

INDONESIA URBANISM: THE TRADITIONAL SETTLEMENT IN URBAN PLANING,
ANALYSIS OF THOMAS KARSTEN'S PLAN OF BANDUNG CITY WEST JAVA

A Thesis

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ABSTRACT

UN Habitat report in 2010 in planning sustainable cities emphasized urban planning as key role to achieve sustainable development. However among dichotomy west-east, formal-informal, urban-rural urban planning need to reassessing itself. In Indonesia one of urban characteristics is existence of *Kampung* which translated as traditional settlements. *Kampung* in modern urban planning is categorized as informal spaces. However from Dutch colonial era, Thomas Karsten proposed different approach to accommodate this space in his urban planning theory. The problem is Karsten's principles and concept for the traditional settlement still not discussed sufficiently.

Preliminary data collected with literature review about Karsten's theory. Data sources from historical archives and digital archives from Indonesia and Netherlands starting to be collected. Based on various interpretations from different publications, then reinterpretation analysis was chosen. The primary data will support to analyze by narrative analysis.

The reinterpretation of Karsten's theory found some base principles. There are: cultural emancipation, recognizing western philosophy, development based on social and economic characteristic. There are two scenarios firstly, preserving traditional settlements with improvement program, secondly promoting new form of traditional settlements with combine traditional value to western practice. The second scenario proved as workable concept in the past. The key elements of success in integrating traditional to modern urban planning were in translation process. Karsten recognize essences of traditional value as communality and social structure. He translated that with provide housing diversity, good quality design, common facilities and multipurpose open spaces then combine with street hierarchies and sanitation concept from western approach.

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DEDICATION

All process in this study can be seen as long journey and all based on support from my beloved wife and daughter. They always stand in every hard moments, reminds me to stand up again every I failed. To my wife Rinekawiati and my daughter Shevara, I dedicate this all to them for your love, tenderness, warm and unlimited energy and supports which make me can finish this journey.

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LIST OF TERMNOLOGY

Kampung: urban neighborhood with traditional characteristic which have various translations such as urban villages, urban settlements, urban *kampung*, spontaneous shelter, illegal settlements, slum area, informal settlements and traditional settlements.

Urban Planning: is a technical and political process concerned with the control of the use of land and design of the urban environment, including transportation networks, to guide and ensure the orderly development of settlements and communities.

UN-Habitat: the United Nations agency for human settlements. It is mandated by the UN General Assembly to promote socially and environmentally sustainable towns and cities with the goal of providing adequate shelter for all.

Sundanese: Majority people who live in West Java, have own culture slightly different with Java People.

Sustainable urban planning: an essential tool to make cities inclusive, environmentally friendly, economically vibrant, culturally meaningful and safe for all.

Traditional Settlements: This defined as settlements which developed with traditional way and brought value as traditional societies.

Urban informality: This is defined as area or activity in urban which excluded from formal planning and developments

NGO: Non Government Organization in Indonesia translated as LSM (*Lembaga Swadaya masyarakat*)

1. INTRODUCTION

1.1 Traditional Settlements in Urban Planning

Urban century was marked by majority of world population living in urban at 2007¹. The condition brought new challenges in urban planning especially with sustainable development issues. UN-Habitat report mentioned the unprecedented challenges shaping the cities in 21st century can be seen from three aspects. The environmental challenges of climates changes and dependence on fossils fuels, the social challenges in demographic changes of rapid urbanization and shrinking and ageing in some countries also increasing multicultural composition of the cities, and the economic challenges with uncertainty and expanding of informality of urban activities. In general those challenges linked to social and spatial inequality, urban sprawl phenomena and unplanned urbanization (UN Habitat-2009).

Urban planning as one of the tools to deal with urban challenges for long time had been questioned in its efficiency and effectiveness to deal with urbanization especially in developing countries. The general problem of urban planning in developing countries is identified as unsuitability of theories and approaches since most of urban planning came from colonial era or exported from developed country. The planning and design became unaffordable and inadequate for catering to the diversity of ways of life and needs of developing world cities (UN-Habitat, 2010).

According to Home (1997) the legacies of English town planning in colonial cities are the existence of the ad hoc agency (the improvement board or trust) which reflected reluctance to allow local land-use planning and regulation to be controlled by democratically-elected local authorities has contributed to the situation whereby local government has become an administrative backwater in many countries, lacking both financial and technical

¹ Mentioned in UN Habitat Report (2009), UNICEF report (2012).

capacity. The use of urban space was for conspicuous consumption and the maintenance of inequality. Racial segregation was replaced by social segregation, and the idea remained that low density equals high income (and vice versa). The garden city planners' preference for low-density development, often reflected in an administrative bias against high density schemes, has added to the inefficiencies and inequities created by the colonial city. Physical planning, which at the time of Independence appeared attractive as a means of taking an inventory of national resources, has become discredited, with resources for development proving finite and the planning ideology becoming associated with a centralizing state role and maybe the most serious legacy of the colonial city is the failure to manage the tidal wave of urban growth and informal settlements.

Root of problems in urban planning approach was mentioned in study about urban informality and this can be reason of unsuitability of theories for developing countries. The paradox situation in study of the cities, when many of transformation and growth is taking place in developing countries but most of theory to understand city function rooted from developed countries and their historical development of the cities. Roy (2005) mentioned in order to understand urbanization process in developing countries is necessary to locate the production of theory and policy in the cities of the developing world.

According to Roy (2005) the international planning today is constituted through models and best practices from developed countries. These blueprint utopias are seen to be the key to the universal replicability of good planning. However the model sometimes fails to recognize urban transformation in developing countries. In particular, informality, once associated with poor squatter settlements, is now seen as a generalized mode of metropolitan urbanization. Since engagement with informality is in many ways quite difficult for planners. Informal spaces seem to be the exception to planning, lying outside its realm of control when planners. It makes urban informality sometimes simple articulated as unintended

consequences from planning. However to understand informality, there must be placed as an organizing logic, a system of norms that governs the process of urban transformation itself. It the state of exception that it embodies, is produced by the state. Planning is implicated in this enterprise. To deal with informality therefore partly means confronting how the apparatus of planning produces the unplanned. From planning perspectives is necessary to learn what goes wrong. Confronting the failures and limitations of models provides a more realistic sense of politics and conflicts, and also forces planning to face up to the consequences of its own good action.

The definition and boundary between formal and informal in urban function itself is remains unclear. However the terms have continued to be widely used, even by their critics. Both have long been acknowledged as problematic concepts; but because there are no satisfactory alternatives, they will continue to be used in the remainder on the understanding that they are ‘constructed opposites’: rather than there being two distinct sectors or types of activity, there is a continuum of closely related development activities, enterprises and forms of work (UN-Habitat, 2009).

More over the characteristic of urban informality described in Global Report on Human Settlements (2009) as follow:

The formal–informal continuum is central to contemporary analyses of urban development. It has been applied to many aspects of urban development, especially the built environment, the urban economy and the provision of services. A state land administration system embraces tenure and its registration, regulation of land use and development, property taxation, and direct public intervention, often involving public landownership. Generally, urban development that comes within the purview of this system and complies with its legal and regulatory requirements is labelled ‘formal’ and all land subdivision and development that do not comply with one or another requirement are considered ‘informal’ (p133)

This condition also recognized in research about urbanization in megacities in Asia which emphasized the situation as new phenomena which never faced in human history. It asserted conventional theory about planning and designing city need to be revised. The

traditional ways of knowing the city inappropriate to understand the new thing. Planning as a rational ordering practice finds no role in Asian Megacities. These conditions necessitate a radical revision that urban planning no longer attempt to order and to control, but rather aims at potential of new urbanities. Various definitions need to be repositioned in the light of the emergence of the Asian megacity (Marshall, 2004).

The similar statement also mentioned in McGee (2005) that misread urbanization process especially in Southeast Asian Countries can be caused from urban theory based on western perspective. In order to understand the process, understanding about historical embedded about urban and rural in cities in Southeast Asia is necessitate. In Southeast Asia, research about urbanization process started since 1960's which produced general theory of pseudo urbanization. The theory describes urbanization process without real strengthening in industry sector. Main economic activities in services sector with relatively low productivity.

Other characteristic of Southeast Asian cities captured in the model of the city can describe main difference of city characteristic between western and eastern urbanism. Western city model mainly follow Burgess concentric zone model in 1920's and Hoyt sector model in 1940's with main characteristic is clear zoning division in city area. However the McGee (1967) developed model for Southeast Asian cities and Ford (1987) developed model for Indonesian cities show the mixed land use on zoning system in urban area as main characteristic of city structure in Southeast Asia especially Indonesia.

The importance to understand local characteristic mentioned in McGee (1995) with his emphasized about global and local relationship.

We have to reassert the local embedded in "place" as the reality of local groupings negotiating their control of the local with the global with varying degrees of success. ...In this concept, the core-elements that make up the roots of place — the environment, local culture, local economies, historical layering of shared experience —, the lived experience of the place are crucial to explaining the global local relationship. This approach avoids the dangers of portraying the local and global as bounded separate entities and also enables flexibility in scale of the local, whether it is

a village, a nation, a region, or in some cases an ethnic group geographically dispersed within a national unit (p.529)

The necessity to reinventing and rethinking urban planning concept which reflected local characteristic of Asian Cities mentioned in various fields of research and it can be accept as general trend of new research in Asia urbanism. From landscape planning perspectives Yokohari et al (2000) based on historical research for development stage in various cities in Asia² concluded the controlled mixed urban rural landscape have potential as workable concept for Asian cities. Marshall (2004) mentioned necessities of the new synthesis of urban live and urban form in Asian Megacities. McGee (2005, 2009) emphasized to gain understanding about local knowledge in Southeast Asia to understanding urbanization process and century it necessitate the rethinking about historical embedded concept of urban and rural that shaved the demographic, political, sociological and economic understanding of what is urban and rural.

Reassessing and reinventing urban planning also became agenda in planning sustainable cities and serve as key role of sustainable development. Main goal of urban planning is to bridging the urban divide and is an essential tool to make cities inclusive, environmentally friendly, economically vibrant, culturally meaningful and safe for all. To be successful in helping to achieve urban development, planning is need continuous updating (UN-Habitat, 2010).

In Indonesia one of urban features which rooted in historical urban development but still not recognized in urban planning theory is existence of traditional settlement in urban area which called "*kampung*". *Kampung* have many translations such as informal settlement, illegal settlement, squatter settlement, slums, spontaneous settlement/shelter, unauthorized settlement, native settlements, traditional settlements (Setiawan, 2010). Palmer and Patton (1988) put *kampung* as one of spontaneous shelter phenomena in urbanization process

² Yokohari et al (2000) concluded based on historical development stages of Tokyo from Edo era, Seoul, and Bangkok.

especially in developing countries similar with *Barrios*, *ranchos* (Ecuador), *barriadas*, *barriadas marginales* (Peru), *colonias populares*, *irregulars* (Mexico), *gecekondus* (Turk), *bustees*, *katras* (India), *abusivismo*, *baariache* (Italy), *barong-barongs* (Philippines).

According to McCarthy (2003) in its original rural version, the word *kampung*³ literally means village. In an era of unbridled urbanization, however, it has also come to mean a poorer neighborhood contained within a city. *Kampung* is not synonymous with “slum”. Most *kampungs* actually contain a mix of lower and lower middle class - even some middle class families - living in mostly permanent dwellings. Squatters are relatively few. Most *kampung* residents actually have some sort of legal title over their land though they are not always able to prove it to the satisfaction of Indonesia’s court systems. True to its linguistic roots, many *kampungs* are, in fact, the remnants of original villages. It is trapped when the city expanded and encroached upon the areas surrounding the *kampungs*.

However, this settlement type actually rooted in historical development of urban area. Most of the traditional settlement in urban area in Indonesia came from rural settlements which encroached by urban area. The traditional settlements evolved from homogeneous agrarian societies and later became more complex and heterogeneous social structure. Factors were influence the expansion of traditional settlements mostly by urban center performance near them. Based on historical data the traditional settlement showed coherent characteristic as cultural unit which maintain their economic, social, and law activities by their self. The societies brought traditional values from rural lives such as communalities, social structure and reflected ability as self sustaining and governing communities (Ekadjati, 1995, 2005).

In this research since *kampung* already exist before western urban planning theory implemented and actually rooted in historical of urban development in Indonesia⁴. *Kampung* defined as urban residential originally from rural villages which encroached by urban

³ McCarthy (2003) use original term in Indonesian languages *kampung* and *kampungs* as plural form

⁴ McCharty (2003), Rohimansyah (2009, 2011), Setiawan (2010)

expansion and has traditional characteristic both in spatial and cultural and translated as the traditional settlement.

From environmental point of view this type of settlements have characteristics of high density residential, mixed housing quality from squatter to better condition, less urban infrastructure poor infrastructures, services provision and unacceptable environmental conditions (McCarthy, 2003; Tunas, 2008). From social perspectives can be categorized as urban poverty, poor of quality of life, unplanned, and without urban networking economic (Sihombing, 2004). However according to Rolalisasi et al (2013) *kampung* as traditional settlements in urban area has unique characteristic of community due to their social living. Their relationship among them is very close. The social capital of urban settlement is shown in social interaction and social network of the resident at their daily lives. The communication is active, expressed in interaction related to gender and age structure. The social capital was developed from the trust and understanding in their relationship. The social capital of the settlements helps them to live better.

In current situation the traditional settlement can play important role in Indonesia urbanism since that occupied about 70% of urban area. However in current urban planning policy this spaces fall into informal settlements⁵ category and placed as temporary place before it replaced with modern urban form. The potency of this area as base of local economy which proves more resilience in crisis situation supported to the fact that more than half of housing in the traditional settlement also have function as productive home industries still ignored. The label of the traditional settlement as part of informality show this space still unrecognized in modern urban planning concept (Setiawan, 2010).

The development program to approach poor condition in the traditional settlement can be divided between two mainstreams. Firstly, to replace the traditional settlements with

⁵ Definition of *kampung* in urban planning, Ministry of Public Work (2013)

formal housing program with high rise public housing system. This approach mainly supported by government and pro development scholars, secondly try to utilize unique characteristic of the settlements with preserve traditional values and create own scenarios for each traditional settlements supported by other scholars, NGOs who supported humanity or socio-cultural relationships (Sihombing, 2004).

The approaches of to deal with *kampung* or the traditional settlements in urban area still in debatable. The replacing program with formal housing will lead modernization and solve the poor environmental condition however that be criticized as condition will erase social capital as characteristic of the traditional settlements. In other side preserving values with compromising environmental condition also be questioned since that rise vulnerability of the urban area especially with fire disasters and disease. The other factor is the area of traditional settlements occupied more than half of urban area, solution for the traditional settlements need more comprehensive strategies in urban planning approach (Setiawan, 2010).

From historical perspective the traditional settlement in urban area in Indonesia has long time history in marginality and informality. Since practiced of western urban planning in Dutch colonial era based on decentralization policies in 1903 and also became the starting point of urban planning practice in Indonesia⁶ the traditional settlement in that time called *kampung* became urban problem. When boundary of the cities was decided clearly the traditional settlement which inside boundary directly inclusion in urban area. Distinctive differences characteristic between urban area, dominated by Dutch and European people, and the traditional settlement by native also came as reason of rejection of the traditional settlement. The settlement became enclave and target to be eliminated from urban jurisdiction.

However, one of leading figure in Indonesia town planning from Dutch era, Thomas Karsten (1884-1945) proposed new approach to integrate traditional values in to western

⁶ Refer to history of Indonesia spatial planning, Ministry of Housing and Infrastructure, Republic of Indonesia (2008)

concept in his planning theory. Karsten propose to integrate the traditional settlements in his western urban planning theory and practice. He recognizes the settlements as one of urban characteristic and planner must deal with that⁷. His principle clearly mentioned in explanation of town planning ordinance for Java in 1938 that modernization especially for native settlements (*kampung*) must be based on traditional values. His concept and approaches not longer adapted and expanded since all connectivity between Indonesia and Dutch cut off abruptly because Papua conflict in 1959⁸. Since then the urban planning direction in Indonesia turn to US. The major approaches after independence tend to regional planning system along with centralistic development policies from Indonesia government.

Current urban planning policies in Indonesia for the traditional settlement almost resemble condition in Dutch era. The target is to change or improve the traditional settlements as part of modernization but always outside formal and comprehensive urban planning approach. Traditional settlements became target to be reduced by project and still outside of urban planning policies. In modern zoning system the type of settlements even not exist in the planning map. The policies still put the traditional settlements as enclave in urban area. So it is important to rethinking Karsten's theory especially for the approaches for the traditional settlement as the contribution to general discussion of reinventing concept in urban planning which suitable with characteristic of Indonesian cities.

The research about Karsten's theory mostly concluded his approach as pioneer in urban planning theory, representative of European theory, comprehensive and modern approach, accommodates to local culture, and utilizes plant and tress as character of tropical cities and gave a lot of attention in aesthetic elements in town planning⁹. However the position of the traditional settlement was still put outside urban planning approach. General purpose of this research is to fill the gap in research about the traditional settlement in urban

⁷ Mentioned in explanatory of Draft Java Town Planning Ordinance 1938

⁸ According to historical record of Indonesia Government and mentioned also in Roosmalen (2008)

⁹ See Jessup (1985), Cobban (1992), Cote (2004), Roosmalen (2008)

planning context with provide analysis based on historical study about the traditional settlements in Western urban planning concept proposed by Thomas Karsten. Result of this research is expected to give new perspectives about position of the traditional settlement in urban planning policy and reintroduce concept of integrating traditional values as base to accommodate this type of settlement in current urban planning practices.

Scope of research will be limited to how the traditional settlement can be accommodated in Karsten's urban planning theory based on his concept integrating traditional value to western planning. Focus of discussion will be at key element in success and failure of his theory and practices with case of Karsten's plan for Bandung City, West Java.

Based on purpose and scope of study formulation of hypothesis will be derived as “the traditional settlements was accommodated in urban planning based on concept of integrating traditional values into western practice in Karsten’s theory”.

The hypothesis will gradually be proven by answering the research questions bellow:

1. What were the values of traditional settlements?
2. How was the traditional settlement accommodated in urban planning based on Karsten’s theory?
3. What were the key elements in integrating traditional value to western concept?

1.2 The Traditional Settlements and Thomas Karsten in Existing Literature

1.2.1 The traditional settlement in urban area

Position of the traditional settlements in Dutch colonial era shows how modern urban planning beside colonial policies failed to accommodate it in planning concept. Situation when urban core expanded gradually to accommodate European interests, which resulted automatic inclusions of indigenous villages¹⁰ within the city jurisdiction. The problem in jurisdiction, standard quality of residential, hygiene and sanitation issues, become high

¹⁰ Cobban (1994) use indigenous village is translation of *kampung* in article uncontrolled urban settlement: The kampong question in Semarang.

tension between city government and native people. The problems presented by the existence of kampongs within the city was well known as the Kampong Question with three solution options: abolition (*opheffing*) of the kampongs as internally autonomous entities, the extension of the jurisdiction of the city councils into the kampongs, and improvement (*verbetering*) of such components of the urban infrastructure as roads, sewers, sanitation, garbage removal and water supply (Cobban, 1994).

The position as marginal space also continues after Indonesian independence, the traditional settlement still treated as ambiguous place in urban area. *Kampung*¹¹ in urban areas can be seen as an unstructured, unorganized and informal settlement in relation to the broader socio-economic system characterized with poverty and poor of quality of life. It can also be realized as a settlement in an urban area without infrastructure, planning or urban economic networking. The differences in images between the traditional settlement and urban area can be summarized as the differences between ‘quality’ values (such as nostalgia, humanity, community and urbanity) and ‘quantity’ values (measurable progress of growth or development. The images of *kampungs* and urban demonstrate that although the images each holds of itself and of the other are different, they are ambiguous, blurred, ambivalent, or slippery. Another impression emerging from this discussion is that, despite their adverse images of each other, *kampungs* and urban are strongly interdependent (Sihombing, 2004)

Recently the position of the traditional settlements in sustainable development discussed with idea to put *kampung*¹² as basic urban compaction as part of international movement to create compact city. The traditional settlement in urban area very strong relationship with Indonesian culture which articulated with self help housing communities, engage in collectives effort or mutual assistance. However this type or residential mainly neglected as potential resource and confirmed as impermanent solution for urban housing by

¹¹ Sihombing (2004) use original word *kampung* for the traditional settlement, and *kampongs* as plural form.

¹² Rohimansyah (2009) also use original word *kampung* for traditional settlements

Indonesian government. The well known development program in *kampung* was *kampung* improvement program since 1969 but mainly in physical aspect. Based on assessment of degree of compactness, show that *kampung* have potential to be basic of compact city, with *Kampung Oriented Development KOD*) however this concept still need approach to be workable plan (Rohimansyah, 2009).

Discussion of necessity to revise urban planning approach to accommodate the traditional settlements is started. Despite of physical condition characterized by disorder, mixed housing, even in some place lack of hygiene and some security issues, *kampung*¹³ show surprising harmonious in building and structure with their own characteristic. In social structure, *kampung* also show dynamic in complexity with high tolerance and also proved as safety net to deal with crisis situation. In economic this type of residential show resilience and durability as source of local economy. In case of informality most of reason is the urban requirement of the building standard hardly achieved by residents in *kampung*. *Kampung* in urban planning will have future if local characteristic of urbanism in Indonesia can be recognized by planner. The revision of education approaches can be one of solution (Setiawan, 2010).

According to Rohimansyah (2011) the traditional settlements have potential became basic unit of urban planning. The research tried to implement the modern approach to measure potency the traditional settlements as basic unit of city planning. Since emerging issues of sustainability in urban development, indeed the urban *kampungs*¹⁴ should have a crucial role as a backbone of implementation issues for urban sustainability. This fact has really showed the importance of the *kampung* as basis of the resilience city as well. There traditionally has been plenty of local knowledge that has been running well in the urban *kampung*. The approach utilize CASBEE-UD (Comprehensive Assessment System for Building

¹³ Setiawan (2010) also use original word *kampung*

¹⁴ Ibid (12)

Environmental Efficiency for Urban Development) and LEED-ND (Leadership in Energy and Environmental Design for Neighborhood Development). As a result generally environmental performances in the *kampung*s are still quite far from the ideal standard of sustainability but *kampung* have potential as basic unit of development based on cultural and social values.

1.2.1 Thomas Karsten and his theory

According to Bogaers and Rudjiter (1986)¹⁵, Thomas Karsten as leading figure of Indonesia town planning proved by his role which involved in town planning in 12 of the 19 municipalities and towns in Java, 3 of the 9 towns in Sumatra, and 1 in Borneo. He was born in Amsterdam in 1885, from well educated family; his father was professor of philosophy and university vice counselor. He graduated as architect from Delft TU (1901-1905) from mechanical and structural engineering. Karsten active in *Sociaal Technische Vereeniging* (STV) as progressive and reform-minded organization of public work professional, keenly involved in debate on housing improvement movement in Amsterdam. In Indonesia, beside his professional work as architect and town planner, he also member of Building Regulation Committee (1930), Town Planning Committee (1934) and finally become lecturer in *Bandung Techniese Hogenscholl* (1941-1942) (today ITB).

According to Jessup (1985) Karsten's theory in urban planning was blend of applying best technical from European ideas and preserving nucleus in Java tradition. Because in Java there are four tropical setting in colonial structure: firstly tendency towards general urban expansion, secondly growing importance of mechanical factors such as roads, pipes, electric line, telephone wires and the like, thirdly lay of assertion individual expression as product of western philosophy pursuit liberty and rationalism, and fourthly running directly counter to the third as order tendency of collectivity as central to Eastern philosophies.

¹⁵ The same source use in Cote (2004)

Karsten's theory can be seen as exporting European theory since planning concept which Karsten proposed nonetheless represented European essences with land use control, and planning technique: the comprehensive plan, districting, setback line the relationship between building height and street width development regulation. The physical planning and building regulation as part of European concept which is adaptable in Indies (Indonesia) situation. Then can conclude Karsten as pragmatic planner rather than a visionary thinker (Cobban, 1992).

According to Roosmalen (2008) Karsten's theory was modern, rational and systematic with adaptation for local condition in tropical cities and emphasizes more on aesthetic value.

The local condition emphasized as:

Plans in which the character of any one plan would largely be based upon local topographical, social and historical circumstances. With regard to the triple town planning task of creating space, facilitating spatial development and encouraging spatial experiences he noted that it was not simply possible to apply Dutch or European solutions to the East Indian situation. In order to reinforce the character of an urban development plan Karsten, in line with contemporary views on town planning elsewhere, was very much in favor of drawing up town plans that would be adapted to the local landscape. Hence in the Dutch East Indies the tropical climate, the vastness of the archipelago and the abundance of its flora were, to his mind, the salient elements that needed to be borne in mind and which in an almost natural fashion would lead to open, horizontal sections ('walls') of what would be largely open structures with much green. (p.228)

From cultural perspective Cote (2004) mentioned that Karsten's approach can be interpreted as anti-modernism:

In his town planning principles, one sense a nostalgia for this lost communal feeling which he was intent to recreate by simultaneously transforming the trends of a modernizing urban Java into a coherent urban plan of tree-lined boulevards, squares, vistas and neighborliness – reflecting all local ingredients. Despite its innovations, Karsten's project appeared to be an anti-Modernist one. (P.23-24)

This assertion based on crystallized for Karsten the decline of European civilization compared with the 'collectivism' the 'not-individualism' of Asia.

1.3 Historical Approaches

As mentioned in purpose of this research. The methods utilized historical research approaches for secondary and primary sources. According to Rowilson (2007) Historical research is the process of systematically examining past events to give an account of what has happened in the past. It is not a mere accumulation of facts and dates or even a description of past events. Rather, it is a flowing, dynamic account of past events that involves an interpretation of the events in an attempt to recapture the nuances, personalities, and ideas that influenced these events. One of the goals of historical research is to communicate an understanding of past events.

The time line of the research is evolution process of the traditional settlements since early form until became part of urban area. Secondary data will be collected from publication about traditional settlements especially in West Java. Primary data will be traced and collected from various archives sources. Both data will utilize to show how traditional settlement was formed and shaping their own characteristic.

Thomas Karsten's theory and principles was reflected in many field since his activities also in multidiscipline such as architecture, urban planning, education, art and culture. His theory can be traced from his articles and report about his engagements in various seminar or congress. Source of secondary data is various publications about Karsten works. Primary data will be tracing from historical archives resources. Both data will utilize to explain How Karsten integrating traditional value to western urban planning concept.

1.4 Two Scenarios for the Traditional Settlements: Preserving and Promoting

Based on historical data since early forming process of the traditional settlements which came from rural culture, neighborhood pattern and social communal lives of the traditional settlement brought communality and social structure as main features of traditional values. In western urban planning which came from European perspective the position of the

traditional settlement in urban area became problem, since rural characteristic was unrecognized in western urban planning or rural and urban have own characteristic which is neatly separated. Other factor was colonial policy which has tendency to segregate social live cannot neglected in this case¹⁶.

Karsten's theory in traditional settlements provides two scenarios: preserving and promoting. Preserving was applied for the existing traditional settlement in part of old town with improvement program without change of original structure. The scenario was unsuccessful because only first part of Karsten theory was implemented. His idea to develop city block as basic unit of planning which mean the traditional settlements will be developed based on their own characteristic failed because lack of support from Dutch colonial government. However the improvement program as part of his approach in urban planning for the traditional settlements was implemented with *kampongverbetering* program. Improvement program did not achieve planning goal. The result of improvement did not accepted by original resident since better environment was attract the wealthier to take over the land and house with their economic capacities¹⁷.

Promoting was applied in new part of city expansion with introduce a new settlement type, combined western planning concept with traditional characteristics. The new settlements developed for native people who working in government and low economic class for Chinese and Dutch. The project was success to provide new planned settlement with traditional characteristics. The scale of project however very small compare with European settlements for Dutch and other foreigners.

The success of the project was brought traditional atmosphere combined with affordable house price. Those conditions meet with local necessities and economic characteristic of native people in that time. The key element in successful of the new

¹⁶ This research focus on urban planning approach as independent practice, the colonial policy treated as general background

¹⁷ Mentioned in explanatory of Java Town Planning Ordinance Karsten (1938), and Wetering (1939)

settlement was Karsten ability to extract the essences of traditional values with communalities and social structure and translate it to diversity of housing, common facilities, multipurpose open space and good quality principles in housing design. From western planning aspect Karsten introduced street hierarchies, drainage and sanitation facilities. The translation process was successful to combine value from traditional aspect and physical planning from western aspect.

1.5 The Traditional Settlements in Western Urban Planning

Karsten effort to accommodate the traditional settlement in urban planning can be seen as integration process of traditional values in western concept. The key is how to translate values and articulate it in western urban planning practice. Some research questions mentioned in introduction have been answered as bellow:

1. What were the values of traditional settlements?

The traditional settlement was formed from rural village which brought traditional value in communalities and social structure. The social structure formed with pioneer-follower pattern creates social structure based on cultural and spiritual values. Community came from close neighborhood pattern in housing and also communal activities in their daily lives.

2. How was the traditional settlement accommodated in urban planning based on Karsten's theory?

Karsten accommodate the traditional settlements based on concept integrating traditional value to western concept. He provide two scenarios for the traditional settlement. There are preserving with improvement program especially for urban infrastructure and enhance environmental quality and promoting with integrating traditional into western practices with recreate traditional settlements as part of urban planning.

3. What were the key elements in integrating traditional value to western concept?

The key element was translation of traditional values to western practices. The process can be summarized as extracting the essence of traditional values, translating into western practices; and integrating in urban planning theory.

As the solution for hypothesis, the traditional settlement is proved ever accommodated in urban planning based on Karsten's theory integrating traditional values into western concept not only by preserving but also with promoting traditional values. The process was applied with extracting traditional essences, translating, and combining it in planning practices.

2. METHODS

2.1 Historical Research Methods

According to Sreedharam (2007) based on forms of research there are three types of historical research: addition of new data as light of new information, new interpretation of known data with look for new angle perspectives for existing data, and subordinates of data to unifying principles this is biggest effort to seek general hypothesis for all historical data to yield synthesis, over-arching theory and laws. Methodology for historical research in general can be divided into two groups. First group is utilize own method as autonomous discipline and second group is to utilize statistical, sociological, and other scientific methods in historical reconstruction.

The methods to interpretative of historical data mainly divided between the pragmatic positivist who believe truth mainly about fact “truth resides ultimately in the facts not in the eye of the beholder¹⁸” and the theory laden who believe interpretation as main key to understand historical fact “the conventional wisdom in both history and political science that all empirical observations are filtered through a priori mental frameworks, that all facts are theory laden”¹⁹ Thies (2002). Between two opposite polar Sreedharam (2007) mentioned the middle course which try to accommodate scientific explanation carefully and utilize in historical perspectives.

In type of data, historical research can use both qualitative and quantitative methods. The quantitative method is developed recently especially after World War II. Econometric history, employed quantitative data with statistical analysis, can be seen as one of examples. Qualitative historical analysis are usually performed on a small number of cases, or perhaps

¹⁸ Levy (2001) as quotes in Thies (2002)

¹⁹ Krassner (1997) as quotes in Thies (2002)

even a single case, whereas the hallmark of quantitative methods is the statistical analysis of a large number of cases coded on a variety of attributes (Thies, 2002).

The prime source in historical research is libraries and historical archives (HAs). There are regarded as the main repositories for preserving and maintaining historical documents. Their documents may constitute either primary or secondary sources, and be maintained in the form of books (pages bound together), manuscripts, single pages, photos, paintings, video etc. A source is characterized as primary if it has been created during the period of interest, whereas secondary sources are those created later on and are based on the analysis of primary sources. Digitized historical archives (HAs) could be considered as a special case of digital libraries; they have however, characteristics that differentiate them. In particular, the digitization process in the context of HAs is inherently more demanding than the equivalent in common digital libraries, mainly due to the large volume of the original material and its poor preservation state, as well as to the convoluted and archaic handwriting often found in documents of HAs. At the best case, keywords or other metadata (creation date, author etc) will be available (Elena, 2001).

According to Haynes (2006) one of methodological tools has used by historians is oral history. The method used to collect data about almost all elements of people's lives, including health, family life, work experience, and political involvement. Invariably it is used by participants to tell the researcher less about events themselves than their meaning to the individuals concerned. As such it allows for the description of feelings, emotion, memory and identity, which more formal documentary sources may fail to pick up. Oral histories also facilitate connections between social groups and roles, giving insights into the lives of many, because the narrator weaves their story with those of significant others, such as, in this case, children, parents, husbands and partners, employers and colleagues.

The result of the process from extracting data relies on the ability of the researcher to elicit information from the participant, and requires interviewer skills of restraint and listening, as well as interviewees who are willing to talk and reflective. In the process oral history have differences with direct interview. However interview has same similarities with oral history, in that they are typically created through interaction drawing on another person's questions, they usually focus on a particular experience or phenomenon. In contrast, oral histories deal more broadly with a person's past, and range widely over many different topics (Haynes, 2006).

2.2 Qualitative methods for reinterpretation of known data

This research will utilize qualitative data both primary and secondary and provide interpretative analysis for the results. The historical data of traditional settlement will be referring to collection of the Dutch East Indies in photographs, 1860-1940²⁰. The concept and social structure will be studied with literature review about history of traditional settlements in West Java, Indonesia.

Karsten's theory in Indonesia urban planning will be referring to collection of Dutch colonial maps and the Colonial heritage archives²¹. The concept of integrating value to modern concept will be reinterpreted by transdisciplinary literature reviews about Karsten's theory in architectural, urban planning, socio cultural publications.

The general steps applied in this research are:

1. Identification and Formulation of Research Problem

The source of can come from different sources such as current issues, the accomplishment of individual, policy and relationship between events.

2. Data Collection

²⁰ Data source from open access of a collection of the *Koninklijk Instituut voor taal-, land- en volkenkunde*, Memory of Netherlands, online image library, *Koninklijke Bibliotheek*

²¹ Data source from open access of Colonial Heritage Site, Royal Tropical Institute, Amsterdam.

- a. Primary data, involved directly with event being investigated, can be documents: publications, map, dairies, newspapers, photographs, relics; recording or transcript of interview for oral histories.
 - b. Secondary source, created from primary source, such as books, report, publication, journal about the events
3. Evaluation of Materials
- a. External Criticism, the process of determining the validity of the source, trustworthiness or authenticity of the source.
 - b. Internal Criticisms, the process of determining the reliability or accuracy of the information contained in the sources collected.
4. Data Synthesis
- a. Results, data will be arranged and analysis to gain insight about research problem.
 - b. Discussion, this step will expand the result from historical fact to find some generalization for contemporary situation (Rowilson, 2007).

2.2 Research Procedure

This research want to explore approach of urban planning which integrating traditional value to modern based on historical data from Karsten's theory and his practices for the traditional settlements.

2.2.1 Operational definition

Qualitative research methods utilize small case data and for this research the data refer to history of the traditional settlements and Karsten's theory in urban planning history in Bandung, West Java. The operational definition and specific measurement explained in Table 1.

Table 1 Operational definition of variable

Concept	Variable	How to measure
Traditional values in traditional settlements	Historical data of traditional settlements in urban area in West Java, Indonesia	Tracing and collecting historical data 1. Publication of traditional settlements (literature) 2. Photograph (Historical archives)
Traditional values in modern urban planning theory	Historical data of Karsten's Theory from various publications	Reinterpreting historical data about Karsten's concept from various publications (literature)
Integrating traditional value to modern concept	Historical data of Karsten's Practices in traditional settlements planning	Comparing and discussing historical data about success and failure in Karsten's practice in traditional settlements planning 1. Publication (literature) 2. Maps, photograph (historical archives, re-drawing)

2.2.2 Data collection

Data source of this research use secondary and primary sources. For Karsten's theory, data collected by reinterpreting of publication about Karsten's concept in integrating traditional values to modern concept. Source of data was taken from various publications such as architecture, urban planning, and socio cultural to gain holistic view. The types and sources of data presented in Table 2, and 3.

Table 2 Secondary data for traditional settlements and Karsten's theory

Publication	Bibliography	Index
Traditional Settlements	Ekadjati, Edi S Sundanese Culture-1 (Historical Approaches) 1995, Pustaka Jaya, Indonesia ISBN 979-419-192-2	T-1
	Ekadjati, Edi S Sundanese Culture-2 (Padjajaran Era) 2005, Pustaka Jaya, Indonesia ISBN 979-419-334-1	T-2
	Nurcholis, Hanif Two Hundred Years Traditional Settlements Democracy: The Failure of Adoption of Democratic Values in Indonesia 2011, Proceeding Seminar FISIP –UT Indonesia	T-3
	Cobban, James Uncontrolled urban settlement: The kampung question in	T-4

Publication	Bibliography	Index
	Semarang (1905 - 1940) 1974, In: <i>Bijdragen tot de Taal-, Land- en Volkenkunde</i> 130 (1974), no: 4, Leiden, 403-427	
Karsten's Theory in Architectural	Jessup, Helen Dutch Architectural Visions of The Indonesia Tradition 1985, <i>Muqarnas III: An Annual on Islamic Art and Architecture</i> ISBN 90 04 07611 5	A-1
	Triyadi and Harapan Housing Analysis in Gempol Area Bandung Study from Structure and Building Construction 2007, Narotama University, Surabaya Indonesia (e-journal) http://ejournal.narotama.ac.id .	A-2
	Raksadjaya, Rini Bandung Colonial City Revisited, Diversity in Housing Neighborhood 2007, Proceeding of The Knowledge City International Seminar Bandung Institute of Technology, Bandung, Indonesia	A-3
Karsten's Theory in Urban Planning	Cobban,; James L Exporting Planning: The Work of Thomas Karsten in Colonial Indonesia 1994, <i>the Asian City: Processes of Development, Characteristics, and Planning</i> , Kluwer Academic Publisher ISBN 0-7923-3135-4	U-1
	Roosmalen, Pauline K.M. van For Kota and Kampong 2008, <i>For profit and prosperity: the contribution made by Dutch engineers to public works in Indonesia, 1800-2000</i> , KILTV Press ISBN 9059942213, 9789059942219	U-2
	Roosmalen, Pauline K.M. van <i>Ontwerpen aan de stad Stedenbouw in Nederlands-Indië en Indonesië</i> (1905-1950) 2008, Delft TU – Amsterdam, unpublished, (Dissertation- PhD)	U-3
	Tanuwidjaya , Gunawan City of Bandung Review of Bandung Spatial Planning Strategies 2005, <i>Environmental Management – NUS (Thesis-M.Sc)</i>	U-4
Karsten Theory in Socio Cultural	Gouda, Frances Dutch Culture Overseas, colonial practices in Netherland Indies 1900-1942 1998, Equinox Publishing (Asia) PTE ltd. ISBN 978-979-3780-62-7	S-1
	Cote, Joost Colonial designs: Thomas Karsten and the planning of urban Indonesia 2004, Proceeding Biennial Conference of the Asian Studies Association , Canberra, Australia	S-2
	Kusno, Abidin	S-3

Publication	Bibliography	Index
	Behind The Postcolonial: architecture, space, and political cultures in Indonesia 2000, Routledge, London ISBN 0-415-23615-0	

Table 3 Primary data for the traditional settlements and Karsten's theory

Data	Types	Sources
Traditional Settlements	Photographs	<ol style="list-style-type: none"> 1. The Dutch East Indies in photographs, 1860-1940, a collection of the <i>Koninklijk Instituut voor taal-, land- en volkenkunde</i> Memory of Netherlands, online image library , <i>Koninklijke Bibliotheek</i>.²² http://www.geheugenvannederland.nl/?/en/homepage 2. Media Library of KITLV – Royal Netherlands Institute for South east Asian and Caribbean Studies Leiden²³
Karsten's Theory	Map, Photographs, Article	<ol style="list-style-type: none"> 1. The Dutch Colonial Maps and Colonial Heritage Site , KIT - Royal Tropical Institute, Amsterdam 2. Media Library of KITLV – Royal Netherlands Institute for South east Asian and Caribbean Studies Leiden 3. http://62.41.28.253/cgi-bin/kit.exe 4. Library and Data Archives of Bandung Institute of Technology, Bandung - Indonesia 5. Library and Data Achieves Ministry of Housing and Infrastructure, Republic of Indonesia – Jakarta, Indonesia 6. Library and Data Archives Ministry of Public Work, republic of Indonesia

2.2.3 Evaluation of materials

According to Rowilson (2007), there are three heuristics in handling evidence to establish its authenticity or accuracy: corroboration, sourcing, and contextualization. Corroboration entails comparing documents to each other to determine whether they provide the same information. Sourcing involves identifying the author, date of creation of a document, and the place it was created. During contextualization, the researcher identifies when and where an event took place.

²² Provide 3000 collection of photographs, access granted for research purpose about copyright please refer to http://www.geheugenvannederland.nl/?/en/paginas/over_het_geheugen/copyright

²³ Provide digitized Dutch colonial maps and photographs, access granted for research purpose only.

For this research the corroboration will be used to gain more accuracy of Karsten's theory from various publications (Table 4). The sourcing and contextualization from primary sources do not apply since most of data was taken from reliable sources (museum, respectable research institution).

Table 4 Corroboration for evaluation data

Karsten's Theory	Sources Index ²⁴						
	T-1	T-2	T-3	T-4	A-2...A3	U-1...U-4	S-1...S3
Values in traditional settlements							
Integrating traditional value to western concept							
Practices in the traditional settlements in urban planning							

Note: (+) mentioned, (-) unmentioned

The result of corroboration process is presented in several tables bellow.

Table 5 Result of corroboration for traditional settlement publications

Karsten's Theory	Sources Index			
	T-1	T-2	T-3	T-4
Values in traditional settlements	+	+	+	-
Integrating traditional values to western concept	-	-	+	-
Practices in the traditional settlements in urban planning	-	-	-	+

Note: (+) mentioned, (-) unmentioned

Ekadjati (1995, 2005) can be placed as main source of text book in history of Sundanese culture. His deep research with ability to translate and analysis old manuscript

²⁴ Refer to table 2

about local culture in West Java society gave general understanding how Sundanese society formed from simple rural agrarian community into more complicated social structure. The values of traditional societies in Sundanese culture in this research refer to his explanation. Nurcholis (2011), with his research about democracy values which was introduced to traditional societies from colonialism process mention how value in traditional societies was contrary with new values from western democracy system. Cobban (1994) discussed about the traditional settlements in urban planning context from Dutch era, how the settlements became urban problem and it unrecognized in western theory about urban planning.

Table 6 Result of corroboration for architectural publications

Karsten's Theory	Sources Index		
	A-1	A-2	A-3
Values in traditional settlements	+	-	-
Integrating traditional values to western concept	+	+	-
Practices in the traditional settlements in urban planning	+	+	+

Note: (+) mentioned, (-) unmentioned

Jessup (1985), mentioned in architectural Karsten tried to accommodate traditional concept since the values of local culture cannot be replaced with modern techniques and those values reside in deeper spiritual meaning. In urban planning practices one of implementation was tried to accommodate eastern philosophy in urban live as communal live and practices that in neighborhood pattern which accommodated traditional concept. Triyadi and Harapan (2007) gave analysis about new traditional settlements in north extension town in Bandung which integrated traditional concept in western practices. Raksadjaya (2007) also discussed about how Karsten's plan for Bandung City introduced new type of traditional settlements in European zone.

Table 7 Result of corroboration for urban planning publications

Karsten's Theory	Sources Index			
	U-1	U-2	U-3	U-4
Values in traditional settlements	-	-	-	-
Integrating traditional values to western concept	-	+	+	+
Practices in the traditional settlements in urban planning	+	+	+	+

Note: (+) mentioned, (-) unmentioned

Cobban (1994) mentioned that Karsten actually utilize European concept and use that as pragmatic concept to solve local problems. Roosmalen (2008) discussed about Karsten practices in urban planning to accommodate local characteristic such as the traditional settlements in his urban planning practices. Tanuwidjaya (2007) mentioned about Karsten's effort to create comprehensive planning for Bandung city which accommodate expansion not only for European people but also for native population.

Table 8 Result of corroboration for socio-cultural publications

Karsten's Theory	Sources Index		
	S-1	S-2	S-3
Values in traditional settlements	-	-	+
Integrating traditional values to western concept	+	+	-
Practices in the traditional settlements in urban planning	-	+	+

Note: (+) mentioned, (-) unmentioned

Gouda (1998) emphasized about how Karsten respected local value with his rejection to colonialism. Cote (2004) mention about neighborhood lines and communalities in eastern culture and how Karsten try to implement that value in his urban planning practices. Kusno (2000) discussed about how the traditional settlements in urban development stage in Indonesia and how Karsten practice in the traditional settlement development.

3. RESULTS

3.1 Values in Traditional Settlement

3.1.1 Development of traditional settlements

This research focus in West Java, Indonesia with Sundanese ethnic and its culture become background for majority population. Based on historical data Sundanese community basically developed from rural settlement. The main characteristics of social live also represent rural lives.

Forms of urban environment traditionally centered in center of government authority and trading places. The main different between rural and urban traditionally in degree of activity, in rural basically livelihood based on farming activities, and societies formed from homogenous farmers. Urban areas represent places for more complex activities such as trading, military, and government activities²⁵. The spread of rural settlement can be seen in Figure 1.



Source: KIT-Royal Tropical Institute (Dutch Colonial Map) 2012
Figure 1 Partial Map of Topographical in Bandung (1930-31)

²⁵ The type of traditional Sundanese societies refer to Ekadjati (1995, 2005)

Rural settlement in Figure 1 look spread in various size, the type of rural settlement in Bandung, West Java area mainly agricultural villages. Until 19th century the form of agriculture still slash and burn. The type of activities lead dynamic forming and deforming settlements along with suitability of land for farming activities. The landownership system still unrecognized in Sundanese culture until early 19th century, the land still categorized as public property and every farmer can open new farming land from forest or vacant land.

According to historical developments of traditional settlements, the stages of settlement forming can be divided became four stages. Basic of grouping is mainly from number of house and residents in new formed settlements²⁶. Detail characteristic of each stages show in Table 9.

Table 9 Development stages of traditional settlements

Stages	Descriptions ²⁷			
	Number of Housing	Livelihoods	Societies	Leadership
First (<i>umbulan</i>)	1 to 3	Agriculture (slash and burn)	Pioneer family	Single leadership
Second (<i>babakan</i>)	4 to 10	Agriculture (slash and burn)	Pioneer family and followers	Single leadership
Third (<i>lembur</i>)	11 to 20	Agriculture (slash and burn and simple irrigation)	Pioneer family and followers	Simple organization
Fourth (<i>kampung</i>)	More than 20	agriculture, trade, industries	First and second generation	Complete organization

Source (Ekadjati 1995, 2005)

First stages of the traditional settlement were formed in the forest as new agriculture areas. The pioneer, consist of one or two family started open the forest and practicing dry land farming systems or *huma* in local language conducted with slash and burn techniques. New settlements usually laid in the range of one or two kilometer from the existing. The first group of family would create neighborhood consist of 1-3 houses. The group of pioneer also creates simple social structure with leadership system. Based on local culture system, the type of

²⁶ Danasasmita et al (1986), Based on Garna (1988), discussed in Ekadjati (1995)

²⁷ Compiled from Ekadjati (1995, 2005) Sundanese Culture, from Historical Perspectives and Padjajaran era

leadership not base in economic capacity which mean the position among the resident was equal in economic access especially to land, the leadership mainly based on cultural and spiritual context. The early stage of the traditional settlement can be seen in Figure 2.



© Het Geheugen van Nederland, 2003
Figure 2 First stage of traditional settlements (*umbulan*)

Figure 2 show the traditional settlement presumably in West Java, taken in 1875 by Woodbury and Page (Batavia) with no detail location. In the picture show two houses, semi permanent types, with material bamboo or wood. The backgrounds mostly forest or dry farming land.

Number of houses, background of picture was consistent with first stage of development in the traditional settlement in West Java. The man who standing in the front of

the houses (marked) can be identified as owner and also pioneer who started the settlement. From data²⁸ the first stage of traditional settlements mainly only formed from pioneer families with single occupation as farmer. The leader of the small group based on the position as *primus inter pares* (number one in the group) and usually the pioneer will have this position.

Second stage of the development when settlement expanded to accept more followers and became bigger group of neighborhood called *babakan*, consist 4-10 houses (Figure 3). The diversity of societies started in this stage with new group of families came to the new place. The occupation still homogeneous as farmer and the leadership pattern still follow the early stage of development.



© Het Geheugen van Nederland, 2003
Figure 3 Second stage of traditional settlements (*babakan*)

²⁸ Ibid (27)

Figure 3 show the traditional settlement in Buitenzorg (now Bogor) West Java taken in 1880 by Woodbury and Page. Number of houses was around five to seven. Types of house still semi permanent, however the background more like dry farming land than forest. Based on stage development, this represented second stage. The new houses built close to each other which created compact and dense neighborhood.

The next stage of development of the traditional settlement, characterized by increasing number of houses became 10-20 houses called *lembur* (Figure 4). In this stage form of societies getting complex and the leadership system started to create simple organization, consist of leader and one or two deputies. The forms of agriculture also improved in some area with apply simple irrigation system.



© Het Geheugen van Nederland, 2003
Figure 4 The traditional settlements in third phase (*lembur*)

Figure 4 show the traditional settlements in West Java, taken in 1885 by Onnes Kurkjian, detail location only mentioned at Preanger²⁹ which associated with mountain areas in West Java. Number of houses was already more than ten units. Types of house mostly semi permanent and background already consist new type of farming land with utilized simple irrigation systems called *sawah* in local languages. Based on development stages this represented third stage. The development of new settlements along with suitability of new farming land to provide occupation for newcomers. Some of *lembur* get more complicated in agricultural activities dry farming and traditional irrigation system developed simultaneously.

When the settlements continually grow to more than 20 houses then the new settlement came to the fourth stage as established traditional settlement called *kampung* (Figure 5). In the last stage, social structures already formed societies more complex and the leadership in complete organization system with leader and some divisions. According to social structure in traditional societies the organization usually divided among sectors government, spiritual, and education³⁰. The occupation also getting divers not only agriculture sectors but also trades and small industries such as handcrafts.

The activities of cultural and spiritual already create new tradition and also simple law about what allowed and not allowed in this settlement. The autonomous concept of traditional settlements creates one unique society with their own characteristic. This concept coined in local term as *ciri sabumi cara sadesa*³¹ which is means every settlements have own rule, own system and ways to manage their self. The condition of rural settlements concluded as self sustaining and governing communities with effort to fulfill their necessities by local products and activities.

²⁹ Preanger today including Bandung, Bogor, Cijur, Sumedang and mostly plateau in West Java

³⁰ Refer to base structure in Kanekes society on of traditional Sundanese community existed in Banten Province, Indonesia

³¹ Loose translation of *ciri sabumi cara sadesa* is local characteristic and local system



© Het Geheugen van Nederland, 2003
 Figure 5 The traditional settlements in fourth stage (*kampung*)

Figure 5 show profile of the traditional settlement in Cianjur, West Java taken in 1910 taken by Woodbury and Page (Batavia) location mentioned in *Kampung Cimaan*. Number of housing more than 20 unit. Type of houses already divers, main street already exist. Based on development stages this represented fourth stage or final stage in the traditional settlements. Other feature most of the traditional settlements in this stage already have own name. The name usually based on the name of river near location, forest, mountain or name of fruit or specific animal in those areas. The name Cimaan can be translated as *Ci*=water, and *Macan*=Tiger³².

³² It is not necessary this original name for settlements, it is possible that *Cimaan* was the name of river is and the settlements near the river named upon it.

The development processes of the traditional settlement in rural area not always follow the stages. Some of them were unsuccessful and abandoned in various stages. However the most critical point was from second to the third stage, if the quality of agriculture areas was insufficient the resident would search for new place and start all over again³³.

The process of forming and deforming the traditional settlements can be described with data about number of settlements in West Java from³⁴.

Table 10 Data of the traditional settlements in West Java 1778-1925

Years	Number of Traditional Settlements
1778	2,828
1796	4,374
1804	3,949
1808	3,903
1815	3,004
1907	4,126
1925	3,446

Data Source: Ekadjati (1995)

3.1.2 The traditional settlements characteristics

Based on data sources³⁵ the neighborhood and social pattern in the traditional settlements created some features such as high density neighborhood and self governing community. The detail can be described in Table 11.

Table 11 Characteristics in the traditional settlement.

Features	Characteristics
Neighborhood pattern	Compact, high density, close each other, narrow alley.
Leadership styles	Equality, spiritual and cultural aspect, common agreement
Social systems	Coherences as cultural unit and self governing community

Source: Ekadjati (1995, 2005)

Neighborhood pattern in the traditional settlements formed by group of housing placed near each other. New housing will be developed surrounding the existing ones. This pattern generates narrow neighborhood streets and will turn almost every ten meters (Figure 6). The

³³ Based on report in Chijs (1880) as cited in Ekadjati 1995, Sundanese Culture-1 A historical approaches p.102

³⁴ Data as compilation from Haan,IV (1912) and Kartohadikoesumo (1965), Ibid. p. 106

³⁵ Data compiled from Ekadjati (1995,2000), Nurcholis (2011) Two Hundred years democratic practices in traditional societies

factors to develop dense housing were influenced by natural condition when mostly of the traditional settlements started in the forest areas and compact neighborhood provide safety from wildlife. Occupation in agriculture demanded long time in work hours and need resident form, supported to supervise children who played in neighborhoods.



© Het Geheugen van Nederland, 2003

Figure 6 Neighborhood pattern in traditional settlements (*kampung*)

Figure 6 show the neighborhood condition of houses, built near each other. The photo was taken in 1947-1953³⁶ location West Java by Charles Breijer. The house structure provided with semi public space in front of the houses. The neighborhood streets between the houses created as narrow alley.

Leadership style in the traditional settlements in West Java had special features. The leader who usually came from the pioneer and their descendant, selected based on ability in physical and spiritual. Pattern of relationship based on equality, the leader and follower did

³⁶ The data of photographs according to Memory of Netherlands (2013)

not have any difference in daily lives, had similar job as farmer. The authority of leadership was mainly in spiritual and cultural events. Others sector such as land distribution, duties and rights of resident decided by agreements.

As societies the traditional settlements develop as self sustaining and governing societies. Food and clothes and material for housing were utilized local product (Figure 7). The production process mostly done manually and need a lot workforce and this situation requires communal work and mutual aid (Figure 8).



Source: KITLV Netherlands 2013

Figure 7 Local clothes production in the traditional settlements

Figure 7 show local clothes production in the traditional settlement. The photo was taken in 1910 location presumably in West Java the author was un mentioned but this picture exist in several documentation album about West Java same with Figure 8. From photo, the location of this activity was in front of the house and done by women.

Figure 7 below show one of processes of food production in traditional settlement. The group of women working together to process rice grain became rice. Photo was taken presumably in West Java at 1910.



Source: KITLV Netherlands 2013

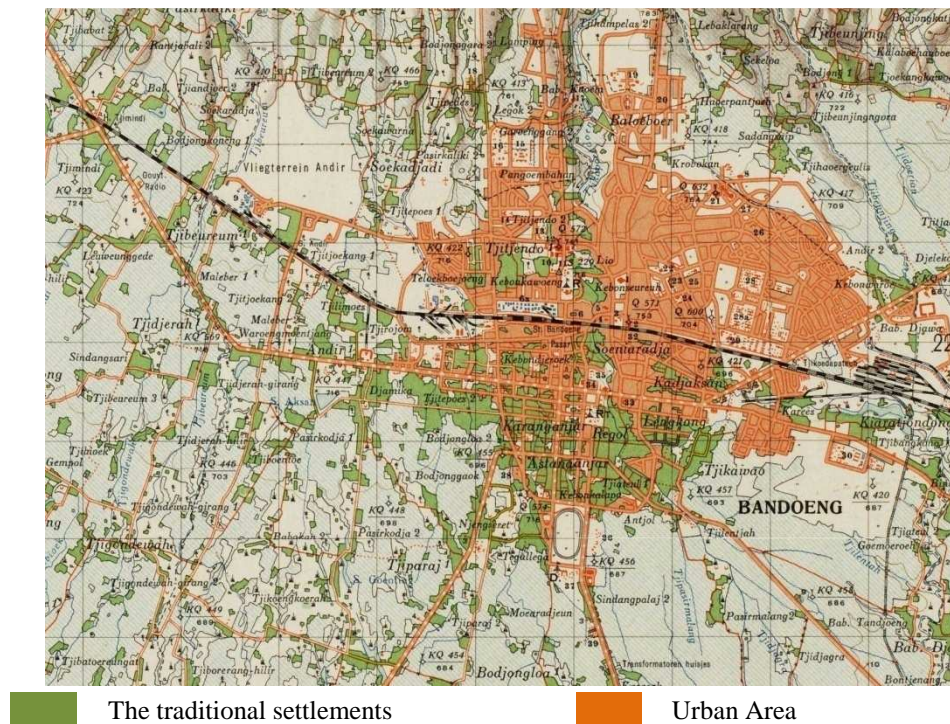
Figure 8 Food Production in Traditional Settlement (*kampung*)

3.1.4 Traditional settlements in urban area

From historical data³⁷, the traditional settlements trapped in urban area since Dutch colonial government applied Decentralization act in 1903, the city boundaries established and the traditional settlements inside boundary would automatically inclusion as urban area.

(Figure 9) Meanwhile the traditional settlement still had autonomous based on Dutch East Indian Constitution 1854.

³⁷ Data compiled from Cobban (1997) Uncontrolled urban settlement: The kampong question in Semarang (1905 - 1940), Kusno (2000) Behind the Postcolonial: architecture, space, and political cultures in Indonesia, Nurcholis (2011).



Source: KIT-Royal Tropical Institute (Dutch Colonial Map) 2012
Figure 9 Partial Map of Topographical in Bandung (1930-31)

Figure 9 show Map of Bandung City, created in 1930-31. The red area is identified as urban area, European residential, and the green area is the traditional settlements in urban area. Different characteristics among the traditional settlements and urban areas made the settlement became urban problem. The main differences described in Table 12.

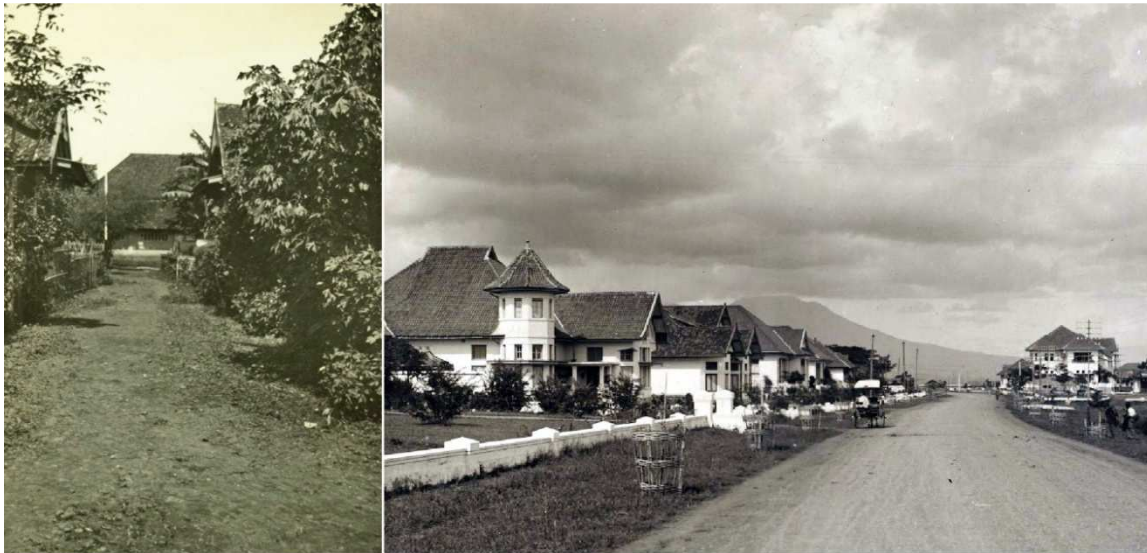
Table 12 Main differences among the traditional settlement and urban area

Settlements	Characteristics			
	Environmental	Housing	Street	Sanitation
Traditional settlements	Unplanned, Overcrowded, lack of open spaces	Semi permanent, Permanent	Unstructured, narrow, unpaved	Limited , common facilities
Urban areas	Planned, large allotment, plenty open space and park	Permanent, equipped with garden,	Structured, large, good quality	Sufficient, private facilities

Source: Personal analysis (2013)

The contrast of environmental quality (Figure 10) and spread of diseases became major issues. The problem of traditional settlement was well known as *Kampung Question*,

which had three options of solutions. There are, abolition of existing settlements, reduction of autonomous rights with extension of the city council jurisdictions, and improving program for urban infrastructure in the traditional settlement especially roads, sewers, sanitation and garbage removal and water supply.



Source: KNILTV Netherlands, 2013

Figure 10 Comparison between The traditional Settlements and Urban Area, Bandung, West Java

Figure 10 showed differences between the traditional settlements in Bandung city with photo (left) taken in the existing traditional settlements in South Bandung at 1929-1930 by Cohen Stuart which show an unpaved main street and some houses. The photo (right) taken at 1920 taken from album B.Coops showed European residential in Bandung north expansion project.

3.2 Thomas Karsten's Approaches for the Traditional Settlement

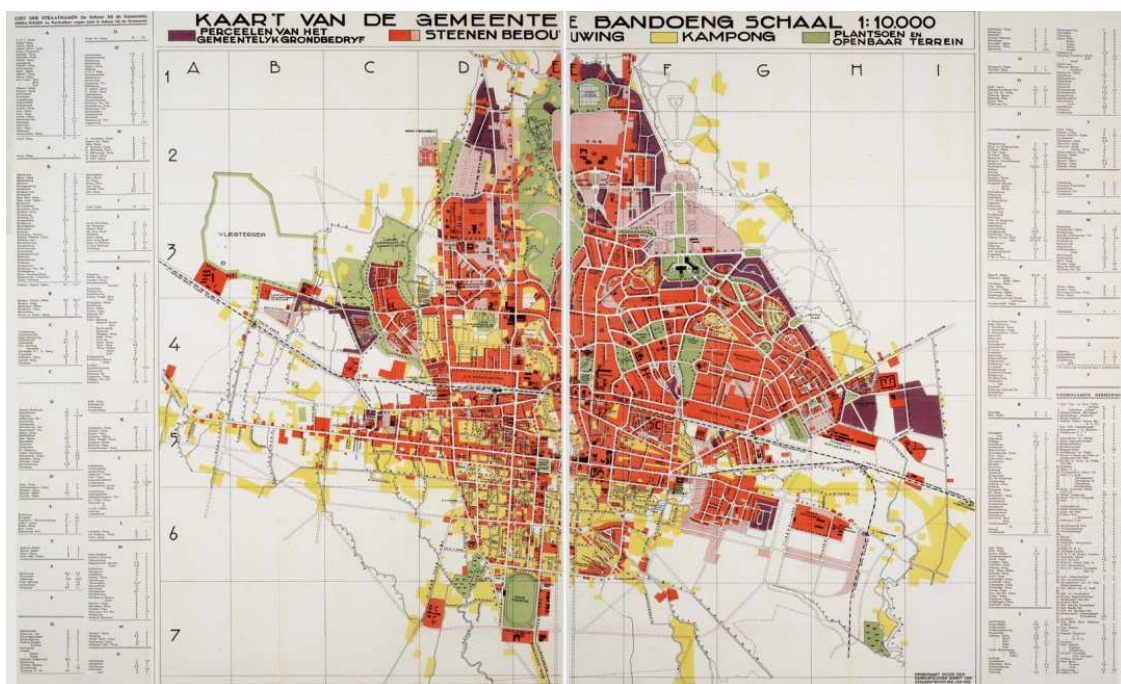
3.2.1 Karsten's theory

Based on analysis and reinterpretation of Karsten's theory to accommodate traditional settlements in urban planning concepts can be summarized in Table 13. The practice in Bandung implemented in Karsten's Plan 1930-1955 (Figure 11).

Table 13 Reinterpretation Karsten's Theory

Subjects	Karsten's principles
Socio-cultural	Colonialism is unnatural and unacceptable
	Basic of Eastern philosophy is collectivity which contrary with liberty and rationalism in western philosophy
Urban planning practices	Development based on group and city area characteristic
Integrating concept	Rationalism is necessary but not against (Java) culture

Source: Personal analysis from various Karsten's publications



Source: KIT-Royal Tropical Institute, Dutch Colonial Map, 2012

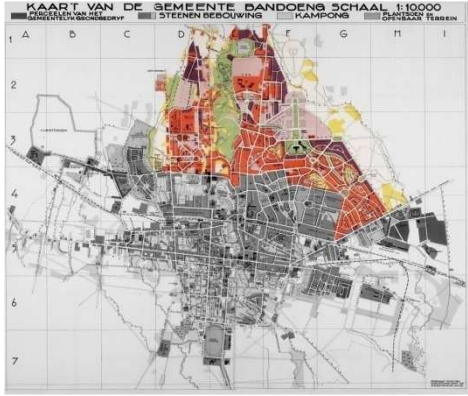
Figure 11 Karsten's Plan for Bandung 1930-1955

Karsten's Plan for Bandung can be put as first comprehensive master plan for Bandung to accommodate city expansion within 20 years. Estimation of population will increase from

210.000 (1930) to 750.000 (1955). However this plan not fully implemented because broke of World War II and discontinue since Indonesia Independence. From Karsten's Plan the devolvment stages of Bandung city can be traced since the early development time in establishing the city in 1810 (Table 14).

Table 14 Development stages of Bandung city

Map	Development Stages
	Early stage of Bandung City Area since established in 1810 to 1825. The area redrawn based on reference map of plan of Bandung 1825 (Kunto, 2000). In original map showed the center of the city only have eight permanent buildings.
	The expanding of the city supported by established railway from Batavia to Bandung in 1856 and opens the Preanger area for estate activities. The urban center expanding and encroached rural areas surrounding the city. Area in map based on Bandung Map 1882 (Griethuysen, 2010).
	The expanding after 1905 when Bandung get autonomous status as city (<i>gementee</i>) based on decentralization policy from Dutch colonial government in 1903. This expansion did not have reference and redrawn based on next map in archives map in 1920.

Map	Development Stages
	<p>The next expansion which include Ghijssels plan with AIA Berau (1917) and Karsten Plan as comprehensive plan in 1930. Reference map taken from <i>Door Gemeente ontworpen en aangevangen stadsuitbreiding</i> (Sandick, 2012).</p>

Source: KIT-Royal Tropical Institute, Dutch Colonial Map (2012) and personal analysis (2013)

3.2.1.1 cultural emancipation and anti colonialism

From emancipation aspect for both western and eastern culture, Karsten emphasized anti-colonialism.

There is more everything he does entail an inner-conflict, both substantively and morally-because colonizing, even if it appears logical and inevitable, subjectively remains unnatural as well as illegitimate. as a result, he feels deeply threatened, whether consciously or unconsciously, in his most personal values. Hence, racial delusions provide a wonderful solution-the exaggerated estimation of the value of his own mind, of his own work, and of the labors of his own people" (Karsten, 1917).³⁸

The good form as part of spiritual of the people also mentioned in urban planning approach

Can we believe that good surroundings are not without a deeper spiritual influence on a people? How clearly does each city give picture of its social mentality? (Karsten, 1920)³⁹

In urban planning a good form can reflect self worth both individual and social, he mentioned.

Just as in our times it would not make sense for all kinds of aesthetic requirements to be demanded of local town planners, likewise no sustainable effects can be achieved by having local communities make demands of the inhabitants with regard to architecture. One cannot extract from a community any more aspects of good form than actually reside in its mental level which is determined by fundamental social factors that are much deeper rooted than any ordinance (Karsten, 1920).⁴⁰

³⁸ Cited in Gouda (2005) from original article *Rassenwan en rasbewustzijn, DeTaak* (1917)

³⁹ Cited in Cobban (1994) as translation of *Indiese Stedenbouw, Locale Belangen* (1920), the similar citation also can be founded in Cote (2004)

⁴⁰ Cited in Roosmalen (2008)from original article *Indiese Stedenbouw, Locale Belangen* (1920)

3.2.1.2 basic eastern philosophy

In urban lives Karsten (1938)⁴¹ mentioned basic differences between eastern and western as "basic of Eastern philosophy is collectivity, where the requirement and rights of individual were subsumed under the needs of whole which contrary with liberty and rationalism in western philosophy".

In urban planning goal, Karsten (1920)⁴² mentioned that "concept of social communal live in the city planning to create coherence, unity, *samenhangend* (oneness) based on theory that city growth as organic whole".

In socio cultural perspective Karsten mentioned his preferences to collectivism than individualism.

Communalism - *gemeenschappelijk (geestelijk) inzicht* – coinciding with an increasing perfection of form, entertainment, comfort and appearance. This left one with a feeling of incredible emptiness lying behind the overfull and over-attended exterior, which is almost frightening (Karsten, 1931)⁴³

3.2.1.3 development based on group and city area characteristic

Karsten recognized diversity in Indonesia urbanism and propose it as basic unit of planning.

All differentiated according to the completely different living styles and level of economic development of three, sharply separated races. And, apart from the fact that all these variations have to developed separately as regard technical regulations, is the need to prevent the constantly occurring danger of disorganized intermingling which, from both technical and hygienic, as well as from social and aesthetic reasons is unacceptable (Karsten, 1922-23)⁴⁴

His vision about the existing traditional settlements was mentioned.

There was nothing wrong with land use pattern typical of Indonesian city, its disorder of built-up and open areas, and its mixture of types of housing. Such a mixture was not

⁴¹ Cited from Jessuf (1985) as explanation of Karsten discourse in urban planning, Semarang (1938)

⁴² Cited in Cobban (1994) as explanation of urban planning goal in Karsten theory from

⁴³ Cited in Cote (2004) Based on Karsten's letter to Prince Mangkunegara (1924,1931)

⁴⁴ Cited from Cote (2004) from original articlef *Van de klasse en het zonesysteem in de bouwvoorschriften van Buitenzorg. Locale Belangen* (1922-23)

bad in itself but became the source of distress in the light of technical needs of hygiene, sanitation and drainage (Karsten, 1920)⁴⁵

3.2.1.4 rationalism is necessary but not against (Java) culture

In Karsten's vision for traditional architecture he mentioned unity of modern and traditional can be seen as combination spiritual and material needs.

the schism, no, the absolute, inevitable, insoluble duality, lies in the essence of the colony: the contrast in tradition, degree of development and aim between dominating European and dominated indigenous life....a successful architecture must express a unity of spiritual and material needs (Karsten, 1938)⁴⁶

In town planning vision, traditional value identified as local conditions as prerequisite for successful modern urban planning

What is essential is a perpetual interest in and knowledge of local issues [...]. Town planning can only be good if planners are well-informed about local conditions and constantly in touch with people's needs and the needs of industry (Karsten, 1920)⁴⁷

Still in urban planning vision applied for transportation system, he mentioned traditional value as basic of adaptation for Western concept.

It would be dangerous to opt for only Western solution since they might be out of place in the Indies urban center which because of its spread-out nature always would be different from European city" (Karsten, 1930)⁴⁸

Karsten mentioned cultural emancipation with quality of design in architecture to promote traditional value in modern concept.

Housing construction whose form, internal and external, is neglected out of indifference or prejudice means active cooperation with the impoverishment of the people's spirit as much as neglect of economy leads to their purse, and that of hygiene to that of their body. (Karsten, 1922)⁴⁹

For intermixing based on housing types, reflected economic capacities.

⁴⁵ Cited in Cobban (1994) from original article *Indiese Stedenbouw, Locale Belangen* (1920)

⁴⁶ Cited in Jessup (1985) from original article *Bij de eerste Indiese Architecture Tentoonstelling, De Taak* (1920)

⁴⁷ Cited in Roosmalen (2008) from original articles *Indiese Stedenbouw, Locale Belangen* (1920)

⁴⁸ Cited in Cobban (1994) from original articles *Inzichten over Verkeerseichen en Stadsaanleg, ook voor kleine Steden, locale Belangen* (1930)

⁴⁹ Cited in Jessup (1985) as translation of *De Woning, Technisch-Arcitectonische Zijde van het Volsuisvestingsvraagstuk, Volkshuisvestingcongress* (1922)

The division into district would be on the basis of social position (with implication of economic well-being) rather than on racial grounds and would encourage the intermixing of ethnic group based upon their ability to pay for housing (Karsten, 1920)⁵⁰

Karsten (1922)⁵¹ mentioned gradually intermixing with cultural pedagogy where each group of economic class would feel better among themselves "Economic conditions were gradually producing a convergence in the domestic habits and economic behavior of the once distinctly differentiated colonial communities – European, Chinese and Native. Nevertheless cultural differences would continue to be evident".

3.2.2 Karsten's scenarios for the traditional settlements

Karsten in decentralization congress (1920) explained urban planning will be deal with existing urban area (old town) and expansion area (new town). Since then Karsten consistent to promote integrating traditional value in his western urban planning practices. One of the concepts was accommodate traditional settlements form in expansion part of the city. His understanding about uniqueness of urban characteristic in Indonesia can be traced from various article he wrote in Java Institute Journal (1917-1942), one of main point was rational planning mostly cannot capture inner life concept in Java tradition. Based on that condition Karsten also promote local planner who really understand local condition as long term solution.

He also consistent to reject concept public housing from European which provide uniform housing types in one large block. The reason was he found housing in traditional societies not merely about physical aspect but more about social and spiritual which provide harmonious live. He mentioned "the system maybe not follow economic efficiency based on western approaches, but harmonious system not less important than economic values".⁵²

⁵⁰ Ibid (23)

⁵¹ Cited in Cote (2004) base on explanation for Karsten discourse in *Woningcongress* (1922)

⁵² Mentioned in article in Java Institute Intellectual in Java (1924)

Karsten formulated two scenarios for traditional settlements in his western urban planning theory (Table 15).

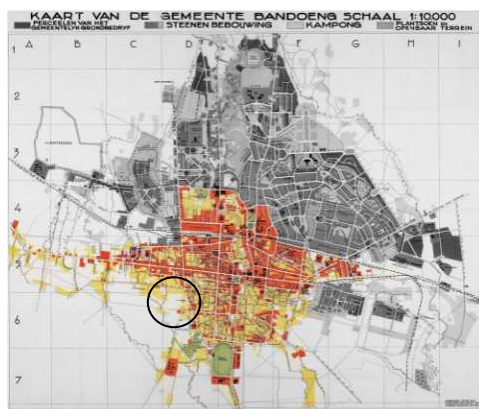
Table 15 Karsten's scenarios for traditional settlements

Concept	Principles	Scenarios
Goal	Inner life reside deeper than any ordinance	<ol style="list-style-type: none"> 1. Preserving the traditional settlements as basic unit of planning – <i>Kampung</i> Improvement Program 2. Promoting new type of Traditional Settlements – Hybrid traditional and western
Frame	Social structure: Each individual has own function in communal lives	
Base	Communality as basic philosophies Individual right subsumed under the needs of the whole	

Source: Personal analysis (2013)

3.2.2.1 the old traditional settlements

For old traditional settlements Karsten's scenario partly implemented with Dutch colonial government policy to launch *Kampung* Improvement Program (*Kampongverbeterring*) 1927-1934. The program was focused to improve environmental quality in existing traditional settlements with straightening street, enhancing sewer line, providing sanitation and hygiene facilities such as public bath, renovation for most severe houses (Figure 12).



Location of *Kampung* Improvement program in Bandung mostly in old town in southern part of the city



Source: KNILTV Netherlands 2013

Figure 12 *Kampung* Improvement Program, South Bandung West Java

Figure 12 show results of improvement program in the traditional settlements in Southern part of Bandung City. The photo taken in 1929-1930 by Cohen Stuart showed straightening and widening street, sewers line, public bath and house renovation before (above) after (bellow).

3.2.2.2 the new traditional settlements

For the new settlements⁵³ there are two samples of Karsten scenario had succeeded to be implemented. There are *Kampung* Mlaten, Semarang and *Kampung* Gempol Bandung. The differences between Karsten's designs with other public housing program can be described in Table 16.

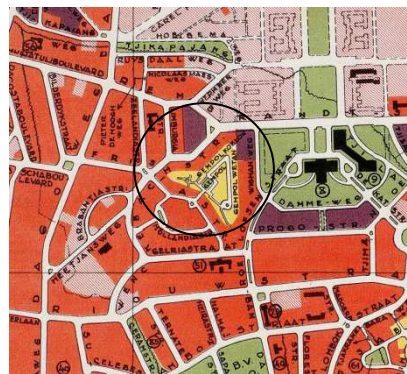
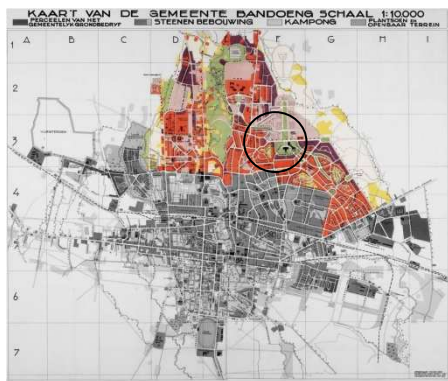
⁵³ Data based on compilation from Cote (2004), Roosmalen (2008), Triyadi and Harapan (2007,) Housing Analysis in Gempol Area Bandung, Raksadjaya (2007) Bandung Colonial City Revisited.

Table 16 Differences of the New Traditional Settlements with Other Public Housing⁵⁴

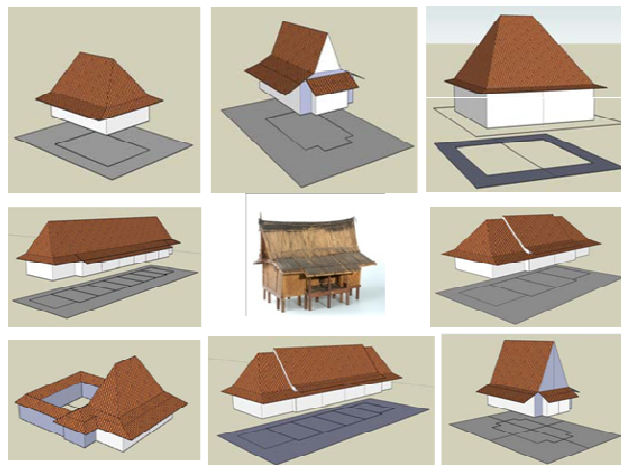
Features of new Settlements	Karsten's Design	Public Housing
Land use	Mixed, residential and commercial in one block	Single use (residential, commercial, services)
Type of Housing	Multi varieties (7-8 design in one block)	Single types for each block
Open spaces	Multipurpose (sport field)	Park, Garden
Infrastructure	Street hierarchies, sewer line, drainage, public bath/toilet	Street, sewer line, drainage

Source: KIT Royal Tropical Institute (2012) and Personal Analysis (2013)

The design of new traditional settlement can be seen in *Kampung Gempol Bandung* which identical with *Kampung Mlaten Design* (Figure 13)



Location of new traditional settlements in Bandung in new town as part of north expansion of the Bandung city



Source: *Bandung Stadgemnetee Bandoeng, 1906-1931*, Ignasia (2008), KNILTV Netherlands (2013) and Personal Analysis (2013).

Figure 13 *Kampung Gempol Bandung*

⁵⁴ Comparing design Kampung Mlaten, Gempol and Semarang Oost

Figure 13 show design of the new traditional settlement form in *Kampung Gempol* Bandung based on achieves map of Bandung (1906-1931). The new settlement consist of six houses types, two shop/house shop types, five public bath/lavatory, street hierarchies from main street until types for pedestrian only. The open space was sport field in the middle of complex. Data of housing in Gempol as the new type of the traditional settlements is summarized in Table 17.

Table 17 House types in *Kampung Gempol*, Bandung West Java

Type of Housing	Unit Number	Percentage from Total	Grouped (%)
Single Large	2	2	11
Single	12	10	
Couple	32	25	43
Couple shop houses	2	2	
Quadruples	20	16	
Four-row	20	16	46
Six-row	6	5	
Eight-row	32	25	
	128	100	100

Source: Triyadi dan Harapan (2007), Ignasia (2008) compiled by author (2013)

From 126 unit of housing in Gempol, most of it provided for lowest group of economic, middle and high 46%, 43 %, and 12 % respectively.

4. DISCUSSION

4.1 Reinterpreting Traditional Value in Urban Planning Concept

Reinventing traditional concepts or values in urban planning for Asian cities came as movement to improve diversity in urban planning approaches which still dominated from Western concept. Integrating traditional value to modern concept have main goal to create more suitable and workable concept in Asia urbanism. Study of historical embedded concepts of urban and rural in urbanization process can be taken as one alternative approach in this type of research⁵⁵.

Integrating traditional values to western concept based on two general assumptions. Firstly, traditional values rooted in cultural aspect and have potential to more suitable with local necessities and combine that with modern aspect can be the workable concepts. Second, traditional values can provide an alternative to enhance diversity in planning concept and improved resilience in sustainability concept.

This research utilizes historical approach to reinterpret concept of the integrating traditional values in western, proposed by Thomas Karsten (1884-1945) from late periods of Dutch colonialism in Indonesia. Analysis key elements in success and failure from Karsten's theory focused to traditional settlements planning will give highlight for discussion in reinventing traditional planning concept.

From historical data the type of traditional settlements (*kampung*) actually rooted in social live both urban and rural in Indonesia. Values such as communality, social structure, self sustaining and self governing communities in the traditional settlement, proved worked in history before modern urban lives introduced by Dutch.

⁵⁵See Yokohari et al (2000) utilize historical data to reinventing traditional landscape planning for Asian Cities

The traditional settlements became urban problem in modern urban planning practices can be analyzed from two factors. Firstly, colonial policies which segregate colonizer and the colonized in all live aspect gave general background to separate the traditional settlements with European settlements in urban area. Secondly, the traditional settlements which brought rural characteristics in Indonesia, such as compact neighborhood, mixed land use, variety in housing types, communal facilities, were unrecognized in European urban planning theory and be seen as unplanned area.

However Thomas Karsten⁵⁶, Dutch architect, who became leading figure in urban planning in Indonesia from Dutch colonial era based on his intention to integrate traditional value to western urban planning concept had accommodate the traditional settlement in his planning theory.

Reinterpretation of his principles from various publication which try to utilize transdisciplinary approach⁵⁷, found four main principles in integrating traditional values. Firstly, cultural emancipation based on anti colonialism perspectives, spiritual meaning reside deeper than any ordinance and self and social worth. Secondly, recognizing Eastern philosophy in urban lives was identified as communalism and social structure. Thirdly, development based on social and economic characteristics and selecting basic unit of planning based on character of social lives for each city bloc. Fourthly, rationalism and culture can be integrated in urban planning practices and cultural intermixing as next step for cultural equability.

⁵⁶ For more detail about Thomas Karsten Biography please refer to Cote (2004) and Bogaers (1985)

⁵⁷ The source to reinterpretation Karsten's theory utilize various publication from architectural, urban planning and socio cultural

4.1.1 Success and failure of Karsten's practices

4.1.1.1 preserving traditional value with improvement program

In the practice Karsten first scenarios for old (existing) traditional settlement which had tendency to preserving traditional pattern and enhance social communal lives with improvement program based on government subsidy policy did not working well from planning perspectives. Improvement program, lead by Dutch planner mostly deal with infrastructure and less in social economic development.

Idea to implement city block (the old traditional settlement) as basic unit of planning with develop infrastructure based on local necessities hardly supported by Dutch colonial government. The main policy in urban planning in Dutch era was to accommodate population growth of Dutch residents with city expansion.

Karsten (1938)⁵⁸ explain the improvements program did not meet the intention of urban planning, because after condition of the existing traditional settlement improved the benefit did not go to original resident but to wealthier people, who came and takeover the residential areas and then push the poor people to move out. This condition also mentioned by Wetering (1939) that after widening and straightening street in the old traditional settlement types of development of these areas totally different and the origin resident was pushed away.

This program also had high dependency to subsidy policy and discontinue since the financial condition of Dutch government⁵⁹. In other side continually growth with unplanned condition of the traditional settlement worsen environmental situation. That means the results of improvement program would overridden by effects of continual growth within mess situation. It supported by report of *Kampung* Improvement Program by Wetering (1939) which mentioned the important aspect not only improvement program but how the local resident can maintain the result of improvement by their own capabilities.

⁵⁸ Explained in Memorandum of Java Town Planning Ordinance (1938)

⁵⁹ From Cobban (1994) the program stopped in 1938 because financial crisis in Dutch colonial government

From preserving perspectives of traditional values, the improvement program also did not meet with intention to improve social lives since only the wealthier group who accepted the benefit rather than the poor group as majority of traditional settlement residents⁶⁰.

4.1.1.2 integrating traditional value into western concept

The second scenario which is integrating traditional values to new settlement form was successfully implemented as part of city expansion however the ratio of new traditional settlement compare to urban area for European people still in very small proportion. In Bandung Karsten's Plan, the type of this settlement only one site in *Kampung Gempol*.

This type of new traditional settlements can be accepted because it was suitable with urban expansion policy from Dutch colonial government and can be integrated in urban master plan. In the case of *Kampung Gempol*, this settlement developed to support labor supply for government office complex especially Department of Public Work near this location.

Kampung Gempol as the new traditional settlements was provide better environmental quality especially in hygiene and planned aspects with sanitation infrastructure and street hierarchies. In other side the diversity of housing types and common facilities can maintain traditional atmosphere in new settlements and preserve social communal characteristics. Above all, the good quality in housing design for all types provide base of social emancipation with nurture of self worth in resident feeling.

The characteristics which brought from traditional and modern meet with urban resident requirement. It was put the new traditional settlement as intermixing places for lower class societies from all groups of races.

⁶⁰ Ibid (4)

4.1.2 Key elements in translation traditional values to western concept

Integrating traditional value in western concept needs bridge from both sides. In the new traditional settlement, Karsten succeeded to extract essence of traditional value and translate it into western urban practices.

4.1.2.1 diversity in housing

Values of the traditional settlement can be analyzed from neighborhood pattern, leadership system, and communal work. Communal lives can be found almost in every aspect of the traditional settlements. The houses which close each others, food production processes, housing constructions and others productive activities create sense of communalism.

This essence translated with diversity in housing types, single block of the new traditional settlement such as *Kampung Gempol* have wide range of housing types from the simplest with only one room without kitchen and bathroom in row house style to single house with three rooms with kitchen and toilet. The diversity of houses accepts multi level of economic capacities of residents and can be basis of forming of social structure and also provide affordable house price with meet with local economic condition of native people in that time (Figure 14).

Understanding of basic philosophy of the traditional settlement was consistent with Karsten's opinion to reject public housing approach which common implemented in European. Uniformity in housing types in one large block will prevent the forming of social structure which is needed in Indonesian urban lives.

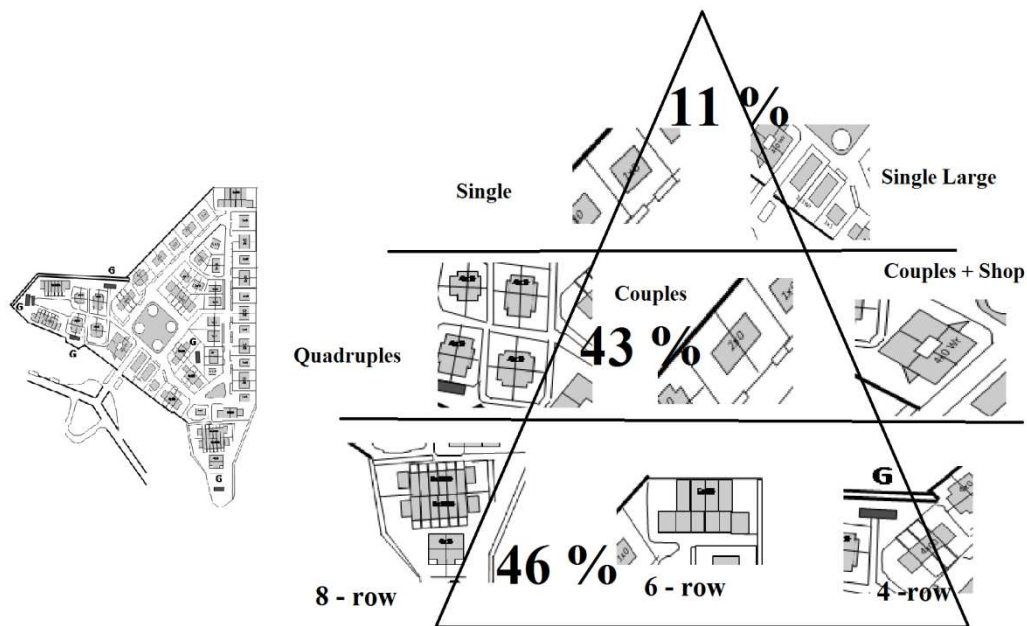


Figure 14 Diversity in housing for social structure

Figure 14 created to provide illustration about interpretation of housing diversity as base of social structure in the new traditional settlement. The diversity of housing accommodates various group of economic level. Ratio of housing maintained to create number population would create the pyramid structure. However this model to maybe oversimplification since leadership in traditional societies in West Java did not base on economic capacities but more in spiritual and cultural⁶¹.

4.1.2.2 good design quality

The other value was spiritual lives since early stages of settlements forming, leadership base on cultural and spiritual shaping the societies to respect this value in their live practices. The values influence their perceptions about material which belong to them.

Karsten, translated this with necessities of good form to fulfill not only material but also spiritual of local people. He articulated the values with good quality design in housing for

⁶¹Type of leadership in traditional societies refers to Ekadjati (1995).

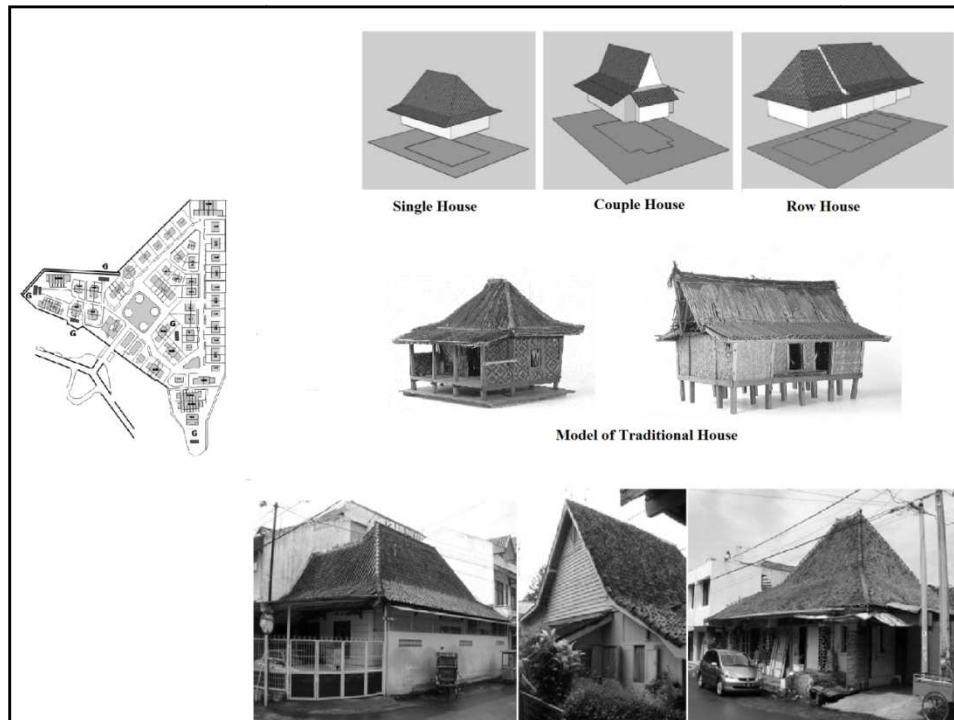
all types including semi permanent type from traditional architecture. The good quality both building and surrounding will influence their self worth as individual and social. Design in housing also resembles traditional style in Sundanese (West Java) house. High roof and utilize local material such as bamboo and wood (Figure 15).



© Het Geheugen van Nederland, 2003

Figure 15 Model of traditional house in Sundanese culture, West Java

Figure 15 shows type of traditional house in West Java, the model created in 1895. The type of house is semi permanent with wood and bamboo. The model of housing was adapted in Gempol as the new traditional settlement (Figure 16).



Source: Harapan & Abadi (2007), Ignasia (2008), KILTV (2013)
 Figure 16 Traditional housing designs in Kampung Gempol

4.1.2.3 street and sanitation system

The concept of integrating traditional value in western concept also adopted modern approach to make it workable. In the new traditional settlement proposed by Karsten, the main intention was to provide better environmental quality with well planned street and sanitation facilities.

The hierarchies of street which gradually narrowed from main streets to level pedestrian only, provide effective transportation and still maintain intimacy and liveliness of the residential. Sanitation and hygiene facilities with better drainage and sewage infrastructures provided to increase environmental condition and meet with requirements of modern settlements.

4.1.2.4 multipurpose public space

The other requirement of modern urban planning was availability of open space in urban area which hardly find in existing traditional settlements. The approaches to provide open space in the new traditional settlements can be seen as adaptation to local necessities. Open space designed as multipurpose place such as sport field rather than conventional park. The multipurpose open space can be green area, temporary market, sport field and this can accommodated multi necessities of residents for communal places.

The other form of public space in the new traditional settlement was public bath/wash, provided for smallest type of house. The type of house do not equipped with private bath and toilet because limitation of space. The kind type of public space also exists in the old type of the traditional settlement. Most of house did not have bath facilities and people usually meet to each other in public bath (Figure 17).



Source: Source: KITLV Netherlands 2013
Figure 17 Public bath/ in the traditional settlement

In *Kampung* Gempol both types of public space was existed. There are multipurpose open space as adaptation from modern urban planning and public bath and toilet from traditional public space (Figure 18).

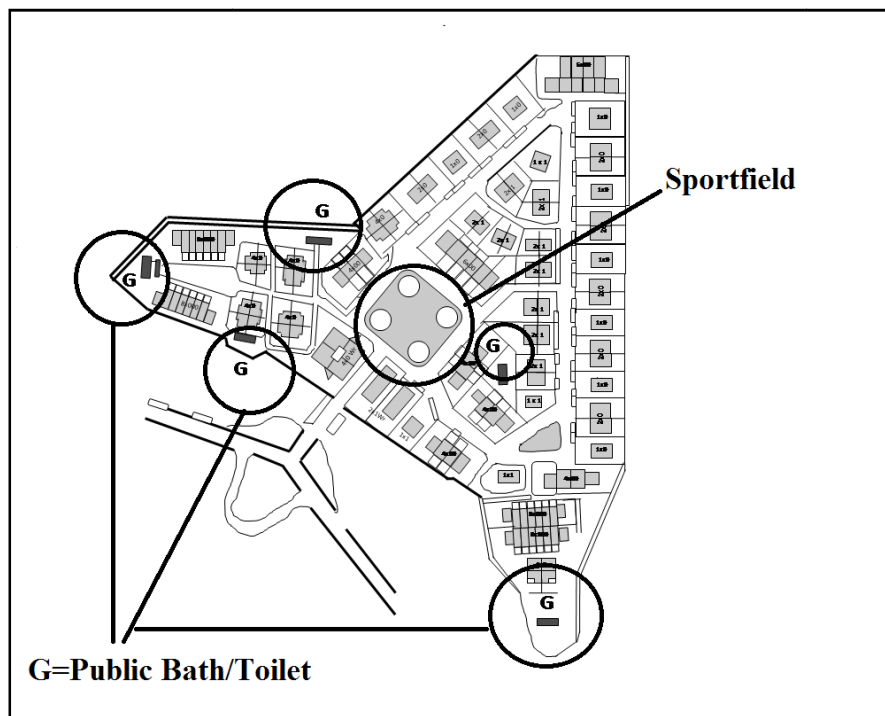


Figure 18 Two type of Public Space in *Kampung* Gempol

4.2 Re-contextualization for Indonesia Urbanism

This research proves that historically the traditional settlement (*kampung*) which grew as self sustaining and governing communities brought communality and social structures as its values. The values recognized by Karsten as part of Eastern philosophy in urban lives and reflected in his theory to integrating traditional values in western urban planning and based on Karsten's theory, the traditional settlement was be accommodated in western urban planning practices.

The key element in integrating traditional value to western concept was translation process. The process was pursued with extracting essences of traditional value such as communality, social structure, and spiritual lives and then translated to technical term in urban planning with providing multi diversity in housing types and applying good quality in all design. The new traditional settlement can be seen as the planned settlement with traditional essence in western practice.

The analysis of the integrating traditional values in western concept in this research have boundary in historical perspective. The workable concept which implemented by Karsten in Indonesia was in colonial era. The research has inevitable limitation from incomplete sources such as data, in continually sequence and constant place of event. External weakness also as nature of historical research with section bias, however the corroboration techniques applied to minimize those possibilities.

From previous research discussion about the traditional settlements in Indonesia mostly still in philosophical stage such as the traditional settlement represent sense of nostalgia, cultural asset⁶² or how the traditional settlements in urban area actually have a lot of potential⁶³. The other direction try to discuss under theory new urbanism in US with neo traditional neighborhood concept⁶⁴, however the traditional in here still brought back from European tradition.

In other side Karsten's theory about integrating traditional values mainly discuss as aesthetic feeling or sense of nostalgia even superficial⁶⁵, this research suggest that the concept was workable concept especially in approaches to the traditional settlements because the translation of traditional value had bridge to modern practice.

⁶² Mentioned in Sihombing (2004)) Transformation Kampung in Urban Area

⁶³ Discussed in Setiawan (2010), *Kampung* – Urban new direction in Indonesia urban planning, Sihombing (2004) Transformation Kampung in Urban Area

⁶⁴ Discussed in Nugroho (2009)

⁶⁵ Discussed in Cote (2004) Roosmalen (2008), Kusno (2000)

The research dealt with concept to reinventing traditional value in current practices based on workable concept from history of traditional settlement still lack and this research tried to fill that gap.

4.2.1 Recognize value in diversity and social structure

The new urban vision which can accommodate the traditional settlements in urban planning need a way to recognize value in diversity and social structure in traditional settlement, extract those essence and combine with modern approaches to make it acceptable and workable in current situation.

Thomas Karsten showed that effort and proposed idea of integrating traditional value with western concept with his urban planning theory. He approached cultural value with involved in many event and discussion with his activity in Java Institute 1917-1942 and sobokarti traditional theater 1927-1942 which is outside his discipline in architecture and urban planning. The other importance factor was his principle to refuse colonialism and promote social equality.

The transdisciplinary approach and planning principles which take side to promote social equality can be found in sustainability principles in current time. This approaches can be replicated to gain more understanding about how accommodate the traditional settlements in current urban planning policy based on integrating traditional value to modern concept.

4.2.2 Application as alternative urban planning

The most well known program for traditional settlement in Indonesia was *Muhamad Husni Thamrin* Project (*Kampung* Improvement Program) in Jakarta, Started in 1969, and in 1979 became national program. The program itself gain much respect including international recognition as Aga Khan Awards in 1980, Global Best Practices in 2004 and mentioned as the

world first slum upgrading project by UN Habitat (2006)⁶⁶. This program with some adding concept is continually until today following by some other cities.

Based on characteristic and principles this program actually resembles ideas from Dutch colonial government with *Kampongverbettering*⁶⁷. The preserving idea was unsuccessful in Dutch era, because this program only focus to physical changes and lack in social planning.

The current situation of the traditional settlement in urban area in Indonesia already influence by modernity and globalization. The traditional value need to reassessment based on present condition. Kartsen's theory was workable in colonial condition can provide highlight how to translate traditional value to workable planning concept. Thomas Karsten provides approaches to extract the essence of traditional live and translate it in western urban planning practices in Dutch colonial era. The practices had target to promote the traditional settlement for better environmental quality with still manage social communal lives as characteristic, rooted in Eastern philosophy.

⁶⁶ Information from Jakarta City Government (2012)

⁶⁷ Mentioned in Various Interview with Ali Sadikin (Former Jakarta Governor as initiator program MHT)

5. CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

Integrating traditional value and western concept in Karsten theory can be seen as success effort in promoting traditional settlements as local urban characteristic to be recognized in western planning concept. The translation process was critical point to determine adaptations will success or not. There are three main points in this research: The traditional values were social structure, communality, spiritual lives which embedded from development process, the traditional settlements was accommodated in western planning concept based Karsten's theory, and key element for integrating were translation process.

From history of the traditional settlement (*kampung*) in Indonesia especially West Java, the traditional values came from adaptation to nature can be reflected in pattern of neighborhood which provide intimacy and street liveliness. Mixed land use which intended to provide local sources such as food, clothes, housing, to fulfill local necessities. Communal social lives from various activities in food production, trades and house construction. Social structure from type of leadership in cultural and spiritual was creating unity as cultural unit.

The traditional settlement became urban problem since modern urban planning theory introduced by Dutch along with Decentralization policies in early 1900's. The theory derived from European perspectives divide clearly boundary between urban and rural, the traditional settlement which have rural characteristic trapped in urban area and became target to eliminated, temporary place, and improvement target. However Thomas Karsten (1884-1945) proposed new concept to integrating traditional concept to western urban planning.

Reinterpretation of Karsten's theory provides two scenarios. The scenarios were preserving with improving program for old areas, promoting traditional values to modern design for new areas. The key element of the processes was translation ability to extract

essence of value and convert to workable concept. The translation of communality, social structure and spiritual as traditional value implemented with diversity in housing varieties, common facilities and good quality design in the new traditional settlement. Meanwhile street hierarchies and sanitation facilities were introduced from western perspectives to provide better environmental quality.

5.2 Recommendations

The future research suggested exploring relevance of approach from Karsten's theory to integrate traditional value to modern concept with translation process for current situation in Asian urbanism especially with case of informality such as in the traditional settlements (*kampung*) in Indonesia. The new theory of practical solution can be generated for this research. The transdisciplinary approach, practiced by Thomas Karsten, combine urban planning from rational and technical aspect and traditional for philosophical and social values.

Other direction, that is to go deeper in historical analysis about original urban planning concept to provide general theory about traditional planning especially in Asian cities. The availability of historical data to support this type of research would be challenges, however the trend to provide open access from various institutions who owned data about urbanization history in Asia started flourished.

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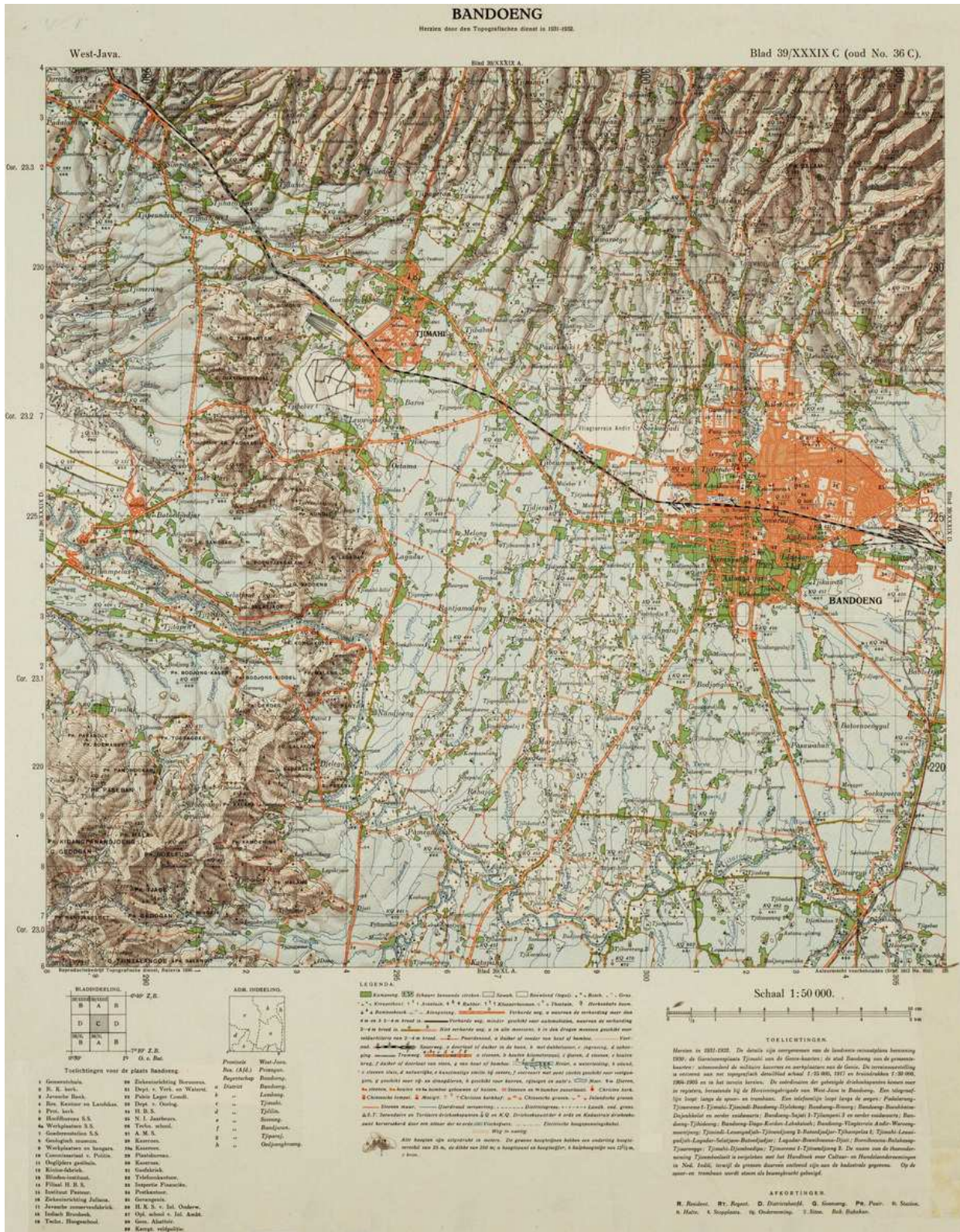
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APPENDIX A

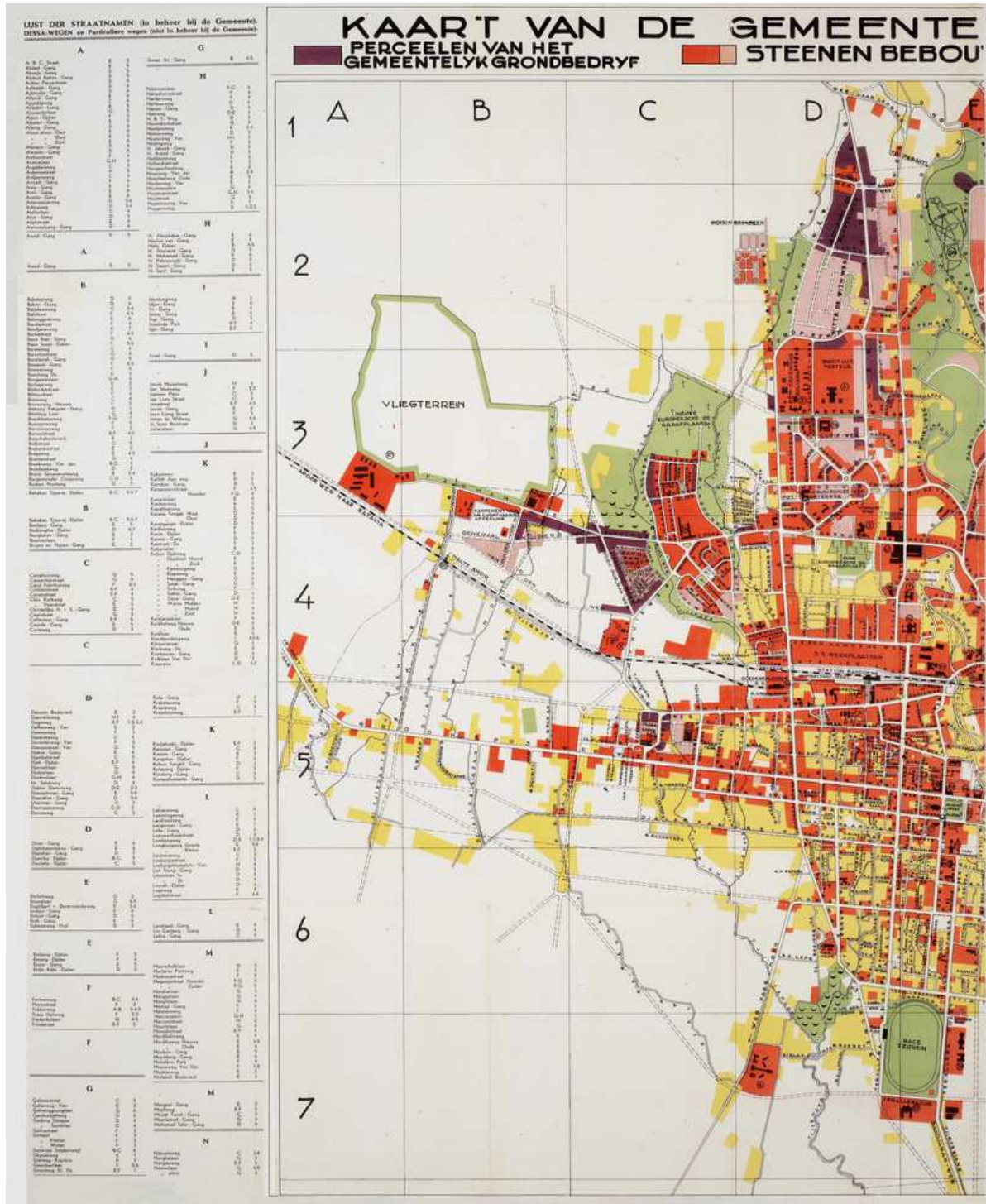
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Topographical Map of Bandung 1930-1931



Karsten's Plan for Bandung 1930 -1955 (1)
(Source: Dutch Colonial Map, Royal Tropical Institute)



Karsten's Plan for Bandung 1930 -1955 (2)
(Source: Dutch Colonial Map, Royal Tropical Institute)

