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Dutch architectural learning process of the Dutch East Indies
Case: Maclaine Pont, Thomas Karsten, C. P. Wolff Schoemaker

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ABSTRACT

This research concentrates on the architectural process of Dutch architects in the Dutch East Indies, specifically Maclaine Pont, Thomas Karsten, and Wolff Schoemaker. The issue addressed by these three people is how they learned, particularly their reaction to the conditions and wealth of buildings in the Dutch East Indies, and what drove each of their architectures. This study employs a synchronic-diachronic analytic strategy as well as a historical interpretation strategy based on contextual evidence categories. It runs from 1900 to 1940. According to the study's findings, all three encounters through the same learning process, which includes the introduction phase, the exploration phase, and the architectural attitude phase. The architectural perspective was expressed at Maclaine Pont through the design of a tent structure system based on studies of Javanese pavilion roofs, whereas Karsten and Schoemaker referenced modern architecture. Karsten was fascinated by people's daily lives, whereas Schoemaker thought Frank Lloyd Wright's style was the most recent at the time.

Introduction

Many Indonesian and Dutch researchers have participated in discussions about Dutch architects, including their works, progress in the Dutch East Indies, and biographical books. It provides more study opportunities due to the abundance of studies and books. One of them is a study on the relationship between Dutch architects. The structure of this study is based on this understanding.

Handinoto has made a comparison of 3 Javanese-born Dutch architects (Handinoto 2010) namely F.J.L. Ghijsels, C.P. Wolff Schoemaker, and H. Maclaine Pont. In conclusion, Handinoto stated that the three of them had worked in the Dutch East Indies from 1910 to 1940, and had adapted to the climate, building materials, and socio-cultural conditions. Handinoto's detailed comparative description study has opened up insights about Dutch architects, particularly those born in Java.

This study clarifies the context for comparing Dutch architects. Handinoto stated that the more data collected, the clearer observations and analyses for architectural and urban interests in Indonesia can be made. This spirit is at the heart of this research.

Thomas Karsten utilized the place of F.J.L Ghijsels in this study. According to his observations, Karsten was an architect who was purposefully summoned by Maclaine Pont to assist him in his consulting office. Despite the fact that Thomas Karsten was not born in the Dutch

East Indies, he is deeply concerned about the architectural richness of the region. Karsten utilized on more responsibilities as an urban planner/designer as the company grew. Ghijsels, Pont, and Schoemaker did not take this role seriously.

Table 1. The similarities and differences in the cases of Dutch architects

	Birth		Graduate		Planing	
	Java	Netherland	Delft	Breda	Building	Urban
Pont	√		√		√	
Karsten		√	√		√	√
Schoe-maker	√			√	√	

Table 1 shows the expansion of the scope of the study from what was performed by Handinoto.

Method

The approach to this study is a historical approach or more precisely interpretive-historical research with a historical strategy as a movement, which means that individual awareness as a human being is a reflection of the communal awareness of humans at that time (Groat and Wang 2002). For this historical interpretation approach tactic employs a type of contextual evidence (Groat and Wang 2002), in this case the period from 1900 to 1940 or the reign of the Dutch East Indies with observed architectural cases is what happened in the Dutch East Indies during that period. Technical analysis utilized diachronic and synchronic understanding (Adiyanto 2018), which is the terminology in linguistics in the historical study of language, which was first presented by Ferdinand de Saussure.

Result and discussion

Henri Maclaine Pont

Born in Jatinegara, 21 June 1884 as the fourth child of seven children in a family that has lived in the Dutch East Indies for 5 generations. At the age of 9, Pont went to Holland for his primary education and then entered the Delft Technical College in 1902 (Handinoto 2010; Mahatmanto 2002).

After graduating from Delft, Pont designed the Hospital in Amsterdam (figure 1) and the school building for blind students in the city of Zeist between 1910 – 1911 before Pont left for the Dutch East Indies. In this early work Pont was still influenced by the Nieuwe Kunst style, an architectural style which was a development of Art Nouveau with a Dutch style approach (Latief 2009).

Figure 1. De Nederlands Hervormde Diaconessen Inrichting
Source: (Gegevens, n.d.)

In 1911, Pont returned to Java and had the opportunity to design several railroad company offices, because his father-in-law, Ir. J.Th. Gerlings, a board member from Semarang *Cheribon-Stoomtram Maatschappij* then appointed Pont as the architect to design the new office in Tegal (Vries and Segaar-Höweler 2009) which later became his first work in the Dutch East Indies. This work is still influenced by design styles in the Netherlands but with a response to the humid tropical climate of the Dutch East Indies (see figure 2).

Figure 2. Semarang Cheribon Stoomtram Maatschappij in Tegal
Source: (Shifa 2021)

In 1913, Pont moved to Semarang and opened his architectural office. The office was flooded with work, so Pont decided to invite Thomas Karsten, who was a fellow student in Delft, to join. This is what underlies Karsten's position as one of the figures discussed to replace F.J.L. Ghijsels.

Handinoto noted that between 1913–1915, Pont periodically made trips to the temple areas in Central Java and the Majapahit heritage sites in Trowulan – Mojokerto (Handinoto 2010). Travel notes accompanied by sketches were then published in 1915. This was the starting point for Pont's study of the rich architecture of the Dutch East Indies (see figure 3).

The journey between 1913 and 1915 was a turning point in Pont's architectural process. The years 1909 to 1914 can be described as the phase of Pont's introduction to the Dutch East Indies. After that Pont entered the exploration phase.

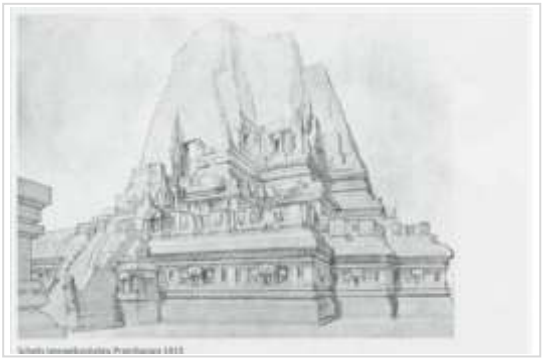

Figure 3. Sketch of Prambanan Temple
Source: Maclaine Pont, H. 1930 'Beredeneerde opgave der reisschetsen, gemaakt in Mei en Juni 1915', Nederlandsch Indie, Oud en Nieuw, p.21

The exploration phase was marked by the design of the *Technische Hoogeschool te Bandoeng* (which is now ITB). It was in this campus project that Pont had the opportunity to explore structures in order to produce buildings that were different from existing buildings. Buildings must be cost efficient and simple in construction (Leerdam and B. F. 1988). Pont's inspiration was the mass system in the Keraton Surakarta and Yogyakarta (Leerdam and B. F. 1988). Pont designed a more friendly form of building with a village/village-like shape, for 18-year-old students who come from the regions, without having to be forced to experience advanced technology from the foreign world (Vries and Segaar-Höweler 2009).

TH Bandung's construction process was protracted and his health condition was not good, making Pont think about returning to the Netherlands. Pont however was offered a position as a technical-inspector in the civil health service in Batavia by his uncle, his mother's cousin, Dr. W. de Vogel (Vries and Segaar-Höweler 2009). This position allowed Pont to travel around Java to carry out inspections of residential facilities related to public health. Pont did not stop at mere inspections, but continued to conduct research, especially building materials that were cheap and suitable for indigenous peoples, especially research on bamboo, Javanese Joglo roofs and roof construction systems. The experiment was then realized in housing in Batavia and Surabaya (figure 4).

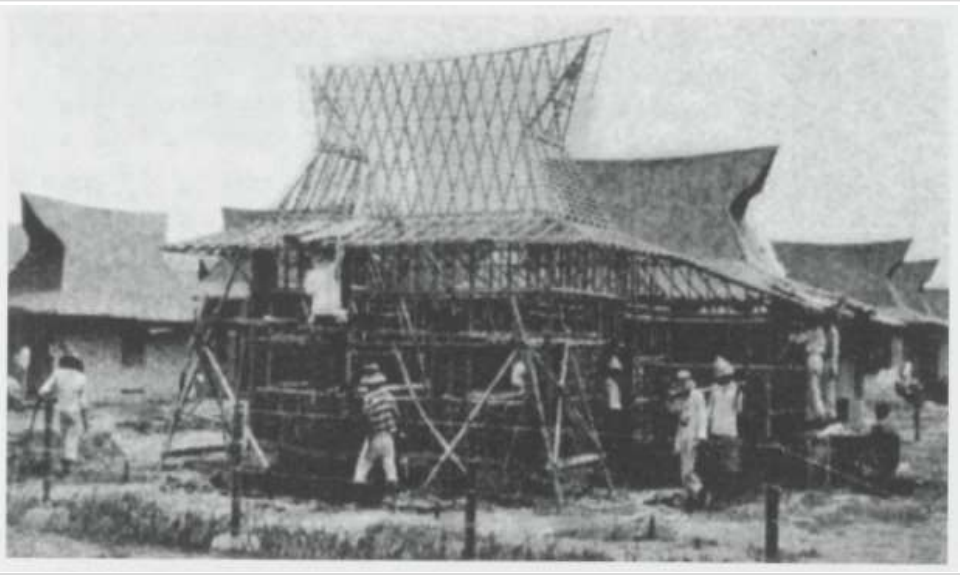

Figure 4. Railway Company Housing in Sawahan Surabaya in 1922
Source: (Vries and Segaar-Höweler 2009)

In 1924, Pont moved to Trowulan to handle the excavation process of the Majapahit temple complex in Trowulan. This happened because Dr. FDK Bosch as head of the Archeology Service was preoccupied with work on the Prambanan and Borobudur temples. Pont's idea to establish a Majapahit archaeological society was liked by the Regent of Mojokerto. Pont's job was to handle the excavation process, describe and preserve the findings at the Trowulan-Mojokerto bathing complex (Vries and Segaar-Höweler 2009). Mahatmanto noted that 1924 was Pont's most productive year in producing writing associated with Javanese society and architecture during the Majapahit era, and these texts were published in Djawa magazine, IBT journal (*Indisch Bouwkundig Tijdschrift*) and NION magazine (*Nederlands-Indie Oud en Nieu*) (Mahatmanto 2002).

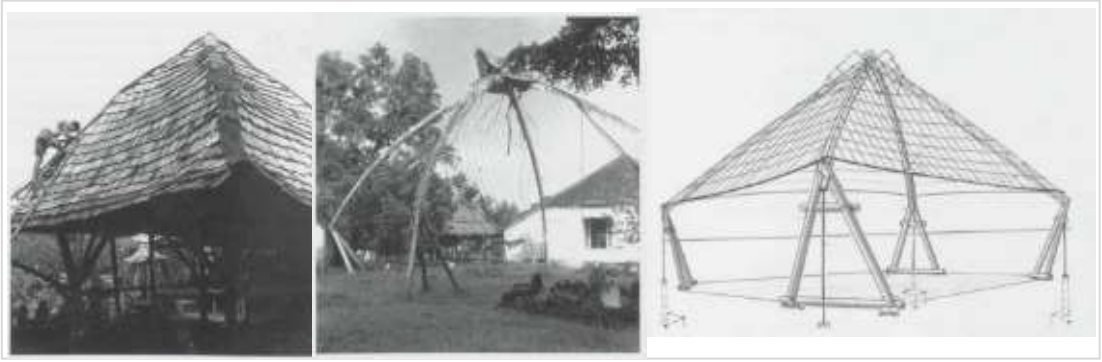

Figure 5. Pont's tent structure experimental transformation, 1927-1928 (left), 1929 (center), 1930 (right)
Source: (Vries and Segaar-Höweler 2009)

The need for a simple and effective storage space measuring 10 x 10 meters is then manifested in a tent architecture. The tent structure is composed of telephone cable material which is then supported by an A-shaped support (see figure 5, on the right). In February 1931 Pont succeeded in erecting a hexagonal storage shed 25 meters in diameter and 13 meters high (see figure 6).

Figure 6. A Storage Place for enshrinement artifacts in Trowulan, by Pont in 1931
Source: (Vries and Segaar-Höweler 2009)

This is the architectural formation for which Pont is extensively understood, particularly after his patented awning structure system. Initially, this formation was intended to be used for the church in Wlingi, but later it was the church in Puhsarang – Kediri that was built first. Many studies have been performed on the Puhsarang Kediri Church; thus, this study will not be discussed further.

This tent structure system then attracted the attention of Frei Otto, an architect and professor from Germany who then sent a letter to Pont asking questions and exploring Pont's design. Otto then developed the Maclaine Pont structural system design which earned him a Pritzer Price in 2015.

With the explanation above, we can divide Pont's architectural journey into 3 phases, namely the introductory phase between 1911–1913; Exploration phase between 1913–1924; and the Discovery phase that occurred between 1924-1937.

Thomas Karsten

Thomas Karsten was born in 1884 to a prominent family in the Netherlands. His father is a Professor at the Faculty of Letters and Philosophy at Gemeente Universiteit Amsterdam and his mother is of German descent who was born in Ngawi. Karsten's family had arrived in Java in 1808 during the reign of H. W. Daendels. Karsten studied higher education at the Delft Technische Hoogeschool between 1905–1909. At that time, the influence of new art streams from Vienna and Germany occurred with the main character Hendrik Petrus Berlage. In 1907, Karten joined the Social Labor Party and the Social-Technical Association of Democratic Engineers and Architects in 1907. After graduating, Karten worked in Germany and Austria, but then concerned on Berlin, when it became the center of art and architecture revitalization (O'Neill 2017). This situation underlies Karsten's next architectural steps in the Dutch East Indies.

At Pont's request, Karsten sailed from Berlin to Semarang in August 1914. Frans Johan Lauwrens Ghijsels and Maclaine Pont, both graduates in 1909, had worked in the Dutch East Indies at the time. Ghijels has been present in Java since 1910 (O'Neill 2017). In 1916, Karsten left the Pont Bureau and founded his own architectural firm. Karsten regularly visited the temple area in Dieng (this was Pont's influence). A trip to Dieng led Karsten to meet Soembinah in 1918, daughter of a former Swiss soldier and Javanese mother. Karsten then married Soembinah on June 21, 1921 (O'Neill 2017).

Karsten's initial work was 2 buildings in Semarang and 1 in Medan. One of the buildings in Semarang is the NILLMIJ Insurance office building (see figure 7), and the *Deli Soorweg*

Maatschappij office (see figure 8) both were completed in 1920.

Figure 7. NILLMIJ office in Semarang, Karsten, 1920
Source: (Hisgen 1927)

Figure 8. Het hoofdkantoor van de Deli Spoorweg Maatschappij in Medan, Karsten, 1920
Source: (Indonesia-dutchcolonial, n.d.)

Karsten's approach in the two works is similar to Pont's in Tegal, particularly climate response, exploration of local materials, and understanding the capabilities of local workers, while also paying attention to the Dutch East Indies government's public building standards at the time. This was Karsten's first exposure to the situation in the Dutch East Indies.

Karsten had a relationship with Prince Prang Wedono who later became Mangkunegoro VII which began in June 1917 through correspondence regarding the addition and restoration of the Mangkunegara palace in Surakarta. Karsten proposed modernizing the Great Hall at the Mangkunegara palace with European beauty techniques (by choosing ceramic floor patterns, lamps, carpets, furniture and other supporting ornaments) and also paying close attention to climatic aspects, one of which is by using shingle material for roof coverings compared to tile material. as well as green layout (landscape) in the form of an inner garden equipped with bird cages. This relationship lasted until 1943 (Jessup 2017).

Figure 9. Modeling the perspective of the people's theatre, Sobokartti, Semarang, Karsten, 1922
Source: (Sukada and Salura 2020)

Concern for indigenous people was seen in the case of Kampung Sompok, Semarang (1923) and the project to enhance the village of Mlaten, Semarang (1924). Improvements to the Sompok village had begun in 1919, and Karsten joined its construction in 1920 and in 1923. After that Karsten's role expanded and the planning of the area in the Mlaten Village case (see figure 10). In Mlaten Village, Karsten did not divide zones based on ethnicity, but on the ability of residents to rent plots of land in the village. The basis of the design is the village-type Javanese house. This area is equipped with open space as a public space and so that air and sun can fully enter the village (see figure 11).

Figure 10. Arrangement of Mlaten Village, Karsten, 1924
Source: (Locale Techniek 1932)

Figure 11. Zone atmosphere and type III house plans
Source: (Locale Techniek 1932)

Karsten's approach was influenced by the thoughts of Freerk Tillema, a pharmacist and member of the Semarang city council, who seriously paid attention to environmental health, whose thoughts were set forth in the 6 series Kromoblanda (1915–1926). Tillema proposed a clean water supply, adequate environmental sanitation and disease prevention techniques. This thinking is applied in residential design and material selection (Roosmalen 2017).

The concept of combining social strata in one integrated area became more 'mature' when designing the New Tjandi area in Semarang. This new residential area is a development area for the city of Semarang and has a fairly steep site contour. This is where the idea of a Dutch East Indies urban planning materialized (Roosmalen 2017).

The demonstration of Karsten's version of the Dutch East Indies city thinking occurred in the design of the Ijen area in Malang City in 1933. The design process took place since 1929 when the Malang city government approved Karsten's design. However, the plan was revised with several requests from the Malang city government and was completed in 1933. In 1935, Karsten made another improvement because there were changes in scope, especially area boundaries with consideration of anticipating urban development. The 1933 design actually accommodated the physical development of the city related to the needs of socio-economic aspects in the future, while the 1935 design was more innovative because it went beyond the city limits and was a solution to several regional planning problems. This 1935 draft (see figure 12) demonstrates Karsten's ability as a city planner both in design applications and in regional (urban) theory (Roosmalen 2017). Karsten also applied the regional design concept in Palembang to the Talang Semut area.

The study of the Karsten area is frequently associated with the garden city concept of Sir Ebenezer Howard. For instance, Budiyono on the study of the urban landscape of Malang, (Budiyono, Nurlaelih, and Djoko 2012), Ramadanta about typology (Ramadanta 2010) and Tallo on morphological patterns (Tallo, Pratiwi, and Astutik 2014), all three of which base their understanding on the concept of a garden city.

However, if examined further, the context of Malang city planning with the background of the Garden city concept is different. Ebenezer.

Figure 12. Aerial Photo of Ijen Area, Malang, Karsten 1935
Source: (Schaik 1996)

Howard departed from a city that was growing rapidly due to the first industrial revolution with the emergence of slum areas and the decline in the quality of the city's environment. This is different from the case of the city of Malang or also the case of Semarang, which requires urban expansion due to population growth, especially immigrants from Europe.

It is suspected that Karsten was influenced by developments in American urban planning, because Karsten had visited New York, Chicago, Wisconsin and Washington and then proceeded to Tokyo and Manila, which he later wrote of his travel notes in a book entitled 'Notebook' (O'Neill 2017). Karsten is interested in the view that modernity offers freedom, which is more in the political context. On the other hand, Karsten admired Frank Lloyd Wright (Cote 2017). Wright in 1935 also proposed a concept of a city called 'Broadacre City'. Wright's city concept pays attention to economic and ecological aspects for an organic urban planning, which is then understood as the concept of organic capitalism (Watson 2019).

In Europe, there was the IV CIAM Congress, which took place on a ship from Paris to Athens from July 29 to August 14, 1933, with the theme of the "functional city" (Gold 2019). This congress discussed 33 cities consisting of 28 cities in Europe, 3 cities in North America and 2 colonial cities, which is Dalat, a French colony in Indochina and Bandung. Karsten was invited, as a representative of the Dutch East Indies, to attend CIAM IV, but Karsten refused on the grounds that the context of cities in Europe was different from cities in the Dutch East Indies (Roosmalen 2017). These assumptions need to be investigated further. However, from this it can be seen that Karsten did not only respond to the tropical climate but also socio-economic developments, socio-culture and even then, entered into socio-politics, especially in the aspirations of the Indonesian nation's independence. It is reflected in the spatial design of the city.

On the building design side, Karsten's thoughts were contained in market projects for the people beginning with Pasar Gedhe in Surakarta (1929) followed by Djatingaleh Market and Randusari Market (1930) with locations in Semarang and culminating in Pasar Djohar Semarang (1938) (see figure 13), structurally similar are also found in Pasar Cinde Palembang (Adiyanto 2018). It illustrates that Karsten's concern for the common people and his sensitivity to the tropical climate really materialize in the case of these markets.

Figure 13. The atmosphere at Pasar Djohar Semarang, Karsten, 1938
Source: (Lengkong Sanggar Ginaris 2017)

From the description of Karsten, it can be concluded that between 1914-1917 was the first time Karsten worked in the Dutch East Indies in response to the tropical climate, an introductory phase. The exploration phase began when Karsten had intense discussions with Mangkunegara VII and also the results of his study of the Dieng temples. The exploratory phase occurred in 1917-1924, the phase in which Karsten deepened his understanding of the daily life of the Dutch East Indies people. The last phase (1924 – late 1930s) in contrast to Maclaine Pont who made architectural discoveries – Karsten did not find or create new forms either in architecture or in regional design, the behaving phase. Karsten emphasized his attitude towards equality between socio-economic levels of society as contained in the city design work. The attitude of concern for the people's daily life is generally embodied in the design of its markets which accommodate the needs and daily behavior of the people in the market. Broadly speaking, Karsten still tries to incorporate elements of modernity into his designs without trying to change the shape or external form of his architectural works. Karsten's modernity is based on people's daily lives and is also responsive to climate with a view that is familiar to society in general.

C.P. Wolff Schoemaker

Wolff Schoemaker was born in 1882 in Banyubiru, Central Java and received higher education at the Military Academy, Breda (1902–1905); After that he worked as a corp engineer for the Royal Dutch Army in West Java, West Sumatra and Batavia from graduation until 1911. October 1912-June 1912 worked at Gemeente Batavia, then joined the Moojen architectural office for 9 months. February 1914-February 1917 Schoemaker returned to work at Gemeente Batavia as a director. Then worked at Carl Schlieper & Company as head of engineering which assigned him to travel to Europe and America to study urban planning, transportation planning and modern architecture and construction technology. In May 1918, Schoemaker returned to Batavia (Handinoto 2010). His initial trip was to have a military education, serve in the army, work in the Batavia government, and study mainly in America and stay for a long time–which was stated as an important moment in his life (Dullemen 2010) - underlies the next architectural attitude.

In 1918, Wolff and his brother Richard Schoemaker founded an architectural bureau based in Bandung. Wolff Schoemaker designed the bureau's logo, by adding an ornament to Kala at the top of the logo.

Figure 14. The Schoemaker Bureau brothers' logo
Source: (Dullemen 2010)

Dullemen divides Wolff Schoemaker's work into three periods, which are:

1) The first period (1918–1920) highlighted the functional and modern side and had a European character.
2) Period two (1921–1924), Wolff Schoemaker incorporated local ornaments - especially Javanese temple ornaments - into his works.
3) The third period, or peak period, by Wolff Schoemaker (1924-1940) left classical Javanese ornamentation and appeared vertical and horizontal lines with dome-shaped peaks, adapted from the stupa formations in the temple (Dullemen 2010).

This study does not repeat what Dullemen has done, but examines the factors that prompted Wolff Schoemaker's work.

Figure 15. N.V Becker & Co office, Bandung. 1919, Wolff Schoemaker
Source: (Dullemen 2010)

In one of his first works, the office of Becker AND co (see figure 15), you can see the influence of Otto Wagner, an early modern architectural figure in the Art Nouveau style, especially the work of Villa II whose initial design was carried out in 1905 but was only built in 1912 (see figure 16). Interest in Wagner was also reflected in a speech celebrating the first birthday of TH Bandung on 2 July 1921 delivered by Richard Schoemaker who stated that Otto Wagner was the greatest architect at that time (Dullemen 2010).

Figure 16. Wagner Villa II, Huttelbergstrasse 28, Vienna: perspective (1st draft). 1905
Source: (RIBA, n.d.)

In the case of the Jaarbeurs building (see figure 17), there is a change in the design approach. Wolff Schoemaker plays in various volumetric compositions and is influenced by Frank Lloyd Wright's organic architecture, who argues that architecture should be appropriate to the time, place and people who use it. In this work, the head ornament was used for the first time (Dullemen 2010).

Figure 17. Jaarbeursgebouw. Bandung, 1919, Wolff Schoemaker
Source: (lostandwander1976 2017)

In the second period (1921-1924), Schoemaker was more assertive in using a kala head and several Dutch East Indies ornaments in his design (see figure 18). Schoemaker is fascinated by Javanese ornaments because he is a sculptor and painter who is passionate about Hindu and Islamic culture, art, and architecture, and has studied in Egypt, India, and several other countries (Dullemen 2010).

Figure 18. De Majestic Bandung, Schoemaker, 1922
Source: (Anugrah 2023)

In the case of Concordia, Schoemaker did not use the head of the kala, but used the makara on the right and left ends of the pediment at the top of the main entrance (see figure 19). The use of the head of the kala and makara on the main door is the right use, and proves that Schoemaker really understands the function and meaning of the ornaments used in his design (Dullemen 2010).

Figure 19. Sociëteit Concordia, Bandung, Schoemaker, 1921
Source: (mooibandoeng, n.d.)

The next phase (1924–1940) was the peak phase of Wolff Schoemaker. Schoemaker had 'let go' of the Dutch East Indies ornaments. Dullemen juxtaposes it with the Gran Hotel Preanger in Bandung (see figure 20) with the Imperial Hotel in Tokyo, Japan by Frank Lloyd Wright (see figure 21). The Imperial Hotel was completed in 1916 and was reviewed by Berlage in Wendingen magazine. This magazine is in Schoemaker's collection with de Stijl and Studio magazines in his personal library (Dullemen 2010).

Figure 20. Gran Hotel Preanger, Bandung, Schoemaker, 1927-1929
Source: (Ranawati 2020)

Figure 21. Imperial Hotel, Tokyo, Frank Lloyd Wright, 1922
Source: (Rethink Tokyo 2018)

Why did Schomaker change his design approach and lean more towards Frank Lloyd Wright?

The city of Bandung developed as a result of the post road launched by Daendels which resulted in many tourists and businessmen coming to Bandung. Gran Preanger Hotel is on the main road side of the post (Dullemen 2010). On the other hand, the development of the city of Bandung was very rapid because there was a proposal to move the capital of the Dutch East Indies from Batavia to Bandung during the time of Governor General J. P. Graaf van Limburg Stirum and it was only implemented in 1920 (Hermawan 2011). These two things as well as Wright's understanding of organic architecture (approach to time, place and people), are the reasons why Schoemaker removed ornamentation in his architectural works to become an Art Deco design approach that prioritized geometric decoration.

Schoemaker's magnus opus is Villa Isola (see figure 22). The design of this villa is completely new with the most advanced modern architectural approach of its time. Flat roof that seems to ignore the tropical climate. But Schoemaker solves the climate problem not with an architectural form – a gable roof – but with a reinforced concrete technology approach. Even W. Lemei - who replaced Schoemaker at TH Bandung - published a book entitled 'Modern Housing architecture in Dutch East Indies' with the subtitle 'Villa Isola'. Villa Isola is located between Bandung and Lembang owned by a telegraph entrepreneur named Dominic Wiliam Berretty. Villa Isola is also surrounded by a beautiful garden, with views of the mountains and the city of Bandung. This villa is called the most luxurious villa in the world (Dullemen 2010).

Figure 22. Villa Isola, Lembang, Schoemaker, 1933
Source: (Netizen Ayo Bandung 2021)

Conclusion

The description of the 3 Dutch architects above explains that the three of them experienced a process and a change in their style or approach to design. These changes were driven by several factors. Broadly speaking, the three experienced three phases. Initial phase or introductory phase. In this phase, the three of them designed in the Dutch East Indies based on what they got while studying architecture in the Netherlands. When they were studying, the Art Nouveau style was just developing in Europe, which in the Netherlands was later adapted to become Nieuwe Kunst. The second phase is the exploratory phase. The three Dutch architects explored the land of the Dutch East Indies, especially the wealth of temple architecture in Java. Maclaine Pont was interested in the heritage of the Majapahit temples, the Karsten temple complex in Dieng, while Schoemaker was not specific about which temples were in which area, but at this time Schoemaker used the head ornaments of kala and makara. In the third phase, fundamental changes begin to occur. Pont invented the cable structural system based on his studies of Javanese building pavilions; Karsten's attitude is to prioritize designs that are more suitable for people's daily lives; while Schoemaker uses a Frank Lloyd Wright version of modern architectural approach.

The difference in the direction of the design approach and architectural attitude is due to the difference in driving factors. There were two factors driving Pont, which is his assignment at the Civil Health Service and his move to Trowulan. Thomas Karsten's relationship with Mangkunegara VII. Meanwhile, Schoemaker's driving factor occurred when he studied in America, especially his admiration for Frank Lloyd Wright and the development of the city of Bandung which made it possible for him to explore his designs based on the latest developments at that time.

This study proves that Dutch architects also studied and seriously explored the richness of architecture in the Dutch East Indies. Influences from outside as well as influences from within the architect himself drive the attitude and approach to his design. The thing that needs to be underlined is that these three architects paid great attention to the condition of the Dutch East Indies, especially the response to the humid tropical climate that the three of them had made since their initial designs in the Dutch East Indies.

It is this way of learning and attitude of the three that can be used as a reference for today's architects in attitude and architecture in Indonesia today.

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