

Creative Reconstruction: A Systematic Approach to Reinventing Large Cities in Democratic Republic of Congo

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Abstract

The current state of large cities in Democratic Republic of Congo highlights the necessity of reinventing cities. More than fifty years after the independence, these major cities, like Kinshasa the capital city, are in a state of are in a state of disrepair. They are damaged, dysfunctional, and more vulnerable. Today, these legacy cities do not meet the international requirements of livable cities. Democratic Republic of Congo faces the challenge of rebuilding its cities for sustainability. The movement for independence of African countries enabled the shift from colonial cities to legacy cities. It is important to understand the cultural and ideological foundations of colonial city. Commonly, colonial cities served as purpose-built settlements for the extraction and transport of mineral resources toward Europe. What's required is a creative reconstruction to achieve a desired successful urban change. Creative reconstruction tends to ensure urban transformation in relation with urbanization, by making continuous and healthy communities. Creative reconstruction seems appropriate way of building back cities in harmony with cultural values. The article provides a framework for urban regeneration. The study is based on principle of thinking globally and acting locally in building back better cities.

Keywords: Creative reconstruction, legacy city, livable city



Council for Innovative Research

Peer Review Research Publishing System

Journal: Journal of Social Sciences Research

Vol. 8, No.1

jssreditor.cir@gmail.com

www.jssronline.com



1. Introduction

1.1. Overview

In this urban millennium, Democratic Republic of Congo faces the challenge of rebuilding its legacy cities. This challenge translates into a big opportunity to for urban regeneration. Reinventing DRC's legacy cities is the genuine expression of urban regeneration. Urban regeneration refers to the physical, economic, and social renewal of areas which have been subject to decline (Parkinson, 1989). It is the comprehensive and integrated vision and action which leads to the resolution of urban problems and which seeks to bring about a lasting improvement in the economic, physical, social and environmental condition of an area that has been subject to change (Roberts, P. and Sykes, H., 2000 pg. 10-17).

Many experts concur with the view that urban regeneration moves beyond the aims, aspirations, and achievements of urban renewal, which is seen as process of essentially physical change, urban development (or redevelopment), with its general mission and less well-defined purpose, and urban revitalization (or rehabilitation), which whilst suggests the need for action, fails to specify a precise method of approach (Coach, 1990, p.2).

Admittedly, reinventing cities is based on the shared vision of modernity based on a desired urban change. The process of urban change necessarily incorporates cycles of growth, decline and regeneration (Berry et al. 1993). The shared vision of modernity is to rebuild better cities in accordance with local cultural values. Culture has in fact moved to become a central concept in development thinking (Radcliffe, 2006). Culture has expanded to such an extent that it can nowadays be considered as humanity's most important intellectual resource (Chaney, 1994).

By visualizing the urban future of the country with a new sense of optimism; all of its large cities (like Bukavu, Kananga, Kinshasa, Kisangani, Likasi, Lubumbashi, and Mbuji-Mayi) can change into world-class cities. Kinshasa the capital city is at the forefront of modernization. Whatever the intensity of urban crisis, there is a possibility for building back better based on people's needs and desires in conformity with international criteria for livable cities.

1.2. Background

The current state of large cities in Democratic Republic of Congo (DRC) is a matter of considerable public concern. These legacy cities are damaged, dirty, and dysfunctional. Since 1970s, large cities in Sub Saharan Africa have fallen into a serious state of disrepair¹. Accordingly, they have lost the nature of livability. While livable cities have become the pivotal of the prosperity of a country, DRC's large cities seem retrograde and more vulnerable. With the urge to remake everything that is old or dilapidated, it is logic, for policymakers who want to increase the quality of in cities, to support the reconstruction process². Rebuilding Kinshasa the capital city is now a high priority.

During colonial period, African cities served as purpose-built environments for European people in charge to ensure the exploitation of natural resources. These colonial cities are characterized by racial zoning with a high disparity between European neighborhoods and indigenous neighborhoods. These cities have been westernized at the expense of local cultural values. After the independence, DRC's successive governments have striven to renovate these legacy cities. However, the renovation of legacy cities is still a highly controversial issue, given the fact that it maintains the colonial identity. Just to say, the renovation is not a panacea for colonial cities.

Today, DRC's legacy cities are totally incompatible with the new realities; they can no longer satisfy the needs of local people. The urban form of colonial cities in Africa is marked by stark spatial, visual, social and radicalized dualities, between the planned and ordered center of administrative function and European residence, and the unplanned and apparently disordered native neighborhoods (Branwen Gruffydd Jones). Following the attainment of political independence, very little attempt was made by the new African governments to change the urban functions of cities, which were inherited from colonial governments (Akatch, 1995).

In this urban millennium, countries rely heavily on livable cities to ensure economic development. Drawing on the principle of better late than ever, all misguided attempt, contradictions, and failures of five decades should help to set a systematic approach to reinventing DRC's legacy cities. What's required is a creative reconstruction towards livable cities in accordance with local cultural values and the requirements of competitive cities in the 21st century. Creative reconstruction gains the meaning of innovation. When people want right answers they strive to find appropriated solutions to the problems, when people want a different way of doing things they adopt a systematic or innovative approach to solving problems. What is creative reconstruction? The study will attempt to answer this question.

2. Making a Diagnosis

An exact diagnosis facilitates to communicate the problem and to formulate the solution. When it comes to describe the condition of DRC's cities, many experts borrow the medical jargon to argue that they have been in a coma for decades. Medically, coma is the state of profound unconsciousness in which someone loses the ability to react normally to external stimuli, and it is difficult or practically impossible to wake this person. When someone is in a coma, he is plunged into unconsciousness for a long time due serious illness or wounds (Longman Dictionary of Contemporary English).

Kinshasa, like other major cities, faces a growing decline due to unplanned urbanization coupled with poverty. DRC's cities suffer from a chronic deficit housing, infrastructure decay, and open spaces loss. Ordinarily, rapid urbanization in developing countries pejoratively means that adequate infrastructure such as affordable houses, roads, bridges, schools, transportation, water and electricity supply, waste removal, flood prevention, and other basic facilities, which make giant cities more livable in developed countries, are often lacking for the majority of the population in their cities, it also refers to



the intensification of poverty, sickness, and preventable death on a scale scarcely imaginable (Davis 2006; Pieterse 2008; Brugmann 2009).

Kinshasa's Built Environment			
Facilities	Current condition		
Bridges, Ports, Railroads,	Obsolete		
Buildings	Obsolete and unsafe		
Electricity (supply)	Aging electric cable (unequal distribution of power)		
Housing (neighborhoods)	Insufficient, unsafe		
Streets, Trees, Park, public spaces, green spaces	Disappearance		
Roads (national, provincial, district roads)	Bad (Unpaved, impassable, dirty)		
Telecommunications	Rudimentary		
Pathway, Sidewalk	impassable		
Transportation	No safe bus, cars, train, boats		
Water and sanitation	Lack of water drainage, lack of waste disposal, extinction of sewerage(i.e. sanitary sewer, storm sewer)		

Table1.The State of Kinshasa Built Environment

The table1 shows poor living conditions that predominate in Kinshasa due to the disintegration of infrastructure inherited from colonial period. Since the independence, Kinshasa's built environment has constantly degraded. Hence, the lack of availability of public spaces, accessibility of healthy and affordable housing, and the walkability of neighborhoods is increasingly high.

2.1. A Historical Account of Kinshasa

2.1.1. Colonial Period: Kinshasa as a Colonial City

It is true that colonialism led colonial powers (like Belgium, England, France, Portugal, and Spain) to get overseas properties for the exploitation of natural resources. Hence, most of cities in Asia, Africa, America, Caribbean, and Australia owed their genesis to colonialism. In Africa, colonial cities served as settlements for the extraction and transport of mineral resources toward Europe.

Colonial powers have built cities and institutions to increase their trade at the expense of per-existing indigenous settlements. Definitely, colonial cities were established by colonial powers through the exercise of dominance, in order to extract agricultural surplus, provide services, and exercise political control. Transport improvements then allow one society or state to incorporate other territory and peoples overseas. Colonial city served as an instrument of colonization and (in the case of the European overseas empires) racial dominance (Home, 1997).

When it comes to evaluate colonialism, many people give a negative opinion by saying that colonialism made a complete mess in the colonies. Colonial powers have forced indigenous people to adopt their languages, religions, customs, and institutions. During colonialism, colonial powers have deliberately replaced local languages, religions, customs, and institutions with their own in order to facilitate the communication and cooperation.

Throughout the colonialism, the Belgium built cities in DRC as anchors for its control of territory. Colonialism was an unstable and flawed foundation. After independence, one of the most critical issues for many of the new republics was that of the domination of a capital city and central government over the countryside and the provinces³.

2.1.2. Postcolonial Period: Kinshasa as Legacy City (Postcolonial City)

DRC has been the Belgium's colony. After the independence, the country did not have local leaders and planners with real expertise to lead and manage colonial legacies. In fact, local leaders were unprepared to care about colonial legacies. Legacy cities suffered from a discontinuity in planning system. In the late 1960s and early 1970s, the government tolerated the migration of people to urban areas as part of the discourse of freedom. But this only propagated a crisis, because the surge in urban population was not planned, nor did it fit into a wider economic project. This triggered a new anti-urban movement (Steve Ouma Akoth,2013).





2.2. Kinshasa's Physical Environment

The continuing degradation of physical environment is posing serious problems for the quality of life. Since the independence, there has been a steady decline in the physical environment. Kinshasa can no longer satisfy the needs of its inhabitants. Kinshasa becomes too weak to deliver goods and services to its people.

2.2.1. Area Description

Figure1. Map of Kinshasa



Province: Kinshasa, the capital city

Climate: Tropical Climate with the dry season temperatures (from May through August) that vary from 18.3 to 26.7 °C with low humidity. And, rainy season temperatures (from October through April) vary from 29.4 and 37.8 °C with high humidity.

Area	99 <mark>65</mark> km²	Districts(4)	Towns(24)
	15.5 million	Funa	Bandalugwa, Bumbu, Kalamu,
Population	Source: UN- HABITAT (2008)		Kasa –Vubu, Makala, Ngiri-ngiri, Selembao
		Lukunga	Barumbu, Gombe, Kinshasa, Kitambo, Lingwala, Ngaliema
Density	910/ km²	Mont-Amba	Kisenso, Lemba, Limete, Matete, Mont-Ngafula, Ngaba
Urban Area	583 km²	Tshangu	Kimbanseke, Maluku, Masina, N'djili, Nsele





Figure2.Spatial Organization with subdivision





Table2. Spatial Structure (Racial Zoning)

Colonial Zoning			
	Functions	Neighborhoods (year of creation)	
European Community	Central district business : Gombe:Industrial area :Limete Housing:Ngaliema	European neighborhoods: Limete (1950-),Gombe(1920-), Ngaliema (1950-)	
	Factories, manufacturing, warehousing, housing (for workers): Barumbu, Kinshasa, Lingwala, Residential area: Kinshasa,Lingwala,Bandalungwa,Kala	Barumbu(1920-),Kinshasa (1920-), Lingwala (1920-), Bandalungwa(1950-), Kalamu(1950-),Kasa- Vubu(1950-), Kitambo (1920-), N'djili (1950-), Ngiri-ngiri (1950-),	



Indigenous Community	mu,Kasa-Vubu, Kitambo, N'djili, Ngiri- ngiri, Matete, Lemba	Matete (1950-), Lemba (1950-),
Spontaneous Community	Residential area: Bumbu, Kinsenso, Masina, Makala, Ngaba, Selembao	Indigenous neighborhoods(1960): After the independence
· · · · · · ,	Semi- Rural Neighborhoods : Mont- ngafula, N'sele, Maluku	

The table2 shows the subdivision of Kinshasa into three parts, notably European, indigenous, and spontaneous neighborhoods. Kinshasa's spatial structure was based on the segregation of European occupants and indigenous people. Kinshasa is deeply rooted in racial zoning with the high degree of centralization of socioeconomic activities in European neighborhoods. This led to the disparities in infrastructure and access to housing (high standing houses). After the independence, most of rich and institutional authorities live in former European neighborhoods.

Spontaneous neighborhoods emerged from the movement for the independence. Contrary to indigenous neighborhoods, spontaneous neighborhoods are the consequence of anarchism; they are lacking in basic facilities.

2.2.2. Built Environment

After the independence, Kinshasa's built environment is increasingly dilapidated and ill managed. The constant increase in the population coupled with poverty caused a big deficit in housing and infrastructure. Moreover, the disintegration of many infrastructure inherited from colonial period is more acute than before.

> Colonial period (1881-1960): According to many experts, Kinshasa's built environment could afford to accommodate 200000 people at maximum capacity. Between 1920 and 1959, the population rose from 1600 to 402500.

> Post- colonial period (from 1960 to now): Today, Kinshasa is now the home for more than 10 million people. Kinshasa is so weak to deal with new demographic, economic, and spatial realities. It is also plagued by the political, financial, and legal hurdles.

		U			, ,
Years	Population	Years	Population	Years	Population
1920	1600	1959	402500	1991	3804000
1936	40300	1967	901520	1994	4655313
1938	35900	1968	1052500	2003	6786000
1939	42000	1970	1323039	2005	7500000
1947	126100	1976	24439000	2015 est	12000000
1957	299800	1984	1232039	-	
Source: World Gazetteer, Africa: largest cities and towns and statistics					

Table3.Kinshasa Population growth before and after the independence (1920-2015)

The table 3 shows Kinshasa's population growth from 1920 to 2015. Particularly, the table 4 shows population's growth related to the consumption of land. The 1884 census put the population of Kinshasa at about 2,653,558 inhabitants, which is 8.7 % of the country's total population (30.7 million inhabitants) and 31 % of its urban population (INS/UNDP, 1991). Kinshasa's population rose from 400000 in 1960 to more than seven million in 2005; the average annual growth rate between 1960 and 2003 would therefore be about 6.80% (Lelo Nzuzi, 2008). While the 1/3 of Kinshasa's population

growth results from the high birth rate, the 2/3 is a direct consequence of migration (rural exodus, emigration, and displacement):

of their population

> The rapid increase in the fertility rate. UN statistics show DRC's total fertility rate of 5.60% and 5.21% between the 1950 and the 1995 (this is crude birth rate per 1000). In 2005, the total urban fertility was 3.8% and 4.5% in 2012 (UN, World Population Prospects: The 2012 Revision).

- Kinshasa's population is mainly due to migration (rural exodus, emigration, and displacement):
 - ✓ There have been more opportunities for job in Kinshasa than other large cities. This led the massive movement of people from rural areas to city, and also from other cities to Kinshasa. In 1975, the number of



industries in Kinshasa was about 725, even though this number has decreased significantly with successive looting happened in years 1991 and 1993. African countries are substantially more urbanized than is probably justified by their degree of economic development (Kempe Ronald Hope, 1998). Moreover, good living and working conditions were attractive to migrants. Kinshasa was well equipped with schools, hospitals, transport shops, centers for trading, processing and manufacturing, administration, religious organization or political and so forth).

✓ The war is now a contributor factor in a large influx of migrants in Kinshasa. Since 1998, DRC undergoes the ravages of civil wars, conflicts between African countries, dictatorial governments, and the intervention of powerful countries and other African governments. The eastern part of the country is subject to illegal exploitation of mineral resources caused by powerful countries. Populations in the eastern of DRC (provinces of Kisangani, Maniema, North and South Kivu) endure rapes, diseases, massacre, starvation, violence, serious abuses, and summary executions. These conflicts armed have already taken the lives of 5.4 million people from 1998 to 2008, and continue to kill 45 000 dead every month (International Rescue Committee study, 2008). These armed conflicts and humanitarian crisis are seen as the Great War of Africa, and importantly the world's deadliest war since the Second World War⁴. This desperate situation forces people to move from their places to safe places. Kinshasa is the rescue place for thousands refugees. Even if millions of displaced are located in neighboring countries⁵, the number of refugees flowing into Kinshasa is still increasing.

Today, Kinshasa is the third African megacity after Cairo and Lagos with a population estimated at 15.5 million. Kinshasa is the third and is projected to surpass Lagos in size by 2025 when Kinshasa, Lagos and Cairo will have 16.7, 15.7 and 15.5 million inhabitants respectively (UN-HABITAT, 2008). However, this rapid growth occurs in unanticipated and overlooked ways. As well known, the lack of planning, poor subdivision practices, excessive land values, ineffectual zoning, archaic streets, and inadequate transportation have created a condition of congestion, unplanned and incompatible mixed land use, and economic distortion that render whole section of the city in a process of built-in physical decay and social disintegration (Eisner, 1993 p.494). A great city should not be confounded with a populous city (Aristotle). Just to say, Kinshasa is a deprived and retrograde megacity.

2.2.3. Natural Environment

Kinshasa's sprawl continues to reduce open spaces, connectivity of wetlands, and wildlife habitat. This chaotic urban expansion increases natural hazards including deforestation, slope instability thus resulting in erosion, landslides and flooding. Urban land expansion is one of the most direct representation forms of land use land cover change, and refers specifically to change in land use pattern and urban space distribution resulted from land, social and economic pressure (Alphan, Doygun,& Unlukaplan, 2009; Gilliesa, Boxb, & Symanzik, 2003).In other words, sprawl has been criticized for eliminating agricultural lands, spoiling water quality, and causing air pollution (Allen et al, 2003). Suffice to say, Kinshasa's sprawl, which is unplanned, accelerates the modification of natural environment at an alarming rate.



Figure4.Illustration of Kinshasa's Sprawl

2.2.3. Socioeconomic Environment



From a logical standpoint, a city that plays the prominent role in a country's economy is a city that meets the requirements of livability. While cities are seen as source of jobs opportunities and economic advancement, Kinshasa is a city where there is a high unemployment and a great number of people living in extreme poverty. If cities are engines of growth, countries should take full advantage of urbanization and not hold back the opportunities it can provide for economic growth and poverty reduction⁶. Kinshasa is dysfunctional (it is not working properly), and it is far less likely to attract investment, create wealth, and reduce poverty. At present, Kinshasa is in a very bad condition.

3. Livability: Livable City

Planners found evidence of a strong correlation between the livability and the quality of life in cities. The concept of livability has become popular in the 1980s as planners began studying shifts in development patterns from the decline of urban centers to rapidly growing suburban areas (Federal Highway Administration, 2010). Livability defines good conditions of a place in such a way people can live and work in comfort and safety. Accordingly, livability is described by:

> Affordable housing (promoting many housing types): a desirable neighborhood provides safe houses for all people. It fosters mixed houses for social integration (rich and poor).

> Adequate infrastructure: A desirable community contains roads, bridges, railroads, civic buildings (churches, shops, etc.), paved streets, parking, sewerage, sidewalks, drain system, electric lighting, public toilets, public spaces (green spaces).

> Public transportation: A desirable neighborhood improves mobility of goods and people through bus, car (taxi), bicycle, train, boats, tramways, air plane, etc.

Solution of outdoor public areas, landmarks, and structures to achieve environmental, social-behavioral, or aesthetic outcomes⁷. A desirable neighborhood increases constructions with the quality of architecture. Suffice to say, a desirable neighborhood is identified with an outstanding beauty and dignity.

> Environmental protection: A desirable neighborhood tends to reduce pollutions (air, noise, water, and greenhouse gases). It increases public spaces (park, gardens, museum, and green spaces).

What is essential about livable city is that it ensures the quality of life people in accordance with cultural values. The desire for quality of life is universal and generates consensus across political and popular arenas. This common goal leads all responsible agencies and citizens to overcome their differences and coordinate their responses to constantly improve their cities⁸. In fact, cities have constantly changed since the beginning of civilization. In response to physical and socioeconomic factors they have grown, declined or undergone major restructuring (Couch, 1990). This dynamism is derived from sociocultural evolution, which is a reliable guide of how human beings strive to maintain cities as viable physical environments over time.

Table4: Livable city			
Livable city			
	Quality of life		
	Component s	Livability	
	Natural environmen t	Preservation of open spaces: coasts, forest, wetlands, shorelines, green spaces, agricultural lands, undeveloped scenic lands, waters (rivers, lakes), etc.	
Physical environme nt	Built Environmen t	Adequate infrastructure: bridges, buildings, hospitals, ports, streets (cleaned and paved streets), sidewalks, public parks, sewer lines, roads and railway, housing (affordable and accessible houses), transport, walkability, water (clean drinking water), electricity, etc.	
	Cultural	Art, sport, leisure activities,	

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dimension	
Socioecono mic dimension	Good services: jobs, health, business trade, culture, hygiene, education, recreation, security, tourism, communication, appropriate zoning, good services (waste deposit), etc.

The table4 synthesizes a livable city. The physical environment defines a living space combining natural and built environment for a lifestyle. The quality of life in city is based on the satisfaction of basic needs in terms of livelihoods, affordable housing, adequate infrastructure, and environmental protection. It can be said that a livable city develops the capacity to ensure health, comfort, shelter, education, sanitation, and other basic facilities. Livable cities can vary from one country to another with their architectural constructions, landscape architecture, and culture heritage. However, their common denominator remains the achievement of the community's cultural, physical, spiritual, and socioeconomic interests in living and working. A livable city is identified with healthy communities.

Literally, sociocultural evolution defines the culture of progress based on the fundamental principle of societies to look and move forward. This involves continuity of social and cultural changes to satisfy human needs in societies throughout times. Sociocultural evolution is a cumulative process in which new elements tend to produce a new form or structure which is qualitatively different from the ancestral or previous form. This explains why cities moved, are moving, and will continue to move in a desirable direction. Cities are complex and dynamic places of contradiction that have been compared to living organisms. They contain opportunities for developing the potential and enriching the lives of many of their inhabitants⁹.

From this perspective, there is need to modernize Kinshasa as well as other large cities. Modernizing DRC's large cities is a real opportunity to remake them in order to produce harmonious livable communities. Definitely, Modernization of DRC's large cities emphasizes the need for creative reconstruction.

4. Creative Reconstruction as a Social Innovation

4.1. Reconstruction Process in Urban Context

Since years, people have always found ways to solve problems. Based on the culture of progress, they developed strategies to improve their human settlements over time. So far, reconstruction serves as a strategy for building back better. It is a process with overlapping interests in renovating (rehabilitating or recovering), upgrading, and reinventing (remaking) cities. Reconstruction serves as a formula to reverse disruptive changes. Throughout the history, cities have been adversely affected by different phenomena resulting in disruptive changes, which undermine the quality of life.

	Failure /Collapse of cities				
Phenomenon	Problems	Disruptive changes			
Natural hazards	Cyclone,drought,storm, floods,volcano,hurricane,tsunami , typhoon,earthquakes, etc.	Devastation			
Urbanization	Sprawl, overcrowding, open spaces loss,pollution, obsoleteness, climate change,depletion of natural resources,etc.	Chaos, decline, decay, obsoleteness, environmental degradation,			
War	Bombardement	Devastation , destruction			

The table5 shows different phenomena that have serious repercussions on cities. It shows that disruptive changes are harmful effects of phenomena on cities. Such as described, disruptive changes cause failure or collapse of cities. In some ways, reconstruction is seen as a movement for change after disruptive changes.



Following examples underscore the fact. European cities (such Berlin, Paris, London), throughout the Second World War, have suffered an intensive bombing campaign causing the destruction of their built- environments. By 2008, the Great Sichuan Earthquake in China was not only felt through the death toll or heavy loss in economy, but also a significant destruction of infrastructure. By 2009, Southeast United States was rife with floodplains that spoiled the physical environment of this coastal region. By 2011, Japan's tsunami and nuclear crisis in Fukushima have changed the northeast region of this country into a disaster area. These cities have been rebuilt; as a result they regained their previous image (influence).

Reconstruction is the proper way to remake cities; it is the formula for rebuilding resilient cities. To some degree, the reconstruction process exhibits predictable characteristics. These include the tendency for damaged cities and industries to be rebuilt on the same sites, continuation of pre-war trends in population growth and urban expansion, continuation of predominance of certain industries, and continuation of previous social stratification patterns (Haas, Kates, and Bowden 1977). Reconstruction leads to improve architectural and socioeconomic aspects. The ultimate goal of the reconstruction is the transformation of a city into resilient city with prosperous and harmonious communities.

The resilience is the capacity to recover and become stronger than before. Reconstruction is the scheme to achieve urban regeneration. Urban regeneration is required to fill the gap between the actual and the desired reality, since it seeks to reverse the vicious spiral in which physical, economic, and social problems can be reinforced each other (P.S.Brandon, P.L.Lombardi, V. Bentivegna, 2005).

Reconstruction is based on creativity in the action to make difference between new and old form. It depends on the principle of adaptability. Reconstruction is a dynamic process that depends on the principle of adaptability in modeling change. The vision of modernity is not a fixed set of ideas; this is to say the movement of modernization is not static: it differs from country to country according to their realities, and evolved in relation with new circumstances over time. The study classifies two types of reconstruction, notably classic model and pragmatic.

4.1.1. Classic Reconstruction: Reconstruction Based on Cultural Heritage

Classic reconstruction (also called classic model) is the pattern of development that based on the conservation of cultural heritage. With respect to cultural heritage, conservation or art conservation focuses on protection and care of tangible cultural heritage, including artwork, architecture, archaeology, and museum collections (also referred to as conservation and restoration or preservation).

Conservation activities include examination, documentation, treatment, and collections care, otherwise known as preventive conservation¹⁰. Conservation of cultural heritage involves protection and restoration using any methods that prove effective in keeping that property in as close to its original condition as possible for as long as possible¹¹. Conservation of cultural heritage is often associated with art collections and museums and involves collection care and management through tracking, examination, documentation, exhibition, storage, preventative conservation, and restoration¹².

Cultural heritage is directly related to the tradition, which refers to beliefs or customs that existed for centuries as basic principle of living and working. Tradition is the inheritance of beliefs and practices from previous generation adopted by a group or society with symbolic meaning or special significance dating from the long past. Developed nations in Europe (Britain, Italy, France, and Germany) as well as the USA are pioneers of classic model for reconstruction. In fact, this model classic tends to rebuild city from the same base. Classic model relies on the existing foundation and form to improve the city. Classic model promotes the protection of ancient constructions, lifestyles, and architectural design that hold the historical memory from generation to generation.

With classic reconstruction, cities in developed nations attest to the principle that each city has its own style and identity that reflect its cultural values. So far, their cities carry traditional values from previous generations that must be preserved for the current and future generations. In fact, their cities are full of historic and natural sites. The aesthetic of their built environment (such as bridges, buildings, streets, monuments, and landscapes dating back from past generations) are unique.

4.1.2. Pragmatic Reconstruction

Pragmatic reconstruction is the pattern of development based on technology. It tends to stretch the limits of tradition. It led to hybrid or utopian model towards rebuilding cities. Pragmatic reconstruction is a gathering of styles to create sophisticated cities devoid of tradition. A sophisticated city is based on technological values rather than cultural values. Rather than be attached to cultural dimension, sophisticated cities are based on utopian dimension. In fact, utopia is the expression of the desire for a better way of being and living (Levitas, 1990, p. 8).

It turns out numerous blueprints sparked by official utopianism in these countries often did not go beyond what had already happened or was happening in the developed world: abundance, industrialization, electricity and automation. It was precisely because modernization had not happened, but was yet to come, that potential existed to employ the vision to teach desire to desire, to desire better, to desire more, and above all to desire in a different way (Thompson, 1977, p. 791).

In the context of modernization, many developing countries embraced pragmatic reconstruction towards sophisticated cities. Hence, pragmatic reconstruction served as bridge between local cultures and Western culture. By approving pragmatic reconstruction, developing countries like China, deliberately have westernized their cities, given the fact that

ISSN 2321-1091



international values derived from Western cultures. From the perspective of urban transformation, the Chinese city is becoming capitalist in many respects: the emergence of central business districts (CBDs), the uneven growth of territorial units, and the rise of new urban spaces such as shopping malls, signature architecture buildings and luxury residential enclaves (Gaubatz, 1995, 2005; King and Kusno, 2000; Wu, 2005).

With the modernization, there is the emergence of such new urban spaces as malls, gated communities, migrant enclaves and suburbs and the widespread use of automobiles in urban China raise the important theoretical question as to whether the post-socialist Chinese city has become or is becoming capitalist in form¹². Restructuring Chinese cities is a local process that exploits and constitutes global processes. It holds an exciting intellectual challenge for understanding global processes in different geographical contexts (Laurence J.C. Ma, and Fulong Wu, 2005).

To sum up, reconstruction seems to be a coherent recipe for continuous transformation of damaged or deprived communities. It can vary from classic model to pragmatic model; the ultimate goal remains the improvement of previous situation (even the current situation). Between classic model and Chinese Utopian model (pragmatic model) which one can match to DRC's cities?

4.2. Creative Reconstruction

When people want right answers, they strive to find appropriated solutions to the problems, when people want a different way of doing things they adopt innovative approach. Innovation concerns the introduction or implementation of a new method, practice, policy or service (Van de Ven, 1980). Innovation refers to the process of bringing any new, problem solving idea into use. Innovation is the generation, acceptance and implementation of new ideas, processes, products or services. Acceptance and implementation are central to this definition; it involves the capacity to change and adapt (Kanter, 1983).

A country closely aligned with the principle of modernity embraces de facto the innovation in reconstruction. The principle of modernity attests to new initiatives for dynamic change, given the fact that nothing can remain static over time. The status quo in action plan is interpreted more often as a stagnation or refusal to formulate new way of solving problems. It can be explained by the frightening uncertainty of new ideas rather than old ideas (tradition) that used to serve as a blueprint for defined goals. Despite the fact that time of great change is also time of uncertainty, innovation is aimed to improve what has proved ineffective in action plan.

Even though it is difficult to accurately predict the future, it is wrong for any country to maintain the status quo in this unstable world that become faster and faster. An action plan defines the step that must be taken in order to achieve a specific goal. Creative reconstruction is formulated as a new strategy to create livable cities in DRC. Creative reconstruction gains the meaning of innovation.

Creative reconstructive as a social, technical, and organizational innovation is the product of a need, a desire, an aspiration, or a quest for solutions to a social problem. Social innovation is based on experiences aiming at finding new solutions to unsolved social problems (Chambon, David & Deverey, 1982; Lévesque 2007). It seen as creative strategy and process that fosters inclusion and combating poverty in integrated areas (Moulaert & Nussbaumer, 2005; Nussbaumer & Moulaert, 2007). Technical innovation is the result of social practices and experiences (Flichy, 1995). Organizational innovation represents the creative transgression of established rules (Alter, 2000).

The focus of interest in creative reconstruction is to do things differently than the two types of reconstruction. Creative reconstruction in this way does not mark a break with the two models, but it maximizes their positive aspects towards restructuring cities. Creative reconstruction involves an eclectic mixture of the classic and pragmatic reconstruction. It is a flexible and realistic model that combines what is appropriate to rebuild DRC's cities in conformity with local expectations.

Figure5: Creative Reconstruction





The figure4 illustrates the relationship of models of reconstruction within the context of urban regeneration. In DRC, the adoption of classic reconstruction can raise the issue of the conservation of colonial identity, whereas the adoption of pragmatic reconstruction can raise the issue of authenticity of cities. Creative reconstruction gives the possibility of reconciling classic and pragmatic reconstruction. It is clear is that creative reconstruction tends to take advantage of the two models by avoiding their imperfections.

5. Conclusion

The necessity of reinventing DRC's large cities illustrates the great merit of the reconstruction. The fact remains that reconstruction process paves the way for the successful urban change. However, the innovation is at the core of the process to achieve a desired outcome. The continuity in habitual ways of thinking and acting is often the default response to common problems, rather than opting new model, taking risks aspiring to reinvent these cities. Hence, creative reconstruction seems appropriate way of building back cities in harmony with cultural values.

Creative reconstruction tends to ensure urban transformation in relation with urbanization, by making continuous and healthy communities. In this urban millennium, the content of urban transformation includes more than the urban renewal, because areas which are not developed before are also in the scope of urban transformation (Bayram 2006). Creative reconstruction tends to optimize positive aspects classic and pragmatic reconstruction towards better cities for DRC.

Notes

1. Carole Rakodi, ed. (2007). The Urban Challenge in Africa: Growth and Management of its Large Cities New York: The United Nations University Press.

2. Journal of the American Planning Association: Green Cities, Growing Cities, Just Cities? Urban Planning and the Contradictions of Sustainable Development.pp 33.

3.Ronn Pineo, James A.Baer. (1998). Cities of Hope.People, Protests, and Progress in Urbanizing Latin America, 1870-1930.pg.

4.Bavier, Joe (22 January 2007). Congo war-driven crisis kills 45,000 a month: study.http://www.rescue.org/special-reports/special-report-congo-y.Congo Civil War.
http://www.globalsecurity.org/military/world/war/congo.htm.
5. Congo Civil War. http://www.globalsecurity.org/military/world/war/congo.htm.

6. Kyeong Ae Choe, Brian Roberts (2011).Competitive Cities in the 21stCentury.Cluster-Based Local Economic Development.

7. Sir Geoffrey Jellicoe, Susan Jellicoe, The Landscape of Man: Shaping the Environment from Prehistory to the Present Day ISBN 9780500274316.

8. Europe Environment Agency, EEA (2009). Ensuring quality of life in Europe's cities and towns. Tackling the environmental challenges driven by European and global change. EEA Report No 5/2009. ISSN 1725-9177.

9.World Health Organization (1997). City planning for health and sustainable development.European Sustainable Development and Health Series: 2.pg.12-113.

10. Definitition of a Profession. International Council of Museums - Committee for Conservation. Retrieved 18 August 2012.



11. Walston, S. (1978). The Preservation and Conservation of Aboriginal and Pacific Cultural Material in Australian Museums. ICCM Bulletin 4 (1): 9.

12. Laurence J.C,Ma and Fulong Wu (2005). Restructuring the Chinese City, Changing society, economic space.

References

- 1. Albrechts, L., (2010). More of the same is not enough! How could strategic spatial planning be
- 2. instrumental in dealing with the challenges ahead? In: Environment and Planning B: Planning
- 3. and Design 2010, volume 37, pages 111 5- 1127 .
- 4. Ambrose, P. (1986). Whatever Happened to Planning?London, Methuen.
- 5. Ambrose, P., Urban Process and Power, London, Routledge, 1994.
- 6. Anderson, B.,()1991. Imagined Communities, Reflections on the Origin and Spread of Nationalism, London, Verso.
- 7. Anthony, K.H., Design Juries on Trial (1991). The Renaissance of the Design Studio, New York, Van
- 8. Nostrand Reinhold.
- 9. Antrop M. (2006). Sustainable landscapes: contradiction, fiction or utopia? Landscape and Urban Planning, 75(3/4): 187–197.
- 10. Arthurson, K. (1998).Redevelopment of PublicHousing Estates: The Australian Experience'
- 11. Urban Policy and research, Vol 16:1 March 1998:36-37.
- 12. Aschauer, D.A.(1990). Why is infrastructure important? In: A.H. Munnell (ed.): Is there a shortfall in public capital investment?Federal Reserve Bank of Boston, Boston/Harwich Port, 21-51.
- 13. Balducci, A.,Kunzmann,K. R.,and Sartorio,F.S.(2004).Towards creative city -region governance in Italy and Germany. DISP, 158,2 -4.
- 14. Barnett, Harold J., and Chandler Morse.(1963). Scarcity and Growth: the Economics of Natural Resource Availability. Baltimore: Johns Hopkins.
- 15. Bartone, Carl. 2001.Urban Environmental Priorities. Environment Strategy Background Paper. World Bank, Washington, D.C.
- 16. Bartuska, T. (2007) The Built Environment: Definition and Scope, in Bartuska T., and Young, G. (Eds) The Built Environment: A Creative Inquiry into Design and Planning, Crisp Publications.
- 17. Becker, Charles, Andrew Hamer, and Andrew Morrison. 1994. Beyond Urban Bias in Africa. London: James Curry.
- 18. Bertolini, L.(1999). Spatial development patterns and public transport: the application of an analytical model in the Netherlands. Planning Practice and Research, 14(2), 199-210.
- 19. Bigio, Anthony G., and Bharat Dahiya.(2003).World Bank Investments for the Urban Environment.Environment Strategy Note No. 8. World Bank, Environment Department, Washington, D.C.
- 20. Bradford, Neil. (2002). Why Cities Matter: Policy Research Perspectives for Canada. CPRN
- 21. Research Paper. Ottawa: Canadian Policy Research Networks. June.
- 22. Buckley, Robert, and Jerry Kalarickal. (2006). Thirty Years of World Bank Shelter Lending: What Have We Learned?Directions in Development Series, World Bank, Washington, DC.
- 23. Calafati, A.(2010).Understanding European Cities' Development Trajectories: A Methodological Framework. Issue paper in preparation on behalf of the European Commission -DG Regional Policy. Università Politecnica delle Marche, Italy.
- 24. Camfield, Laura, Gina Crivello and Martin Woodhead.(2009).Wellbeing Research in Developing Countries: Reviewing the Role of Qualitative Methods, Social Indicator Research, 90: 5-31.
- 25. Campbell, Tim.(1989). Environmental Dilemmas and the Urban Poor. In H. Jeffrey Leonard, ed. Environment and the Poor: Development Strategies for a Common Agenda. New Brunswick, N.J.: Transactions Books.
- 26. Cobb Clifford, W & Rixford C. (1998). Lessons Learned from the History of Social Indicators,
- 27. Redefining Progress: San Francisco, Website: rprogress.org.
- Cobbett, W. (2002).Poverty alleviation in the urban millenium: The challenge of citywide upgrading. Proceedings of Reducing Poverty and Strengthening Growth: The Urban Perspective, Washington, D.C., July 25-26, 2002. USAID.



ISSN 2321-1091

- 29. Couch, C. (1990). Urban Renewal Theory and Practice, Macmillan Education LTD, London.
- 30. Crombie, H.(1995).Sustainable development and health.Birmingham, United Kingdom Public Health Alliance.
- 31. Eagleton, T., (1990). The Ideology of the Aesthetic, Oxford, Blackwell.
- 32. Eberhard, J.P., (1970).We Ought to Know the Difference', in Moore (ed.
- 33. Edwards, B.(1992).London Docklands: urban design in an age of deregulation. Butterworth Architecture, Oxford.
- 34. Englund, H.(2001). The politics of multiple identities: the making of a Home Villagers Association in Lilongwe, Malawi', in A. Tostensen, I. Tvedten and M. Vaa (eds), Associational
- 35. Life in African Cities: Popular Responses to the Urban Crisis, Uppsala: Nordic Africa Institute,
- 36. pp. 90-106.
- 37. Falola, T.(2005): Urban cultures: the setting and the situational', in T. Falola and S. Salm (eds),
- 38. Urban ization and African Cultures, Durham, NC: Carolina Academic Press, pp. 3-16.
- 39. Farrar, A.(1999). Housing and Sustainable Communities', In There's No Place like Home, Proceedings of the 2ndNational Conference on homelessness, Melbourne 19-21 May
- 40. 1999.
- 41. Florida, R. (2000). Competing in the age of talent: quality of place and the new economy. Carnegie Mellon University, Pittsburgh.
- 42. Florida, R.(2002a). The rise of the creative class; and how it's transforming work, leisure, community and everyday life. Basic Books, New York.
- 43. Florida, R.2002b: Rebuilding Lower Manhattan for the creative age: implications for the Greater New York Region. Prepared for the Regional Plan Association and the Civic Alliance, obtained from www.creativeclass.org (29 August 2006).
- Florin, B. (2005). Urban policies in Cairo: from speeches on new cities to the adjustment practices of ordinary city dwellers', in A. M. Simone and A. Abouhani (eds), Urban Africa: Changing Contours of Survival in the City, Dakar: Codesria, pp. 29–67. Fogarassy, H. (1999) Mission Im.
- Fu, A. and M. Murray.(2007). Cinema and the edgy city: Johannesburg, carjacking, and the postmetropolis', in F. Demissie (ed.), Postcolonial African Cities: Imperial Legacies and Postcolonial Predicaments, London: Routledge, pp. 121–30.
- 46. Gikandi, S. (2002): The politics and poetics of national formation: recent African Writing and
- 47. Maps', in D. Wright (ed.), Emerging Perspectives on Nuruddin Farah, Trenton, NJ: Africa World
- 48. Press, pp. 449–68.
- 49. Gilbert, A. Third World urbanization. In: Douglas, I., Huggett, R., and Robinson, M., eds. Companion Encyclopedia of Geography: The Environment and Humankind. NewYork, Routledge, 1996. p. 391-407.
- 50. Globalizing City (2009): The Urban and Economic Transform tion of Accra, Ghana, Syracuse
- 51. NY: Syracuse University Press.
- 52. Hemphill, L., Berry,J. & McGreal,S.(2004): An indicator-based approach to measuring sustainable urban regeneration performance: Part I, conceptual foundations and methodological framework, Urban Studies, 41, pp. 725-755.
- 53. Hewawasam, Indu. 2002. Managing the Marine and Coastal Environment of Sub-Saharan Africa: Strategic Directions for Sustainable Development. Washington, D.C.: World Bank.
- 54. Hunt, Caroline, Sandy Cairncross, Manish Dubey, Peter Kolsky, Simon Lewin, Rajashi Mukherjee, V. Ramaswamy, Aromar Rev, Carolyn Stephens, and the Sustainable Indicators Team. (1999): Community Based Environmental Health Indicators: A Useful Tool in Facilitating Dialogue between Communities and Planners?" Urban Health and Development ulletin2(2):82–90.
- 55. Jacobs, Jane. (1984). Cities and the Wealth of Nation: Principles of Economic Lives. New York: Random House.
- 56. Jingzhu Zhao (2011). Towards Sustainable Cities in China. Analysis and Assessment of Some
- 57. Chinese Cities in 2008.p.98.
- 58. Kaiser, Robert G(1991). Why Gorbachev Happened: His Triumphs and His Failure. New York.



- 59. Lipton, Michael.(1976). Why Poor People Stay Poor: Urban Bias in World Development. Cambridge, MA: Harvard University Press.
- 60. Moser, C and Norton, A (2001) To Claim Our Rights: Livelihood Security, Human Rights and Sustainable Development, Background Concept Paper for the Workshop on Human Rights, Assets and Livelihood Security, and Sustainable Development, Overseas Development Institute, London.
- 61. Nan Ellin (2006). Integral Urbanism. Routledge Taylor & Francis Group New York, London,p.22-232. Queensland Government 2000 The Challenge to Lead and Opportunity to Learn through Community Renewal Occasional paper 6 Queensland Government.
- 62. Ranis, G, Stewart, F and Ramirez, A (2000) Economic growth and human development, World Development, Vol. 28, no 2, pp197–219.
- 63. Rogers, Maureen and Roberta Ryan, 2001, The Triple Bottom Line for Sustainable Community Development, Local Environment, 6 (3): 279-289.
- 64. Stedman, Richard, John Parkins, and Thomas Beckley, 2005, Forest Dependence and Community Well-being in Rural Canada: Variation by Forest Sector and Region, Canadian Journal of Forest Research 31 (1): 215-220.
- 65. Stimson, R. (1999).Concentration and dispersal, Suburbanisation and reurbanisation in Australia'
- 66. in Housing and Jobs in Cities and Regions: Research in Honour of Chris Maher, K. O'Connor (ed) University of Queensland Press: Brisbane.
- 67. Wilkins, J. (2001).On the Ground: Practical Responses & Strategies, Karawara Community Project in Randolph B 2001 Community renewal & disadvantaged areas A national agenda for action.
- 68. Wood, M. (2002). Residential Participation in Urban and Community Renewal: Final
- 69. PaperAHURI, Melbourne Wood, Randolph & Judd 2002 Residential Participation in Urban and Community Renewal: Positioning PaperAHURI, Melbourne.
- 70. Woodson, R. (2002).Resident Management of Public Housing and Grassroots Initiatives for Community Revitalisation, National Centre for Neighbourhood Enterprise, Washington.
- 71. United Nations Centre for Human Settlements (Habitat). The state of the world's cities 2001.Nairobi, UNCHS, 2001. 125 p.
- 72. United Nations, Department of Economic and Social Affairs, Population Division: World Urbanization Prospects, the 2011 Revision: Highlights. New York, 2012.
- 73. United Nations Development Programme, United Nations Centre for Human Settlements and World Bank. Towards environmental strategies for cities.Washington, DC, World Bank, 1994 (Urban Management Programme Policy Paper, No. 18).
- 74. United Nations (DDSMS and UNDP), Report of the United Nations Global Forum on Innovative Policies and Practices in Local Governance, Gothenburg, Sweden, 23- 27 September 1996, ref St/Tcd/Ser.E/46, p. 26
- 75. UNFPA (United Nations Population Fund). 2007. State of World Population 2007: Unleashing the Potential of Urban Growth. New York: UNFPA.
- 76. UNCHS and UNEP. 2000. Sustainable Cities and Local Governance.
- 77. UN-Habitat. 2001. Sustainable Cities Programme 1990–2000: A Decade of United Nations Support for Broadbased Participatory Management of Urban Development.
- 78. United Nations Population Fund. 2008. State of World Population 2007: Unleashing the Potential of Urban Growth. <u>http://www.unfpa.org/public/publications/pid/408</u>.
- 79. World Commission on Environment and Development (WCED). 1987. Our common future. Oxford, UK: Oxford University Press.
- 80. Williamson, Jeffrey A. 1987. "Did England's Cities Grow Too Fast during the Industrial Revolution?" Discussion Paper 1311, Harvard Institute of Economic Research, Cambridge, MA.

81. Websites and Web Resources

- 82. United Nations, 2007, Indicators of Sustainable Development: Guidelines and Methodologies –Third Edition, and Methodology Sheets.
- 83. http://www.un.org/esa/dsd/dsd_aofw_ind/ind_index.shtm.
- United Nations Development Programme. United Nations Environment Programme. World Bank Resources Institute. 2000. A guide to World Recource 2000-2001 summary:9. Available fromhttp://www.wri.org/publication/world-resources-2000-2001-people-and-ecosystems-fraying-web-life (accessed 25 March 2010).

ISSN 2321-1091



- 85. United Nations Environment Programme, Declaration of the United Nations Conference on the Human Environment, 1972,
- 86. http://www.unep.org/Documents.Multilingual/Default.asp?documentid=97&articleid=1503.
- 87. United Nations Environment Programme, Rio Declaration on Environment and Development,1992, http://www.unep.org/Documents.Multilingual/Default.asp?documentID=78&articleID=1163.
- 88. World Resources Institute. 2010. Repairing the fraying web: A call to action by UNDP, UNEP, World Bank, and WR. http://www.wri.org/publication/content/8148 (accessed 25 February 2010).

