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"CITIES WE HAVE VS. CITIES WE NEED"

Proceedings

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ISOCARP
Knowledge for better Cities



Short Outlines

Papers

1. Transforming human settlements
2. Planning activism and social justice
3. Envisaging planning theory and practice for the next decades
4. Urban planning and policy making in times of uncertainty, fragility and insecurity
5. Intelligent cities for people
6. Planning for an interlinked and integrated rural-urban development

Authors are responsible for the content of the short outlines and the full papers that are listed in the order of their presentations in each track.



Track 5 Intelligent cities for people

**Co-rapporteurs: Awais Piracha,
Jianxiang Huang & Aurobindo Ogra**

This theme tackles the definition of smart cities where technology and access to data can be exploited for an unprecedented awareness and control of our built environment. Papers in this track grapple with the question, “while technology flourishes, have the human priorities of these cities been appropriately defined”?

The cities of the world are facing a number of new and difficult challenges often at scales unimagined before. To begin with fast pace of population and economic growth and the sheer number of people migrating to cities in search of better lives is unprecedented. That leads to very high demand for housing, employment, transport and leisure. In addition, due to very hyper connectedness people are highly aware of what exists in other parts of the world. The city dwellers thus expect facilities of the highest standard that other places have managed to provide. Intelligent cities try to address those expectations and demands.

Intelligent cities are not only about ICT manipulation. These are the cities that are good at learning and finding innovative and novel solutions for their problems. From the protective walls of the ancient cities to the dykes of Netherlands cities have been coming up with clever and daring solutions. Intelligent cities is thus a broad field. The value of this concept lies in the potential it offers in rethinking interventions by city managers and city dwellers typically using the latest technologies to ensure the interventions are clever, out of the box measures.

Intelligent Cities, a year-long initiative of the National Building Museum supported by partners TIME and IBM, and funded by The Rockefeller Foundation, explored the intersection of information technology and urban design to understand where we are, where we want to be, and how to get there. It contains a broad range of themes under the umbrella intelligent cities title. Time presented a number of different examples of what were deemed as intelligent city in action. That includes the cases where ICTs were cleverly used to achieve improvements in health, transport, clean energy, jobs, walkability, identity, convenience, leisure and security.

The distinction between smart and intelligent cities is not clear. They are overlapping concepts and at times are used as synonyms. The discussions in this track will inevitably discuss this fundamental question. The following sub-themes have been identified from the papers selected for presentation in this track.

Session 1: Intelligent cities of emerging economies

Emerging economies such as China, India, Southeast Asia and Sub-Saharan Africa have wholeheartedly embraced the Intelligent/smart city concepts. The notion is attractive for cities in these countries as it offers them the potential to leapfrog on the path to development. It is also attractive because the traditional (unintelligent) measures cannot cope with the needs of sheer numbers of existing and incoming citizens. However, there seems to be some evidence of the excessive use/misuse of the intelligent/smart cities concept. In some cases, the prefix intelligent/smart is simply added to existing and routine measures and developments as a catchy title/phrase.

Session 2: Intelligent cities of developed countries

Some cities in the developed countries have been highly successful in tapping intelligence for resolving their problems and attracting young, energetic and creative people. Other cities are trying to learn from the successful example such as Boston. Some scholars in the developed countries are sceptical about the blind following of the intelligent cities concept. They suspect, in some cases, gizmos are not what people require.

Session 3: Planning with big data / complex systems

Use of big data such as mobile phone, smart travel card and other large data in planning is fast emerging a very promising area of study. A number of papers in this track present case studies of use of big data is studying and improving various planning related issues such as land use, housing provision, mega projects, commercial activities and more.

Session 4: Smart transport / infrastructure

A number of case studies in this track explore how intelligence/smartness can assist in improving mobility. The topics in this area range from smart mobility, promotion of non-motorised transport, to integration of the airports to provision of health services. Health, access and equity are recurring and underlying themes in this sub area.

Session 5: Participatory smart planning

A number urban planning scholars grapple with the following questions. Who can participate and who benefits from all the intelligence introduced in the city planning endeavours? Are citizen able to participate in consultations related to smart planning? Are their voices being heard? Do planners and policy makers even care if quest for smartness does not engage with the marginalized? Is smartness leaving sections of society even further behind?

Session 6: Smart energy in cities

Intelligent systems are enabling cities across the world to make use of complex, dispersed and renewable sources of power. Smart electricity grids and meters allow households to feed electricity produced from rooftop solar systems back into the grid. They also enable the peak and off-peak electricity charging leading to dampening of demand for peak times and thus avoiding the need to build/run peak load power plants. Smart energy systems are enabling isolated developing country cities to maximize the utility of off-national-grid local energy generation including that from the renewables. A number of scholars from both developed and the developing country cities will present their experiences in this area.

Session 1: Intelligent cities of emerging economies

Xingping WANG, Southeast University, Nanjing, China; Kai ZHU, Zhejiang University of Technology, Hangzhou, China

Innovative space of metropolitan area: types, patterns and evolution

We present refined and systematic development process of innovative space and analyse the distribution pattern and interrelation characteristics of it.

Qingqing WANG, Nanjing, China

The research of spatial form in Xinjiang vernacular settlement focuses on water resources

This article focuses on the water resources in vernacular settlements of China's typical arid region. It studies the impact of location, spatial form, functional layout and other aspects caused by water resources. The paper summarizes the conventional wisdom in settlement-construction and makes reference to recommendations in further settlement construction of arid regions.

Xiaojun WANG, China Academy of Urban Planning and Design, Beijing, China

Eco-smart research parks: Shanxi Science and Technology City case study

China recently started building its third generation of research parks: eco-smart research parks. This paper analyses and compares the key characteristics of the three generations and takes Shanxi Science and Technology City as the research object, to study the connected eco-smart strategies for research parks.

Naniek WIDAYATI, Tarumanagara University, Jakarta, Indonesia

Old city restoration of Jakarta, Indonesia

The sub-district of Glodok is part of a to-be embryo of Jakarta city located between the Jakarta West and North. The emerging problem is an unfortunate image of traffic jams, etc. Becoming the Manhattan of Asia needs presidential regulation stipulating restoration.

Session 2: Intelligent cities of developed countries

David LUDLOW, UWE, Bristol, United Kingdom

Intelligent city planning – meeting people's requirements?

Innovation, both societal and ICT driven provides major opportunity to realise the full potentials of bottom-up engagement in integrated urban planning leveraging collaborative ICT technologies for responsive urban planning. However, intelligent city planning meeting people's requirements must mobilize ecosystems of research actors and policy makers to support research driven strategies.

Bruno MONARDO, Leonardo BIANCHI, Nicole DEL RE, Andrea SIMONE, Almona TANI, Sapienza University of Rome, Roma, Italy

Smart specialization strategies for supporting the Europe 2020 vision

These reflections aim to highlight the crucial challenge that European Regions face applying the 'Smart Specialization Strategy' principles for pursuing the virtuous implementation of the Europe 2020 Agenda. The different cultural style of the 'US model' represents a significant lesson.

Chelsea ERWEE, University of Kwa-Zulu Natal, Durban, South Africa

Rebranding Umhlanga as an intelligent city

The shift towards the intelligent city model, as a response to traditional city challenges, embodies inter-connectedness between sustainability and efficiency in order to create a conducive environment for all age groups and diversities to prosper together in a more liveable urban habitat.

Jianxiang HUANG, The University of Hong Kong, Hong Kong, Hongkong; Lishuai LI, Department of System Engineering and Engineering Management, the City University, Hong Kong, China

Pleasant urban experiences: re-examining place-making theories using social media data in high-density cities

Creating enjoyable places are of growing importance for post-industrial cities. This paper re-examined classic urban design theories using geo-located social media data in Hong Kong, a high-density cities in Asia. The purpose is to identify what attributes of the built environment correlate with pleasant experiences.

Session 3: Planning with Big Data / complex systems

Justyna KARAKIEWICZ, The University of Melbourne, Melbourne, Australia; Caroline BOS, UNStudio and University of Melbourne, Amsterdam, Netherlands

Ever smarter, cities that learn: the application of complex adaptive systems theory to urban development

This paper examines the challenge of designing and implementing cities that can be incrementally smarter, that are able to learn. We address the question of what it means for a city to be smart.

Ning ZHAO, Jianjun WANG, Shoujia ZHU, Guangzhou Urban Planning & Design Survey Research Institute, Guangzhou, China

An empirical study on mega-city commercial spaces distribution characteristics: exploratory big-data analysis on Guangzhou, China

The distribution of the modern service industry becomes one of the important factors influencing the layout of a metropolis. This paper, taking Guangzhou as an example, explores its layout characteristics and general laws by statistical and spatial analysis based on big-data mining from Baidu.

Zhenyu WANG, Jiangsu Institute of Urban Planning and Design, Nanjing, China; Pengpeng ZHOU, Nanjing Institute of Technology, Nanjing, China

The role big data plays in the construction of smart city: a case study in Shanghai

Smart city construction is a good solution to Chinese city-problems in the context of globalization. The paper introduces how Big Data influences the construction of a Smart City through the case study of Shanghai.

Zhejiang CAO, Tsinghua University, Beijing, China

The interaction mechanism between urban planning, land supply and tertiary industry spatial structure in Hong Kong

This paper established the socio-economic model to examine the interaction mechanism between urban planning, land supply and tertiary industrial spatial structure in Hong Kong. It analyses the city's spatial economic and concentration structure through GIS and judges the relationships between the aforementioned three key elements, based on pre-built model and assumptions.

Prasanth VARUGHESE CHARAKUNNEL, Kiranjith CHULLIPARAMPIL, Anuradha CHAKRABARTI, Drishti Center for Urban Research, India

The urban conundrum in defining smartness; citizen or technology: a critique into the Indian idea of smart city

The research deciphers the contextual and non-contextual notions of smartness and the idea of smart-cities based on the 100 smart-cities project initiated by the Government of India. It brings out the inherent contradictions within the smart city proposals in the realization of urban commons and the right to city.

Session 4: Smart transport / infrastructure

Giovanni SERGI, University of Genoa, Senigallia, Italy

Intelligent cities for local growth, smart city in Italy: the case of the Municipality of Genoa

In 2016, 158 municipalities in Italy like Genoa have worked on the issue of Smart City and prepared 1800 projects using a holistic approach, which considers the city as a system that is able to support and spread innovation.

Ntsieni Colin KHWATHISI, James CHAKWIZIRA, Peter BIKAM, University of Venda, Thohoyandou, South Africa

Smart mobility: challenges of integrating intelligent transport systems for enhanced transportation systems performance

Achieving smart mobility through intelligent transport systems still faces paramount challenges. The paper investigates the challenges of integrating intelligent transport systems for enhanced transportation performance through the review of case studies from developed and developing countries.

Oluwafemi OJO, Eric MBAUKAAN, Federal University of Technology, Minna, Nigeria; Paul AJAYI, University of The Witwatersrand, Johannesburg, South Africa

Urban core health vulnerability: assessment of carbon monoxide level in Bida, Niger State

The study aims at determining the urban core dwellers vulnerability for Carbon Monoxide (CO) along major roads. The study employs a portable meter to determine the spatial variation of CO and residents related health challenges.

Robynne HANSMANN, Durban University of Technology, Durban, South Africa

How integrated is the airport in the production of space?

The study explores the movement of goods through airports in order to understand the relationship between flows and the production of space, and specifically how integration occurs between modalities and land uses within the context of the Dube Trade Port case study.

Session 5: Participatory smart planning

John VAN DEN HOF, Saxion University of Applied Sciences, Enschede, Netherlands

Digitalization and planning empowerment

An important precondition for planning empowerment is the availability of reliable data. Partners of Saxion UAS anticipate on the coming Environmental and Planning Act by experimenting in three LivingLabs with new methods for sharing data to enhance involvement of civil society with planning policy at a local scale.

Nancy ODENDAAL, University of Cape Town, Cape Town, South Africa

How smart are we about smart cities? Exploring opportunities for empowering alternatives

The relationship between technology and planning is under new exploration due to the current publicity on smart cities. This paper suggests alternative conceptions that are not infrastructure-led.

Guy VLOEBERGH, OMGEVING and University ANTWERP, Antwerp, Belgium; Philippe VAN WESENBEECK, Department Spatial Planning, Ghent, Belgium

Inspire and be inspired: an innovative, citizen-centered design of the spatial structural vision 'Room for Ghent'

Ghent (300.000 inhabitants) is creating a Spatial Structural Vision 2030 for the city. This focuses on a 'citizen-centred design approach' to create opportunities, practices for citizens, (social) entrepreneurs and policy makers. The idea is to inspire each other by sharing, collecting and testing ideas, experiments and concept for the future.

Tathagata CHATTERJI, School of Planning and Architecture Vijayawada, Vijayawada, India; Souvanic ROY, Indian Institute of Engineering Science and Technology, Shibpur, India

Participatory planning in the age of smart cities in India

This paper reviews India's new urban agenda to develop 100 Smart Cities from the angle of participatory planning - to understand whether this new urban agenda would promote more inclusionary form of development through dissemination of information or further perpetuate social polarisation through a technocratic planning.

Alberto CENDOYA, University of Navarra, Pamplona, Spain

Digital slums - understanding the importance of the digital connectivity to transform African slums: the case of Cape Town

61.7% of urbanites in Africa are slum dwellers, and this number is set to increase. This paper aims to show the most efficient way to combine traditional urban policies with digital and technological ones to ensure agile and durable solutions for slum dwellers.

Session 6: Smart energy in cities

Ntombenhle NDWANDWE, GSC Holdings Pty, Johannesburg, South Africa

Green energy for African cities - the changing landscape of our cities

The rise of energy supply in response to the demand of electricity has become one of the corner stone in tackling urbanization and rural migration within the urban development paradigm.

Somayeh TAHERI MOOSAVI, University of Manchester, Manchester, United Kingdom

Distributed ledger technologies (Blockchain) in urban energy systems, the case study of smart plugs in the UK

This paper seeks to explore the potential opportunities and challenges involved in the implication of smart plugs to address fuel poverty in the UK. The block chain technology attempts to change the interaction between the UK government and the citizens and improve trust, transparency, governance, disintermediation, and security in the system.

Garfield Wayne HUNTER, Guanzeng ZHANG, Lan WANG, Tongji University, Shanghai, China; Daniele VETTORATO, European Academy of Bolzano, Bolzano, Italy

Urban energy planning of human settlements: taxonomy, frameworks, and tools to guide planning evaluation and support decision-making

This paper aims to propose a framework to develop insights into the complexity of urban energy planning. This will sensitize stakeholders on current trends, challenges and transitional theoretical and analytical frameworks and models, tools and mechanisms, which will ensure a seamless integration to achieve a sustainable future.

Adriano BISELLO, Daniele VETTORATO, EURAC Research, Bolzano, Italy

Verifying and weighting citizens' priorities for energy refurbished dwellings

What characteristics are driving the citizens' decision to buy an energy refurbished dwelling? Are the monetary savings in energy bills really the most relevant benefit? Are citizens' priorities appropriately addressed by designers? To answer these, this study applies the AHP methodology to a local real estate market in Europe.

RESTORATION OF KOTA TUA JAKARTA OF INDONESIA IN TERMS OF REALIZING THE MANHATTAN OF ASIA

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Background

In light of Jayakarta city's history established upon Fatahillah's order with the development in 1619 thus Jayakarta city was attacked into demolition by VOC. In 1620 Batavia city was established upon J.P. Coen's order with his city center lying in the east of *Kali Besar* (name of big river).

As in similar custom of towns built in that period by The Dutch government in their colony such as; Manhattan island located in the corner south of river Hudson. That island was settled by the Dutch in 1624, established to follow-up pattern of Amsterdam city then dubbed in name of *New Amsterdam* (in Dutch: *Nieuw Amsterdam*). At the time of World War 1 between Netherland and England, Netherland there was an agreement of exchange between *New Amsterdam* and island *Run* that was part Banda's islands in Maluku.

The content of agreement was *New Amsterdam* previously powered by Netherland then released to power of the England. Name of *New Amsterdam* was converted into *New York* for honour of British nobleman, Duke of York, finally becoming a British King of Catholic James II, whose name also was used for city and state of New York. On the other side, England surrendered an island of *Run* as part of Banda's islands in Maluku to Netherland as well as concession of trade of various spices. Today Manhattan grows to be a big independent city of American pride.

In 1808 due to disease contamination thus Dutch ruler at that time Daendels moved the city to the south. And the city was then left. In 1905 Batavia city had been left and rebuilt upon City Council's order. Recently old city enters into 2 municipal districts, West Jakarta and North Jakarta. Based on *PERGUB* (Governor Regulation) no 34 of 2005 there was conversion from name of old city of Jakarta to *Kotatua* Jakarta, holding a potency as Queen of the East" as a commerce center with 23 ports all around the earth in the east, from Darwin to Banda.

Moreover revitalization implementation has started since the year of 2006 by referring to *Kotatua* as *brand image*. Once undergoing several revitalization in 2015 *Kotatua* had been enacted by Governor of DKI Jakarta to be Cultural Conservation region of National level and is on the way for effort of admittance of world cultural conservation (World Heritage List from UNESCO). As a matter of fact, this *Kotatua* as dubbed today is not yet able to be an

independent city as in Mantattan or New York. The latter is due to problems at hand not solved out .

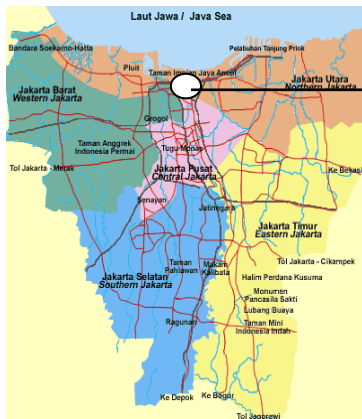


Figure 1. Map of Kotatua's border (Source: Candriyan, 2015)



Figure 2. Overview of Region (Source: Candriyan, 2015)



Figure 3. Kotatua Existing (Source: Candriyan, 2015)



Figure 4. Building of Dasaat (Source: Candriyan, 2015)

Problem

Problems coming-up are *image* a little bit unfortunate, lacking of vitality in the region, infrastructure condition not supporting, thus there are irregular traffics, decrease in significant environment quality, policy not yet integrated aministrative border divided, and institution not yet on-target, some buildings belong to the private and state-owned entity not belonging to government. There is no particular regulation on arrangement of handling Kotatua. Dwelling society multy ethnic and fully worried of dispute if there will be power exchange.

The Method to Use

Research done is qualitatively interpretative with natural approach in learning phenomenom at hand for interpretation and comprehension (Norman Denzin, Yvonne Lincoln, 2002:176). Data search is done with observation, interviews to informants pertaining

to research object. Data then is compared to notes and articles related to problems. Then the latter is analyzed to obtain a conclusion.

Field Data

Kotatua holds potency such as; 1). an international port town in the past time becoming a prospective for establishing a Jakarta city and mixed communities, 2). heterogeneity of society, it is due to establishment of mixed cultures between several ethnics (Tionghoa or chinese, Arabian, Dutch, British, and Malayan), 3). city structure already established previously on river bank resembles to cities in Netherland with river Ciliwung as economic activity center, 4). maritime tourism activity center in the past time taking an important role in numerous aspects of regional development, 5). infrastructure support of road transportation and canal to districts of Glodok and Pasar Baru, 6). remnants of European architectural building of seventeenth century. 7). port of Sunda Kelapa is one of ports with Phinisi ship up to present still on the operation. 8). having a museum displaying past time maritime greatness.

Kotatua has been experiencing several revitalization for instance; Revitalization stage 1 was implemented with reason about establishing city renovated totally, execution years started during 1905-1929 upon idea of City Council, area width revitalized was 105 ha, by establishing a new structure in region of river *Kali Jelakeng* and river *Kali Semut*, during those years also Beos railway station was officially inaugurated. Transportation mode during that period was; trem, two wheeled-buggy or delman and boat. Revitalization stage 2, executed with reason of economic revitalization of President Soekarno's era, started from 1950 to 1962, marked with inauguration of building BNI 46, Bank of China and so forth, by central Government. Transportation mode of that period was; trem, bus, opelet. Revitalization stage 3 was executed with reason of advanced destination creation made by Governor Ali Sadikin, from years 1971-1974, revitalization area contained 20 hectare including; garden of Fatahillah and *Kali Besar*, identifying the infrastructure and creating new function. To-do list as target expected in order to welcome Inauguration of PATA conference. The latter was managed by DKI Jakarta administration. Transportation mode at that time was bus, opelet, bemo. Revitalization stage 4, executed with reason about rescuing revitalization stage two by Governor Sutiyoso. Started from 2005 and its plan will head to the year 2030. Width of 846 hectare, started from National Archive building up to region of Outside Batang (*Luar Batang*). Activities done by pedestrians (is to make pedestrian road) by giving industry's creative function. Groundbreaking of revitalization as a mark from complete program of Regional Spatiality Order Blueprint or RTRW (*Rencana Tata Ruang Wilayah*). Managed by the institution itself. Transportation mode at hand is KRL, Trans Jakarta, small bus named Angkot (Candriyan, 2011).

As in fact today in 2016 revitalization implementation is still wobbly. Old building condition has been derelict and in general has been wrecked on the top of roof or building without roof or the roof was wrecked, affecting wreckage at other parts since there were no protection of rain and heat of sun then it affected to building structure wreckage. This derelict buildings were utilized by seekers of second-hand goods as a place for residence and goods piling. In years of 2008-2016 there were about 6 derelict buildings at wreckage, without any attempt of renovation up to present recently, just left-behind to let it go as derelict. The expensive cost of renovation and dispute of the ownership become causes of too many buildings at derelict ion.

REVITALISASI

	REVITALISASI -1	REVITALISASI-2	REVITALISASI-3	REVITALISASI-4
A	Membangun kota yg dibongkar	Revitalisasi ekonomi	menciptakan destinasi unggulan	menyelamatkan Rev-2
B	?	Soekarno	Ali Sudikin	Sutiyoso
C	1905	1950	1971	2005
D	1912	1950	1973	2006
E	1929	1962	1974	2080
F	25 tahun	12 tahun	4 tahun	?
G	105 hektar	?	20 hektar	846 hektar
H	wilayah yang diapit kali Jalangkong dan kali Semut Membangun struktur baru	bukan kawasan	Taman Fatmahlillah dan Kalibesar Beautifikasi infrastruktur dan memberi fungsi baru	dari Gedung Arsip hingga Luar Batang Pedestrianisasi dan memberi fungsi kreatif industri
I	Beroperasi STA Beos	perseman BNI 1946	Konperensi PATA	Akhir RTRW
J	Kotapradja Batavia	Pemerintah Pusat RI	Pemerintah DKI Jakarta	Kelembagaan tersendiri
K	Trem, Delman, Prahau	Trem, Bus, opelet	Bus, Oplet, Bemo	Busway, KRL, Angkot

A: Alasan B: Gagasan C: Launching D: Pelaksanaan E: Rampung F: Waktu pelaksanaan G: Luas H: Batas I: Persemanian J: Pengelola K: Moda Trans

Figure 5. Table of Revitalization
(Source: Candriyan, 2011)

Conclusion of Field Data

Effort of renovation is still not yet done toward building at dereliction simultaneously, by Central Government or Province of DKI Jakarta's government. Central government is not capable fully, since the ownership had been surrendered directly to State Entities. Party of BUMN or state entities responsible on the renovation. Yet most of state entities (BUMN) are not able to finance renovation due to economical crisis since 1998, as a matter of fact it has not yet been 100 percent recovery up to present, therefore in order to finance renovation is not still a main priority scale order. Also provincial administration has not yet assisted in overall, since they think that the assets are not theirs. In 2016 there were also private businesses in attempt to provide revitalization toward Building of OLVEH (Onderlinge Levensverzkering Van Eigen Hulp) inaugurated officially on date of 19 March 2016. The building belonged to Pieter Peereboom Voller as functioned as office up to year 1959. In 1960 once nationalization occurred toward foreigners-owned buildings thus building of OLVEH was functioned as building of Jiwasraya insurance. Recently that building is functioned as a gathering place of creative worker's community.

Solution

Based on legal standing in Indonesia except Law No 11 of 2010, Cultural Conservation is supposed to be catalization for developer/development of tourism industry whose authority in guidance is under control of Minister of Tourism and Creative Industry.

Referring to a book; Economic Perspective of Heritage Management (Rizzo, 1997) said that, to fulfill target on result thus a regional revitalization needs an inovative and integrated thinking on how *Kotatua* Jakarta can be thought as: 1. Cultural Model, 2. Economical Model, 3. Technology Model.

Ad 1. Kotatua as Cultural Model

Batavia Community Order is multi-ethnic, and there were ample buildings well-kown and unique. Batavia as a “fire remain” and city important for art life and knowledge life that carried out city architectural heritage holding enchantment for world onservation development. Art, culture, cultivation, and history are key words in biography depiction of human being and human society inherited from the past-time generation to future generation.

Sophistication of art and culture as well as human cultivation are in the form of *tangible heritage* and intangible heritage. In case both of them are combined, in fact both can be sold out as an enchantment providing additional value toward environment and building o cultural conservation or *heritage tourism*. An approach is “*community based actions* thus it is supposed to occur in implementation of renovation or conservation of environment and cultural conservation building, as indeed suggested by UNESCO.

In terms of increasing societal awareness in global and all around the age, UNESCO held champaigns love of cultural heritage with program through schools from Kindergarten to Colleges, entitled: *Heritage In Young Hands*. The UNESCO also gave message to politician/decision maker/district adminstration, that in cultural conservation implementation then society in vicinity is supposed to get involved with the project as joint project with society in vicinity so far the project is willing to get success. Maintenance of renovation and utilization of cultural conservation consistently in fact can be seen in Manhattan.

Ad. 2 Kotatua of Economy Model

Old buildings in region of *Kotatua* Jakarta as cultural conservation building in form of past time arhitecture is frequently appraised or valued by the owner as *non marketed good*, but in addition there is one in perspective of marketable asset after done via concervation process. From perspective of *stake holders* thus classified as holder and cost bearer for maintenance thus economy perspective becomes the only determinant.

In light of the latter, ICOMOS-UNESCO in 1993 (re-reviewed in 1998) had produced recommendation about *Cost Benefit Analysis for the Cultural Built Heritage* by taking four possibilities of case in relation of environment and cultural conservation building with the owner as well as visitors. The four possibilities in original terminology are called as:

a. Basic Model Maximizing Welfare

It is a condition where a cultural conservation owner does not depend on visitors, either from side of number or gain of visit, even the visitors are not cost-incurred.

b. Profit-maximizing Supply of Cultural Heritage

In this case visitor has *willingness to pay* to visit that cultural conservation. But willingness to pay is balanced with a certain utility at hand from that cultural conservation owner.

c. Supply Under a Zero-profit Restriction

Owner can ask for subsidy from other parties, whilst entry cost of visitors is determined by other parties. If there are profit surplus from visit result exceeding the subsidy received by owner, thus the surplus becomes the possession of subsidy provider.

d. Supply with a Fixed Cost Subsidy

In this case there is differentiation between physical maintenance cost from the owner by himself and subsidy received from other sources. Also cost allocated to give service toward visitor based on their willingness to pay on the visit. This has close relation to economy value increment target in renovation/conservation works. There is theoretical system regarding *willingness to pay, selling place, marketing cultural heritage management and policing*.

Ad. 2 Kotatua as Technology Model

Technology advance in present time gives chance in order technically to apply whatever the best or sophisticated in work, rehabilitation, restoration, renovation or revitalization. Technology capital is usually related to economy or cost if in developed country it is a point very important and as prerequisite in renovation process.

A format proposed by ICOMOS-UNESCO to calculate expense or cost in renovation implementation particularly on attentive focus of architects, designers or consultants on *check-list* regarding spatial element and building element relevant to cost in renovation design,

a. *Spatial element*, namely all expenses related to or in accordance with spatial establishment.

b. *Building element*, namely all expenses related to or in accordance with building cost necessity in physic.

c. *Building element*, in relation to space and having impact on particularly building cost.

Another side in technology capital interest is a need to conduct archeological research and information data search in the past time and to produce documentation for the future. This becomes part inseparable in event of renovation. Notion of independent management is to achieve a *self supporting operation*.

Conclusion

Successful restoration of *Kotatua* Jakarta Indonesia much depends on; economy stability and security, for instance, revitalization of 1971-1974 underwent deadlock discontinuation since the event of Malari of 1974. In 1996 there was re-groundbreaking of revitalization, but the fate is similar since there was disputes of monetary crisis of 1998-1999, however both revitalization has shown infrastructure improvement. Trauma of disputes recently has left-behind sample building derelict. besides there is necessary an existing "Trust of Investor".

This is seen as a matter of fact as one of background of today's revitalization namely re-generating rust of investor through pedestrianization improvement in region of garden Fatahillah and its vicinity. The result is sufficiently shocking almost five thousand persons a day visiting this region. But queerly no any investor opening new business in the region. Even investor already at hand, was brankrup. It means effort of government of DKI Jakarta in ordering and utilizing the old derelict buildings has a longer time. Perhaps this condition can be a threaten of failing revitalization.

Future Hope

1. Needs to build; 1. Art District, 2. Financial District, 3. MICE Activity, 4. Creative Industry District, 5. Food, SME & Traditional Comercial Center, 6. Education. With complete equipment at hand therefore expectantly *Kotatua* Jakarta comes a main destination with its possession named International Port of Sukarno Hatta, as well as direct highway heading direct to *Kotatua*. It must be a "Single Destination and Single Management". Therefore it takes *New Branding*, one of which is proper to see from preliminary establishment of its city "Manhattan of Asia".
2. Needs to have Presidential Enactment on Restoration of *Kotatua* and establishment of Authority Council for *Kotatua*, as conducted likewise in Borobudur, Toba Lake, and so forth. Partner making with UNESCO is necesasry in responsibility of restoration and marketing. Result to expect: target for 5 years in future from 150 thousands of tourists to 150 thousand foreigners, and 5 million domestic tourists, thus income target will be 10 billion/year achievable.

3. Realizing region of *Kotatua* Jakarta complete with historical nodes of Heritage Patist Path in terms of Indonesian Independence of 100th or 500 years-old Jakarta in next 2045 supported by numerous parties.

From the three, expectantly it can increase safety of *Kotatua* having positive impact on Jakarta of Indonesia positively and independently, as set forth in Manhattan and New York.



Figure 6. Hope in Building Arrangement
(Sumber: Ella Ubaidi, 2011)



Figure 7. Hope in Environmental Arrangement
(Source: Ella Ubaidi, 2011)

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