The influence of architecture of *Umah Pitu Ruang* on Gayonese modern housing in Takengon

R A Putra*, A Zahrah, C Dewi, Izziah  
Department of Architecture and Planning, Faculty of Engineering, Universitas Syiah Kuala, Indonesia

*E-mail: rizaauliaputra@unsyiah.ac.id*

**Abstract.** Takengon is the capital of Central Aceh district located in Aceh highland. The geographical location of Takengon in the highlands certainly distinguishes the climate in this city from the cities in the lowlands and the coast in Aceh. This condition certainly affects the architecture in Takengon. The housing owned by the people is certainly constructed in such a way as to be responsive to climatic conditions in this city. Besides, housing is likely influenced by the customs and culture of the local people as well. This study aims to examine to what extent *umah pitu ruang*, which is the traditional architecture of the Gayonese, influences the modern housing architecture that exists today. Based on this study, the influence of *umah pitu ruang* as a traditional Gayonese house on the housing of modern society is almost no longer exist in terms of spatial arrangements and ornaments. This makes the values in the Gayonese traditional architecture could disappear over time.

**1. Introduction**

Architecture is the result of the culture of the society. The architecture has emerged from the need of the people for a shelter [1]. As a place to live, people will certainly build houses with different elements that can accommodate their activities and provide comfort to those who live in them. The ability of humans to create comfortable housing has been around for centuries [2]. This means that the housing in each region and even in the world will vary depending on the conditions under which the housing is built.

Several aspects may affect humans or the community in the construction of a house or living space, including the geographical, historical, and cultural aspects that develop within that community. These three aspects are generally very influential in housing architecture in every community. Geographical aspects play a role in creating comfort in housing, to give an example, thermal comfort in buildings will be achieved when the architectural design has a good response to local climate conditions. While historical and cultural aspects are generally influenced by people's belief in local cultural values, which are considered sacred and need to be maintained. Traditional architecture is one of the factors that influence society in creating new housing.

This paper focuses on a study of the Gayonese traditional architecture or better known as *umah pitu ruang* and its influence on the modern housing of the people in the city of Takengon today. The author wants to see to what extent the Gayonese maintains the values that exist in the *umah Pitu Ruang* architecture of its housing at present.

*Umah pitu ruang* is a term for the traditional houses of the Gayo tribe, which were born and formed from people activities in the hereditary agricultural sector [3]. The Gayo tribe is a tribe that inhabits...
most of the central part of the province of Aceh, which is a highland area [4]. *Umah pitu ruang* in Indonesian means a seven-room house. However, in reality, there are also houses with only three or five rooms. This means that the traditional house of the Gayo people is a house with a balanced and long layout that protects and supports several families [2].

*Umah pitu ruang* has an elongated shape extending from east to west. In general, *umah pitu ruang* is divided into 3 (three) large parts which are divided into small spaces or what is known as *umah rinung*. *Umah rinung*, which separates the two porches on the right and left side of the house, has a higher floor than the porch floor. In the front part of this house, there is a *lepo* or in Indonesian called a terrace. Each of these spaces has several different philosophical functions and values.

![Figure 1. Umah Pitu Ruang in Toweren.](image1)

One of Gayonese’s traditional houses that still exists is *umah pitu ruang* located in Toweren, Lut Tawar sub-district, Central Aceh district, as shown in Figure 1. This building was built in 1860 as a heritage of Reje Baluntara. At first glance, this traditional Gayo house is not very different from the traditional Aceh house or *Rumoh Aceh*, in which both of them are made of wood and are typical of stilt houses. *Umah pitu ruang* in Toweren consists of five rooms, two *serambi* and one *lepo* at the front side of the building. There are three stairs for access to the house, two at the back which goes directly to the right *serambi* and the left *serambi*, and one stair at the front of the *lepo* (terrace). Figure 2 and Figure 3 portray the layouts.

![Figure 2. The layout of *Umah Pitu Ruang* in Toweren.](image2)
2. Methodology

The data collection process in this study was carried out through direct observation, interviews, and literature studies related to umah pitu ruang. The observation was carried out by surveying umah pitu ruang in Toweren, Takengon, Central Aceh, and observing various elements of umah pitu ruang, including layout, facade, and building materials. Observations have also been made on 15 modern housing in Takengon to obtain information regarding the impact of umah pitu ruang architecture on the modern housing that currently occupied by the community. For this study, interviews were conducted with gayo traditional and cultural experts and also the homeowners. Observation and results of the interview were then compared by referring to some related literature.

3. Results and discussion

3.1. Building layout

The most basic part of the housing is the layout which is the arrangement of the rooms in the building. The layout is formed from the needs of the mobility of its users. Generally, historical and cultural influences often influence the pattern of home layouts these days. Historical and religious principles form the framework for society in designing their housing arrangement. But, currently, these principles are no longer found in any houses owned by the Gayo people. In the observations made at that time on 15 houses in Takengon, almost no house layout was found to be identical to the traditional house layout of Gayo Umah Pitu Ruang. The layout of the house in the modern housing of the Gayonese is generally formed from the needs of the community based on the activities and influences of the existing land lots. In addition, the influence of climate also still dominates the layout arrangement of the modern housing of the Gayonese at present.

Figure 4 and Figure 5 are the 2 (two) out of the 15 Gayonese houses currently observed. Figure 4 is a layout of the house of Mr. Muhammad (65 years old) in the form of a rectangular backward construction with 2 (two) floors. This is because of the form of land plots that extends to the back so that makes the homeowner does not have choices of other layout forms. While Figure 5 is a house plan of Mr. Studi Gunawan which also has a rectangular shape but has a longer width than the house plan in Figure 4. Both houses were built taking into account the homeowner's room needs, consisting of a living room, middle room, kitchen, and bedroom. A fascinating feature in the modern Gayonese house layout is the living or middle room that has different floor heights. Today, nearly all Gayonese houses have a living room where the floor is elevated with wood or concrete material which is then covered with carpet. Floor elevation in the middle room is due to the cold weather in Takengon. The living room that is often used as a space for family gatherings as a communal tradition of the Gayonese who used to live together will become warmer when the floor is elevated and then covered with wood or carpet material, as shown by Figure 6.
3.2. Facade and building material

When discussing architecture, it certainly cannot be separated from the facade of the building. The facade is a display of the building that can be seen directly by anyone who enjoys architectural works. The first impression of the architectural work will be determined by the facade of the building. The facade often becomes the identity of a building [5].
Like the layout of the building, the facade is often influenced by the historical and religious values in which the building was built. In general, the facade reflects the characteristics and culture of the region. Traditional houses are often used as a reference source for the design of facades.

![Figure 7. Reje Naggroi Bebesen house.](image1)

Based on observations made on several modern houses in Takengon, this study found a variety of different types of facades. In general, the facade is spontaneously formed by following the function of the building. It is rare to find a house building that adopts the facade of a traditional house building. Figure 7 shows a house with a facade influenced by colonial architectural forms without the slightest element of *umah pitu ruang*. Similarly, in Figures 8 and 9, the facade seen in the building is also a relatively common and simple architectural style. There are no carvings like those found in *umah pitu ruang* in both houses. The use of materials in buildings depends relatively on the economic conditions of the homeowner. In general, people of middle to upper economic levels build their houses with concrete materials, while others build their houses with wooden materials.

![Figure 8. Facade of Mr. Muhammad’s House.](image2)

![Figure 9. Facade of Mr. Ilyadi’s House.](image3)
4. Conclusion
This study found that the influence of umah pitu ruang as a traditional Gayonese house on the housing of modern society is almost no longer exist in terms of spatial arrangements and ornaments. But in terms of the need for communal space for an extended family gathering, some modern houses have adopted it as an elevated floor called pepanteren in the living room or dining room, next to the kitchen. Therefore, the pepanteren made of wood will make the living room or dining room, which is often used as a gathering place, warmer. Based on several houses observed, almost all of them were built without considering and incorporating the values of the umah pitu ruang architecture especially in spatial arrangements and ornaments. Gayonese housing in modern times is formed by the need for space functions for activities. The facade of the building is formed according to the function of the room, without considering the needs of the ornaments. Room functionality is the main reason for the Gayonese to no longer adopt umah pitu ruang architecture in modern house design at present.

5. Acknowledgement
This research is funded by Universitas Syiah Kuala through PNBP (PHI) scheme 2020.

References
[1] Putra R A, Ekomadyo A S 2015 Tesa Arsitektur, 13(1) 1-14.
[2] Sari L H, Izziah, Meutia E, Irwansyah M 2016 The 4th Int. Conf. on Sustainable Built Environment: Sustainable Building And Environment for Sophisticated Life, 68-77.
[3] Ifani S M 2015 Kajian Arsitektur Tradisional Sebagai Acuan Desain Rumah Tinggal Kontemporer. Thesis, Universitas Syiah Kuala, Indonesia.
[4] Salwin S, Hendra A 2019 Jurnal Arsitek, 1(1) 14-25.
[5] Lisa N P, Fithra H, Siska D, Dafrina A 2019 International Journal of Engineering & Technology, 8(1.9) 560-564.