

JOGJAKARTA AND CAKRANEGARA.

An initial study on two capitals of the last kingdoms in the Archipelago (until the 18th century) which were designed based on the local traditional city planning

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Abstract

Knowledge on the basic town planning of the past can be invaluable in the development of urban/town planning in the future. The key to understanding the meaning of urban planning of the past is to understand how the people at that time classified their activities, i.e., which activities were considered 'sacred' and which were 'profane'. This division was basically a religious act of the pre-modern society to balance themselves with the 'cosmos', because life at that time was understood to lie in the 'living-in-a-sacralized-cosmos' atmosphere. Therefore, they separated the 'sacred' and the 'profane' areas. However, in the modern era when people live in the 'living in a desacralized cosmos' atmosphere, everything is changed. People idolize private life and property, and private belonging are often considered as something private. As the result, the space division in the modern era has changed the 'sacred-profane' into 'private-public'. The article below shows the importance of acquiring knowledge of planning in the past which was full with cosmos symbols to visualize the configuration of nature and functioned as the backdrop of a social life. It is hoped to help the readers understand the present urban planning. Jogjakarta in Central Java (1756) and Cakranegara in West Lombok (1740), which were the last cities in the Archipelago to design by the local authorities, are used as the subjects of this case study.

Keywords : settlement of the past , sacred and profane, Jogjakarta, Cakranegara

Introduction

"City planning is not only a place of physical to guarantee the reproduction process of a society, but also a complete cultural phenomenon which involve almost all of the life dimensions of the people in it".

Morphologically, some cities in Java, Bali and Lombok¹ were originally designed as "planned cities", but later developed into "organic cities"². The history of the early development of city planning in Java cannot be separated from the initial concept of planning the capital cities of some ancient kingdoms in South-East Asia. Those were the capitals of some ancient kingdoms like Majapahit³ (in 14th century), Moslem Mataram (Kotagede, Pajang, etc) and the development of those kingdom capitals in 18th century (Surakarta, Jogjakarta) in Java, which designs were based on the macrocosmic and microcosmic concepts⁴.

When J.P Coen controlled and built Batavia in 1619, cities in the Archipelago generally and Java specifically were gradually occupied by the Dutch. Since then the designs of those cities were fully controlled for the Dutch. However, there were some exception cases, such as

¹ What is meant by West Lombok is the former colony of Karangasem Kingdom in Bali (especially Cakranegara)

² "Planned Cities" are those designed base on the 'grand plan' concept as the result of political ambition. "Organic Cities" are those developed naturally without certain plans. Former capitals like Jogjakarta, Surakarta and Cakranegara (in Lombok) were initially designed as "planned cities"

³ Architect Henri Maclaine Pont once reconstructed the capital planning of Majapahit. See Pont (1925), *Madjapahit Posing tot reconstructie van het stadplan, negezocht op het terrein aan den hand van den middleeeuwschen dichter Prapanca*, in magazine **Djawa** 5(1925), no.4 pp. 157-199. Later, Pont (1924), *Beschouwingen over Madjapahit* in **Indische Bouwkundig Tijdschrift** 10 (1924) pp. 157-164. See also other articles.

⁴ Regarding the meaning and capital planning of these ancient kingdoms in relation to macrocosmos and microcosmos in South-east Asia in general and in Java in specific, see: Heine-Geldern, Robert (1972), *Conceptions of State and Kinship in Southeast Asia (Konsepsi Tentang Negara Dan Kedudukan Raja di Asia Tenggara)* translated by Deliar Noer, C.V. Rajawali, Jakarta

Jogja⁵ (1756) and Cakranegara⁶ (1740), which could become the last cities designed based on the principles of traditional city planning at that time.

Although the planning of kingdom capitals in Java from the Majapahit (14th century) to Jogjakarta (18th century) underwent regular development, it was found that there was a red line in the layout concept based on the abovementioned macrocosmic and microcosmic concepts⁷. These concepts were understandably applied in accordance with the topography and the socio-political and historical development of the local kingdom.

In general, the layout of the city planning and architecture in South-east Asia until the 18th century was based on the so-called "Form Follow Worldview"⁸. The traditional architecture in South-east Asia⁹ – especially those influenced by Hinduism and Buddhism until the 18th century – acquired the same red line in their basic concept of planning. Robert Heine Geldern (1972:2) said that the similarity was on the belief about the parallelism of the 'macrocosm' and 'microcosm', between human beings and the universe¹⁰. In real life, this concept was applied on the harmony between the kingdom and the universe. Harmony could only be achieved if the city planning in the kingdom was designed in such a way that followed the 'model' of the universe (macrocosmic) in its small version (microcosmic). Thus, harmony and balance between macrocosm and microcosm should be achieved to produce prosperity and social welfare. If this was not achieved, then chaos would have occurred. The effort to achieve harmony was the obligation of every person from the kingdom/government to each individual. This setting up needed guidelines and these were found in the cosmology (worldview) which was practiced by the whole people in the kingdom. They would then need a 'form giver' who understood the details of the cosmography¹¹ so that they could produce the planning as in line with the cosmography, which provided classification of planning based on the values practiced by the local people. This was very important for a kingdom which was centrally formed, as most kingdoms at that time, to achieve prosperity for its state.

Based on this thinking then, the capitals as the Magic Centre of the kingdom had to be arranged in such a way so that their physical shape reflected that of the 'macrocosm'¹². This was a sacred attempt, and consequently the result was a 'sacred space'. Outside of this planning method was understood as 'chaotic space' or a 'profane space'. This planning was applied gradually, which meant that it was stated with the planning of the region, cities, big buildings (kraton, temples, etc) to the housing complex. Therefore, to understand the meaning of the space planning and building planning of a city we need to understand how they classified the human activities, that is, which activities were classified as 'sacred' and which were 'profane'.

The gradual changes in the society will influence the city planning as well; however, the knowledge of the basic principles of ancient city planning becomes an important knowledge for future city planning.

⁵ Jogjakarta was built by Hamengku Buwono I, as the consequence of Giyanti Treaty in 1755

⁶ Cakranegara, ruled by the king of Karangasem, Bali, experienced its golden years in the reign of King Gusti Wayan Teguh from 1740 to 1775 in Lombok. Lombok was not occupied by the Dutch before Lombok War in November 1894.

⁷ See : Santoso, Suryadi Jo. (1981), *Dinamika Perkembangan Arsitektur di Jaman Prakolonial di P. Jawa* in magazine *Dimensi* no.5, 1981, pp. 34-36.

⁸ Traditional architecture in general was always influenced by the mindset and the lifestyle of the people at a certain period of time. The mindset was always influenced by their worldview about the world and the visible and invisible realities. That's why traditional architecture was said to adhere to "Form Follow Worldview"

⁹ Especially: Thailand, Burma, Laos, Cambodia, Java and Bali

¹⁰ According to Heine-Geldern (1972:2-3), this concept of harmony between macrocosmos and microcosmos was not the typical belief of the South-east Asia. It had occurred since the Babylonian period in 3,000 BC, as well as Hellenism in Europe, Roman empire and the middle ages. It flourished in China especially during Chou dynasty (1030-256 BC) and Han dynasty (206S BC-220 AD). It reached South-east Asia through India and China and then blended and integrate with the local religions.

¹¹ In Bali a 'form giver' is called Undagi, who has a high status in the society.

¹² Every building act was conducted with an understanding that the building to be built was a microcosmos, whose structure and shape imitated or copied that of the macrocosmos. The act of building itself was an activity which imitated that of the Almighty when the universe was created. So, setting up either a city, a kraton complex or any building, the act of building was a religious act (Eliade, 1959:33-35.)

Sacred Space and Profane Space¹³

Sacred space is non homogeneity within homogeneity. Its mere quality of being homogenous – different from its surroundings – that make it sacred. For religious man, this spatial non homogeneity finds expressions in the experience of an opposition between space that is sacred – the only real and reality existing space – and all other space, the formless expanse surrounding it. This idea of non homogeneity within homogeneity implies a boundary. Somewhere between the secular and the sacred one ends and one begins (Eliade, 1959).

In the mind of the religious traditional society (the religious man), their region was divided in accordance with their activities, which were sacred and which was profane. In the sacred space everything — the behavior of the inhabitants as well as the building structure -- was arranged in orderly; while in the profane space, everything was chaotic because it was not yet purified.

The traditional man (Eliade mentioned him as *man of all pre-modern societies*) always assumed that cosmos (the earth) was something 'sacred'¹⁴ because it was something well-arranged. On the other hand, outside the earth was 'chaos' and regarded as profane space (Eliade, 1959). When man would open a woods and change it into a settlement or farm, they have to ask permission with an apology ceremony for such alteration. Anthropologists and theologians have proved that traditional people always conducted certain religious rituals before they open a woods and change its function for settlement. It was meant as an 'apology' to or 'asking for permission' from the gods or guardians of the earth for such purpose¹⁵.

The man-controlled environment must reflect the cosmos (the well-arranged world), and this is the sacred one; while the un-arranged environment is the 'chaos' because it is profane. To simplify the planning of sacred space, the space then must have boundary. Physically, the boundary could be in the form of surrounding walls or fences. Thus, the surrounding walls or fences of the space planning of *kraton*, for example, functioned not only as a security element but also a boundary of the sacred space from the profane. The main gate, consequently, function as the 'transition' (threshold) from the sacred to the profane¹⁶.

¹³ In everyday life, profane is like commerce, technology, social economic. Religious-sacred is like religion, sacred architecture etc.

¹⁴ *Cosmos is the ordered world, and cosmology is the knowledge concerning the structure of cosmos. Cosmology and world view, though related, should not be used interchangeably. Cosmology refers to more apprehensible and appealing images and ideas about the universe. World view denotes a set of more general, less exact represented but generally believed ideas about life and world* (Eliade, 1959).

This is the difference between "Cosmology" and "World view"

¹⁵ Things like these can be found in the opening the woods which later become the capital of Jogjakarta (1755). Peter Carey even said that Tugu Monument (at the intersection following Malioboro Street) was set up as a replacement for the woods guardian because the woods was then changed into a city (see Carey, Peter (1984) *Jalan Maliabara ('Garland Bearing Street'); The Etymology And Historical Origins Of A Much Misunderstood Yogyakarta Street Name*, *Archipel* 27:51-63. 'Tugu' ("ceremonial lingga") was a tribute to the spiritual guardians of Jogjakarta, well known as *Kyai Jaga*.

Initially, he was the guardian of the Banyan tree which was swept off by Sultan Hamengkubuwono I to build Jogjakarta *kraton* (Carey, 1984:57). This tradition originated probably from a land-opening ritual from veda (vedis) culture in India which was then adopted by the Javanese. According to this ritual, cleaning up woods to build settlement was 'legally' approved when there was a replacement site for worshipping the guardian. This is a common custom when the 'ownership' of such place is transferred.

¹⁶ In a city scale, the 'sacred space' was sometimes realized in just a 'non-physical' boundary. For example, when there was an outbreak or epidemic over the people in the city and its surroundings, they conducted a ritual by displaying the kingdom sacred legacy from the *kraton* to the whole city. In Jogjakarta specifically during the 1932 epidemic, a procession to display 'Kanjeng Kyai Tunggal Wulung' (a sacred banner/ flag) was held on Jum'at Kliwon 13 Pasa, Je 1862 (Kliwon Friday 21-22 January 1932) around the streets of Jogjakarta. See R. Soedjana Tirtakoesoema in magazine *Djawa* (12:41-49). *De Ommegang met den Kandjeng Kjahi Toenggoel Woeloeng te Jogjakarta, Donderdag-Vrijdag 21/22 Januari 1932* (Djoemoeah-Kliwon 13 Pasa Dje 1862) for the map of the procession route.

Macrocosmos And Microcosmos

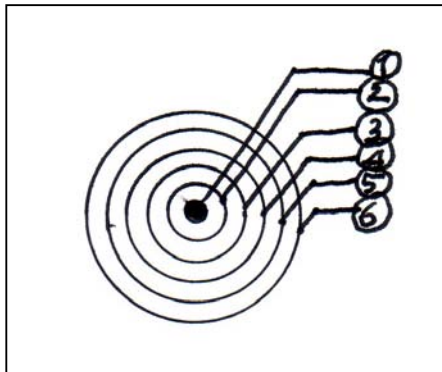
The image about the world (macrocosmos) partly influences the microcosmic arrangement which was realized in the setting of the region, the capital, the kraton complex and the general buildings around them. As Heine-Geldern (1972:4) stated, according to Brahmana doctrine, the image of the world (macrocosmos) or the universe consisted of:

“Jambudwipa, sebuah benua berbentuk lingkaran terletak di pusat, dikelilingi oleh tujuh buah samudra berbentuk cincin dan tujuh buah benua lain berbentuk cincin juga. Di luar samudra terakhir dari ketujuh samudra tadi, jagad itu ditutup oleh barisan pegunungan yang sangat besar. Di tengah-tengah jambudwipa (tengah-tengah jagad raya), berdirilah Gunung Meru, gunung kosmis yang diedari oleh matahari, bulan dan bintang-bintang. Di puncaknya terletak kota dewa-dewa yang dikelilingi oleh tempat tinggal dari delapan lokapala atau dewa-dewa penjaga jagad.”

According to Budhisme, the image of macrocosmos is a little bit different. It was said that,

“Gunung Meru menjadi pusat dari jagad raya. Gunung ini dikelilingi oleh tujuh barisan pegunungan. Masing-masing pegunungan ini dipisahkan oleh tujuh buah samudra yang berbentuk cincin. Di luar rantai pegunungan terakhir terletak lautan dan di dalam lautan ini dijumpai empat buah benua, masing-masing pada penjuru angin. Benua yang terletak di Selatan Gunung Meru adalah Jambudwipa, tempat tinggal umat manusia. Jagad raya itupun dikelilingi oleh sebuah dinding besar yang terdiri dari batu karang, disebut barisan cakrawala. Pada lereng Gunung Meru terletak swarga (surga) yang terendah, yaitu swarga dari keempat Raja Besar atau penjaga dunia. Pada puncaknya swarga kedua, yaitu swarga ketigapuluh tiga dewa serta Sudarsana, kota dewa-dewa, tempat indera bersemayam sebagai raja. Di atas Gunung Meru terdaat lapisan-lapisan lainnya dari kayangan” (biasanya ada duapuluh enam, termasuk lapisan-lapisan diatas Gunung Meru, tetapi jumlah ini kadang-kadang berbeda)

Different interpretation on the universe also took place in several regions in South-east Asia including Java and Bali ¹⁷. Despite minor differences, the core concept is like this: the ring-like areas which were centered to Mt Meru were actually the same.



The concept of regional planning of Javanese Kingdom

¹⁷ The image of the universe as the model of regional planning and the palace complex and building planning was also believed by the ancient Maya in the American continent. See Jennifer P. Mathews and James F. Garber (2004), *Models Of Cosmic Order: Physical Expression Of Sacred Space Among The Ancient Maya*, Ancient Mexcoamerica 15 (2004) pp. 49-59, Cambridge University Press, USA.

Notes :

1. **The Sultan, the Centre of Power**, is analogous to 'the inside' (*dalem*) of the Sultan and where the kingdom's sacred legacy was stored
2. **The boundary of Keraton walls**, where inside the royal compound for the Sultan's family, the assistants, and the guard soldiers is built
3. **"Nagara"** or the capital, where the head offices of administration and government and the compounds for the palace officials (*priyayi*), *Kepatihan* and the foreigners (the Dutch, the Chinese) are located
4. **"Narawita Dalem"**, farming lands under the direct authority of the Sultan, where all needs of the *kraton* dwellers are supplied from here (included here are the staple foods, vegetables, grass for the *kraton* horses, and others.
5. **"Naragung"**, where the apanage of the palace officials are located.
6. **"Mancanegara"**, which is controlled by the *Bupati*. The coastal areas are included as Mancanegara.

Center, Hierarchy, Axis, and Orientation

The traditional society in the South-east Asia in general and Java-Bali in specifics possessed two foundations. The first was the 'sacred-religious' foundation and the second was the 'profane-political'. On these foundations the kingdom capitals were built. Thus, the grand design would include the decision of which sacred-religious areas and which profane-political areas to be located.

The 'sacred' space must be separated from the 'profane' space. Inside the sacred space (microcosm) human beings could regularly organize their activities based on the cosmology¹⁸ of the inhabitants, and they would need the cosmography to make their decision. The effort to present this philosophy in their physical form was realized in the regional planning and the building planning following the physical elements: Center (Axis Mundi & Imago Mundi), Hierarchy, Axis and Orientation

Axis Mundi¹⁹ (The Center of the Universe)

In the perspective of the traditional society, the world was formed into three layers. The first was the World where we live, the second was the Upper World (Heaven), and the third was the Lower World, which was often figuratively understood as the dark world²⁰. *Axis Mundi* (very often drawn as a vertical line), was the centre of the world which connect the above three layers. In the physical realm, *Axis Mundi* is presented as the sole pillar (in the center), the trees (banyan trees)²¹, the intersection of the village center or sometimes the mountains of Meru²² (Mt.

¹⁸ From Free Online Dictionary, it was explained that:

Cosmology means:

1. The study of physical universe considered as the totality of phenomena in time and space
2. a. The astrophysical study of the history, structure, and constituent dynamic of the universe
b. A specific theory or model of this structure and these dynamic.

Cosmography means:

1. The study of visible universe that includes geography and astronomy
2. A general description or depiction of the world or universe

As a noun Cosmography can mean:

1. the science that maps the general feature of the universe, describes both heaven and earth (but without encroaching on geography or astronomy)
2. a representation of the earth or heaven. Representation- a creation that is a visual or tangible rendering of someone or something

¹⁹ *Axis Mundi* (Latin): *center of the world*, the cosmic pillar.

²⁰ These three divisions in their physical form are often symbolized as Head, Body and Leg of the building, or the mountain, the land and the sea in the built environment. In Bali there are three kinds of building to represent this threesome division: *Parahyangan*, *Palemahan* and *Pawongan*

²¹ The banyan trees in the middle of the park square (*alun-alun*) was also understood as the 'centre'

²² In South-east Asia in general and Java-Bali in specific, the kings were perceived as the Meru itself, especially during the periods of ancient kingdoms. Quoting Geldern (1982:15), it was said that the king was the Meru itself. His right eye represented the sun, the left eye the moon, the arms and legs the four directions of the wind (North-South, East-West). The gold-layered umbrella on his head represented the six

Semeru, Mt. Merapi, Mt. Agung, etc). Temples are also pictured as (man-made) mountains and understood as the center of the environment.

***Imago Mundi*²³ (The Image of the World).**

In the perspective of the traditional society, the world developed from the centre and dispersed into all directions. Consequently, when we wanted to build a new environment, we had to start it from the center²⁴, which later was developed into all wind directions (controlled). A village, then, should start, for example, from the intersection (as the centre), and then spread following the winds (north, south, east, and west). As a result, when a new environment is built, it must be a new construction of "*imago mundi*". It was understood that the cosmos above the ground being built can spell any attack from the evil world (demons) and its tendency of chaos. So, '*imago mundi*' (the image of the world) as a cosmic arrangement should be represented in each environment.

Hierarchy

Every government structure has hierarchy, so did the ancient kingdom society in Java and Bali with many different hierarchies. Some examples included the hierarchy of the public servants, which was chaired by a *patih*, hierarchy of palace workers, hierarchy of the intellectuals and writers, hierarchy of religion leaders, and many others. In each hierarchy, however, the king possessed the highest rank both in the sacred (religious) power and the profane (military and economic) power.

In architecture, the hierarchy was presented in the design of several forms. One example was the use of floor and walls as boundary. The higher the floor the higher the rank, whereas the surrounding walls were used to separate a region from other regions which belonged to different hierarchy. The concept of "hierarchical microcosm" was implemented in the design.

Axis and Orientation

Axis has three functions: as the orientation, the integrating element, and the boundary in classifying the hierarchy of space planning (based on the cosmography) in the 'sacred space'. This can be seen from the placement of which building to put on the left, on the right, in front of, behind, above and under other construction. Besides this, axis also functions as a guide in the design of building structure mass. For example, the axis can arrange or separate a room into two sections (*halving*), or four sections (*quartering*), and others. As mentioned by Bertling (1923), halving tended to be used to separate matters related the Upper World and the Human World (a vertical relation), while quartering to separate human beings in the world (a horizontal relation).

Axis can function also as the boundary or separator of sacred space and profane space. Axis is usually controlled by the wind direction, like North-South and East-West. The 'center' is the crossing of both axis. Everything in it should be arranged harmoniously and in balance based on the agreed cosmography. This balance did not emerge voluntarily, but rather, efforts should be geared up to keep the balance. Designing a "**dualistic microcosm**" (attempts to balance two opposing elements, such as, night-day, man-woman, left-right, etc) needs an axis. Dualistic microcosm can be understood as a way to create a harmony of the 'upper world' and the 'human world', which is the requirement of the human beings welfare on earth (Santoso, 1984).

The main function of the North-South axis in a town in Java is to connect the center of power, which was 'sacred' and in the South, and the administration and trade areas, which were 'profane' in the North.

layers of the lower sky. The sharp-pointed crown represented the summit of Mt. Meru, and the slippers he put on were the ground. This meant that the king was understood as similar to the axis of the universe (*Axis Mundi*). The title of the Sultan in Solo was "*Paku Buwono*" (the nail of the earth). See also *Nusa Jawa : Silang Budaya* vol. 3, written by Lombard, Denis (1996:60-71) in the chapter of *King as the Axis of the Earth*.

²³ *Imago Mundi* (Latin): the image of the world : *image, model, microcosm of the world*.

²⁴ Same thing with when we plan to build a tradisional Javanese house, for example, what we erect first was the main pillars (*soko guru*), then the *pananggap*, and finally the brim (*paningrat*)

A Case Study of Jogjakarta in Java and Cakranegara in West Lombok

The power system, which was mentioned as a "sacred magical"²⁵, had become the principle of the powers of ancient kingdoms in the remote Java and Bali-Lombok. This had influenced the design of the city plan and its architecture.

One instrument to show that power in the physical form was reflected in the space and building planning based on the cosmography and its designing principles²⁶. In those kingdoms in Java and Bali-Lombok the regulations were not merely instructed from the top to the bottom (from the king to the people). Rather, the process was agreed by involving the existing cultures of the people and integrating them into a cosmological system. This cosmographic concept was then the approved foundation to design the regions, space and building in the jurisdiction. Thus, the designing principles did not only deal with the shape of the building, but also involved other architectural dimensions, such as the relation between the building and its surrounding, modules, orientation and ornaments inside. All of these were possible to achieve when the cultural values inherent in the cosmologic system were supported by some groups or the people in the kingdom like what happened in the ancient kingdoms in Java and Bali Lombok.

Jogjakarta was built in 1755 by Sultan Hamengku Buwono I, while Cakranegara in 1740s during the golden years of the reign of King Gusti Wayan Teguh in 1740-1775 in Lombok. Both establishments are used as the case study.

Jogjakarta

The space planning which were related to the macrocosm and microcosm like Center, Hierarchy, Axis and Orientation were prioritized in the design of Jogjakarta by Sultan Hamengkubowono I. So was the classification of space planning based on Javanese cosmology which was divided into the five absolut components, four components which were combined into the fifth (*mocopat, kolomudheng, poncosudo*) The prototype was a rectangular world with a center (*papat kiblat limo pancer*) in the order of: South, West, North, East, Center. Days were also categorized as *Legi, Pahing, Pon, Wage, Kliwon*. So were colors. Every part had its own characteristics in accordance with its cosmography which was called "hasto broto"

As it has been mentioned before, the traditional society system in South-east Asia in general and Java-Bali-Lombok in specific had two main foundations, the sacred-religious and the political-profane. Both complement each other. The 'political-profane' was also the basic principle to decide the form and structure of a kingdom capital. One unit of settlement, which was called "*kampung*" was a very important matter in political-profane designing. Even many historians on South-east Asian cities agreed that *kampung* was the basic principle of planning a city.

In Jogjakarta, the city space planning was based on the political profane concept with "*magersari*"²⁷ as the most used method in town. Magersari kampongs include *Pakualaman, Gondomanan, Suryodiningratan, Prawirotaman, Tirtodipuran, Mangkuyudan, Sosrowijayan, Jogokarsan, Pringgokusuman, Bausasran, Purwanggan*, etc. Magersari method with a system of *kawula-gusti* "follower-nobleman" (the nobleman's estate surrounded by the followers' houses) was evidently common during the Majapahit era²⁸. This political-profane concept was directed to overcome security matters which were related to the structure of a traditional society.

²⁵ More detailed explanation about sacred-magical power or the "god king" especially those took place in South-east Asia, which resulted in the physical design can be seen in Geldern, Robert Heine (1972), *Konsepsi Tentang Negara Dan Kedudukan Raja di Asia Tenggara (Conceptions of State and Kinship in Southeast Asia)* translated by Deliar Noer, C.V. Rajawali, Jakarta.

²⁶ This act is necessary in building an integrating language, or similar 'polite' expressions between the authority and the people.

²⁷ Magersari method is building a settlement surrounding a center of power which represents the power of the *keratin* of that region. In the physical state, it is in the form of some units of settlement of the *kawula* (followers) which surround the *Ghrya Sang Pangeran* "the House of the Prince" (the nobleman worshipped by those followers) In Jogja, some areas which do not follow *magersari* are *Tukangan, Godean, Jagalan*. Usually it is because these areas are influenced by certain professions

²⁸ See Pigeaud, Theodore G. Th (1960-3), *Java in The 14 th century: A study in Cultural History*, The Hague, Martinus Nijhoff. Vol. III.

One building which was understood to violate the city planning was Vredenburg Fort, the Dutch housing and the railways crossing Malioboro Street. It was difficult to avoid since the establishment of Jogjakarta as the influence of the Dutch colonials was very great²⁹.

Cakranegara in West Lombok

The design of Cakranegara basically had the same principles with that of the capitals of ancient Javanese kingdoms. These originated from the book of *Negara Kertagama*³⁰, and thus, the foundation concepts of 'sacred-religious' and 'political-profane' were also implemented in the designing of Cakranegara. The design patterns of sacred-religious such as macrocosm and microcosm, (*Axis Mundi* & *Imago Mundi*), Hierarchy, Orientation and North-South Axis following 'hierarchical microcosm' and 'dualistic microcosm' discussed earlier in this paper were applied in this capital city planning. What is interesting is how the 'political-profane' concept was applied on this city.

Cakranegara consisted of 33 *karang* (the 'kampong' in Lombok). The design of human settlements based on the rank of the inhabitants (in accordance with the caste) was not found in Jogjakarta. The width of the street and the size of the land reflected the rank of the inhabitants. This means that the housing for the noble people (Knightman's caste) was very much different from those of traders (Weisya's caste). The name '*karang*' was partly adopted from the villages in Karang Asem – Bali, because Cakranegara (1740s) at that time was controlled by Karang Asem kingdom. It was arranged that way so that people from Karang Asem Bali would stay in the kampong with the same name in Cakranegara. It can be concluded that there was a colonialization element in the capital design. In every religious day, the 'head of the kampong' should be present in the religious rituals held in Meru Temple (located in the centre across Mayura Temple), which was the royal temple. It was located near the cross-section of North-South and East-West axis. By so doing, the authority could quickly check if there was any rebellious leader. So, the design based on 'sacred-religious' was combined with that of 'political-profane' to create a very compact city planning³¹.

While the application of macrocosm and microcosm was jeopardized in Jogja due to the public facilities like Vredenburg Fort, railways, the office of the Dutch governor and other common facilities which were placed in front of the keraton, in Cakranegara with the strong Hinduism and the caste system until the of the 19th century there was no interfere of the Dutch at all.

²⁹ About the history of Jogjakarta, see Ricklefs, Merle C. (1974), *Jogjakarta Under Sultan Mangkubumi 1749-1792: A History of Division of Java*, London.

³⁰ *Negara Kertagama* was an ancient manuscript from Majapahit Kingdom (14th century). Written on *lontar* leaves, it told the history of the golden era of Majapahit. It was discovered on 18 November 1894 at Mayura Temple, Cakranegara. A linguist, J.L.A. Brandes, was the first scholar to recognize it. In 1960, the manuscript was translated and analyzed by Th.G. Pigeaud, a scholar of Javanese language and history in 5 volumes (*Java in the 14th Century*)(1960-1963). From this book we can learn the history and prosperity of Majapahit. It is now kept in Museum of Leiden. Not until 1973, when Queen Juliana visited Indonesia, was the manuscript returned to Indonesia through President Soeharto at that time. See J.L.A Brandes (1902) *Negarakrtagama; Lofdicht van Prapantja op koning Radjasanagara, Hayam Wuruk, van Madjapahit naar het eenige daarvan bekende handschrift, aangetroffen in de puri te Tjakranegara op Lombok*. Or, the latest book of S.O. Robson (1995), *Desawarnana (Nagarakrtagama)*.

This book (compiled from the *lontar* trees), written by Empu Prapanca, was brought by a Javanese Hinduist from Kediri kingdom, after the fall of Majapahit, to Lombok. Lombok Island was regarded as the last fort of Hinduism to prevent the coming of Islam in the Archipelago. This book was later used as the guide to build government and also defense system in Cakranegara. This fact was explained by Agung Biarsah from Pamotan Palace, Cakranegara, east of Mayura Park, Cakranegara (read Kompas, Friday, 28 October 2005, entitled *Menelusur Sisa Majapahit di Lombok* 'Tracking the Remnants of Majapahit in Lombok')

³¹ Further explanation about Cakranegara can be read in Funo, Shuji (2002), *The Spatial Formation in Cakranegara, Lombok*, in *The Indonesian Town Revisited*, Peter J.M. Nas (Ed), Lit Verlag, Institut Of Southeast Asian Studies, Singapore, pp. 201-229.

Summary for Discussion

The capital city Cakranegara morphologically was more solid than Jogjakarta. The people of Cakranegara in the 18th century adhered to Balinese Hinduism with the caste system³². This had affected the design of the city, which was more controlled from the centre (Mayura Temple), where the king ruled. Jogjakarta, on the contrary, during its early settlement (during the reign of Hamengkubowono I), had adhered to Javanese-Islam (shown from the Agung Mosque on the west of *Alun-alun Lor*). However, the design of the capital city Jogjakarta was still strongly influenced by the ancient Javanese-Hindhuist kingdoms. The residence of the Resident, as the colonial government authority, was placed across Vredenburg Fort. It can be concluded that there was an axis of governmental and colonial authority which was very strategic. It can also be said that the city planning was used to blockage the authority of the Javanese king, and thus, city planning was used by the colonial government as a political tool. In the early 20th century, these blockages were even made perfect to jeopardize the sacred orientation of the kraton to Mt. Merapi by building a number of colonial buildings along the ceremonial axis like *Nillmij*, *Ned. Handel Mij*, *Escomto*, the Central Post Office and *Javasche Bank*.

In an agricultural society (especially until the 18th century), the territorial boundary was originally a boundary between humans' life environment and wilderness which was not yet influenced by civilization (sacred v profane). After the social relation aspect between those settlements developed, this aspect took part in determining the boundary of a territorial unit. Basically, this social aspect became the most important one in the society and later developed into the so-called 'political-profane'.

In the later development of cities in Java, the urban society acquired a heterogenous cultural religious structure. The social relations between those territorial units were not able to be organized based on their religious, cosmic principles. Rather, they were set up to form an administrative structure (tended more to the 'political profane' than the 'sacred-religious'). However, it did not mean that the territorial unit in a city had lost its cultural, religious aspect. In the modern era when "*living in a sacralized cosmos*" has changed into "*living in a desacralized cosmos*", individual rights of the people tend to be put forward.

The coming of new values as the result of colonialization in South-east Asia has brought many changes in the social life. One clear example is the transaction relation theory in daily trade which is based on market relation theory. In the market context, every individuals are rivals and competitors to each other. Most often the competition is not a fair one. Therefore, all transactions are accepted and approved only in paper which states the contract, is written word by word, and is guaranteed by the national government which holds the power to control the legal enforcement tool. As the result, people tend to be enemies to one another. Family, regional, school relationships, and friendship may be seen as irrelevant. Siblings send each other to courts, and friends are trapped in lengthy court deals. What is important now is one's self interest, and it should be won through a harsh competition in the market.

Values like these have created a clear separating line between the 'private' space and the 'public' space in architecture, especially in the urban area. It does not mean that there were no private and public spaces in the past; rather, these new values have become the priority and defeated the issue of 'sacred' and 'profane' spaces from the past. The building line (both for the building and the fence), for example, besides functioning as a regulator in 'urban fabric', also functions to separate the private rights and the public rights of a building. Currently, the arrangement of 'sacred' and 'profane' spaces is more emphasized in a religious building complex itself.

The decree of Sultan Hamengkubowono IX from Jogja to open the kraton walls for public (after the Indonesia's independence) was a surprising decision. This indicates that the 'sacred' space inside the kraton walls, which for centuries were not meant for the general public, is now changed. Automatically, the kraton walls did no longer function to separate the 'sacred' and the 'profane', although it does not mean that the public can venture all corners of the kraton. The privacy boundary of the Sultan should still be respected. Therefore, the room division inside the kraton complex is now based on the 'public space' and the 'private space' of the Sultan.

³² Lombok kingdom in the 18th century was controlled by Karang Asem kingdom in Bali, and thus, the official religion at that time was Balinese-Hinduism. Further reading on Lombok can be found in Kraan, Alfons van der (1980), *Lombok, Conquest, Colonization and Underdevelopment, 1870-1940*, Singapore, H.E.A.

The separation of 'sacred' and 'profane' areas is implemented in a different levels. This division is started from the big element, such as the region, to the smallest one, such as the building details. Setting a boundary in a region means to provide a surrounding walls or fences around it with a purpose to differentiate the unorganized outside world. Heine-Geldern (1982:4) analyzed that in its progress to a modern era in South-east Asia and Java-Bali, the thoughts on the space planning of the traditional architecture have become vague and vague. This has been caused by the emergence of Islam and specifically the westernization in this area.

Structurally and geographically, there are three kinds of environments in Java. These are, first, the culture of common people in the remote areas which is rich in arcaic elements, second, the culture of monarchist kraton which is very thick in Jogjakarta, and third, the maritime and heterogenous culture of those living along the coastal areas. In Cakranegara, however, all of these are only memories, because the kraton was demolished by the Dutch when they occupied the region at the end of the 19th century.

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