Alteration of Bugis Traditional Architecture in Coastal Area in Cungkeng Village, Bandar Lampung

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Abstract. Cungkeng is a coastal village located in Bandar Lampung. In this area, there are traditional forms of Bugis’ houses arising from the presence of migrants of Bugis people who came from the Bugis tribe in South and Southeast Sulawesi, then forming a new environmental image that is the pattern of the form of the house far from where it came from, but is attached and is closely related to the personality of the Bugis people. Acculturation of Bugis’ houses in the middle of Bandar Lampung city is highly possible and become an interesting research topic, how the Bugis community in Cungkeng village retains its original traditional architectural forms and anticipates different characters from the house forms that still characterize the Bugis architecture. It can be observed from the comparison between the original Bugis’ house form and the existing Bugis’ house in the Cungkeng village settlement. The data processing was done based on qualitative method, through this method found the influence of heterogeneous culture in Bandar Lampung. Even though it is in the form of a house, it still maintains the authenticity of the Bugis’ house in accordance with the standards set by the original Bugis tribe.

1. Introduction
Bugis people originated from South Sulawesi which is spread in several provinces in Indonesia such as South-East Sulawesi, Central Sulawesi, Papua, Kalimantan Island and Sumatera. They live their life by hunting, fishing, farming, livestock, and crafting. Those who live in mountainous are mostly farming while those who live in coastal area mostly are fisherman. Aside from their famously trading skill, Bugis people are also well-recognized as sailor who are scattered in almost in Indonesia region. Lampung is one of the places for Bugis people to spread and inhabit which forms Bugis’ settlement while still carrying indigenous element from their origin as the identity of Bugis people, even though not in South Sulawesi [1].

Architecture as one of the cultural aspect is a manifestation of the values embraced and inherited for generations. As Yudono A (2008) stated, the faster a study on scrutinizing local traditional architecture conducted, the better it will be. It should be performed before the wisdom elderly on cultural, sociology, and architecture gone away hence we are able to knit again the local wisdom architecture tacit knowledge which is undoubtedly essential for the next generation [2]. A house is a physical culture hence makes it the easiest aspect to be seen in a settlement apart from the village structure which in the traditional context is a manifestation strongly related with the society characteristics. Its physical manifestation is highly influenced by socio-cultural and environmental factor in where ever it grows and develops. The differences between region and the cultural background also initiate the differences on its architectural manifestation.

Bugis people settlement at Cungkeng Village, Bandar Lampung is an intriguing phenomenon which is necessarily analyzed for its architectural manifestation background. It emerged as the incoming of
settler from Bugis people in South Sulawesi and South-East Sulawesi, incrementally and evolutionary shaping new environmental images by enhancing house pattern accordingly with its origin. One of the important factors to be noticed in this research is how these Bugis people anticipate the difference environmental characters while on the contrary, shaping a Bugis new settlement environment. What kind of factors dominate the sustainability of this particular shape and the problem they encounter on the effort to maintain their tradition houses. Those aspects will be brought upfront as this research’s question and analyzed and discussed in this research.

2. Method
This research focuses on house observation as the object hence the data processing was conducted using qualitative method where the data source and research information were obtained using explorative technique by using field survey to gather data using direct observation with sampling data, interview and literature.

3. Results and Discussion
Demographically, Kota Karang’ area is 30 Acres and divided into 2 regions of 1st neighborhood which consists of 12 RTs and 2nd neighborhood which consists of 10 RTs. Cungkeng Village is located in 2nd neighborhood and the closest RTs from coast are RT 05, RT 06, and RT 07 which encompass more than 16 ha and Bugis people mostly inhabit (Figure 1). At the administrative map of Kota Karang, Cungkeng Village is categorized as seedy area (Figure 2). according to statistic of Kota Karang, at April 2019, the residents of Cungkeng Village is 2061 in 141 families.

Cungkeng Village is inhabited by more than 80% Bugis people while the rest is Sundanese, Javanese, and Lampung People. Those Bugis people are comprised by Bone Bugis and Wajo Bugis and occupy separated area. Bone Bugis mostly live in RT 07, RT 06, and some part at RT 05 while Wajo Bugis tenant RT 05, cemetery, and main road as outer area of Cungkeng Village.
3.1. House Form of Bugis People at Cungkeng Village

The house of Bugis people usually called “Bola Ugi” are built on stilts (Rumah Panggung) and used woody materials from coconut trees or bamboos for the main part of the house. The house has terrace with 1-meter-long 7 meters’ width, each of these houses has front and back stairs with height of 1.5-2.0 meters, width of 1 meter and 5 or 7 steps or in odd. High of underneath or the distance from the ground to the floor is about 1.5-2.0 meter with variety of contour. Each house column is made by coconut tree wood where below it, a rock is put as foundation or umpak and used to inhibit weathering to the wood with the dimension of the column 14 x 14 cm – 16 x 16 cm (each column has different size). Floor and the wall of the house use coconut and meranti wood, while the roof uses asbestos or clayish roof. Most of the houses use woody material from surrounding island and timbered because it is cheaper than buying in Bandar Lampung.

Abidah (2010) mentioned Bugis people think holistically hence Bugis traditional houses are strongly influenced by the understanding of “cosmic structure” where the realm is divided into 3 parts of: upper world, middle world, and underworld which is essential in establishing house [4].

![Figure 3. Section Y-Y (left) and Section X-X (right) of ‘Original’ Bugis house [5].](image)

According to Palemmui (2006), vertically, Bugis traditional house has 3 main parts which are: Ale Bola or Watang Pola as house’s body with rectangular shape and function as living space or daily activities, Rakkeang which is a space above house’s body and utilized as a place to store foods such as rice or crops and heritage stuffs, and Awa Bola which is space underneath with soil as the floor and has no wall and functioned as public space [5]. Houses of Bugis is ‘Rumah Panggung’ made of wood. Bugis house’s structure can be built without iron nails, instead using wood nails functioned as lock between connection of one structure with another.
Figure 4. Bugis houses in Cungkeng Village.

In terms of form, Bugis’ house at Cungkeng Village still resemble Bugis House which has Ale Bola or Watang Pola as the house’s body with rectangle form functioned as living and activity space for the house owner. Second part is Rakkeang or a space above the house’s body though it’s just plafond-less house cover. Third part is Awa Bola, an underneath space without wall and grounded as public space. Space beneath the house is utilized to store the vehicle or warehouse.

Figure 5. Cross Section of the Bugis’ house at Cungkeng Village.

Horizontally, the division of space which in Bugis terms is called lontang, can be grouped in three parts as follows [6]:

1. **Lontang risaliweng** (front room), as a semi-public space, this space is a space where communicating with outsiders has been allowed to enter. Before entering this space, outsiders are first accepted in the transition room (tamping). serves as a place to receive guests, a guest bed, a place for deliberation, a place to store seeds and a place to lay a body before it is buried.

2. **Lontang retengngah** (latte retengngah) or living room. as a semi-private space, in this space the nature of family and informal activities in the family is very prominent. function for the head of the family and children who are not yet mature, a place to eat, give birth.

3. **Lontang Rilaleng (Latte Rilaleng)**, as a private space. The function of this space is to sleep a girl or grandmother/grandfather. This family member is considered as someone who needs protection from the whole family.
Figure 6. Layout of the ‘Original’ Bugis house [7].

Figure 7. Lay out of Bugis’ house at Cungkeng Village.
In Cungkeng Village, the house’s layout is enclosed with terrace in the front. Inner space consists of parlor and family room, 2-3 bedrooms, kitchen, washing and bathroom while the toilet is set below and in the back of the house using brick wall. The number and function of lontang are also divided into three namely lontang risaliweng, retenggah and rilaleng with the same function, between lontang retenggah and rilaleng there is not always a room divider. Most of Bugis’ houses in Cungkeng Village has two stairs, located in front side below the roof as a main stairs and in back side of the house as a additional stairs, usually used for service functions to the private area such as lontang retenggah and/or lontang rilaleng.

From Figures 6 and 7, it can be seen the comparison of the amount of space in the Bugis house in Cungkeng village, which is the addition of 1-2 rooms (bedrooms and or multifunction/shared spaces), as well as the addition of the total space in the Bugis house, where the addition of the room which was originally located in lontang retenggah to be placed in lontang risaliweng.

3.2. Architectural Details and Construction Process of Bugis’ House

A single building of Bugis house consists of several architectural details including structural elements, and non-structural elements such as fasade and interior elements. Bugis house structure elements consist of lower, middle and upper structures, where the structural elements function to support the existence of non-structure elements.

According to Samsudin (70 years old) as a citizen and an elder in Cungkeng Village who has been living in Cungkeng since 1960s, in the past the Bugis house constructed by mutual cooperation under the command of a building specialist as an architect. But now the construction of Bugis house has been done by the homeowner with paying some carpenters to build an house with a form tailored to the desires of the homeowner, so that the form of the new house in Cungkeng has many different from the original Bugis House in Sulawesi, For example, the amount of space in the house that is now more varied, the shape of the window using a new model window door, the use of Timpak laja that is incompatible with meaning, etc. However, the original Bugis houses can still be found in Cungkeng village, usually old houses that have not been renovated.

Syamsuddin said that in the construction of the Bugis house is always starts with the installation of Possi Bola in the form of a main pole wrapped in a white cloth and then the Possi Bola is placed in the center of the house as the first structure to be installed at the site of the house construction. At the bottom of the Possi Bola hung certain items such as sugar cane, old coconut and rice grain as a condition when setting it up. This ritual is still conducted in Cungkeng until now.

The parts of the house structure are Patolo (sideways beam), Aresen (beam that leads to the back and is located above the patolo), Pacala (patolo’s lock with wooden pole), Faciriciri (beam upper house, located parallel to patolo as a floor retaining beam. There are also blocks located above the wall that serve as a buffer for the building easel), Fasola, Tuneba (wooden retaining planks/floors). The house poles in the Cungkeng village used a type of Kayu langit in the past but now they are gone. The height of the pole is 4 meters, 2 meters for the column under the house and 2 meters for the retaining column. Syamsudin explained that the parts of the construction of Bugis house in Cungkeng Village are similar with the original Bugis house in Sulawesi.

![Figure 8. Possi Bola in Bugis’ house at Cungkeng Village.](image)
The wooden structure of the Bugis house also determines the position of the entrance. Syamsuddin said that the door should not be placed under a wooden connection, where the wooden connection is usually located in the middle, so why the door of Bugis house is always on the side of the house, not in the middle of façade. But this does not apply to laying the windows. The floors and walls mostly use board material, or bamboo material.

In the original Bugis house, the shape of a prism roof with a different ridge between one house and another, depending on the social caste of the owner of the house, the more the shape of the ridge of the roof the higher the social caste, the ridge referred to is called *Timpak Laja*. But today in Cungkeng this does not apply, the form of the roof ridge is no longer based on the caste of the owner, social caste has been replaced by economic capacity, the wealthier the more social status that is gained from society. This is due to the influence of the demands of the times that cannot be stopped.

4. Conclusion
The Bugis house in Cungkeng village generally still retains the same shape as the original Bugis house in Sulawesi. Some differences and modifications occur quite significantly in the addition of the number of rooms that should be in *lontang ritenggah* to be placed in *lontang risaliwweng*, then the shape of *timpak laja* which no more shows the social status of the homeowner based on caste, but based on the economic ability of the homeowner. In influence with other cultures, the Bugis house in Cungkeng village still reflects the Bugis house as traditional architecture in terms of vertical space, horizontal spatial plan, form, and architecture detail of house including the terms of structure of Bugis house.

The results of this study raise the existence of a Bugis village in the middle of the city of Bandar Lampung, where in Cungkeng village a Bugis identity can still be seen from the existence of a Bugis traditional house which is the residence of its citizens who also come from Bugis. However, the current condition of the Cungkeng village, which is considered a slum by the local government, has become a data for the improvement (re-condition) of the urban marginal area to be made a target village by the team of Department Architecture of ITERA in collaboration with national NGOs to assist slum settlements into better urban settlements in structuring villages, improved sanitation, economic conditions by utilizing the potential of human resources, as well as the natural resources of Cungkeng village.
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