

“MODERN ARCHITECTURE DOCUMENTATION METHOD IN INDONESIA: AN ALTERNATIVE APPROACH”

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1. Introduction

The aim of modern architecture documentation is to identify particular architecture product, its function and character in context of modern time. Asian architecture, in this case Indonesian architecture, is greatly different to Western architecture, especially on their time setting acknowledging Modern time. In the Western world, Modern time was started since early 19th. It was early 20th when European architecture for the first time developed in Indonesia, which was known as colonial architecture, it was an inception of modern time in Indonesia.

There is a fundamental difference distinguished Modern architecture and traditional architecture, before the Modern era, in Indonesia, in term of its function. In the modern era, building function is more complex as life style and culture. It is important to define appropriate method to document this type of architecture era. This paper will identify appropriate method of Modern architecture documentation in Indonesia by giving several case studies that are developed in that era. It will be clearly defined that different building function needs different method of documentation that is very specific comparing to that documentation from Western countries.

2. Background

Discussing modern architecture in Indonesia is an interesting topic that raises questions about when it is started, why it is needed to be documented, and possibility of its application. Commonly believe that idea of modern architecture comes from Western civilization. Many modern literatures has proof that modern lifestyle has grown up during late eighteen century. According to Vincent Scully Jr. (1975), democratic movement and industrial revolution was a starting point of modernization in Western countries. Modern terminology from Western countries is different from modern term in Indonesia. In Indonesia, there is no revolutionary action of perception such Industrial revolution, which also changes expression, includes architecture. The difference of historical point of view between Western countries and Indonesia is a focus of this paper to identify the method.

Historically, Indonesian architecture is divided into two sequences: traditional and non-traditional. This paper will stand on non-traditional style as an expression of modern culture that mixed from Eastern and Western culture as part of Dutch colony. Therefore, basic meaning of modern life from philosophy' view will be important to identify modern architecture in Indonesia first before discussing the method of documentation.

3. Philosophical View as a Basic Justification of Modern Architecture

Every physical expression, includes architecture, is a reflection of conceive pattern of community. Hence, it is important to examine background culture of the community first before identify the architecture, which gives understanding the reason behind architecture. Koentjaraningrat (1996) defined this process as expression of culture that is explained as follow:

1. Idea, means individual idea of culture that cannot be documented.
2. Activities, means every human activities that can be documented.
3. Artifacts, includes everything that is man made and real. Such as painting, sculpture, and also architecture.

Many literatures defined modern in different meaning and character with the conclusion: modern movement is a revolutionary progress. Popper (Macrae-Gibson, 1989) defines modern movement as a theory of history that was achieved by discovering different spirit that invalidated all previous traditions and cultural patterns. Trachtenberg and Hyman (1986) highlighted modern architecture as a recognition of a deep historical discontinuity. According to Habermas (1987), modernity is an unfinished project that creates a new-regulated form. Therefore, he defines main character of modernity as: free from ethical and sense of ratio, which currently applied at that moment. Alex Inkeles (Habermas, 1987) stated that change of spirit of thought, sense, and act are basic change in modernity.

Macrae-Gibson (1989) pointed three themes of modern architecture, which are: memory, expression, and morality. These three themes as a way of modern movement justification. The movement views the past competitively or as a rival. They do not see Greece or Egypt style as romantic style, but try to create physical expression of romantic based on new approach. Free choices of architects are needed to free expression of building. The third, morality, which is a main idea of two themes before, there is no style of architecture, but there is good architecture that tune with the times.

From above description, it is known that modern movement is not a matter of time, but a change of perception that was created by tradition and culture. The revolutionary change was happened differently in different countries around the world. In this paper in order to study modern architecture in Indonesia, it is important to understand how Indonesian community act and think to adopt philosophical and physical changes. Based on the view of Macrae-Gibson, the three themes of modern movement are starting point to justify terminology of modern.

4. Modern Architecture in Western Countries

This section will identify modern architecture in western countries that finally compare with modernization in eastern country, which is Indonesia as a study case. According to Macrae-Gibson (1989), the original modern architecture was on the machine age that was

founded on an ideology of Karl Popper as a historicist. Several characteristics are identified from modern architecture literatures. These characteristics are basically formulation from the three themes above, memory, expression, and morality that mostly focused on physical performance rather than ideology.

Trachtenberg and Hyman (1986) identified two significant characteristics of modern architecture: inventing new forms and new building materials. New forms appear in active, mainly response to the ever-changing environment. It is a crucial support for architect who needs creativity to create a revolutionary architecture. For example the first modern building in America is designed by Chicago School: the Monadnock Building of 1889-91. The building is sixteen stories high of sheer brickwork as square, uniform piers, rectangular windows, and rhythmic accents. This building break common style at that moment, carved detail. It only shows simplest windowsills projecting from the plane of the wall (Trachtenberg and Hyman, 1986). Chicago School as the first generator of modern architectural movement, in mid 18th century, shake off the past and follow where the future seemed to sign. The second characteristic is an invention of new building materials, which are cast iron, wrought iron, and reinforced concrete. Before, architects unwilling to confront art of building with technology. In modern time, architecture technology is a beauty of the building, and known as machine-style architecture. The best example is the Eiffel Tower in Paris, which demonstrates glassy boundaries with the solids fragmented into complicated web.

5. Criticism of Modern Architecture

After fifty years of modern movement, Brent Brolin (1976) identified two problems of modern architecture implications: the movement is not generally accepted by the public and modern architecture tend to disregards the social and aesthetic values of the users.

A growing reaction against modern building in traditional context that try to be different rather than fit in. And a new disposition of non-Western cultures, which formerly accepted modern architecture because of a sense of cultural inferiority, to try to recapture their own traditional visual and social values (Brolin, 1976,p.8). In other word, Brolin emphasized his criticism into two factors: social and aesthetic values. Universal form-language, which is created during modern movement, neglected the uniqueness of place that is different form place to place. Modern architecture dismissed the sense of neighborhood rather than sympathized them. These two factors is mainly generated by idea of rationalization from modern movement, including design process. Consequently, issue of user' value, which is previously described as community, is important to justify modern architecture and its approach of documentation method.

6. Modern Architecture in Indonesia

Modern architecture in Indonesia differs from those in Western countries. Modern architecture in Indonesia firstly defined during Dutch invasion. There was changing on

traditions and cultural patterns, which finally change physical pattern, includes building form and function. New building form as a product of mix-culture of western and Indonesian style. There was an also new building function that was previously unrecognized, such as hospital, office and church (will be explained on case studies). These changing are a gradual consequence of modernism in Indonesia. Referring to Habermas' idea (as previously explained), modernity is creating a new regulated form. In this case, new form is a product of acculturation process of Western and Eastern idea, in terms of building form and function.

The new regulated form also presents a new meaning and symbol, as Mangunwijaya (1988) stated "*although building is a not a living creature, it has its own soul*". The meaning of modern architecture building differs form the traditional one. We cannot interpret modern architecture building with similar background of traditional building. It should use new approach of interpretation. Modern architecture in Western countries is commonly known by its simplicity. Different from that, modern Indonesian architecture is needed to understand by the cultural setting of the changing process. Indonesian modern architecture is an acculturation product, which creates new meaning and in some cases has no meaning at all. From this point of view, Indonesian modern architecture should be justified. For example (figure below), shown a mix-culture house as an expression of particular social strata during the modern time, with less concern of basic principal and meaning of traditional form.



Figure 1. A mix-culture house (Mangunwijaya, 1988)

According to Mangunwijaya (1988), in the early modern time in Indonesia, there was a common thing to adopt architectural elements from Western and traditional form as a copy-cat activity based on individual perception. Mangunwijaya defined this process as an irrational activity of adaptation (eclectic).

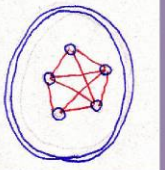
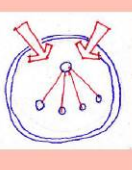
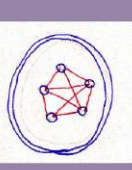
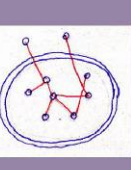
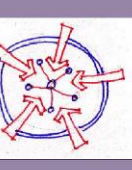
Period	Before DUTCH Invasion	DUTCH Invasion	Indonesian INDEPENDENCE		
			Soekarno - Hatta	Soeharto	Reformasi
Culture	<ul style="list-style-type: none"> Indigenous culture Stabil and solid 	<ul style="list-style-type: none"> Input from western culture Value & culture pattern has changed Accupation 	Back to local content	<ul style="list-style-type: none"> Eclectic culture Open to other culture 	<ul style="list-style-type: none"> Global culture Combination culture and nature
Architecture	Traditional architecture	<ul style="list-style-type: none"> Colonial architecture Modern architecture 	<ul style="list-style-type: none"> Tropical architecture Modern architecture 	Eclectic architecture	Global architecture
Function	<ul style="list-style-type: none"> Mosque Palaace Home etc 	<ul style="list-style-type: none"> Train station Market Office Hospital etc 	<ul style="list-style-type: none"> Convention Hall Bank etc 	<ul style="list-style-type: none"> Trade Centre Plaza Mall etc 	Multi-function
Diagrams					
MODERN TIME					

Figure 2. Diagrammatic process of architecture in Indonesia

Based on above diagram (figure 2), Indonesian modern architecture is not *simplicity* or *less is more*; as character of modern architecture in Western countries, but more on its process. The idea of modern time of the diagram is referring to idea of Jonathan Friedman (1994) and Sidharta and Eko Budihardjo (1989). The process is an acculturation of two cultures as expressions of new pattern of thought and act, which is noted by new meaning of when and why particular architecture start to exist.

7. Case Study of Indonesian Modern Architecture

This sub-chapter will examine four case studies of modern building in Indonesia. The case studies have different building function: church, residence, hospital and office. These will describe how modern architecture documentation in Indonesia should be done without neglecting meaning and message behind the architecture in order to communicate it to future generation.

Before the Dutch invasion, religious building such as church is unrecognized by the community, only Hindus temple. But after that, church building started to exist. The performance of Puh Sarang church is rich of local content of temple. It can be seen from the altar, building form, and the roof. This building performs a church; as imported function from the Dutch, in a new form.

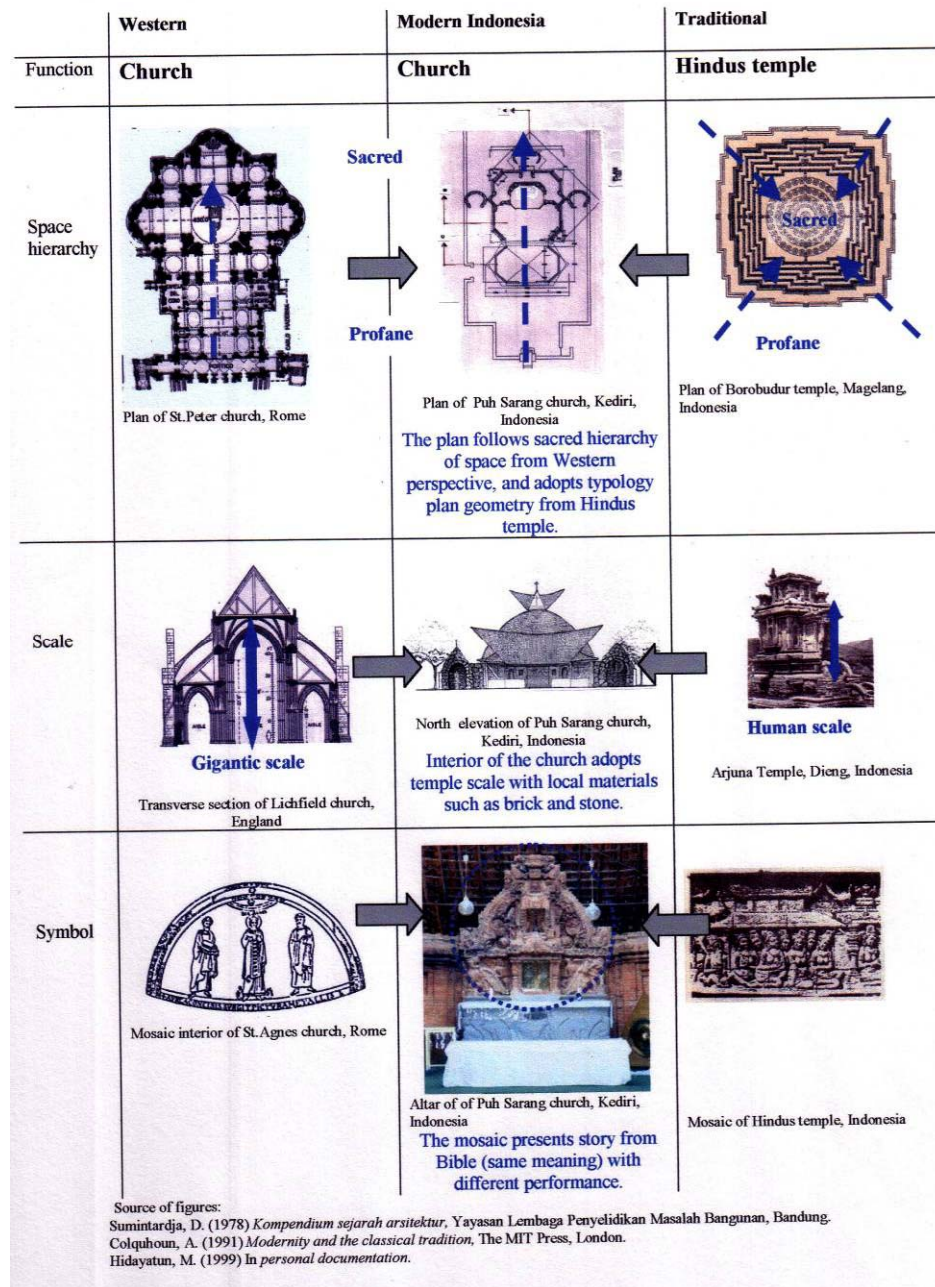


Figure 3. Diagrammatic transformation of Puh Sarang church

The figure 4 shows a transformation of a residence building in the modern time as an acculturation of western and Indonesian idea. Some of activity inside the house, which is shown on its plan, is imported from western. And the climatic approach is very adaptable to tropical house.


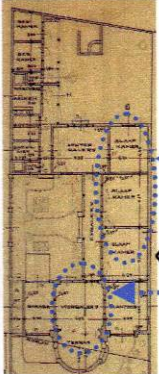
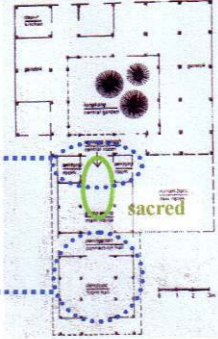

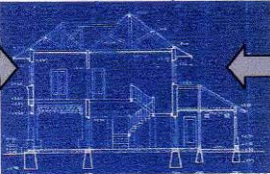
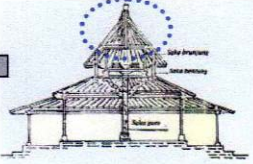

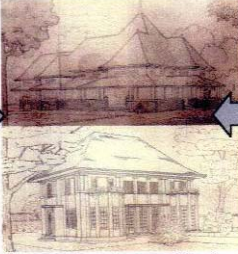

	Western	Modern Indonesia	Traditional
Function	Residence	Residence	Residence
Space Hierarchy			
Organizational Space		<p>Plan of a house by Ghijssels in Jakarta, Indonesia</p> <p>Same function of building performs in a new approach, in term of organization and hierarchy of space.</p>	<p>Plan of Javanese traditional house, Indonesia</p>
Science approach			
	<p>A house by Walter Gropius</p>	<p>Section of house in Menteng, Jakarta, Indonesia</p> <p>Western' organizational space with tropical approach for its roof and verandah.</p>	<p>Section of Javanese house</p>
Meaning			
	<p>A house by Ludwig Mies van der Rohe</p>	<p>Houses in Yogyakarta and Bandung, Indonesia</p> <p>These houses tend to perform traditional architecture with no symbolic meaning as place of ritual ceremony.</p>	<p>Figures of traditional Javanese house, Indonesia</p>
<p>Source of figures: Sumintardja, D. (1978) <i>Kompendium sejarah arsitektur</i>, Yayasan Lembaga Penyelidikan Masalah Bangunan, Bandung. Akihary, H. (1996) <i>Ir.F.J.L. Ghijssels, architect in Indonesia, 1910-1029</i>, Seram Press, Netherlands. Colquhoun, A. (1991) <i>Modernity and the classical tradition</i>, The MIT Press, London.</p>			

Figure 4. Diagrammatic transformation of Residence building in the modern period

Next case study (figure 5) shows a transformation of hospital in Indonesia as an acculturation of two cultures. Like Puh Sarang church, hospital term was unrecognized by traditional function. It performs a new function of building with new approach of building design.

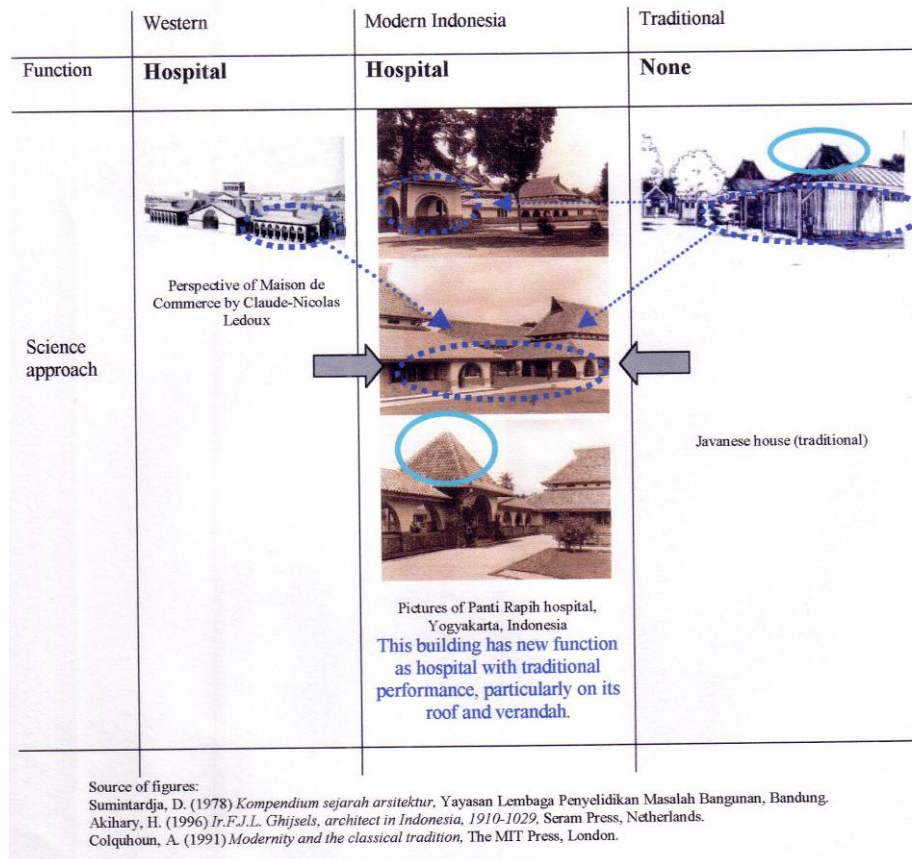
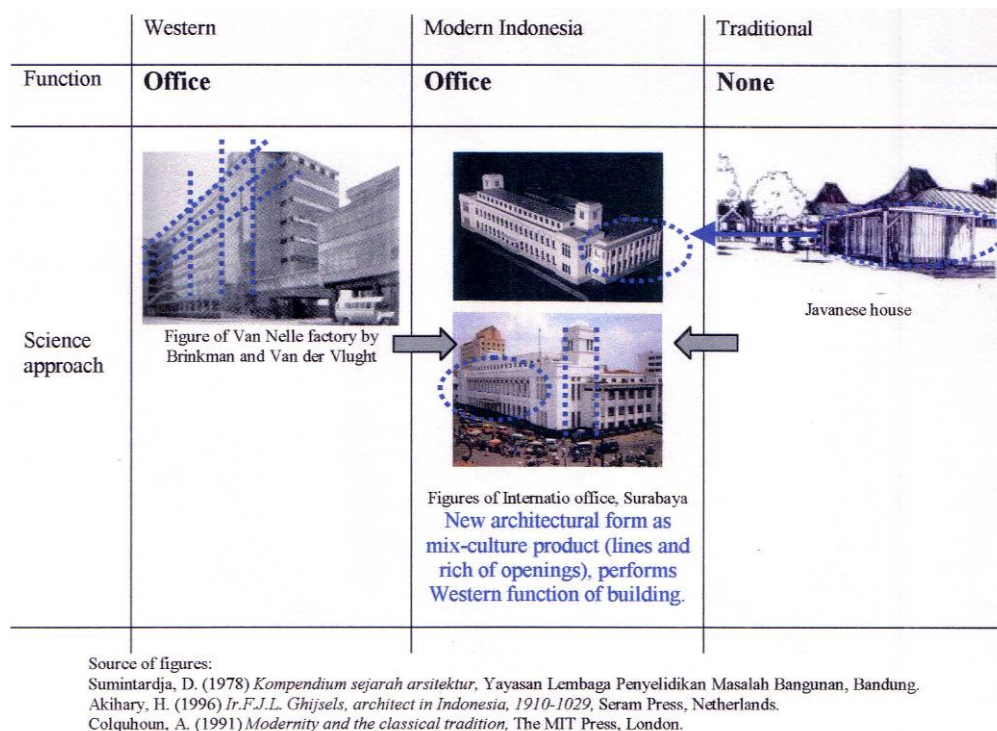


Figure 5. Diagrammatic transformation of Hospital building in the modern period



Diagrammatic transformation of Internatio office in the modern period

Internatio office building (figure 6) has a same approach of transformation, like the hospital and the church. The design is rich of openings and lines, which is adopted from the two cultures.

8. Systematic Approach and Technique of Documenting

Following explanation, which is based on above case studies, is an ideal model of modern architecture documentation approach in Indonesia (figure 7). Commonly known, every methodology needs a systematic approach and technique, the approach is:

1. Document data gathering
2. Data sorting between text and figures
3. Identification of meaning
4. Documenting physical data existing
5. Cross checking between existing data and document
6. Identification of relation between meaning and physical performance

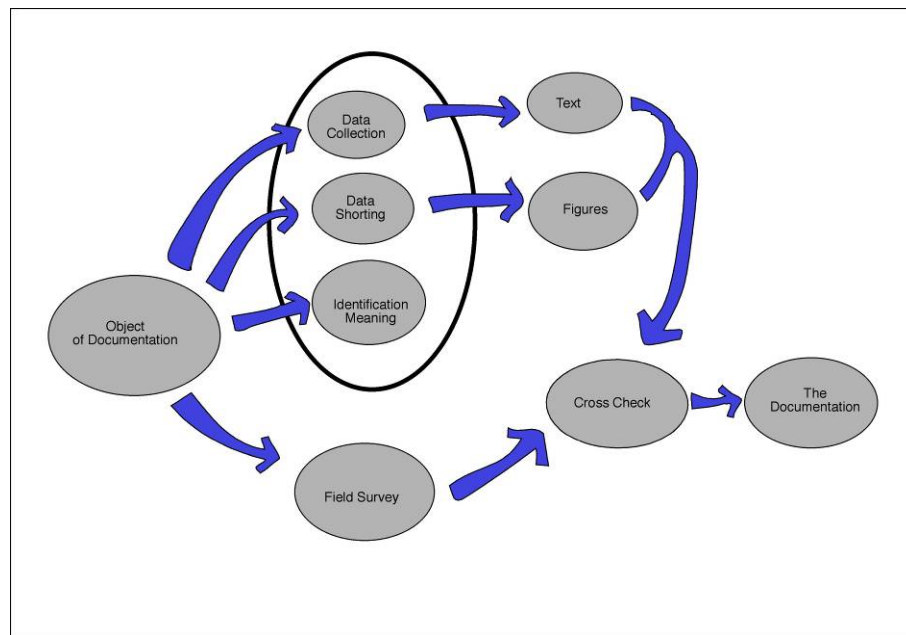


Figure 7. Systematic approach of modern architecture documentation

8.1. Data collection

First process is a data collection from literatures, as a first step to understand the object.

8.2. Data sorting between text and figures

Data sorting is needed to make the first step effective in order to study the data more sharp and deep. As a result, the literature data could be documented into one document with categorization.

8.3. Identification of meaning

This step is identifying the reason behind the existence of particular building. It needed in order to trace the history of the building (as shown previously on the case studies) and finally understand the reason why particular object was developed. Tracing of history step is mainly learnt from text document from the architect or documented view from other sources. In some cases, understanding particular theory or concept first before reading the text is important. For example; case study of Puh Sarang church (figure 3), background and main concept of the architectural planning are identified from reading the historical text.

8.4. Documenting existing physical data

Field survey is needed to documenting the existing physical data of the object. The data will complete the data from previous process. Technique of field survey documentation will be explained on the next section.

8.5. Cross checking between existing data and document

This process is cross-checking data from field survey with literature data from the first step. In some cases, time can destruct measurement of field survey; hence it is important to cross-checking with original data from literature.

8.6. Identification of relation between meaning and physical performance

The focus of documentation ideally is on the meaning behind physical existence to the future generation. Referring to culture development previously explained, indigenous architecture is performed by its traditional architecture, which is meaning behind architecture could be understood as a solid meaning. During the Dutch invasion, where acculturation firstly occurs, meaning become unclear. Therefore, architecture documentation with focus on its meaning is important to examine. The documentation process finally could identify the result not only its physical performance but also the meaning behind it.

As explained before, besides systematic approach, the process also needs technique of documenting. This technique is to collecting physical data as part of architecture documentation that this paper suggested.

The technique could be extending as follow:

1. Historical information
It includes all of physical history, such as dates of plan, building permits, local tradition, occupants, architect, and original construction.
2. Architectural information
It mainly includes architectural character and condition of fabric, as a description of exterior and interior.
3. Sources of information

This step is documenting all the sources of information, such as architectural drawing, early views, interviews, and bibliography.

4. Project information

It is a summary of the whole process, including the measured drawing, photographs, and historical report.

9. Conclusion

Suggested documentation method above, basically tries to read the meaning behind physical performance of Indonesia modern architecture. Current documentation is merely focus on the physical data, and lack of understanding of the process how the architecture exists. The suggested method is answering the weakness of current method. Modernism process in Indonesia is greatly different to those in Western countries. Logically, the method and approach of documenting should be different.

Anthropological and historical view is a standpoint of the suggested method. It proves that different culture needs different approach of understanding the modernity. The approach is focusing on defining the meaning behind architectural form. Architectural meaning is very important for future generation to avoid eclectically activity during globalization nowadays. Communication between future generation and 'old' building is only accommodated by documentation, if the meaning is undocumented, there will be an idle communication to the future generation.

The approach still needs several case studies that more complex and variety of building function. Extended research and discussion as a follow up of this research is needed to define more clearly modern architecture documentation in Indonesia.

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