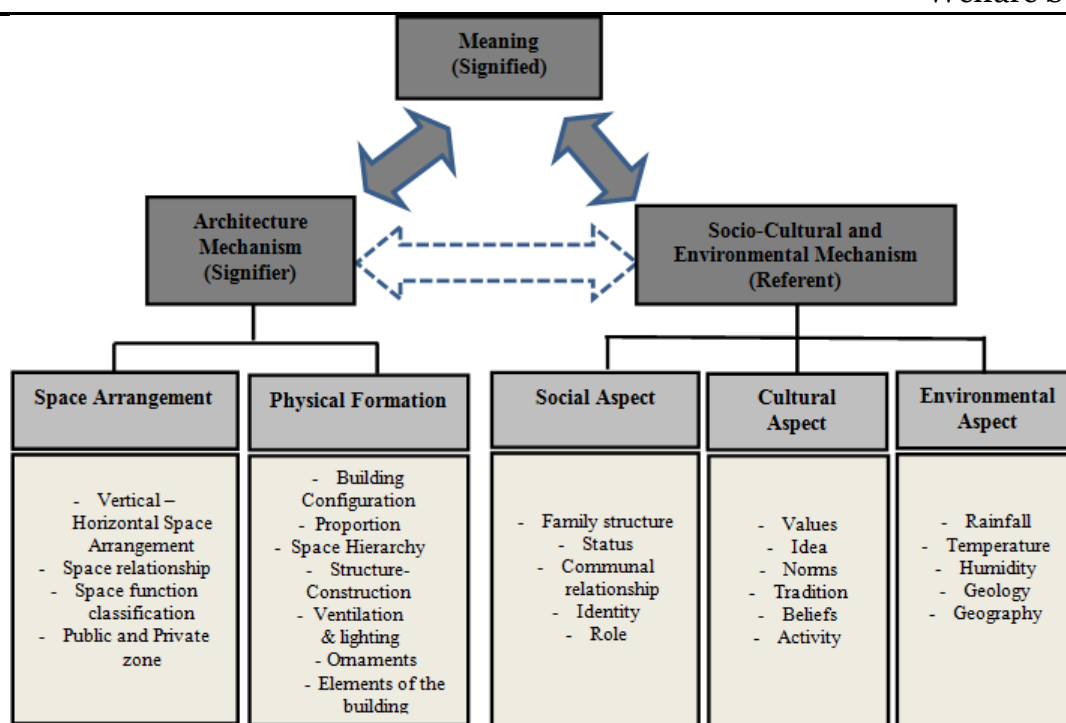


Figure 14. Analysis result with semiological approach in architecture

Basic concept of gorontalo vernacular architecture involving: (1) physical comfort, (2) visual relation with surrounding environment, (3) social interaction, (4) balance in proportion, (5) privacy, (6) optimized space usage, (7) cultural climate sustainability, (8) maximizing climate exploitation, (9) in and out interaction system, (10) aesthetic principal, (11) presenting engineering problem.

IV. Conclusion

Based on architectural, socio-cultural and environmental analysis, signs within architecture can be analyzed. Through Table.1, basic concept that creates spacial and physical form of gorontalo vernacular architecture can be recognized. These concepts are result of climate and socio-cultural demand of gorontalo people which emerged in architectural system. Moreover, this approach can be used as a method to obtain identity concept of acertain place. Result of the study exhibit that this approach is appropriate for detecting and identifying architectural system as well as deconstructed it into architectural text Through this method, we obtainedrelationship concept of gorontalo people with god, nature, social/community and as individual which reflected in purpose, form, and meaning of its architecture, which in essence refers to the social-cultural institution and environmental and Islamic values as the motto "*Adati hula-hula'a to sara'a, Sara'a hula-hula'a to kuru'ani*" (customs is based on syara', syara' is based on kitabullah) which became the philosophy of Gorontalo society .

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