Asian Pacific Planning Review

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Theme: Planning and Design of Asian Pacific Cities under Transformation

With torrential concentration of population to cities and expansion and globalization of urban economy, many of the Asian Pacific cities have drastically transformed, which has brought great changes in urban space but also in socio-economic system to the cities. Under the surging borderless circumstances, a substantial number of the cities have come to face such challenges as revitalization of local communities and industries, inheritance and evolution of their unique townscapes and environments, and conversion of themselves to an environmentally friendly city.

It has no small significance for future development of urban planning and design to shed light on how the Asian Pacific cities have worked on such contemporary issues. Giving "Planning and Design of Asian Pacific Cities under Transformation" for the title, this special edition tries to explore current conditions and challenges, and further, future directions of development of the cities.
Indigenous Local Concept of Cosmology within City Development
Case Study: The City of Yogyakarta

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INTRODUCTION

In an attempt to understand the basic ‘world view’ of the old Javanese in the motion of new human-kind civilization of 21 century, the exploration approach has put the emphasis on Javanese culture. This cultural approach endeavors to gain access to the Javanese conceptual world. It refers to the values and ideas which inform that the Javanese basic world view corresponds to the unity between man and God (spiritual forces), unity of people and the king and unity the human condition and the cosmic. This basic world view constitutes the cosmic analogy afterward. In the view of the Javanese, the city corresponds to nature and culture, where its morphological structure was mainly determined by the cosmic and dualistic tradition, stressing the direction of the compass. Meanwhile the social structure and religious ideas become the basic concept of the unity between man and God which is well known as the term of cosmology and became clear within the layout of the traditional city in Java.

In the view of some experts of city development and conservationists the westernization of the city emerges as the main issue. Westernization beside represents progressive approach to reform and improve the existing human society, it also gives such negative impact as diminishing old buildings and new-buildings be taking place of it. It will weaken the character and identity of the city. It means that the city development which aims at upgrading the quality of life and growth of people prosperity is not fully true. In the words of G W Skimmer,1964 (in Akira, 1988), the dual function of city as for administrative and economic matters in case of an old city such as Yogyakarta actually resulted decaying and disappearing historic city elements. Based on the above opinion, it accordingly emerges the opinion that the spirit of city development can interrupt the local concept which is fit in the form and spatial pattern of the city. This is the reason why the research is presented in the framework for the overall city development in the context of the continuity of city local culture in such that the city should be developed based on its history.

THE METHOD

Content analysis is used as the research method to determine the concepts of the city of Yogyakarta within texts or sets of texts. The research itself analyzes the presence, meanings and relationships of such words and concepts of indigenous Javanese culture and Javanese city, then make inferences about the messages within the texts of the culture and time of which these are a part. Texts which have been used in this research refer to books, book chapters and historical documents in the context of Javanese worldview.

COSMOLOGY IN THE JAVANESE WORLDVIEW

Tjahjono (1989) describes that the classification system of a culture cannot be discussed apart from a
people’s images the world. Cosmos is the ordered world, and cosmology is the knowledge concerning the structures 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 exactly represented but generally believed ideas about life and world. In addition Tjahjono added that in old Javanese prose, descriptions about cosmology contain strong Hindu elements. Except for some changes in sequence which have taken place, the concept of the structure of the cosmos can be considered identical to that of Brahmanic doctrines which also shared similar concepts with Buddhism. In the former, the world consists of a round continent, Jambudvipa, which is situated at the center and is surrounded by seven annular continents. After the last oceans there is a huge mountain range that encloses the world. At the center of Jambudvipa rises Mount Meru, the cosmic mountain, around which sun, moon and stars revolve. On its top is the city of the Gods which was surrounded by the habitat of eight guardian Gods. In the ancient Javanese text such as Bhimasenaparwa and Brahmandaparwa (9th-10th Century A.D.) the description of the cosmos is in accordance with that of Brahmanic doctrines except in the sequence of those annular oceans and continents. In those texts Jambudvipa with mount Meru is the world center, which is surrounded by an area called Jawasagara. Along its north-south axis are six huge mountains, three at its north and three at its south. This condition is balanced by four mountains along its east west axis. Between the mountains of the south-north axis are the places of habitation. The accumulation of all past experience is variously manifested in the Javanese world view today. World view refers to the entire system of descriptive beliefs about reality by which human beings structure their experience meaningfully. It provides a frame of reference for human beings to understand each element of experience of his/her experience.

CONCEPT AND IMPLEMENTATION OF COSMOLOGY IN THE CITY OF YOGYAKARTA

Different from other main cities in Java which are built based on the concept of colonial city such as Batavia (Jakarta), Semarang and Surabaya infact Yogyakarta is built upon its own worldview which is derived from the Islamic-Javanese culture. The Javanese view of the monarch cannot be separated from the Javanese cosmic-religious-magic worldview of life and the universe. In the book of Kraton (palace) Jogja (2004) it is mentioned that this worldview is basically founded on the belief in the pararel relationship between the macrocosm and the microcosm, or between the universe and humans. In this worldview, human being is constantly under the influence of the forces coming from the all corners of the world, the stars and the planets. These forces can bring either welfare and prosperity or disaster to the world. Whether or not the forces bring prosperity depends on the success of the individuals in leading a harmonious life in the universe. One can attain the harmony by perceiving the spirit of the age, as they are written traditionally in astrological knowledge, fortune and other rules which should be followed. The harmony of between the kingdom and the universe is gained by managing the state as the model of the universe (macrocosm) on a smaller scale (microcosm).

According to Mulder (1977) the palace was constructed as a model image of the cosmos, symbolizing its position as center of the universe in this world. In the view of the Javanese, harmony and unity with the cosmic purpose will result in beneficial moral and material conditions in this world. Therefore, the speculation on the relationship between the state and the universe become a crucial question in the traditional life of the Kraton Yogyakarta and in other kingdoms. The basis of the cosmic-religious-magic views on the state and the kingship can be found in all aspects of life such as literature, language, noble title, rites and traditions, arts, religious life, palace, architecture and place of worship. The pre-Islamic and the Islamic teachings diffused in the Kraton worldview are reflected in the concept of power, position, function, task, the king’s image and the ideal kingdom, which are the basis of the Kraton Yogyakarta historically and up to the present time. The concept of cosmic-religious-magic mentioned above in Yogyakarta, is implemented by the imaginary line or mainline axis as the basic spatial structure of the city of Yogyakarta.

The imaginary line extends from Merapi volcano (a), going south towards south ocean (e), passing the palace passing the palace of yogyakarta (c) as symbol of macrocosm (‘a’ to ‘e’) signifying
the concept of unity of people and the king and from the stage of Krupyak (d) to the tower of 'Tugu' (b) passing the palace of Yogyakarta ('b' to 'd' as a symbol of microcosm) signifying the concept of unity of man and the God (figure 2). All those descriptions mentioned above may help in understanding the concept of Javanese cosmology. It is intangible values and tend to relate with and describes the worldview and the way of living for the Javanese.

In actual world, the concept of nature which relates to cosmology, in term of microcosm, is translated to the setting of the main promenade which spread from the tower of Tugu in the north of the palace into the stage of Krupyak in the south of the palace. Some important points (elements) of the city of Yogyakarta above set up the city structure which appears as a grid spatial formation pattern. Those points (tower, palace and stage) created a imaginary line as the skeleton of the city of Yogyakarta and it is useful for people to live in and move from one place to other place. In other word the imaginary line as the axis of the city together with other elements (tower, palace and stage) can create an orientation for and assist people to well-recognize the city in such that they can escape from losing and confusion. The requirements of city’s elements that can be easily to be an orientation point should contain signals, symbols and cautions that can stimulate people cognition mainly when they were in their city. This discussion leads to understand that the core elements of the city center have a significant role in assisting people to have an orientation in the city.

For human being orientation is very important for their way of living. It is linked to survival and sanity (Lynch 1960 and Hall 1966 in Rapoport 1977). It involves codification and classification of "whatness" and "whereness" (Lee 1969 in Rapoport, 1977) and is directional relationship of places and distances organized into a system whereby navigation through the environment become possible. Orientation concerns three questions such as (1) where one is, (2) how to get where one is going and (3) how one knows that one has arrived. Involves in this process are recognition and noticeable differences. As real condition, the imaginary line in Yogyakarta still has its own role as an entity that becomes the focal orientation within the city across more than 200 years. The survival imaginary line intact is also utilized for setting quarters which are scattered in the west and east side of the line which set the city up into grid pattern. This phenomenon reflects the important role of imaginary line in constructing the city spatial structure as a whole.

Preceding discussion demonstrates that the basic design of Yogyakarta can hardly explain the Javanese cosmology which represents the belief in the pararel relationship between the macrocosm and the microcosm, or interaction between the universe and humans. The unity between universe and human is taken primary in Javanese point of view to see the harmony of life. In actual condition the traditional city of Yogyakarta with its concept implementation has stimulate the interaction between human and (built) environment, and simultaneously has implemented the idea of Rapoport in terms

![Figure 1: The microcosm of Yogyakarta.](image1)

![Figure 2: The macrocosm of Yogyakarta ('a' to 'n') Source: Karaton Ngayogyakerto, 2004](image2)
of man-environment interaction. According to Rapoport (1977) any attempt to deal with the man-environment interaction must involve three areas such as knowing something, feeling something about it and then doing something about it. We are thus concerned with three broad areas:

1. Cognitive as involving perceiving, knowing and thinking, the basic processes whereby the individual knows his environment
2. Affective as involving feelings and emotions about this environment, motivations, desires and values (embodied in images)
3. Conactive as involving acting, doing, striving and thus having an effect on the environment in response to (1) and (2).

Besides those three areas related to man-environment interaction mentioned above to enhance the harmony of the city, it is also necessary to learn the past and present for future image of the city also plays a role since all these change with experience. The change in other word means alive, thus in understanding the sustainable city the word of continuity is necessary to be completed by the word of change. Lively city in consequence does not only requires the interaction between city's elements and its citizen (man and environment) as is mentioned by Rapoport, but also requires the assurance of the implementation of the idea of change and continuity in practice. The idea of change and continuity should be comprehended as the determined factor to enhance the character of the city based on its own culture without avoiding the development itself, since in our LIFE we can not deny the development (the change) itself. Based on this argument it is so clear that socio-cultural variables play a major role in recognizing the identity of the city which is developed through its character. In relation to the continuity of the city in term of sustainable city, Jacques Derida has said that a city no longer inhabited, not simply left behind, but haunted by meaning and culture, this state of being haunted, which keeps the city from returning to nature (and culture). The importance of both change and continuity is as same as we look at the significance of the development and keeping the nature and culture of the city. In the word of Rossi (1994) the continuity is developed based on the concept of permanence. According to Rossi monuments as primary elements in the city are persistent and characteristic urban artifacts. As a permanence and a primary element in the city, a monument is dialectically related to the city growth, and this dialectic of permanence and growth is characteristic of time in Rossi's skeleton-city. This circumstance exists in Yogyakarta in the form of the imaginary line as an intangible monument. It actually can play its significance roles in both keeping the culture and giving a sound response to the development simultaneously. Thus the existence of imaginary line, even though it constitutes an intangible monument, it cannot be deleted since it can generate man-environment interaction as mentioned by Rapoport above as giving stimulus of knowing something, feeling something about it and then doing something about it.

Nowadays many cities are facing three kinds of essential challenge. It is well known that continuing and complementary (in term of peach-meal development) are united by the need to meet con-
stantly changing such as conservation, renewal or redevelopment and pure-development. In other words Dix (1989) formulated the three kinds of essential challenge as three parts those that are worthy of preservation, possibly with some adaptation to meet further needs; those that need significant renewal but where some existing construction may be retained and thirdly, those areas comprising or requiring widespread new construction. In its physical structure the form of the city must meet contemporary requirements but in so doing it must take account of the investment of earlier ages. As the words of Dix (1989) this clearly calls for combination of old and new in circumstances where conservation, renewal and development complement each other in urban revitalization. As another cities which their owned attribute as city of culture, Yogyakarta has to be assertive in giving decision alternatives that related to the prospective city in the future. It leads Yogyakarta should choose and pay attention to both conservation, redevelopment and pure-development simultaneously.

New form of development at the expense of the urban heritage or the retention of old city at the expense of convenience and innovation that in this case as usual is conducted by conserving the main element of the city. So a new approach to get the conservation, the re-development and pure-developed is urgently needed. It is not the intention to prescribe solutions—least of all those from specific civic background and culture but also by considering underlying principles to contribute the evolution of the city itself. The continuity and change and the variety and combination of function of the city constitutes the constant characteristic of city development. As a consequence, it implies the city not only possesses a before and after, but which is defined by their relationship. Thus the imaginary line which is owned by the city of Yogyakarta can both retard and accelerate the process of modernization (development) in a city.

CONCLUSION

In conclusion cosmology and world view for the Javanese, 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 exactly represented but generally believed ideas about life and world. World view refers to the entire system of descriptive beliefs about reality by which human beings structure their experience meaningfully. Cosmology together with world view in the Javanese view after that develop the basis of the cosmic-religious-magic views where the concept of imaginary line appears in the Javanese worldview later on. The strengthened imaginary line of the city of Yogyakarta which existed from its indigenous local concept stick it out with crosses more than 200 years. It demonstrates that its existence in one side has a deep relationship to the Javanese culture as the representative of the continuity and the dynamic of life which is shown by the development of the city on the other side become the model of best practices for another old city in facing the revitalization and or the pure-development of the city. Here the Javanese worldview that embodied in lifestyle becomes a key element in understanding how the city of Yogyakarta operate and how its citizens make choices and behave in the city.

NOTES

1. This paper is presented at the International Seminar on City Culture in Motion organized by Trans Urban, Austria at Chulalongkorn University, Bangkok, Thailand on February 20-21, 2006.

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