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Constructing an Indonesian Architecture Documentation

Why

The systematic documentation of cultural heritage in Indonesia has been developed after the establishment of Bataviaasch Genootschap van Kunsten en Wetenschappen (1778) and De Oudheidkundige Dienst (1913) by the Netherlands Indies government. After Indonesian independent, the tasks of cultural heritage documentation take over by The Ministry of Culture (now become The Ministry of Education of Culture) with focus on the ancient and classical heritage, (uninhabited buildings). The needed of comprehensive documentation data especially regarding architectural heritage become significant issues since the government and private sectors pay attention to the preservation of heritage building in the urban site, so called living monument (inhabited buildings). The archives of original drawing plan many times do not fit with the existing condition, while the conservation plan demands a document such as built drawing plan to work on. The technology, methodology and system to provide such comprehensive document of heritage building and sites become important, to supports good conservation plan and afterwards will use for heritage building regular maintenance.

Architecture of Indonesia

The architecture heritage in Indonesia can be summarized from a course of Indonesian Architecture which represents every period in the Indonesian history, different forms and technique that reflects the cultural diversity in each region. The contribution of the diverse tradition also has an important role in characterized the Indonesian architecture. This following general chronology of Indonesian Architecture tried to describe all the influences that contribute to the formation of Indonesian architecture.

Vernacular Architecture

The vernacular architecture of Indonesia is part of an ancient building tradition in Southeast Asia as well as shared Austronesian ancestry. This vernacular Indonesian Architecture means the traditional Indonesian houses in all its variant of many regional forms. Despite of the variety of forms and techniques which represent the cultural diversity in the whole archipelago, it can be abstracted in a number of common themes and principles. Those are: Timber Structure, Elevated Roof, Stone Foundation, Dominant Roof, Adaptation to Climate and Contour and The Ritually Ordered Space (Widodo, 2004). The roof shapes of vernacular architecture, later on were being adopted in design by several Dutch architects whom work in Indonesia

early 20th century. In many areas through the archipelago, people still lives in this traditional houses and villages.


Toraja and Nias Traditional houses are the example of vernacular Architecture in Indonesia

Classical Heritage of Indonesia

Classical architectural heritage in Indonesia was influenced by the Hinduism and Buddhism culture. *Candi*—a tower like structure made of stone or bricks—is the main form of the building from this period. In this period, the architecture of Indonesia encounters a new principle—ordering principles – that organize the spatial hierarchy, axis and orientation. Although most of the heritage buildings in this period were not inhabited as the living monuments (mostly function as a worship temples), it has an important role in the Indonesian architecture. Later on, the principles and ornaments of these *Candi* (temples) influenced the design of some Dutch architects whom work in Indonesia early 20th century. The buildings from this period are now became the tourist object as well as the object for study and research.


Borobudur and Prambanan Temple, the two most famous classical architecture heritage in Indonesia influenced by Hinduism culture (Prambanan) and Buddhism culture (Borobudur)

Islamic Tradition

The spread of Islam through the archipelago from the 12th century influenced the Indonesian Architecture and introduce a new building types—Mosques, tombs and *Keraton* (palaces). With the advent of Islam, Indonesian Architecture has new principle—the new direction (direction of *Qiblat*)—which guided to build a Mosque. The emergence of tomb architecture, distinctive palaces and the development of coastal cities are the most significant from this period. Islam entered Indonesia

through the adaptation and re-interpretation of the local culture that has been there before. Reinvented and reinterpreted of the existing architecture to suit with the Muslim requirements had occurred.

The Tower of Mosque in Kudus (Central Java), it resembles the adaptation and re-interpretation of the local culture by Islamic religion. It shown from the Hinduism temple shape of this tower building

Chinese Tradition

The contact between Chinese and Indonesian was started from 5th century. These Chinese people brought their traditional architecture and spread it through the archipelago. Traditional Chinese living monuments in Indonesia consist of; Chinese residences, shop houses and temples. Those buildings have the characteristic of the curved roof, row houses and the dominant red color in temple.

Candra Nadi Temple in Palembang, showing the Chinese architecture character

European Tradition

The arrival of the Europeans to Indonesia in the 16th century to found the spice—a lucrative trading commodity at that time—also brought an influence in terms of culture and architecture. Spanish, Portuguese, Dutch and the British introduce a new building type: forts. The fort is not only serving as a military purpose but also as a trading post equipped with trading offices and warehouses, gradually it grows into a complete small town within the wall. Subsequently fort became the embryo of a larger city. Cities such as Jakarta, Surabaya, Semarang originally evolved from a fort.

In this period the archipelago also became acquainted with Christianity and Catholicism. Church began to be built.

The earlier Dutch building in Indonesia from 17th and 18th century was a faithful copy from Europe. The types are from massive grand single buildings such town hall, courts, warehouses, up to row houses and villas. More than a century later; the Dutch architecture began to adapt the local climate and architecture. The Indies style houses arise. It is a synthesis of European Neo-Classic with the indigenous architecture and adaptation with the tropical climate.

When many Dutch architects arrived in Indonesia in the early of 20th century, they found the dominance of Neo-Classical architecture derived from earlier century. These architects then tried to define the Indonesian architecture. Some architects such as Henri Maclaine Pont and Herman Thomas Karsten tried to extract the local ideas and then realized through the use of modern Western construction techniques. While another group of architects such as C.P. Wolff Schoemaker and A.F. Aalbers tried to bring the latest ideas from the West to Indonesia and quoting the local elements. Those ideas has resembles in their buildings. These architects design various buildings such trade offices, banks, train stations, schools, markets and houses, etc.

These two buildings showing the different character of architecture, both resembles the different ideas on Indonesian Architecture should be; Bandung Institute of Technology building by Maclaine Pont (left) is influenced by local tradition while Villa Isola by Schoemaker (right) is more western look.

Early Independence

Indonesian architecture in the early years of independence was still influenced by the Dutch Modernist; this is due to the fact that many Indonesian architects studying in the Netherlands or working for the Dutch architecture offices before the World War II. They replaced the Dutch architects who returned to their country following the enforcement of the nationalization program by the Indonesian government. This nationalization program resulted historical continuity between modern architecture and traditional Indonesian architecture Dutch East Indies ceased. Modernism at this time occurs in several contexts: newly independent Indonesia and the Cold War were going on. Modernism in Indonesia when it is associated with nation building projects and the imagining of Indonesia will be progressive from Soekarno—the first President

of Indonesia. Many monumental buildings have built such stadium, offices, mosques, etc.

Istiqlal Mosque by F. Silaban, it resembles the new and modernism Indonesia

Contremporary Arcitecture

“In late 1980s some young architects formed a discussion forum. They named their forum as Arsitek Muda Indonesia (AMI, Young Indonesian Architects). They wanted a sort of pluralism in architectural ideas in Indonesia. The impact of AMI’s appearance was a shift of orientation. In previous periods there had been an orientation toward searching for Indonesian-ness. AMI’s orientation was more on exploration of ideas.

AMI is not the only contemporary phenomenon in the country. There are Forum Arsitek Medan (FAM) in Medan, Desainer Muda Surabaya (De Maya) in Surabaya, SAMM in Malang, BoomArs in Manado. In Jakarta there are also AMI’s predecessors. AMI Last being the latest. They all try to react on face real situation in situ. At present, there are also architects such as Adi Purnomo, who try to explore site’s geist, materials and spaces. This is an ongoing journey of the present, which someday may be characterized by future historians as a pragmatical period, which still….”


Two example of contemporary architecture in Indonesia

What – When – Who

Pusat Dokumentasi Arsitektur (Center for Indonesian Architecture Documentation) - PDA is an independent organization which legally established in 2002 endorsed by Ikatan Arsitek Indonesia - IAI (Indonesian Institute of Architects). However our activities to documenting heritage buildings in Indonesia were started in 1994. The

center was established by 9 founders, supported by 5 staffs who responsible for field survey, IT, management, library and database.

The Objectives, Focus, Activities and Products

PDA has established to meet the needs of a comprehensive data of heritage building (living monuments), to utilized as basic document for conservation planning. Not only provide document of the digital drawing such site plan, plan, elevation, section and details of architecture elements, but also document of historic research, material analysis and completed with diagnosis and mapping of building damages.

PDA's concern was to facilitate the public from various users such students, academicians and professionals who need data and information of heritage buildings in Indonesia. PDA committed to collect, keep and manage a variety of architectural heritage records, research and documents from various heritage buildings and sites. We believe that heritage building documentation and research should be available prior to any works and interventions of building preservation.

How to Construct the Collection

Not like other Architecture Museum, PDA's collection based on the product of heritage building documentation and research. First step of building survey is doing the inventory of building. To get information of its existence, state of condition, numbers, location, architecture significance, and history significance. This inventory will be used as database to determine its heritage status that later on will be declared its protection legal state by the government.

As the architects of heritage building not live anymore, the data and archives are scattered everywhere in some institutions or keep by private. We use the different approach to collect building information, by doing documentation. We survey the building and get as much data base on its current condition. Later on, this data will compare with the result of archives research to determine its originality, history and architectural value. During the research, we also make a reporduction of the archive. We keep these reproduction as part of our collection, and we share them to the public who need it. By doing this, we connect the public with the archive.

How we do the heritage building survey? We compile as much information as we can, start with re-measure and re-drawing. We use HABS-HAER standard and module (Heritage American Building Survey) as reference to provide a comprehensive technical drawings. This technical drawing later on will use by architects to make conservation plan.

Not only provide the technical drawing, our activities to gather information also to discover the "building health condition", such it damages, material composition, and its strength. What we do will be similar as building health laboratory. Mapping its damage and caused are aimed to provide complete information of building condition,

to use by architects to subscribe a good recipe for heritage building repair. Based on archives research, combine with building physical current condition, the building can tell itself about the fact and its history traces.

Documentation process, manually and digitally

The Challenges, Management and Achievements

In the beginning of PDA's establishment, it was not easy to convince the public about the importance of heritage building documentation. PDA's activities were considered as useless, waste time and money. After years the public realize on our existence because PDA's focus was clear and proof a consistency, quality, usable and sustainability products especially for the preservation of heritage buildings. These consistence and commitment make PDA to become a trusted institution.

Visioning the Future

PDA's visions to enhance the reliability of institution to provide qualified documentation and facilitate data searching. We are now in the process of establishing digital database for Architecture Heritage in Indonesia. We hope that our effort will increase the architecture awareness.