Learning from the non-technological foundation of a smart city: philosophy and its representations in the formation of urban attributes of Kota Cakaranegara (Lombok)

N K A Siwalatri

1 Architecture Department, Engineering Faculty of Udayana University

Abstract. Cakranegara is one of the cities which located in west Lombok was planned city and was developed since kingdom of Karangasem Bali controlled the island of Lombok in the 16th century. Cakranegara is one of the cities that has a very regular grid pattern and applies the Hindu philosophy in its design. How the Hindu philosophy is represented in the spatial character of the city of Cakranegara is the goals of the study. This research is a qualitative study and data collected by observing, interviewing and conducting empirical analysis on the map of the Cakranegara. From this study, it was concluded that the Hindu philosophy is represented in the spatial pattern of Cakranegara by applying the binary opposition concept of luan-teben, kaja-kelod, periphery-centre, upper-lower, and east-west orientation to create a spatial hierarchy for the city. Forming elements of the city are the palace/government, temples, markets, residential blocks and community housing, road networks, parks, and cemeteries. The layout of the elements forming the city applies the concept of the kuta negara to create a cosmological balance. The application of Hindu philosophy in urban spatial planning can be an alternative approach to urban design in recent time.

1. Introduction
Cities in Indonesia generally develop naturally in line with the development of their communities, but there are also cities that are planned in advance so that urban spatial planning is very organized [1]. Some cities in Indonesia generally thrive from royal cities that have developed before. One of the Hindu royal cities on the island of Lombok is the city of Cakranegara which is royal city after the island was ruled by the Karangasem kingdom. Cakranegara is one of the old cities planned beforehand and forms a regular grid pattern. Cakranegara is a city planned by applying Hindu philosophy [1]; [2][3]. This study aims to determine the representation and application of Hindu philosophy in the city of Cakranegara Lombok.

Cakranegara is currently one of the districts in Mataram City. Previously Cakranegara was the centre of government and economic and trade centre of West Lombok Regency before the government centre was moved to Mataram in 1978 (source: Government Regulation No. 21 of 1978), but until now Cakranegara is still one of the economic centre in the city of Mataram, this case visible from various shopping centers and markets that develop along the Pejanggik-Selaparang road, while the city of Mataram is more inclined to be the centre of the Regional Government of the City of Mataram

2. Historical Background
The formation of Cakranegara is inseparable from the development of the Karangasem kingdom in Bali and in 1692 the Karangasem Kingdom was able to rule Lombok [4] (Cokorda Oka Interview,
The ability of the Karangasem Kingdom to dominate Lombok Karangsem is due to several things, among others, the waning power of the Gelgel kingdom in Bali, so that the kingdom that was once conquered by the Gelgel kingdom broke away from the power of the Gelgel kingdom, including the Karangasem Kingdom. The dynamics of power development in the Karangasem Kingdom in Lombok was caused by several reasons, namely seeing an opportunity to expand power and the conditions that made the governor of the Selaparang I Gusti Banjar Getas kingdom uncomfortable and asked for help from the Karangasem Kingdom to fight the Selaparang kingdom. Representative sent to conquer the kingdom in Lombok is I Gusti Ketut Karangasem who is a descendant of the regent I Gusti Batan Jeruk to help Patih I Gusti Banjar Getas to conquer the Selaparang Kingdom. After the Karangasem kingdom ruled Lombok, the dynamics of power struggles between the ruling kings in Lombok also colored the development of the Hindu kingdom in Lombok. From some writings states that the city of Cakranegara began to develop in the 17th century until the mid-18th century before the Dutch began to intervene in Bali.

In line with the development of the power of the Karangasem kingdom on the island of Lombok, it also brought along royal followers who were the people of Karangasem. The arrival of the Karangasem community to Lombok Island also brought the traditions, culture and architecture of Bali to Lombok which influenced the architecture and spatial structure of urban and residential areas. The influence of Balinese culture is very much felt in the Cakranegara and Mataram areas because many temples can be found and places of worship are very similar to the names of villages in Bali, especially at Karangasem.

3. Spatial structure in Hindu philosophy

The majority of people living in Cakranegara are Hindu and are followers of the Karangasem kingdom who succeeded in mastering the island of Lombok. To understand Hindu philosophy in spatial planning in this region, Hindu philosophy in Bali is used as a reference. Hinduism is the oldest religion in the world and develops organically with the surrounding nature. Before the 11th century Hinduism in Bali consisted of many sects and by Mpu Kuturan was later simplified to become Hinduism by uniting a place of worship at Kahyangan Tiga Temple as a symbol of Brahma, Vishnu and Shiva.

The essence of Hindu philosophy emphasizes maintaining the balance of the cosmos/cosmology. Maintaining cosmological balance is a way of view of the Hindu community towards the environment, maintaining a balance with nature can be interpreted as "partnership with nature". Maintaining the balance of the cosmos has an understanding of how the human world can be harmonized with the vast universe. Maintaining the balance of the cosmos is revealed to be a variety of concepts that can be applied in regional planning.

3.1. Cosmology of Hinduism

Cosmology is the mythological knowledge of the universe, the life cycle and evolution of all beings in this long time. [5][6]. The universe or universe is the macrocosms and the kingdom or other built environment with all its contents is a replica of the universe. Maintaining cosmic balance must be done by humans, one way is to create a hierarchy by drawing an imaginary line north-south / kaja-kelod and east-west direction which creates four cardinal directions. According to the Balinese the hierarchy is an order to regulate all layout and human activities in a built-up basin. The four directions evolved into eight cardinal directions (dewata nawa sanga) which were given values as symbols of Gods or forces that maintain the balance of the world. Imaginary lines are also drawn vertically to sort out the three layers of world / or referred to as Tri Loka namely swah loka as the world of the Gods; bwah loka is human world and bhur loka as the world of deites. The eight cardinal directions and these three layers produce the number eleven which is often used as the highest level of a hierarchy.

The meeting of the two axes of kaja-kelod and east west forms the cathus patha or the pempatan agung/crossroad as the center of the city and the center of orientation of the area. Spaces formed by these two axes have certain hierarchies or have certain sacred values. According to Putra [7], the
position of the king's castle which has good grades is in corner of *kaja kangin* / northeast and in the southwest corner, and good and bad grades in the west corner, bad grades in the southeast corner (figure 3).

3.2. The concept of Kutha negara

During the Hindu kingdom in Indonesia, the king as the highest leader was considered to have a special connection with the god in Hindu beliefs. King is considered to have the nature of a deity so that the concept of *dewaraja* [8] appears. In Hindu belief, the universe is round and concentrically arranged from the center outwards (Soemardjan, 1991 in [9]. Microcosm is a replica of this universe and the palace or castle as the residence of the king becomes the center. Referring to the spatial layout of the Yogyakarta palace in applying the cosmic balance, the position of the palace becomes the center of the area surrounded by other functional components to maintain the central point of the palace / *kuthanegara* (figure 2).

![Figure 1: Kuthanegara concept according to Yogyakarta Palace (source: Wardani, 2011)](image1)

![Figure 2: Concept of catus patha and spatial hierarchy in the city center (Source: Putra, 2005)](image2)

The spatial concept which refers to the central and peripheral patterns can be found in the rung inside the castles in Bali. The area inside the castle usually consists of several mandalas / zones or saren and the center is the *saren ageng* / *saren gede*. *Saren ageng* / *saren gede* is a place where the ruling king lives or sleeps and is surrounded by other spaces such as food stands, *semanggen*, great administration and so on. Nowadays, because the political system has changed, the descendants of the kings have rarely been officially crowned kings and *saren ageng* no one dared to occupy them.

**Article I. 3.3. Binary Opposition**

In ancient society often found the concept of opposing but at the same time complementary / binary opposition. In Hindu society in Bali the concept of binary opposition is known as *Rwa-bhineda* which is two different but one. The concept of binary opposition is often found in various societies in Asia such as *yin* and *yang* in China. *Rwa bhineda* are two contradictory things, but become one unit and complementary. The concept of *rwa binedha* can create categorization that has the same position as black and white, noetic scale, male, but can also create hierarchies such as sacral profane, upstream-lowstream, positive negative, right-left, etc. But the concept of *rwa bhineda* actually has three components, namely in-between component or in-between, the neutral point, or in its appearance like a chessboard fabric at the meeting of black and white, there will be gray.

These three concepts are the viewpoints of the people and how they place themselves in a built environment and are carried out to create hierarchy, because in Balinese society hierarchy is the order and hierarchy is obtained by implementing and applying a value system [10]. Hierarchy of space is needed to determine the layout of functions according to their functions. Hirarkhi is made not to dichotomize good and bad, high and low, *luan-teben*, but emphasizes the concept of fit and proper.
4. Research Method
This study uses a visual observation approach to understand the spatial characteristics of the city of Cakranegara. Visual observation is done through direct observation of the spatial characteristics of the city of Cakranegara, studying and understanding city maps and through in-depth interviews with resource persons who are considered to have a deep understanding of the spatial characteristics of the city of Cakranegara. All data collected is analyzed and interpreted by discussing it with spatial rules / norms derived from Hindu philosophies. From the results of the discussion obtained an overview of how Hindu philosophy is represented through the arrangement and layout of functions in the Cakranegara city area and understanding the considerations underlying these rules applied.

The analysis was carried out at two levels, namely at the regional level how Hindu philosophies are represented and at the settlement / karang and dwelling levels. This analysis was conducted to find out how are of the spatial character of Cakranegara with the application of Hindu philosophy at both levels.

5. Representation of Hindu Philosophy in the Cakranegara
5.1. Spatial Characteristics of Cakranegara City
Cakranegara City is one of the old cities in Indonesia which is well planned and until now the spatial character of the area has not changed much. Research on the patterns and layout of Cakranegara city has been widely carried out and the opinion of those that Cakranegara city was designed based on Hindu religious philosophy [2][11][12]. However, in this article, we still see the spatial pattern of the city of Cakranegara from the perspective of the philosophy of Hinduism in Bali, and have not shown much difference or the influence of local local conditions that make the difference.

From observations made in the city of Cakranegara, macro-level determination of the space hierarchy is done by determining the central point of the initial expansion which is the meeting of Jalan Pejanggik in the east west direction and the name of Sultan Hasanudin street - AA Gede Ngurah in the north south direction. Determination of the central point is needed to determine the city center that functions as the economic, social and cultural center of society. The meeting of the two axes is to determine the position of the castle in the northeast corner which is the main hierarchy in the downtown area. Next determine the layout of the market, the square and wantilan. From Fitriya's research in the northwest corner (Javanese Kampong) and southwest (Karang Sekambang) in 1700 it was empty area / green space and it was possible that one of them was planned for the town square. At present according to Putra [7] the location of the castle that has good / main value is in the northeast corner / kaja kangin and in the southwest corner (figure 2).

![Figure 3](image)

**Figure 3.** The concept of *Kuthanegara* in the city of Cakranegara

The layout of the castle, market, Pura Meru and the square is the center of the city of Cakranegara and surrounded by settlements and public housing is the application of the concept of *kuthanegara* ie the castle/palace of the king into the center of the city becomes the core or center of government surrounded by settlements of the king's subordinates/state and foreign areas that are still under the
authority of the king/castle. The concept of Kuthanegara and the surrounding regions is a representation of the concept of Hindu cosmology, which is to maintain the balance of macro cosmos/the universe and micro cosmos [9]. At the height of its glory Puri Cakranegara controlled almost all of Lombok. Determination of the great intersection as the city center to determine the layout of the Castle and public facilities needed for economic activities such as markets, social cultural activities and places of worship.

According to Hindu philosophy the layout of the castle as a representation of power is in the corner of Kaja-kangin / northeast or southwest because it has good meaning. The layout of functions that are regulated within the great intersection area is only the castle, while the market, open space and bale banjar are not determined exactly. Currently in the area of the castle has changed into shops and trade, while the castle and the royal family moved to the east of the Taman Mayura in Karang Pemotan. , Taman Mayura and Pura Meru, which were built in 1740 while in the northwest and southwest corner are green open space and are now home to the Javanese village and Karang Sekambang[2]. Pura Meru was built in 1740 to express the King's legitimation at that time and became a binding element of Cakranegara society. Puri Meru when seen by its visual characteristics and spatial layout is a Royal Temple and not the Kahyangan Tiga as is common in Bali.

The center of Cakranegara is represented by the layout of the king's castle / palace, Taman Mayura as a royal park, market and Green open space. The city center that functions as the center of government, the center of the economy and the center of community orientation becomes the center of the microcosm which is a replica of the universe. The city center is surrounded by community settlements which are followers of the ruling king and the majority comes from Karangasem. The role of these settlements is as a layer of defense and representation of the power of the king. The second layer or in the concept of Kuthanegara called the state can be clearly read its borders, namely in the west is Pura Dalem Karang Jangkong, river in the north, Rahwana road in the east and the Pertanian road in the south. The second / state layer can be read because the spatial pattern is very regular and follows the established residential spatial rules. While the third layer or called the negaraagung and mancanegara is the outermost layer of the power of the king of Cakranegara which covers the entire island of Lombok [13].

Taman Mayura which is a royal park located eastside of Cakranegara castle also applies the concept of center and periphery. Taman Mayura has a bale/building in the middle of the pond or called the floating bale. This building is located in the middle and is the focal point of the whole park. The building is surrounded by ponds and fountains that flow from the river located in the north of the city. At present this building is only a pillar of the building. Taman Mayura may be the inspiration of King Karangasem in Bali to build a park similar to Taman Mayura, the Taman Ujung park which was built in 1901 and the Tirta Gangga garden which was built in 1946.

Figures 4 :a, b, : Bale kambang di Taman Mayura;and the current castle of recent king of Cakranegara at Karang Pemotan
The characteristics of the city of Cakranegara are strongly influenced by the regulation of the road network and the organization of community settlements. Roads as an accessibility network in the city of Cakranegara have levels based on road width [11]. The classification of roads as links and accessibility is arranged according to the main road is Pejanggik road which becomes the east west axis and is the main street of the city with a width of 45 meters. The consideration of putting the main axis east west is due to economic considerations because this road connects the port city of Ampenan to central Lombok. Before the sea port was moved to Sheet, Ampenan was the largest port so that the east-west axis was the economic route for the people of Lombok. Hasanudin Street and AA agung Ngurah road are north-south axis roads with a width of 36 meters and a neighborhood road with 18 meters and nine meters width. With the arrangement of the width of the road formed a spatial pattern of the city in the form of a very neat chessboard pattern and a great intersection that became the center of government and the economic center of the city of Cakranegara. Hadinoto identified four road classes, namely the marga sanga east west with a width of 45 meters, the Marga sanga north south with a width of 36 meters, marga dasa with 18 meters wide as collector road and environment street call marga with 9 meters wide.

The width of the road in Lontar Asta Bhumi is determined based on the needs of community activities. As a farmer community, the activity to bring crops is the main consideration, so that the bees walk at least as wide as "sanan" / rice bearer. In addition, another consideration is during the ceremonial ceremony where the road is used to carry dead body containers / bades to the cemetery, so the width of the "sanan" bearer of the bade is also a consideration. This is in accordance with the consideration of the Pejanggik road being the widest road, because it is widely used to carry out a
procession of large ceremonies, for example the ceremony of taking the king to Karang jangkong cemetery requires a very wide space to parade the *bade*

The application of a grid pattern in the Cakranegara area with an orderly road system creates a spatial character that is easily understood and enjoyed. The regional planning carried out in the 17th century by implementing a road system with road widths ranging between 45 meters and 36 meters for main roads is a brilliant idea because it has a far-reaching vision, because the road system can still accommodate today's modern transportation systems. The application of a regular grid pattern makes accessibility to various points of interest very easy even though currently there are many one-way road systems implemented, accessibility to various destinations can be achieved easily.

5.2 Spatial Concept of Settlement at Cakranegara

The control of the Salaparang Kingdom by Karangasem kingdom by I Gusti Ketut Karangasem brought many of his troops and then settled in Lombok. Mastery of Selaparang Castle certainly also brought the influence of Balinese culture and Hinduism to the island of Lombok. The settlements in Cakranegara City consist of housing blocks called *Karang*. *Karang* are group territories based on kinship relations (interview: Cokorda Oka, 2020). The karang consist of organized residential groups. There are various names of karangs that represent the names of clan groups. According to Hadinoto, the smallest housing unit is called *marga* which consists of 20 residential plots. While the combination of two *margas* is called *kriang* and combine of four *kriangs* are called *Karang*. The word *karang* may be taken from the definition of land, space or sites and it is possible also take from the fragment of the word Karangasem as a representation of the power of Karangasem kingdom in Lombok.

*Karang* is a social organization based on kinship. Each karang generally consists of 80 treads of houses of similar size, but the number of plots depends on the number of group members who live there, but all of them are multiples of 20 as the smallest module. The street that combine plots of houses in one module is 9 meters wide and lead to the main road with 18 meters wide and this road will meet the main road with a higher level [12]. With this arrangement, a regular and neat chess board housing pattern is formed. The naming of each *karang* is the identity of the community groups living in the area, such as the *Karang* Batuaya housing group of the Batu Aya kinship group or the Karang Jeruk Manis, which is the *soroh* of Jeruk Manis group.

![Figure 7: arrangement of residential sites and settlement layout of Karang (source: Hadinoto, 1999)](image1)

![Figure 8: Temple of the community/pura pemakaan (source: Mulyadi 2015)](image2)
The number of sites of houses in each karang ranges from 40 to 80 units, depending on the number of families in the reef. Site size is 24 meters x 26 meters. According to the Asta Kosala Kosali manuscript, the size of the site as above categories a large size because it is categorized in size of the Lembu / gajah, which is for the Brahmin and Knight groups. the Singha house is 13 fathoms long and 12 fathoms wide (16). One fathom is the length of the tip of the middle human finger and left and right when stretched and added a shake / a musti (15). Assuming the average length of the human fathom is 1.70 meters, the footprint of the tall house in Cakranegara is in the Lembu/Gajah category. The possibility of this measure was chosen because the people who live are followers of the king or the knight community in the national chess order, another possibility is the availability of sufficient land so that they can choose the size that best suits for their position in the community

Karangs are a territorial unit of a community group bound by the imposition of a temple. A Karang has a Bale Banjar and a Pura Pemaksan/worship of the clan, and also called a Banjar Temple. When analogous to traditional villages in Bali, every traditional village in Bali has three temples call Kahyangan Tiga and graves. Villagers who have the right to use the grave are members of the villages, other members of the village are not allowed to use it. In the Cakranegara city area there are several graves, such as the Karang Jangkong grave, graves in Getap and Karang Medaeng. The community may choose the closest grave to carry out the ceremonial processes of the abolition because there are no clear restrictions on the use of the grave through good communication, all can be resolved properly.

In Bali community organizations that have definitive territorial areas are known as Desa adat. Each traditional village has a clear territory / desa pakraman, kramadesa, place of worship / Kahyangan Tiga, and graves. All community activities are organized according to awig-awig that has been mutually agreed upon. The members of traditional villages in Bali consist of several kinship groups / clans and Kahyangan Tiga Temple to unite all members of the community groups in the village. The people in Cakranegara are members of one Karang and each karang has a clear territory and is a group based on kinship and each karang has a place of worship in the form of Pura Pemaksan / Pura Banjar and Bale Banjar as a place to gather and consult. (Interview: Cokorda Oka, 2020). Banjar Temple / Pura Pemaksan is usually located in northeast side of Karang (figure 7) and as a binding element for karang members. Some articles state that the city of Cakranegara has Kahyangan Tiga, but from field observations it is found that what is owned by the city of Cakranegara is the Grave and Dalem Karang Jangkong Temple located to the west of the city while Pura Puseh Temple and Pura Desa Temple are not binding. Pura Meru temple which was built by the Cakranegara kingdom, and its functions as a royal temple, although many claim that the Pura Meru is a binding symbol of Hindu society in Cakranegara, but the visual character of Pura Meru represents the legitimacy of the King's power at that time. The position of the Karang is similar to the position of the Banjar in a traditional village in Bali, but one karang with another does not have the obligatory bonds like the banjar in a traditional village in Bali, this may be caused because each karang is a community group that is bound based on kinship or soroh relationship so that the form of the bond is sufficient to be a strong bond and no other binding component is needed.

The position of settlements located around the city center also represents the city's defense system. The castle and market are located in the center of the city and surrounded by housing groups of people aiming to protect the central government and provide support to the king's power. The pattern of development of the city of Cakranegara is more inclined towards the east west because it is influenced by the attractiveness of Ampenan as a port city in the west and important places of worship (Pura Lingsar, Narmada and Suranadi) in the east. Whereas in the north it was blocked by the Ancar river which might not have been able to be crossed at that time so that development in the north was hampered. While towards the south the majority are inhabited by local people / Sasak, but in the southern part of the city of Cakranegara there are the villages of Pagutan and Pegesangan which are inhabited by many Balinese people. In the Southwest there is the Gunung Pingsong Temple which is the first place I Gusti Ketut Karangsem troops rested after landing the first time in Padang Reak [13].

The regularity of karang spatial patterns can be created because the rules for determining the size of the site and the width of the road are determined and agreed upon together. The order occurred
because the karang which was a community group settlement was a follower of the king of Cakranegara. This order also represented the strong legitimacy of the king to the followers who accompanied him.

5.3 The Spatial concept of the community’s house

The site and road layout configuration in the Cakranegara area has certain rules that all houses must face west or east, not allowed to face north or south even though the site is located on a corner of the road that has the opportunity to place the entrance on the north or south side. With this provision, all entrances to the dwelling site are located on the west or east side of the road. This norm was chosen for the possibility of uniformity and ease of application of the hierarchy of space within the site. This arrangement is an implementation of Hindu philosophy, namely the arrangement of the hierarchy of the utama, madya and nista spaces. Mulyadi in his article described that the spatial layout of the Hindu community in Cakranegara uses the space hierarchy of the sanga mandala, but is not implemented fully. The concept of spatial hierarchy that is still applied to dwellings in Cakranegara is the location of the house hold shrine/sanggah pemerajan which still remains in the corner of the kaja kangin / northeast / utamining utama and the position of the entrance in the nista zone. While the layout of the building / bale / other rooms are adjusted to the needs of the occupants. The location of the kitchen and penunggun karang shrine is located in a different zone when viewed from the rules of the layout of the function of space in a traditional Balinese house. The kitchen in a traditional Balinese house is usually placed near the entrance and in the nista zone, because the Balinese have a belief that the kitchen is a symbol of fire / God of Brahma who has the ability to melt down the negative energy of someone who will enter the house. The procedure to entering a traditional house in Bali is that after going through the entrance you have to pass through the kitchen and head to natah as the center of orientation and then head to the designated room. The houses that located on the west side of the road then the entrance is located on the east side and due to the procedure to enter the house must pass through the kitchen, then behind the kitchen there is usually a circulation path so that someone who enters the house on the west side still must enter from the noose / southeast zone and must pass the kitchen. With this configuration, the sacral room becomes the main zone and the furthest place to maintain the sanctity of the sacred room.

6. Liveability of Cakranegara City

The Cakaregara area was chosen to be the capital of the kingdom at that time because of the character of the flat area, fertile land and a large river, namely the Ancar River which crosses the area. With these geographical conditions, the authorities at that time could plan a compact city equipped with an orderly road network system in accordance with a predetermined hierarchy. The city of Cakranegara was intended for followers of the king of Karangasem who were able to control the island of Lombok around the 17th century. The area of each house on the karang is about 500 m2, with this area, the community has the opportunity to freely arrange the house. This is a representation of the welfare of the people during the reign of Puri Karangasem, because apart from being given the land of the followers of the Karangasem king, they were also given cultivated land in the form of rice fields and fields to ensure their life. It seen from the spatial character and economic conditions of the community today, the liveability of the city of Cakranegara is very good and the community lives their life comfortably and regularly. City liveability is as “the sum of all things that make life enjoyable, comfortable and meaningful including physical, psychological, economic, aesthetic and recreational benefits” and can be derived from items, processes or imaginaries [14]. Liveability of Cakranegara city can still be felt today because the regularity of the spatial patterns of the city is still maintained and the patterns of community settlements are still maintained.

The development of the city of Cakranegara is currently unable to apply the hierarchical rules of roads that have been used before because the regional development planning no longer strictly refers to the
previous urban spatial pattern. When viewed on the map, it can be seen that the order of the old city and the new developing area is very clear. This condition was due to the fact that during the reign of the king, the rule of the king was very strong so that the rules for regional development followed the rules that had been set, whereas at present the development of the city was mostly determined by the people themselves and the government did not have much power to exercise control.

Data released by the Mataram city government statistics agency shows that the city of Cakranegara is still the economic center of Mataram city and economic facilities such as markets, malls and other trade facilities are still centralized in Cakranegara [15]. A compact and orderly city planning with an orderly road network system has a positive impact on the community. Mayura Park which uses water from the Ancar river as its water source has become an attractive water park and a place for people to have recreation. Pura Meru was built by the king of Karangasem who was in power as a symbol of the king's power and a strong unifier of society.

The city center of Cakranegara is at a great crossroad where the Mayura park, the palace, and market are located and is surrounded by community settlements. The spatial pattern that placed the palace at the center (Kutuh Negara) was a defense system at that time. The settlements that surround the palace as a fence to secure the palace of the king's palace. An orderly and interconnected road network system also aims to facilitate movement and secure the palace if necessary. The pattern of the layout of the houses in a back-to-back reef is also a strategy to secure oneself, because with this pattern the activities that occur along the road can be observed by the residents of the house. A Karang is block that inhabited by community groups/clans so that a back-to-back spatial pattern is the right choice to protect the safety of their environment.

7. Conclusion
The philosophy of Hindu religion in the city of Cakranegara is represented through the application of various elements of the city such as the royal palace / castle, road networks, places of worship, both at the city and settlement levels, community halls and cemeteries. The representation of Hindu philosophy in the city of Cakranegara does not fully adopt what is applied in Bali, but is adapted to the time, and local conditions that create specific spatial pattern of the city, but the visual character of the city is still strongly felt to have a Hindu breath with various shrines scattered in many parts of the city. The visual character of the place of worship uses a lot of Balinese forms and ornaments, but still has differences due to the influence of local situations and conditions. Karang as a territorial unit with an organized housing site is still maintained and is still one of the physical characteristics of the city of Cakranegara

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