

The Influences of Architectural Transformation Caused by Dynamic of Urbanization on Flood Disaster in the Ayutthaya Isla

Siyanee Hirunsalee^{1*}, JANMAIMOOOL Piyapong²,
PROMSAKA NA SAKONNAKORN Sarunwit², KANEGAE Hidehiko³

¹Doctoral Student, Ritsumeikan University, ²Master Student, Ritsumeikan University,

³Professor, Ritsumeikan University

Thai Traditional Houses Transformation



House's Pillars

Measuring of pillar approximately 2 meters in height. Made of wood.

Ground Floor Open Space

This space originally takes the function as a living room or for welcoming the guests.

It can also potentially mitigate flood severity by absorbing water and allowing water run through natural direction.

Ayutthaya Island, the historical city and associated modern town registered as a world heritage site by UNESCO on December 13 1991, symbolizes abilities of Thais forefather in stably building Thai nation and establishing the distinctive capital city which no historic city anywhere in Asia or any other parts of the world looks like. Many remaining ruins are currently located in this area, and it also shows how civilized Thai nation was in the past of 417 years ago. Even though, its location was frequently flooded due to surrounded by main rivers and situated on flood prone area, Thais ancestors creatively designed the traditional house style, pillar house, which was considered the natural features of water based settlement, particularly risks of flood disaster, by building a house being able to avoid the negative consequence of flood and also pointing of the cultural atmosphere. In this way, the historical city of Ayutthaya and its values, in addition to the residents in vulnerable area, could stably survive from the negative consequences of flood because of this kind of the distinctive architectural design.

Currently, urbanization is rapidly expanded in this area due to high acceleration of economic development, tourism development, and a huge of population migration. These situations

significantly influences on a change of urban structure and its function. Namely, the historical city of Ayutthaya, previously covered by agricultural area, historical monuments, and low residential settlement, is gradually replaced by modern buildings, emphasizing high capacity and having diverse architectural styles in order to response the needs of plenty of residential migration. In addition, due to role of economic and transportation center of Ayutthaya city, transportation routes were rapidly constructed and expanded, water transportation was inevitably disappeared. As a result, urbanization is therefore expanded dramatically due to high number of residential settlement along main streets, and various business activities are conducted. Consequently, the transformation of traditional architecture to modern one is gradually occurring.

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