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The role of localities in karsten’s works in architecture and city of Semarang

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Abstract. Herman Thomas Karsten architectural masterpiece becomes objects of cultural heritage that must be appreciated, it covers town planning and architectural design. On progress, Karsten’s masterpiece hasn’t changed much as a result of globalization that hits Semarang city; his masterpiece is considered well, valued by the society, it is possibly because of the conceptual approach that prioritizes and blends the local aspects of wealth. Collecting data including literature study, synchronic and diachronic method, will produce a red thread ideology that influences Karsten’s way of thinking. History shows, the architectural work that survives is that have the local aspect in the concept of planning. Through the literature review of the Theory of the City and Local Aspects, and by taking the case on the cities of Karsten design, there will be a relation between the Local Aspect and the Concept of Town Planning by Karsten. Case Study in Semarang city, which is also the best or the most completed masterpiece of Karsten, becomes a reference that corresponds to the literature study, so we get the scope of the local aspect that consists of Place, People and Period always related with cultural, social and economic aspect, and all of these have correlation with the town planning and architectural work of Karsten.

Keywords: town planning, architectural design, local aspect

1. Introduction
Based on the historical facts of the formation of cities in Indonesia, initially Indonesia has no city, then since the Dutch colonialism, began to form the city based on race or ethnicity, and we know it divided into colonial city areas, Chinatown and Kauman area. Furthermore, the formation of cities in the Dutch East Indies into a modern city, can not be separated from the role of Ir. Herman Thomas Karsten, especially in the city of Semarang. Some cities in Indonesia which are included in Karsten planning proposals are: Batavia, Bandung, Semarang, Surabaya, Malang, Magelang and Sukabumi. Furthermore, Karsten's works spread to the city of Cheribon, Meester Cornelis / Jatinegara, Yogyakarta, Surakarta,
Purwokerto, Sumatera (Palembang, Padang and Medan), and Banjarmasin in Borneo / Kalimantan [1]. Based on this fact, it can be said that Karsten was the pioneer of town planners in the Dutch East Indies.

Roosmalen argues that the multifaceted nature in the socio-political context of colonial built heritage, awakens the appreciation, admiration for the heritage of the cultural heritage. This contributes to the creation of a wider awareness and creation of a cultural heritage that includes colonial architecture and city planning [2]. Related to this, then studying the formation of cities in the Dutch East Indies (Indonesia), can not be separated from the role of Ir. Herman Thomas Karsten, especially in Semarang City, which derives the legacy of applying Karsten’s concept of city and architecture in a complete and large-scale way; And its artifacts can still be seen today; Karsten’s other great heritage is in Bandung, Malang and Palembang.

Before the arrival of Karsten, the towns in Dutch East Indies were not likely to be properly planned, not planned by town planning. It was only when Karsten arrived and planned the expansion of Semarang city 1916-1920 and became a gemeente adviser of Semarang city 1916-1942, it can be said that Karsten was the first time delivering the city planning properly and holistic by introducing town planning in the Dutch East Indies, and this is applied by designing Semarang City as a modern city, and then he also plans other cities in the Dutch East Indies at that time. As a famous architect and city designer, Karsten acknowledged that private companies had an early influence on the change of a city and the passive role originally played by the government. He argues that the size and character of the expansion for more densely built buildings and districts brings about far-reaching change, which has reshaped the prospects of the cities forever. [3]

The facts show that Karsten's design is fully and thoroughly implemented in Semarang City, and until now the Karsten’s works have been relatively undisturbed, its patterns have not changed and survived until now. This phenomenon also occurred in cities that had been planned by Karsten, this is very interesting, and if the concept of Karsten design is researched and understood, then this could be a good example to apply to the planning of today's city. On the other hand, Karsten's works are not only on the town planning, but also on the design of the buildings. The history of Semarang City noted that Karsten got many duties from the land owners (private), to plan the master plan of a city area, also to design the buildings with various functions. The city area and buildings designed by Karsten reflect his concern for the local climate and culture.

Semarang City in the next development to the present, the expansion of the city is planned by developers who tend to think only of planning within the area they planned, without thinking about the relationship with the city as an integral entity. Town planning like this is not based on a thoroughly integrated urban pattern, causing urban development areas to become chaos, causing city problems.

Currently, to get input from the concept of Karsten’s thought is not easy to do, because Karsten never describes his concepts of thought with detail and may be said his concepts is not operational. However, Karsten concludes that the concept of urban planning, which is balanced with the regulation of building arrangement, is a concomitant element to regulate and control the development and development of a city, in connection with the tendency of urban economic growth that is directly related to the socio-economic condition of a city. It can be said, Karsten has also begun to notice the socio-economic factors that will influence the form of urban settlements; and this is also the case today. Thus the purpose of this study is to reveal the concept of town planning according to Karsten, and explore all aspects of local and elements of the city.

1.1. Novelty Research

Research on Karsten which has been done, is generally a research or study of the work of Karsten in the work as an architect and advisory town in the Dutch East Indies. This is related to the political, economic and social situation that occurred in the Karsten era at that time.

To find out the position of this research, a review of several previous studies was found, which was related to the concept of thinking and Karsten’s concept in planning the city. Previous research on the relation between local aspects and Karsten’s town planning concept has never been done. Research conducted by Erica Bogaers (in his doctoral dissertation) [4], Hellen Ibbitson Jessup [5], Peter J.M. Nas,
and Pauline K. van Roosmaleen, have not discussed the issue of the role of local aspects in the works of architecture and the city of Karsten's works.

Thus State of the Art of this research is Local Aspect have influence on architecture and city design. While the novelty of this research is that the local aspect is one of the design determinant of the architectural design and the city by Karsten.

Based on all this, so the ideas, architectural concepts and town planning by Karsten is an important issues for the advancement of science of architecture, but it becomes very interesting to learn because the results of the city order that survives and does not change. From the study of Karsten's thought through the study of various literatures, as well as observations on the artefacts of Karsten's works, it can be said that local aspects became important things learned because they became local concepts that influenced the concept of urban architecture and planning, so that the architectural and urban designs by Karsten Changed until now. In more in-depth study, this research has a purpose to know the relation of Local Aspect in architecture design of city; How the relationship Karsten Concept and Local Aspects. Thus, the relationship between the local concept and the elements of the city and the design of Karsten's architecture becomes an interesting thing to examine.

2. Theory

2.1. Local aspects of urban order and architecture

According to Koentjaraningrat, there are four forms of culture, namely culture as an ideological value; Culture as a system of ideas; Culture as a patterned system of conduct and actions; and culture as physical objects/artefact. From the four forms offered above, each has a tendency of different forms with each other.

a. Cultural values are the philosophical or ideological stages formed by human experience, this stage is the result of thinking that usually has a textual form express or implied in the norm, custom rules, folklore or artwork.

b. Cultural systems of ideas and concepts are also manifestations of thought. This stage of form also has an explicit written form and some may be in the form of images or configurations.

c. The social system as the next stage of existence is an action in order to "realize" the concept. The stage of this form can be in the form of writing, drawing, configuration and activities.

d. Physical culture is a form of outcome in a culture. In this latter form culture has the most obvious form among other forms. In this form of culture often already has the form of objects, so it can be seen, touched and felt [6]

To help understanding Architecture as a form of culture can be done through the study as mentioned above. For that the activities of architecture should be understood as a process, from the underlying ideology, concepts, methods and techniques used, to the work.

Koentjaraningrat further argues that the "architectural work" as a product of architecture is a physical being that can be clearly seen, touched and felt its presence in society. This physical form, whether in a single building scale or a built environment or city, can be understood as an artifact. An "architectural work" communicates the conditions of society where the artifacts are located. Artifacts are the final form arising from the existence of ideas and actions in a culture, physical form. Culture in the physical form is the outermost part of the concentric circle cultural framework.

According to the English dictionary of Indonesia John M. Echols and Hasan Syadily, local means local, then the local aspect will always be related to everything related to local conditions. Based on Koentjaraningrat's opinion about the four forms of culture, the local aspect in a city order and architectural work is related to the system of ideas; Behavioral systems and patterned actions; And related to physical objects/artifacts. The city is always growing and experiencing its development, will always be in line with the development of social life, culture, economy and polity behind it. The city is the built environment, and the city is also the work of architecture, which is a physical form of culture based on the ideological ideas that influence it; so it always contained the ideology that shaped it.
The development of the city is the work of the construction of human thought both in the level of adaptation to the environment and adjustment. The local aspect which is an integral part of culture, has a role in determining the character of the city. The urban community with a certain background from the traditional to the modern lifestyle influences the changes in urban formation.

2.2. Relation between local aspects with architecture and city planning
Miles in Cities and Cultures (2007) mentions that cities produce culture and vice versa at times, culture reproduces the city [7]. On the other hand, Antariksa underscores Lewis Mumford's view that the city has creative focal points for society, and the city is the maximum point of concentration for power and cultured communities. The city is shaped by culture, but instead the city is influenced by a form of that culture [8]. Furthermore, Antariksa argues that the local aspect is formed as a cultural superiority of a particular community as well as geographical conditions in a broad sense.

These two views show that between cities and cultures have a very close relationship, each influencing each other. In the context of the city, the concept of thinking in urban planning based on local aspects will always have a close relationship with the elements of the city that is formed. In urban planning, strengthening the potential of local aspects becomes an alternative to reduce the impact of conflict problems.

On the other hand, Rossi posited three arguments relating to the city as a man-made object - as a total architecture [9]. The first is that urban development has a temporal dimension, that this city has a time before and after. This shows that we are attributing comparable phenomena that are not homogeneous along the temporal coordinates. The idea of immortality comes from this proposition. The second proposition concerns the sustainability of urban space (spatial continuity). To accept this continuity means to assume that all the elements we find in a particular region or in certain urban areas are homogeneous artifacts, without discontinuities. Finally, as the third proposition is that some of the major elements in urban structures have the power to obstruct or accelerate urban processes.

Furthermore, according to Lynch, the city was not built for one person, but for a large number of people, with a variety of backgrounds, temperaments, jobs, and classes. Therefore, the designer must create a city equipped with the widest possible path, edge, beam, knot, and district, a city that utilizes not only one or two quality forms, but also all [10].

Thus it can be concluded that people and society become an important element for city. Local aspects which consist of social, culture, politics, economy and place, will influence the development of city. Local aspects are always related to place, people and periods, and they have important relations and roles that influence the planning of a city.

3. Method
This research method is qualitative with synchronic and diachronic approaches that seek role and local aspect relation in Karsten's architectural and town planning. These roles and relationships are related to the structuralist hermeneutical approach that identifies the structure of urban elements and architectures to derive references to the interpretation of relations from an empirical state.

3.1. Importance of Understanding the Karsten Idea
The step of Synchronic and Diachronic study will reveal that forged Karsten contributed so he created the concept of architecture and town planning that affects many cities in Indonesia, especially in Semarang at the time he worked in Indonesia.

Please note, synchronic study is a study that is intended to seek foundation and reinforces the interpretation of an idea/work of architecture as well as the correlation of the characteristics of contemporary architecture events; while the diachronic study is a study intended to look for spots or changes and developments in the world of architecture both historical perspective and architectural Indonesia.

This understanding will be emphasized on the reality of Semarang town planning, both of which passed on its development until now and those not used in the development of present-day city of Semarang; it will be searchable on the maps of the old city of Semarang who may still be sought. Critical
to this study and analysis on the basis of patterns and ideas Karsten thoughts and theories of urban design will generate an interesting insights and useful for conservation in Semarang city.

4. Results and Discussions
To understand Semarang City, historiography of Semarang City must be understood, then it should be done the study starting from the beginning of the formation of Semarang city. Semarang city settlement began to have a pattern when the Dutch colonized Indonesia almost four centuries ago. With the bull defense system and the construction of meliternya tangsi, the Dutch began to form settlements. At that time there were pockets of settlements that are for Europe, China and Earth Putera. Furthermore, the Dutch built several municipal facilities for the benefit of their nation, among others: office facilities, schools, hospitals, sports and entertainment venues, all built without any comprehensive planning; This process is the initial stage of the formation of a Dutch East Indies city. Thus the Indonesian nation began to be introduced to the settlement environment since the colonial period. Some Dutch-built settlements in general imitate many forms of buildings in their home country which they then adapt to the tropical nature of Indonesia; The settlement environment is solely for the security interests and comfort of the Dutch nation itself.

In 1678 the VOC began to build a military fortress of clay along the east of Kali Semarang and continued to close in 1690. So on the Embryo map of the city of Semarang in 1695, it was seen a VOC defense bull (see figure 1). European ethnic settlements, especially the Dutch in the Old City in the 18th century called Europeeschebuurt which means European settlement. As a city center at that time the Old City was planned in European style with its center of Church and Square, open space as city public space.

The main road to the city center is the main gateway through the Mberok Bridge which is supposed to be also the gate of the fortress of the city then straight east is the main road of Heerenstraat which means 'The Way of Lord Reverend' which is now the Letr Jend Suprapto Road. On this road are important office buildings lined two floors to the city center in the form of Immanuel Protestant Church or Koepelkerk-style Renaissance Architecture, this church is now known as Blendug Church built in 1894. Near the church there is a plaza that was formerly called Parade Plein, In the vicinity are important department stores and office premises. In the city center area is equipped hotel facilities that is Hotel Jansen which is a luxurious hotel at that time and Schouwburg theater building is very famous at that time.

This settlement was originally Semarang city center equipped with housing, offices and other downtown facilities. But in the 19th century after the fortress of the city was opened, the housing started
out on this area they moved to the main road of Bodjong or now Jalan Pemuda and Jalan Poncol now Jalan Imam Bonjol. While the location of the Old City (the old city center of Semarang) dominated many as an office area for the central government and administrative center of industrial administration of plantation industries such as sugarcane, tobacco, coffee, teak, rubber and others in Central Java. In addition, as a central office of banking, trading office, export - import, insurance and other administration offices and warehousing. At the early of the 20th century after the fortress of the city was opened, the area in front of the Old City began to be developed. The first is the establishment of the Head Office of the Dutch East Indies Government in Semarang City which accommodates Gouverneurskantoor, Gemeentehuis, Gouvernerswoning, Burgemeesterswoning and Regentswoning. All these buildings were founded in the 1900s.

So from the beginning of the embryonic formation of the city of Semarang up to the 1900s, the development of Semarang city residential development is concentrated in the old city area (colonial word), as the center of Semarang Old (Old Semarang). Furthermore, in 1914 Ir. Herman Thomas Karsten was present in Indonesia as an architect of city planners, he proposed a concept of controlling the city's development in the Dutch East Indies, due to the worsening housing and settlement conditions of the Indies and this has inspired Karsten to improve it.

Thus it can be said, before Karsten's arrival in Indonesia, cities in Indonesia grew and developed without a good plan, but since Karsten was in Indonesia, then cities like Batavia, Bandung, Semarang and Malang were reorganized and developed on the basis of the proposal Concept of Karsten planning.

In 1920 in Bandung, Karsten proposed the concept of urban planning of the Dutch East Indies in the congress forum of Decentralization to X based on the knowledge and experience he had gained in Semarang. He proposed a new approach to breaking the development and improvement of the Dutch East Indies city. Karsten wrote the book "Indische Stedebauw" as a study of the development of the Dutch East Indies that contains the concept of urban elements and the role of government in urban development, including: road planning, building, zoning, control through regulations. Some cities in Indonesia are included in the proposed planning include: Batavia, Bandung, Semarang, Surabaya, Malang, Magelang and Sukabumi [1].

For example, the implementation of urban planning in Semarang to Semarang Baru (New Semarang), Karsten distinguishes temple community and society below. In the revamping and expansion of the city in 1919, the division of an area each with special types of houses, no longer based on race (Europeans, Putra and China), but based on economic class (upper, middle and lower).

By Karsten, the higher land (temple area) is completely reserved for the housing of the wealthy Europeans and Chinese, in the lower regions, the villages are planned. In the subsequent process, Karsten planned placement of the upper regions with expensive houses to subsidize cheap houses in the lower regions.

Furthermore, Karsten brings together Pekunden and Peterongan regional planning and expansion plans for Sompok and East Semarang. The improvement plans, as we can see, introduce the idea of differences in economic class as the basis for the spread of housing types.

Besides all mentioned above, it is important to learn, Karsten has also begun to notice the economic factors that will affect the shape of urban settlements that also occur in the present. In addition, Karsten has also planned the regulations to control the development of a settlement of the city, and at that time it was followed so as to create a good settlement arrangement. If we look at the current situation, the development of urban settlements is less controlled by regulations that are quite binding.

Karsten approaches the problem of repair and development of the Dutch East Indies town with "Town Planning", which had not been done by the Dutch government at that time. So the morphology and typology and patterns / urban patern Semarang city implemented according to the ideas and concepts Karsten planning, is a very important input for the revamping of the city of Semarang today, the planned development of the city of Semarang to come; Especially as input for making master plan of Semarang city which will come.
4.1. Semarang town planning and architectural works by Karsten

As mention above, Karsten has his own town planning concept in Indische Stedebouw, which organized based on his knowledge from literature and also his experience during he works in Semarang.

He also emphasizes his concept on a principle think that the layout of a town consists of three elements:

- The detail
- The townscape
- The plan-as-a-totality.

All three elements must join to form a unity and organic coherence. However, according to Karsten this is often overlooked.

The detail is made up of building, road system, squares, points of interest and planting in addition to drainage, sewage, airports, docks, etc. Each and every detail must be given careful thought. The different kinds of buildings, united in neighbourhoods, have their own road profile. Roads flow like a circulatory system through the town, alternated by points of interest and squares. Public open space and greenery play a very important role in the creation of a townscape.

Townscape is the combination of the built form and the layout of the surroundings and must be seen as the aesthetic idea of town-layout. Time and time again the planner must ensure that the town has “character”. Thus, in this case a planner must be required to creat a special character of a town.

In The plan-as-a-totality (the town-plan), all these elements join together. The town-plan must form a unity, it must give an indication of future improvement and development of the town. The town-plan must not be thought of as a very detailed plan but of a plan of main issues; so it is made global by indicating grouping of the element of city as the main features. One could think of the main transport routes organized in a simple form, the railways, the distribution of squares. With this type of plan Karsten hopes to develop the town, as he speaks of a development plan:

“...; het moet levend blijven, en zo nodig worden aangepast – zonder het uit zijn verband te rukken, tenzij om een beter verband te bereiken – aan gewijzigde omstandigheden en inzichten.”[11]

(. . . ; the town must be still alive and if it is necessary, adapted by the situation and the opinion which change, without denies the relationship within, except for achieving a better one.)

With the other words, the physical elements of a town (according to Indische Stedebouw) are:

1. Housing
2. Public and semi public building
3. Roads
4. The important points as a town-view
5. Parks
6. The other supporting elements.

Karsten’s influence was especially clear to see in the revising of various town expansion plans in 1919. Division of neighbourhoods, each with its particular housing type, was no longer based on race (European, Indonesion or Chinese) but on Economic Class (upper, middle, lower).

In order to make the development financially feasible for the Council, Karsten and his partner, Ir.A.Plate, created as many large plots as possible with a view over the town and the sea to the north. These plots yielded more ground rent and were for the more expensive housing. Elsewhere smaller cheaper plots were developed entirely along the lines of this plan, and was to give Semarang a certain fame in the field of housing; this work in Semarang was Karsten’s first practical experience.

During this period Karsten was also asked by two private land owners to draw up an expansion plan for their estates at Pekunden and Peterongan, which both lay between the old town and the hilly terrain. The local authority saw a chance for increasing the provision of housing near the town.

However, the land owners appeared not to be interested in actually building, but hoped to increase the value of their land by getting it designated as housing land.

Rather differs from the Karsten’s experience in Malang, in Semarang he faced a reality that the land which he had planned was owned by the private owner, and they hoped to increase the value of their land. But one thing is clear, for the land of Sompok, Karsten proposed it as the housing for middle class, because Sompok is a place for the tram stopped and it had a good drainage and it is near with the main road: MT. Haryono street and A.Yani street; so public transportation system influenced Karsten to plan Semarang town planning. Together with the others, all of the district were planned into a unity and united
with the old city.
Thus, although Karsten plans several districts which are separated for Semarang extension, but those
districts together with the other part of Semarang, form a unity of city structure, because Karsten very
concerns with the streets which have been exist, like: Dr.Cipto, MT.Haryono, A.Yani, Pandanaran and
Gajahmada street. This reflects Karsten’s consistency in town planning with totality in town planning.
Those districts are namely:
• New Candi terrain (1916)
• Pekunden, Peterongan, Batan, Wonodri (1919)
• Sompok (1919)
• East Semarang (1919)
• Mlaten (1924)

This planning of the city extension uses a model which is similar with combination between
Concentric Zone Concept and Sector Concept, but Karsten realizes, it is impossible to depend on the
central of old city Semarang (colonial city as a central of activities); therefore he seems to move the
central of Semarang into Simpang Lima.

In each part of every district, the zone is arranged based on Radial Concentric design, and the layout
of roads it arranged by following the gradation of classification of the roads, from the wide roads in the
outside until the narrow street in the inside on the zone. This Radial Concentric does not only used in
the New Candi terrain, it is also used in the underside of Semarang. This design is combined with grid
design as can be seen on the plan of extension on Pekunden, Peterongan, Batan and Wonodri. See Figure
2. Besides this, Karsten has also planned Mlaten settlement in 1924, see Figure 3. The five districts
mentioned above, when put together is the whole area of Semarang city that we see today.

As an architect, Karsten did not only concerned with the Semarang Town Planning, but he also had
a lot of design work, spread in the city of Semarang, both inside and outside the old city. See Figure 4,
5, 6, 7, 8, 9.

Before the arrival of Karsten in Semarang, in 1910 Semarang’s health problems were announced in
connection with the severe state of urban health, it was announced to be fixed. Improvement of urban
health in the lowlands is an impossible task. Then gemeenteraad will use all funds to exploit the New
Candi hill area for the settlement area, as the southern boundary of the city; So that the planning stage
preparation of Semarang city expansion plan on the hills of New Candi (Toekomstig Semarang, 1914:
1, 2), see figure 10.

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1 Concentric Zone Concept was proposed by Ennest W. Burgess on 1923, and Sector Concept was proposed by Homer Hoyt on
1939, so that is on the years Karsten worked. Central City Concept and Sectoral City have the same idea that centre of the city lay on the
nucleus of the city which its location is geographically central. The difference is on the theory of city’s growth. In Concentric Concept, city’s
growth is assumed has radially movement, the other zone develops on the outside, therefore the city becomes bigger and bigger. In Sector
Concept, said that city structure is not separated according to the central one, but according to sectoral and its development follows the
direction in every sector.

2 In this case, Radial Concentric which Karsten used is different with the idea from Ebenezer Howard. According to Howard, the
arrangement based on the society grouping which have the same work, and the city itself has a big scale. But Karsten based his idea on the
arrangement of the roads and housing which is according to the geography of the land, and the scale is smaller.
Figure 2. Map of Expansion Plans Semarang by Karsten

Figure 3. Map of Mlaten Settlement 1924 by Karsten

Figure 4. Djakarta Lloyd Building, 1930 by Karsten

Figure 5. Puri Gajah Mungkur, 1923 by Karsten
Figure 6. A detailed plan about raadsplein by Karsten

Figure 7. Perspective atmosphere raadsplein by Karsten

Figure 8. Volkstheatre Sobokartti, 1930 by Karsten

Figure 9. Interior of Volkstheatre Sobokartti, 1930 by Karsten
When Karsten planned the expansion of Semarang City, he planned it as shown in figure 11; altogether he did not use the map in figure 10. In comparison, the map in figure 10 was made without regard to the contours of the New Candi hills, as if it were planning a settlement on a flat land. Different is done by Karsten, he is very careful and planning the New Candi settlements with great attention to the contours of the soil, see figure 11. Figure 6 shows, the contour lines look detailed, become a very important part, together with the design of the site around Raadsplein, picture 7 shows the atmosphere of Raadsplein (now the Elisabeth Hospital roundabout), which designed by Karsten.

In planning the Mlaten settlement (see figure 3), Karsten based this plan on economic considerations, as these settlements were allocated to the low-level streets of low-income citizens, and Karsten implemented a recycling system for building materials using used building materials. In this case, Karsten introduced Kampong Verbetering/the kampung improvement program, and the bathing, washing, and toilet system (MCK = mandi, cuci, kakus → Indonesian), which was implemented by the Indonesian government after Indonesian independence. In addition to this, Karsten also introduced small type houses for the poor.

In the case of Volkstheatre Sobokartti (see figure 9), each saka-guru pendopo (four wooden columns of pendopo) stands on a stone pedestal. If the wood dimensions of saka-guru 20 cm x 20 cm, then the circumference of wood saka is equal to 80 cm. By what was stated by Prijotomo (2016: 128) based on Kawruh Kalang Sasrawiryatma’s passage, the height of the saka-guru is equal to the size of the circumference of the saka-guru cross-section. This is a very remarkable fact, because Sobokartti saka-guru’s pedestal is 80 cm in height, corresponding to the circumference of the wooden columns saka-guru.
5. Conclusions
Karsten, who has an educational background as an architect who pursues structural engineering, proved that an architect with structural engineering knowledge, and willing to learn local aspects and local wisdom, can produce innovative architectural works. Culture on building sites and functions of buildings become an important element in designing architectural works.

Understanding of traditional architecture becomes the basis for designing, the traditional architectural philosophy or archipelago architecture (which is now being widely voiced) should be understood to develop the architecture into the future. Understanding of traditional architecture and archipelago architecture does not stop merely on the data collection, but become the data to develop architectural masterpiece in this earth Indonesia, in line with science which develops very fast nowadays.

On the other hand, the local aspect is a very important part of planning a city. The local aspect will always be related to place, person and time. With this premise, local aspects can be understood regarding social, economic, cultural, place and political aspects, of course, will always be related to the time when planning a city is made.

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