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# Sustaining City of Solo by Creative City and Networking

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Abstract — The background of this paper is the phenomena that the urban spaces of Solo experienced rise and fall because of urban disasters, especially of urban social disaster. On the other hand, related to Agenda 21, now the cities of all around the world are being focus on sustainable city program. Based on these phenomena and its city program, Solo basically has an urban paradox conditions. Thus, Solo needs more many emergency actions rather than research activities and others. This paper describes the author's practical experience in an emergency action to sustain the city of Solo, conducted jointly by the 'pentahelix' team (5 stakeholders), namely: (1) government (Mayor, Bappeda, DTRK, BBWS, DPU); (2) NGO (Ngreksa Lepen, SCCN, YUF, SKK); (3) academics (UNS, UMS, ISI, ATMI); (4) professionals (artists, businessmen, architects, designers); and (5) media (Solopos, TATV, Joglosemar, RRI). These activities are basically to avoid the urban disaster, either of urban natural disaster (flood, pollution, landslides, pandemic), urban built disaster (fires, collapse, squatter, slum) or urban social disaster (riots, mass amuck, vigilantism, terrorism). According to the previous research's finding, there are 9 factors of urban disaster in Solo, namely: (1) leadership crisis; (2) economic disparity; (3) cultural hypocrite; (4) invasion; (5) occupation; (6) expansion; (7) pollution; (8) exploitation; and (9) extinction. The most dangerous of all urban disasters in Solo is an urban social disaster, which is caused by the first factor until the third above. Now, this paper is trying to share how the stakeholders of Solo cover this problem in releasing those factors. To sustain the city, Solo is finally developed in the model of creative city, while to get stronger of this creative city program, Solo also creates a networking. Afterwards, Solo is developed to be a part of the UNESCO Creative Cities Network (UCCN). There are 15 sectors in developing creative city in Solo; while to create networking, there are 7 themes in UCCN. To get a high added value, the 15 sectors are always developed within eco-cultural concept, which means that the creative activities must always consider about ecology and Javanese culture. According to the advisor team of UNESCO, the best of UCCN's thematic for Solo is design, and batik is the object of design. Accordingly, now and the coming future all of the stakeholders of Solo try hard to create a friendly environment and Javanese culture.

Key words - creative city, sustainable city, networking, solo

#### I. INTRODUCTION

Entering the second decade of the third millennium, we really are faced with the paradoxical condition. At the moment we are being intensively implementing sustainable development to a variety of fields and locations in Indonesia, but it is obtained that the conditions leading to chaos, destruction, pollution, decays and the like. Speed of sustainable development, both in developed and developing countries allegedly had apparently lost quickly with global conditions decaying. So, we are having a race between speed sustained actions by the global decay condition. Related to this situation, on June 25<sup>th</sup>, 2014, the Ministry of Public Works in Indonesia has signed an agreement with UN-Habitat renewing its commitment to the sustainable development. Building safety, sustainable cities and human settlements are the key challenge for Indonesia and many other rapidly developing countries. UN-Habitat gives message and support to enhance the capacities of governments for integrated urban and territorial planning, so that more people and businesses can thrive in livable cities.

#### II. THEORETICAL FRAMEWORK

#### A. Sustainable City

According to Budiharjo (1998), the sustainable city is an urban area that is able to compete successfully in the global economy and the fight also is able to maintain a culture of life and environmental compatibility (Qomarun, 2013). Thus, from the definition it can be seen that the aspects related to the management of the economic sustainability of the city, the culture and the environment. In other words, the management of the social environment (economic), built environment (culture) and the natural environment (ecology) are the keys. Sustainable city program started after the global awareness about sustainable development in 1987 by the United Nations, through the World Commission for Environment and Development (WCED). Definition of sustainable development according to the WCED or Brundtland Charter (1987) is as follows: "The development that meets the needs of the present without compromising the ability of future generations to meet their own needs." Sustainable development is the rearrangement of technological, scientific, environmental, economic and social resources in such a way that the resulting heterogeneous system can be maintained in a state of temporal and spatial equilibrium (Devuyst, 2001).

Agenda 21 is a report that helps to clarify "sustainable development" and functions as an action plan for the 21<sup>st</sup> century. It is the result of the United Nations Conference on Environment and Development (UNCED), organized in Rio de Janeiro, Brazil, in 1992. The Rio Declaration is a document consisting of a preamble and twenty-seven articles reflecting

the general principles of Agenda 21. This declaration explores ways of sustainable development that focus on human beings and their right to a healthy and productive life in harmony with nature. Since the Rio conference, these principles have received wide attention from governments around the globe.

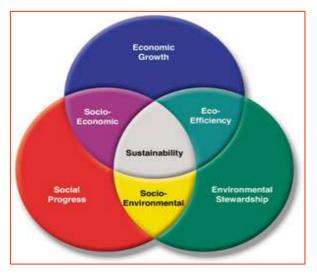


Fig. 1 the Main Aspect of Sustainability (Source: WCED, 1987)

The concept and idea of sustainable development has been widely explained by urban experts, both personal and institutional, both nationally and internationally (Qomarun, 2013). International individuals who published a study on the sustainable city are including: Leitmann (1999), Srinivas (1997), Moughtin (2005), Yeang (2006), Watson (2003), and Oswald (2003); while the national individuals are including: Budiharjo (1998), Sarosa (2002), and Soegijoko (2005). International and national institutions (NGO) which often explore issues of sustainable city are including: ICLEI-International Council for Local Environmental Initiatives (Canada); GTZ-Gesellschaft fur Technische Zusammenarbeit (Germany); CASE-Cities as Sustainable Ecosystems (Australia); CA-Cities Alliance (USA): EMAS-Eco Management and Audit Scheme (Europe); ECP-Eco City Plan (China); and URDI-Urban and Regional Development Institute (Indonesia). In addition, there are also many nationally and internationally forums competent with sustainable city. At the world level, there is the World Urban Forum (WUF) under UN Habitat, while at the national level there is Sustainable Urban Development (SUD) under the Ministry of Public Works Directorate General of Spatial Planning.

After the issue of sustainable development existed into the agenda around the world in the late 20<sup>th</sup> century, there were many emerging tools to monitor, control or assess the degree of success of sustainable development programs (Qomarun, 2013), such as in the European countries with program of PETUS (Practical Evaluation Tools for Urban Sustainability), in the United States with program of LEED (Leadership in Energy and Environmental Design), and in Japan with program of CASBEE (Comprehensive Assessment System for

Building Environmental Efficiency). In 2006 (Qomarun, 2013), the countries that joined the European Union makes the Commission engaged in monitoring European the implementation of the sustainable development program, which is referred to as the EU Sustainable Development Strategy (SDS). To control it, it is made of sustainable development indicators (Sustainable Development Indicators or abbreviated SDI), which is composed of 10 themes, namely: (1) social development economic; (2) sustainable production and consumption; (3) community participation; (4) changes in demographics; (5) public health; (6) energy and climate change; (7) sustainable transport; (8) natural resources; (9) global cooperation; and (10) good governance. The sustainability assessment instrument may include (Devuyst, 2001): Environmental Impact Assessment (EIA), Strategic Environmental Assessment (SEA), Social Impact Assessment (SIA), and Health Impact Assessment (HIA).

Component of urban space is divided into three kinds (Srinivas, 2008), namely: (1) the natural environment, in the form of the elements that already exist in nature such as water, air, light, soil; (2) the built environment, which form elements are created by humans, such as: roads, buildings, installations, and vehicles; and (3) the social environment, which form the elements of a civilized society that have activities towards quality of life, such as: work, vacation, worship and learn. According to Arsitoteles (Lang, 2000), the city should be built in a brilliant and safe; while according to Vitruvius city should be robust, beautiful and powerful. Under the rules of the science of architectural design, the key factors of design are: (1) firmitas (strength); (2) utilitas (usefulness); and (3) venustas (beauty). In its development, the paradigm was developed further by Wotton (1624) to be: (1) firmness; (2) commodities; and (3) delight, and then further developed by Gropius (1930) to be: (1) technics; (2) function; and (3) expression, and then further developed by Schulz (1965) to be: (1) technics; (2) building task; and (3) form. Latest, in the law of Indonesia (UU No. 26/2007) also mentions the factor of spatial planning is a safe-comfortable-productive-sustainable. The pillar of sustainability was the healthy environment, an integrated social community and economic efficiency. Finally, the crystallization of some design paradigm above is: (1) safe; (2) comfort; and (3) delight. Safety factor has the meaning of effort avoidance of death threats; comfort factor has the meaning of effort avoidance of physical pain; while the delight factor has the meaning of effort avoidance of psychical pain (Qomarun, 2013).

## B. Creative City

The term of creative city is developed from creative economy. The term of creative economy was first introduced by John Howkins, the author of "Creative Economy: How People Make Money from Ideas" in 2001 (UNDP, 2008). John Howkins is a multi profession. Besides as a film maker from England he was also actively voicing the creative economy to the British government that he was heavily involved in the discussions of the creative economy policy formation among governments of European countries. By definition of Howkins, creative economy is the economic activity in which the input and the output is the idea. True enough, the essence of creativity is the idea. Imagine only with a capital idea, a creative person can earn a very decent income. For Howkins, "creativity is not new and neither is economics, but what is new is the nature and the extent of the relationship between them and how they combine to create extraordinary value and wealth". Howkins' use of the term creative economy is broad, covering fifteen creative industries extending from arts to the wider fields of science and technology. According to his estimates, in the year 2000, the creative economy was worth \$2.2 trillion worldwide, and it was growing at 5 per cent annually. For Howkins, there are two kinds of creativity: the kind that relates to people's fulfillment as individuals and the kind that generates a product. The first one is a universal characteristic of humanity and is found in all societies and cultures. The second is stronger in industrial societies, which put a higher value on novelty, on science and technological innovation, and on Intellectual Property Rights (IPRs).

There is no simple definition of creativity that encompasses all the various dimensions of this phenomenon. Indeed, in the field of psychology, where individual creativity has been most widely studied, there is no agreement as to whether creativity is an attribute of people or a process by which original ideas are generated. Nevertheless, the characteristics of creativity in different areas of human endeavour can at least be articulated. For example, it can be suggested that: (a) artistic creativity involves imagination and a capacity to generate original ideas and novel ways of interpreting the world, expressed in text, sound and image; (b) scientific creativity involves curiosity and a willingness to experiment and make new connections in problem solving; (c) economic creativity is a dynamic process leading towards innovation in many ways (such as: technology, business practices, and marketing), and is closely linked to gaining competitive advantages in the economy; and finally, (d) all of the above involve technological creativity to a greater or lesser extent and are interrelated, as shown in the following figure:

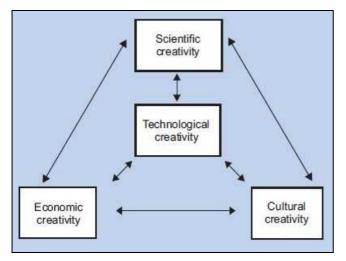


Fig. 2 the Main Aspect of Creative Economy (Source: UNDP-UNCTAD, 2008)

Creative economy is categorized by economic fourth wave. According to Toffler (2006), the first wave of the economy relies on agriculture, the economy of the second wave in the industrial sector, and the third wave economy in the information sector. Creative industries are vast in scope, dealing with the interplay of various sub-sectors. These subsectors range from activities rooted in traditional knowledge and cultural heritage such as arts and crafts, and cultural festivities, to more technology and services-oriented subgroups such as audiovisuals and the new media. According to UNDP (2008), classification of creative industry is divided into four broad groups: (1) heritage; (2) arts; (3) media; and (4) functional creations. These groups are in turn divided into nine subgroups, as presented in the following description and figure:

#### 1) Heritage

Cultural heritage is identified as the origin of all forms of arts and the soul of cultural and creative industries. It is the starting point of this classification. It is heritage that brings together cultural aspects from the historical, anthropological, ethnic, aesthetic and societal viewpoints, influences creativity and is the origin of a number of heritage goods and services as well as cultural activities. Associated with heritage is the concept of "traditional knowledge and cultural expressions" embedded in the creation of arts and crafts as well as in folklore and traditional cultural festivities. This group is therefore divided into two subgroups: (1) traditional cultural expressions: arts and crafts, festivals and celebrations; and (2) cultural sites: archaeological sites, museums, libraries, exhibitions, etc.

# 2) Arts

This group includes creative industries based purely on art and culture. Artwork is inspired by heritage, identity values and symbolic meaning. This group is divided into two large subgroups: (1) visual arts: painting, sculpture, photography and antiques; and (2) performing arts: live music, theatre, dance, opera, circus, puppetry, etc.

#### 3) Media

This group covers two subgroups of media that produce creative content with the purpose of communicating with large audiences ("new media" is classified separately): (1) publishing and printed media: books, press and other publications; and (2) audiovisuals: film, television, radio and other broadcasting.

## 4) Functional Creations

This group comprises more demand-driven and servicesoriented industries creating goods and services with functional purposes. It is divided into the following subgroups: (1) design: interior, graphic, fashion, jewellery, toys; (2) new media: software, video games, and digitalized creative content; and (3) creative services: architectural, advertising, cultural and recreational, creative research and development (R&D), digital and other related creative services.

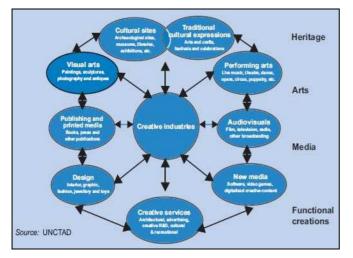


Fig. 3 the Classification of Creative Industries (Source: UNCTAD, 2008)

Finally, the idea of a creative economy has also been applied specifically to the economy of cities, leading to the emergence of the concept of a "creative city" (UNDP-UNCTAD, 2008). This term describes an urban complex where cultural activities of various sorts are an integral component of the city's economic and social functioning. Such cities tend to be built upon a strong social and cultural infrastructure, to have relatively high concentrations of creative employment, and to be attractive to inward investment because of their well-established cultural facilities. Charles Landry, in his seminal work on the concept of the creative city, argues that cities have one crucial resource: their people. Creativity is replacing location, natural resources and market access as a principal key to urban dynamism. He points out that "Today many of the world's cities face periods of transition largely brought about by the vigor of renewed globalization. These transitions vary from region to region. In areas such as Asia, cities are growing, while in others, such as Europe, old industries are disappearing and the value added in cities is created less through what is manufactured and more through intellectual capital applied to products, processes and services".

Creative cities use their creative potential in various ways. Some function as nodes for generating cultural experiences for inhabitants and visitors through the presentation of their cultural heritage assets or through their cultural activities in the performing and visual arts (UNDP-UNCTAD, 2008). Some, such as Bayreuth, Edinburgh or Salzburg, use festivals that shape the identity of the whole city. Others look to broader cultural and media industries to provide employment and incomes and to act as centers for urban and regional growth. In other cases, a more pervasive role for culture in the creative city rests on the capacity of the arts and culture to foster urban livability, social cohesion and cultural identity. The contribution of the creative sector to the economic vitality of cities can be measured in terms of the direct contribution of the sector to output, value added, incomes and employment and further through the indirect and induced effects caused, for example, by the expenditures of tourists visiting the city to experience its cultural attractions. In addition, cities with an active cultural life can attract inward investment in other industries seeking to locate in centers that will provide an enjoyable, stimulating environment for employees.

In the "creative city", it is not only artists who are creative, but also those who involved in the creative economy (UNDP-UNCTAD, 2008). Creativity can come from anyone who addresses issues in an inventive way, be it a social worker, a business person, an engineer, a scientist or a public servant. In the urban context, interestingly, it is combined teams that, with different insights, generate the most interesting ideas and projects. This implies that the "creative city" is a place that is imaginative comprehensively. It has a creative bureaucracy, creative individuals, organizations, schools, universities and much more. By encouraging creativity and legitimizing the use of imagination within the public, private and community spheres, the idea bank of possibilities and potential solutions to any urban problem will be broadened.

The "creative city" requires infrastructures beyond the hardware - buildings, roads or sewage. Creative infrastructure is a combination of the hard and the soft, including, too, the mental infrastructure, the way a city approaches opportunities and problems, the atmosphere and the enabling devices that it fosters through its incentives and regulatory structures. The soft infrastructure needs to include: a highly skilled and flexible labor force; dynamic thinkers, creators and implementers; being able to give maverick personalities space; strong communication linkages internally and with the external world; and an overall culture of entrepreneurship whether this is applied to social or economic ends. This establishes a creative rub as the imaginative city stands on the cusp of a dynamic and tense equilibrium. Being creative as an individual or organization is relatively easy, yet to be creative as a city is a different proposition, given the amalgam of cultures and interests involved. This usually implies taking measured risks, widespread leadership, a sense of going somewhere, being determined but not deterministic and, crucially, being strategically principled and tactically flexible. To maximize this requires a change in mindset, perception, ambition and will, and an understanding of the city's networking capacity and its cultural depth and richness. This transformation has a strong impact on organizational culture. It requires thousands of changes in mindset, creating the conditions for people to become agents of change rather than victims of change, seeing transformation as a lived experience, not a one-off event. It requires bureaucracies that are themselves creative. The built environment – the stage, the setting, the container - is crucial for establishing a milieu. This milieu creates the mood of the city, the atmosphere and its culture (UNDP-UNCTAD, 2008).

#### **III. DISCUSSION**

To sustain the city, Solo is finally developed in the model of creative city, while to get stronger of this creative city program, Solo also creates a networking. Afterwards, Solo is developed to be a part of the UNESCO Creative Cities Network (UCCN). There are 15 sectors in developing creative city in Solo, namely: (1) architecture; (2) design; (3) fashion; (4) film, video and photography; (5) craft; (6) IT; (7) music; (8) art shop; (9) publishing and printing; (10) advertising; (11) interactive game; (12) research and development; (13) performing art; (14) TV and radio; and (15) culinary. To get a high added value, these 15 sectors are always developed under the eco-cultural concept, which means that the creative activities will always consider about ecology and Javanese culture. To create networking, there are 7 thematic networks in UCCN, namely: (1) literature; (2) film; (3) music; (4) crafts and folk art; (5) design; (6) media arts; and (7) gastronomy. According to the advisor team of UNESCO, the best of UCCN's thematic for Solo is design, while *batik* is the object of design.

The city of Solo, which already has a brand image as 'The Spirit of Java', now is developed to be a creative city and networking city in the UNESCO. Solo is actually the result of logic-ethics-aesthetics by the Javanese community for centuries. Solo has metamorphosed from the cosmology city (1745-1945) to an organic city (1945-2000), and now it is being preceded towards the creative city. So, the community of Solo which is trying to build for the future through the past cultural roots ('Solo's Future is Solo's Past'), will always require creative design in various sectors, either at the level of macro, medium or micro. On the other hand, the creative design will also consider about green design, as the result of sustainable development. Urban green planning, physical green appearance of cities, community green activities, ancient Javanese tradition and contemporary culture will be combined into one inseparable unit. The combination of green and Javanese culture finally creates concept of eco-cultural city. Accordingly, at the present time all of the stakeholders of Solo try hard to create a friendly environment and Javanese culture city. Afterwards, Solo's public awareness related to creative design based on eco-cultural is finally able to touch the emotions of the society and then motivate them to achieve a better quality of life.

#### A. Sustaining City vs. Urban Disaster

The city of Solo has experienced many urban disasters either of urban social disaster, urban natural disaster or urban built disaster, in the last few decades. However, the first disaster phenomena (such as: riots, looting, mass amuck, bombing, terrorism) is more prominent than the second or the third as mentioned above. The city would be quickly perished, if the shredder is precisely from its social environment. The science of Urban Design at the 21st century has reached the term of sustainable city (Watson, 2003). The city is not only being able to achieve the sustainability of the natural environment (ecological) and the built environment (technological), but must also being able to cover the sustainability of humanity (socio-economic). Currently, the term of sustainable city has become a strategic object to the various fields of science, such as: Architecture, Urban Design, Urban Planning, Sociology, Ecology, Economics and Geography (Leitmann, 1999; Srinivas, 2008; Moughtin, 2005; Oswald, 2003). The city problems, however, have grown in

many aspects of field and been developed to an uncontrollable situation.

The phenomena of urban disasters in the city of Solo in the last few decades are including: (1) urban social disaster; (2) urban natural disaster; and (3) urban built disaster. The first type of disaster, in the form of riots and acts of anarchy, has a higher frequency, either due to economic polemics, politics, law, sports or 'Sara'. Since independence era up to 2007, there were 15 times of such tragedy. Afterwards, the second type of disaster, in the form of flood in urban areas also showed a higher frequency. Since the era of independence until 2007, Solo experienced 5 major floods, e.g: 1966, 1980, 1999, 2005, and 2007. Then, the third type of disaster, in the form of fire in urban areas also showed a higher frequency. In 1985 a huge fire happened at Kraton Surakarta which was spending important heirlooms from 10 generation of Mataram Kingdom (PB PB II-XII). The tragedy of the fire in the city are also becoming more frequent, i.e. from 23 to 96 times/year only in the period 1990-2007 (Qomarun, 2013).

The urban dynamic of Solo is found impulsive rather than curve or flat type. Urban dynamics is defined as the growth and development pattern of urban environments during a specific period of time. Urban dynamics refers to the land use change in urban environments in order to provide a historical perspective and an assessment of the spatial patterns, rates, correlation, trends, and impacts of that change. The main element of urban dynamics in Solo is found in 10 factors, which are nine factors related to decrease quality and one factor related to increase quality. The nine factors are derived from three different aspects. The first three aspects are the elements from the social environment which then led to the urban social disasters, that is: (1) leadership crisis; (2) economic disparity, and (3) cultural hypocrite. The second three aspects are the elements from the built environment which then led to urban built disaster, that is: (4) invasion, (5) occupancy and (6) expansion. Furthermore, the next third three aspects are the elements from the natural environment which then led to the urban natural disaster, that is: (7) pollution; (8) exploitation, and (9) extinction. The nine factors above are the root of the urban disaster, causing the quality of the city has always declined, while the factor that increasing the quality of the city is consciousness collective. So, a nine decreasing factors versus the one increasing factor are the ten factors that lead to the urban dynamics in Solo over the years.

Urban Social Disaster (USD) is defined as the intentional event to reduce or even eliminate the city resources, either in the form of human resources, natural resources or man-made resources, due to the natural process of the gap toward equilibrium social environment. USD ultimately results in the destruction of the built environment, which is named as a 'mechanism transform'. So, 'mechanism transform' is defined as a process of destruction of symbols, objects or buildings which may represent a specific target of people, institutions or government. USD is essentially the process of energy release due to social stress to achieve social balance. USD can be seen as a battle, burning, killing, robbery, looting, communal clashes, mass rioting, amuck, bombings or terrorism. Solo has experienced 28 times of USD during the 265-year (1746-2011), so that there is a space in the city of Solo often ups and downs. Its typical urban space, which is critical as it is referred above to as a 'vulnerable space of USD'. Such space above in Solo was detected in the cultural triangle: *Kasunanan-Mangkunegaran-Pasar Gede*. This region is factually as a symbol of economic-political-cultural activities.

Urban space is always related not only by the physical elements, but also by the psychical elements (Qomarun, 2014). Physical elements are related to the impact of our health, such as: noise, pollution, exercise, workplaces, housing, healthcare and mobility; while the psychical elements are related to the social and spiritual aspects, such as: our sense of home in our neighbourhoods, our level of stress, spiritual refuge, and our opportunities to connect to each other and other living things (HCI, 2010). Urban disaster in Indonesia is the main issue in the cities in the latest decades. Accordingly, urban disaster has destroyed both of the physical and psychical elements. Afterwards, how to avoid or to cover the urban disaster are the most important thing to do in nowadays and the future time. In other words, healing the city is an emergency action in this decade and the next.

The term of healing city has developed by the Healing Cities Institute (HCI) in 2010. The institute was founded by Mark Holland, Nicole Moen, Lindsay Clark, Keltie Craig and Joaquin Karakas. Healing city is defined as an integrated approach to planning and design for the natural and built environment that values holistic health and wellness of people and ecosystems. According to HCI (2014), there are 8 dimensions of healing city: (1) whole communities; (2) conscious mobility; (3) restorative architecture; (4) thriving landscapes; (5) integrated infrastructure; (6) nourishing food systems; (7) supportive society; and (8) healthy prosperity. The first dimension (whole communities) refers to the awareness that the treatment always involves all of the stakeholders, can not be done alone. The second dimension (conscious mobility) refers to the awareness that the treatment should be able to accelerate the mobility of citizen everyday. The third dimension (restorative architecture) refers to the awareness that the treatment should be addressed to create a comfortable place. The fourth dimension (thriving landscapes) is refers to the awareness that the treatment should be addressed to create a harmonious place (the balance of natural environment and built environment). The fifth dimension (integrated infrastructure) refers to the awareness that the treatment should be able to integrate the systems of community's inputs and outputs (e.g. water, waste, sewage, energy). The sixth dimension (nourishing food systems) refers to awareness that the treatment should be addressed to secure the resources of food. The seventh dimension (supportive society) refers to awareness that the treatment should be able to build the social interactions; while the last dimension (healthy prosperity) refers to awareness that the treatment should be addressed to balance the social economic. Therefore, in a conclusion, the healing city will always impact in 4 aspects: (1) physically; (2) emotionally; (3) socially; and (4) spiritually.

#### B. Creative City vs. Urban Social Disaster

The most dangerous of all urban disasters in Solo is an urban social disaster, which is caused by: (1) leadership crisis; (2) economic disparity; and (3) hypocrite culture. To avoid urban social disaster, the stakeholders of Solo try hard to release its factor within creative city and networking. On the other word, these activities will simultaneously release the root factor of urban social disaster. Based on eco-cultural concept, the stakeholders of Solo have been implemented about the creative city to release the root of urban social disaster, as presented in the following description and figure:

# 1) Releasing the Leadership Crisis by Cultural Creative

The city of Solo, which is formally often called as Surakarta, is now designed according to the public participation, so that the results can always be grounded. For example, Jokowi (the Mayor of Solo 2005-2012) had a 27-meeting with community to solve the city problem. As a leader of community in Solo, Jokowi was glad to hear, to talk, and to discuss the problem until finding the solution. Finally, both the Mayor and the community have agreement. So, beginning with the movement to restore the function of the public space in the Villa Park, Banjarsari, by principled *nguwongke wong* (cherish each other), Solo began to appear with some other creative programs related to Javanese culture. Afterwards, the *kirab* tradition is recognized to around the world for explaining the Javanese ceremony in relocation of the community, as shown in the following figure:



Fig. 4 Releasing Leadership Crisis by Cultural Creative (Source: Solopos, 2007)

#### 2) Releasing the Economic Disparity by Eco-Design Creative

Solo will continue to evolve and reinvent creative design, along with all municipal entities, toward the eco-cultural city. For coming years, Solo will revitalize the existing rivers (see Fig. 5), to be designed into new creative spaces, and then combined with the socio-economic activities in the area of the land. Through the participatory development with the river side residents, then there was built the concept of Javanese-3R: *Resik-Rejo-Rejekeni* (Qomarun, 2014). The concept of '*resik*' (healthy) is to create the river be clean again in the short term (less than 5 years); the concept of '*rejo*' (worthy) is to create the river be beneficial in the moderate term (5-10 years); while the concept of '*rejekeni*' (wealthy) is to create the river be scene of new jobs for riverside residents in the long term (after 10 years).

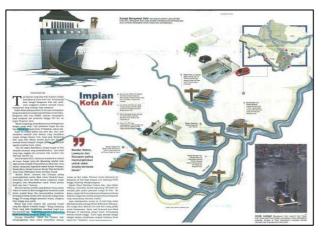


Fig. 5 Releasing Economy Disparity by Eco-Design Creative (Source: Qomarun, 2014)

## 3) Releasing the Hypocrite Culture by Penta-Helix Team

Good governance is the most serious problem in Indonesian government. Good governance has 8 major characteristics, namely: (1) participatory; (2) consensus oriented; (3) accountable; (4) transparent; (5) responsive; (6) effective and efficient; (7) equitable and inclusive; and (8) follows the rule of law. To get good governance, the stakeholders of Solo create 'penta-helix' team that containing 5 groups, namely: (1) government (Mayor, Bappeda, DTRK, BBWS, DPU); (2) NGO (Ngreksa Lepen, SCCN, YUF, SKK); (3) academics (UNS, UMS, ISI, ATMI); (4) professionals (artists, businessmen, architects, designers); and (5) media (Solopos, TATV, Joglosemar, RRI). Supreme Audit Agency (BPK) gave a WTP score (means: fair without exception) for budget accountability Solo fiscal year 2010. This assessment was the first time obtained having previously got a WDP score (means: fair with the exception) or even unfair score.



Fig. 6 Releasing Hypocrite Culture by Penta-Helix Team (Source: Survey, 2014)

### C. Sustaining City by Creative City and Networking

Solo society is a community with a strong Javanese culture. The richness of Javanese culture comes from the presence of Palace of Surakarta and Mangkunegaran. The great Javanese culture is not only spread in the region around the city of Solo, but also in the archipelago. Therefore, the cultural activity in the city of Solo is being an indicator of cultural progress for the surrounding area, even for Indonesia. In 1997, there were 491 arts organization consisting of a group of dance, music, vocal, theatre and visual arts. On the arts organizations was recorded at least 10,196 members and 177 artists. Unique art of Solo still continues to be preserved now, including: wayang wong, wayang kulit, kethoprak, kerawitan, tari. Subsequently, in 2004, there were 332 arts organizations with 11,310 members and 115 artists. Activities related to the arts community, the current government has done a lot of new breakthroughs, such as: (1) the provision of creative spaces in various areas hometown city (example: Kampung Laweyan, Kampung China, Kampung Arab, Kampung Kauman); (2) staging various performing arts (e.g. SIEM, SIPA, keroncong, shadow puppets, people puppet, theatre), and (3) show a variety of festivals (e.g. batik festival, puppet festival, dance festival, festival boat). Currently, the city of Solo scheduled more than 50 regular arts events each year, both in open spaces and enclosed buildings, both on the land and river, both for national and international levels. Otherwise, in order to develop arts and culture in the city of Solo, many educational institutions of art and culture have developed, such as: TBS (the Central Java Cultural Park); SMKI (Indonesian Javanese Music School); ISI (the Indonesian Arts Institute) and others. With a variety of programs and activities, each institution has played an active role in preserving and developing cultural arts of Solo. According to Bappeda (2013), there are 50.000s SME (Small and Middle Enterprise) of economy creative in Solo, while the distribution of 15 sectors in the district of Solo can be shown as the following table:

Table 1 Distribution of 15 Sectors Economy Creative in Solo

No.	Sector	District
1.	Architecture	Pasar Kliwon
2.	Design	Banjarsari, Serengan
3.	Fashion	Laweyan, Banjarsari, Pasar
		Kliwon, Serengan
4.	Film, Video and	Jebres, Banjarsari, Laweyan
	Photography	
5.	Craft	Banjarsari, Serengan, Pasar
		Kliwon, Jebres, Laweyan
6.	Computer and IT	Laweyan, Banjarsari
7.	Music	Laweyan, Banjarsari
8.	Art Shop and Antique	Banjarsari
9.	Publishing and Printing	Laweyan, Banjarsari, Pasar
		Kliwon
10.	Advertising	Serengan, Banjarsari, Laweyan
11.	Interactive Game	Laweyan
12.	Research and	Jebres
	Development	
13.	Performing Art	Banjarsari, Serengan, Pasar
		Kliwon, Jebres, Laweyan
14.	TV and Radio	Banjarsari
15.	Culinary	Banjarsari, Jebres, Pasar Kliwon

(Source: Bappeda Solo, 2013)

In this globalization era, it is a fact that no one or entity is able to stand alone separate from other entities. In other words, we urgently need a networking to make our lives more successful. Although we are in the modern era, where everything can be controlled by cutting-edge technology, but the success of the institution or organization is still very dependent on the success of creating a networking. So, to establish social relationships with anyone become an important part in all the activities of the life of any organization.

Networking or partnership is often called, is etymologically derived from the root of the word partner. Partner can mean spouse, ally or companion, while the partnership is translated fellowship or communion. Thus, the partnership can be interpreted as a form of alliance between two or more parties that formed a mutual bond in a certain business sectors or specific purposes so as to obtain better results (Sudjatmoko, 2009). Build networks (partnership) is essentially a process of communication or relationship building, sharing of ideas, information and resources on the basis of mutual trust and mutual benefit among the parties who partner as outlined in the memorandum of understanding or agreement form in order to achieve success greater shared. Thus, networking meets the following requirements: (1) there are two parties or more organizations/institutions; (2) having a common vision in achieving the goals of the organization/institution; (3) there is an agreement/understanding; (4) mutual trust and requires; and (5) the joint commitment to achieve greater goals.

Afterwards, to get stronger and more successful, the creative city needs a networking. Finally, the penta-helix team creates a networking in UNESCO Creative City Network (UCCN). To create a networking in UCCN, the stakeholders of Solo need to specify of city's thematic. There are 7 thematic networks in UCCN, namely: (1) literature; (2) film; (3) music; (4) crafts and folk art; (5) design; (6) media arts; and (7) gastronomy. To clarify aspects of Solo's people lifestyles, the following are various examples that occur in the community: (1) gagrak Sala (style of Solo); (2) loro blonyo (inseparable couple); (3) pagelaran Jawa (Javanese performances); (4) kejawen (Javanese attitude); (5) tembang (Javanese songs); (6) omah (Javanese house); and (7) batik (Javanese clothes). However, batik is the most popular traditional product fashion from all tribes or communities in Indonesia. After being decided as a world heritage, batik has brought Solo to the world community. Batik is the pinnacle of success in maintaining Solo's ancestral heritage. This artwork, as a Javanese clothing art, is still being worn at many levels of social in Solo in their daily lives. Finally, according to the result meeting of UNESCO and penta-helix team, the best of UCCN's thematic for Solo is design, while batik is the object of design. To realize the city of Solo as a Creative City Design, preparation is carried out as follows: (1) created the organization; (2) created the vision-mission; and (3) created the roadmap. Since October 21st, 2014, the organization has already done, which is named: Perkumpulan Solo Creative City Network. The organization is legally registered on the

Ministry of Law and Human Rights, No: AHU-00608-60-10-2014.

### IV. CONCLUSIONS

This paper describes the author's practical experience in an emergency action to sustain the city of Solo, conducted jointly by the penta-helix team, namely: government, academic, NGO, professional and media. Solo has experienced in many disasters. To avoid urban social disaster, Solo actually needs many treatments, which is formulated by creative city and networking. The treatment is focus on releasing the root factor of urban social disaster, such as: (1) releasing leadership crisis by cultural creative; (2) releasing economic disparity by ecodesign creative; and (3) releasing hypocrite culture by pentahelix team. Now, this paper is trying to share how the stakeholders of Solo cover this problem in releasing those factors. In other words, to sustain the city, Solo is finally developed in the model of creative city, while to get stronger of this creative city program, Solo also creates a networking. Afterwards, Solo is developed to be a part of the UNESCO Creative Cities Network (UCCN). The best of UCCN's thematic for Solo is design, and batik is the object of design. There are 15 sectors in developing creative city in Solo. To get a high added value, the 15 sectors are always developed within eco-cultural concept, which means that the creative activities must always consider about ecology and Javanese culture. Accordingly, now and the coming future all of the stakeholders of Solo try hard to create a friendly environment and Javanese culture.

#### References

- Bappeda Solo (2013) Profil Ekonomi Kreatif Kota Surakarta. Solo: Bappeda. Devuyst, Dimitri (2001) How Green Is the City? New York: Columbia
- University Press.
- Holland, Mark (2010) The Healing Cities Institute.
- Website: http://www.healingcities.org. Accessed March 25<sup>th</sup>, 2014. Howkins, John (2001) *Creative Economy: How People Make Money from*
- Ideas. London: Penguin. Leitmann, Josef (1999) Sustaining Cities: Environmental Planning and Management in Urban Design. New York: McGraw-Hill.
- Moughtin (2005) Urban Design: Green Dimension. New York: Architectural Press.
- Oswald, Franz & Baccini, Peter (2003) *Netzstdat: Designing the Urban.* Berlin, Birkhauser.
- Qomarun (2013) Dinamika Perkembangan Kota Sala, 1746-2011. Yogyakarta: Disertasi Arsitektur-UGM.
- Qomarun (2014) Healing the City of Solo by the Javanese-3R: Resik-Rejo-Rejekeni. Bandung: Proceeding Artepolis5 Arsitektur-ITB.

Srinivas, Hari (2008) Urban Environmental Management: Theme Disaster Management. Website: <u>http://www.gdrc.org</u>. Accessed May 2nd, 2011.

- Toffler, Alvin (2006) Revolutionary Wealth. New York: Knopf.
- Watson, Donald (2003) *Time Saver Standard for Urban Design*. New York: McGraw-Hill.
- WCED-World Commission on Environment and Development (1987) Our Common Future. Oxford: Oxford University Press.
- UNDP- UNCTAD (United Nations Development Programme United Nations Conference on Trade and Development) (2008) *Creative Economy Report 2008*. New York: United Nations.