Creative city towards sustainable development

(Case Study: Isfahan, Iran)

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Abstract

The UNESCO Creative Cities Network (UCCN) was created in 2004 to promote cooperation with and among cities that have identified creativity as a strategic factor for sustainable urban development. Creative locations become a key element of public regeneration strategies and develop innovative services based on knowledgeable property. A creative city is supposed to develop imaginative and innovative solutions for a range of social, economic and environmental problems: economic stagnancy, urban shrinkage, social segregation, global competition or more.

This paper will examine essential characteristics of a creative city with regards to principles of urban planning during the Safavid era and present a model and a tool for guiding the designer, planner, or administrator through a lifetime of conservation based, sustainable practices. The EcoSTEPSM methodology for assessments and the use of Landry's creativity indicators for Sustainable Communities is used to plan any large urban project located at Isfahan, Iran, as a member of the creative cities network.

Keywords

Creative city, Startup center, Youth center, Sustainable Development, Business Incubator, Creative Economy

Introduction

The concept of “sustainable development,” as coined by the World Commission on Environment and Development and with it, the term “sustainability” itself, have been gaining increasing appreciation in recent years all around the world. Creative city is made up of many distinct characteristics within the four domains of environmental, cultural, social and economic sustainability. All of these characteristics are dependent for the creative and sustainable human habitat. Each key characteristic within these four domains is potentially a sustainability indicator that can be designed, planned, and tracked over time for urban sustainability efficiency.

It is estimated that by 2050 there will be more than 30 cities of 10 million residents. (Steward & Kuska, 2008) In 1950 there were only eight cities in the world with more than 5.0 million people. The cities have been identified as the major sources of air pollution (primary reason for climate change); water contamination and depletion of supply (endangering the lives of millions of people and causing global conflicts); of excessive fossil fuel consumption (principally because of carbon-based electric power generation and the growth of personal automobiles). The UNESCO Creative Cities Network (UCCN) was created in 2004 to promote cooperation with and among cities that have identified creativity as a strategic factor for sustainable urban development. (UNESCO, 2016)

Creative cities will be learning cities – communities of leaders and participating citizens who learn from all sources of sustainable urban design and development, from their experiences, and from other sources of best practices. A creative city will be a collective of distinctive, culturally related special places, each with re-forming qualities for the human essence.

Creativity

Creativity has always been the lifeblood of the city. Creative thinking is a way of getting rid of inflexible pre-conceptions and of opening ourselves to complex spectacles which cannot always be dealt with in a strictly logical manner. It is also a way of discovering previously unseen possibilities. Everybody is potentially creative, but organizational structures, habits of mind and working practices can squeeze creativity out. (Landry & Bianchini, The creative city, 1995) Creativity takes place indeed in the interaction between a person’s thoughts and a socio-cultural context. Interaction with other people, institutions and societal structures that embody knowledge and resources are therefore important contributors to the creative act. (Csikszentmihalyi, 1996)

As Patrick Geddes, Lewis Mumford and Jane Jacobs mentioned, creativity can affect our cities not only through its physical shape but also by the way people experience the city.

Creative city

The concept of creative city was first mentioned by David Yencken around 1988 in his article called "the creative city". (Yencken, 1988) According to Yencken’ s definition, a creative city must be committed to fostering creativity among its citizens and providing emotionally satisfying places and experiences for the citizens. Charles Landry defined creative city as a city with its special brand and personality. (Landry, 2016) In a creative city people work in creative industries and the city store of talent continually refills through domestic and foreign immigration in order to feed this mechanism. Jane Jacobs advocates that urban creativity must emerge locally and states that the source of wealth is not the nations but the cities. (Jacobs, 1961) However, the idea of creative city became the central to urban regeneration and started to receive much attention beginning in the 1990s. (Peng & Yang, 2013) Isfahan became the member of the creative city community in 2015 under one of the seven fields called

crafts and folk arts. Being the third biggest city in Iran, with 1.5 million inhabitants, its creative sector comprises the country's most specialized craft people in 67 different disciplines, including carpet weaving, metalwork, woodwork, ceramics, painting and inlay works of various kinds.

Table 1- Creative City Liteature Review

Creative city literature review			
Year	Philosopher	Concept	Source
1995	Landry & Bianchini	Cultural and Artistic activities can lead to urban regeneration	(Landry & Bianchini, The creative city, 1995)
1995	Porter	Creative Competitiveness from the Governance perspective	(Porter, 1995)

1998	Hall	• Human Innovation has emerged from the city
		• Identifies three periods in the development of creative city
		  ○ Productive Innovation
		  ○ Cultural-intellectual Innovation
		  ○ Cultural-technological Innovation (the use of information technology to bring art and technology together)
			(Hall, 1998)

2000	Landry	• Stages to produce the creative city
		• Focuses on:
		  ○ Decline of traditional industries
		  ○ Lack of sense of belonging
		  ○ Weakening of quality of life
		• He argues that the above problems can only be resolved using creative methods.
			(Landry C. , 2000)

2002	Florida	• Creative class in contrast to working and service class whose work is entirely planned, is dedicated to producing new ideas and technology. • 3T: Technology, Tolerance, and Talent – attract creative manpower- achieve the goal of creative city • **Producing an environment that is suitable for the creative class to live and work can therefore attract creative talent which is a crucial objective in urban development.**	(Florida, 2002)
2003	Hospers	Creativity can effectively highlight the character of the city	(Hospers, 2003)
2010	Yeh	• City Planners should broaden their knowledge and vision to reimagine the urban living experience.	(Yeh, 2010)

		• Encourages citizens to exercise their imagination and creativity, and collaborate and participate in city planning.	

Dimensions of creativity

Hans J. Eysenck presented a set of "cognitive", "environmental" and "personality" variables that are to interact in a multiplicative manner to produce creative outcomes. This theory highlights the importance of socio-cultural factors in the measurement framework of creativity. (Eysenck, 1996)

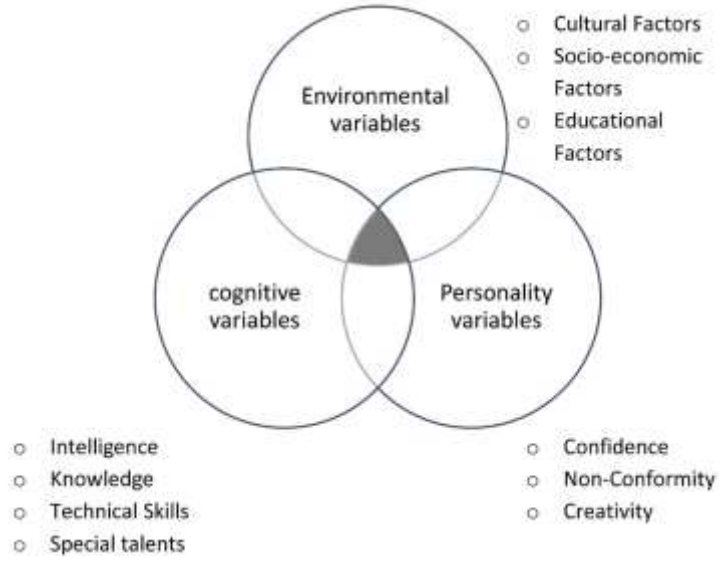

Figure 1-Dimentions of Creativity by Hans J. Eysensck (Home Affairs Bureau, The Hong Kong Special Administrative Region Government, 2005)

Creativity and sustainability

The world commission on environment and development states that sustainable development should ensure that the present development meets the needs of today without compromising the ability of the future generation to meet their own needs. (World Commision on Environment and Development, 1987) Sustainable environments will not be created if we only look at the environmental dimensions; we also have to address how people mix and connect their motivations and whether they take responsibility and 'own' where they live and change their lifestyles appropriately. The characteristics of creative city are discussed within the fields of sustainable development. The **environmental field** insures the access to environmentally protected accessible green space and recreational areas while the **cultural field** takes into account the presence of facilities which are able to accommodate life-long creative events. The **technologies field** mentions the use of affordable and appropriate technologies towards carbon-free systems along with convenient and efficient mass transit, sustainable buildings and infrastructures, and within the **economic field** the context in which locally owned enterprises with both local and export markets can shape is mentioned. Finally, the **social field** aims for the participation of all stakeholders through planning, design and management phases. (Steward & Kuska, 2008)

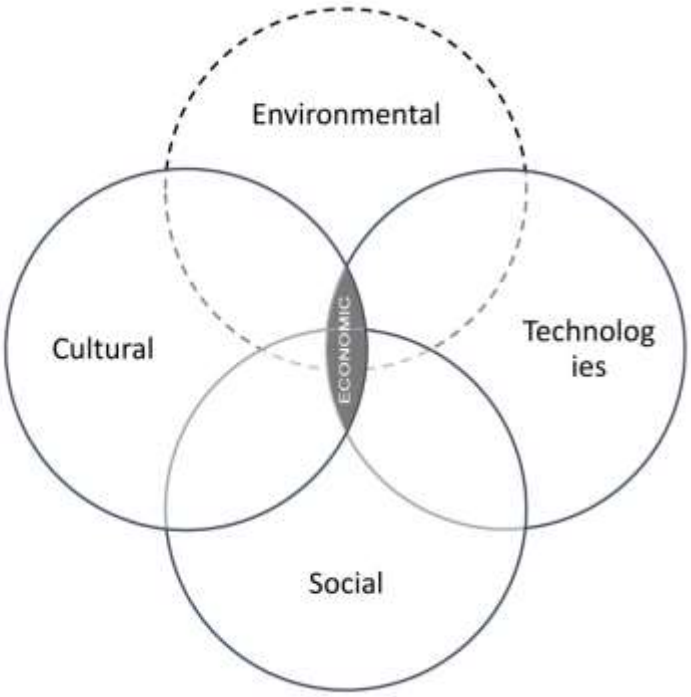

Figure 2-Creativity and sustainability

Creativity-Sustainability Indicators

For the purpose of this research creativity indicators with a direct relationship with sustainability are given much attention. Hall (2000) and Lin (2010) believe when researching about the topic of creative city it is necessary to pay much attention to industrial clustering, structural instability, and diversity.

Landry (2000) believes that the formation of creative city requires environmental stimuli and cultural diversity. He puts forward a measurement index covering the four dimensions of: economic, social, cultural, and environmental. Landry also proposes nine indicators for evaluating the vitality of creative city: critical mass, diversity, accessibility, safety and security, identity and distinctiveness, innovativeness, linkage and synergy.

Hospers (2003) following the Landry's study proposes three key elements of creative city: concentration, diversity, and instability. Florida (2002) introduces the idea of "creative talent" as an important factor of urban economic development. He proposes the use of four equally weighted factors: creative talent, innovation index, High tech index, along with diversity index.

Florida (2002) develops the 3Ts model– Talent, Technology and Tolerance – which argues that creative people prefer places "that are diverse, tolerant and open to new ideas", and that the presence and concentration of creative capital in a region" in turn lead to higher rates of innovation, high-technology business formation, job generation and economic growth". (Florida, 2002)

Glaeser (2005) introduces the 3S model towards completing Florida's "3T" model. He argues that the forces effective at attracting creative talent though promoting economic development are three S': skills, sun, and sprawl. (Glaeser, 2005)

Summarizing the above literature, a review shows that Landry establishes the theoretical basis of creative city while Florida introduces the creative class theory which aims at industrial development towards building creative city. The 3T model explains the criteria of such an environment that attracts creative talent for the purpose of creative city shaping while Glaeser lays out the setting in which creative talent is attracted. Landry defines four dimensions of creative city similar to dimensions of

sustainable development and so the indicators named by him could be used as a well guided tool for creating creative-sustainable large urban projects.

Table 2-Creative City Dimensions and Indicators

Creative city indicators & dimensions			
Year	Philosopher	indicator	Source
2000	Hall	• Industrial clustering • Structural instability • Diversity	(Hall, Creative Cities and Economic Development, 2000)
2000	Landry	• Environmental stimuli • Cultural diversity	(Landry C. , 2000)
		• Economic • Social • Cultural • Environmental	
		• Critical mass[1] • Diversity • Accessibility • Safety and Security • Identity and Distinctiveness • Innovativeness • Linkage • Collaboration	
2003	Hospers	• Concentration • Diversity • Instability	(Hospers, 2003)
2002	Florida	• Talent • Technology • Tolerance	(Florida, 2002)
2005	Glaeser	• Skills • Sun • Sprawl	(Glaeser, 2005)

Safavid era

Isfahan, located about 340 km south of Tehran, is the capital of Isfahan Province and Iran's third largest city (after Tehran and Mash-had). The city flourished from 1050 to 1722, particularly in the 16th

[1] the minimum size or amount of resources required to start or maintain a venture

century under the Safavid dynasty. Isfahan was named the capital of Iran in 1598 by Shah Abbas the Great, and so adopted a new master development plan during the seventeenth century. (Rahbar & Ansari, 2016) The river with a general direction of east to west and the main axis of Chaharbagh[2] with a north to south direction, created the basis of this new urban design system. The new system takes into account the natural potential of the city (the river[3]) and combines it with the new axis Chaharbagh in the form of a grid network derived from the Persian garden structure.

With the river as the natural edge and Chaharbagh as the path, later on it gets completed by adding landmarks in the form of bridges connecting the north to the south over the river. Districts and nodes are shaped within the gridded network of streets therefore fulfilling the five basic elements of city image described later by Lynch in around the 1960s.[4]

The principles of the new city structure planned by Sheikh Bahaie[5], answers well to the city image laid out by Lynch, and therefore it can be used as the basic layout for any new large urban projects within the city. This is while taking into account the four basic dimensions of creativity mentioned by Landry (economic, social, cultural, and environmental), effective towards planning a creative city, which in return results in a creative economy necessary for sustainable development.

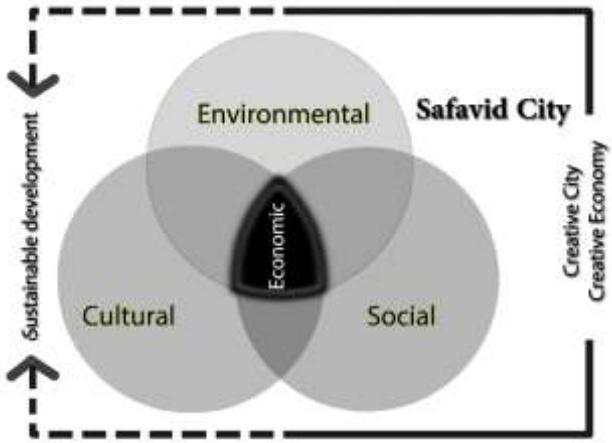

Figure 3-Proposed Model of research

Mohan Munasinghe believes "Having a sustainable city is possible when there is a mutual relationship among the three factors of environmental, social and economic, for a city in which all citizens feel satisfied." (Munasinghe, 1993) The economic factor is derived from the common relationship among features within the environmental, social, and cultural fields. The partnership of such features within different fields will provide a sustainable economy resulting from the creative ideology within the core of Isfahan's historic background.

Methodology

Currently, a number of methods and techniques are used to select and evaluate the characteristics of creative city. Measuring the improvement or decline of various quality of life factors over time is clarified using the EcoSTEPSM tool. EcoSTEPSM is an effective tool for plotting various sustainability

[۲] Literally meaning four gardens. The quadrilateral garden is divided by walkways or flowing water into four smaller parts. In Persian, "Chār" means 'four' and "bāgh" means 'garden'.

[۳] Zayanderud: the largest river of the Iranian Plateau in central Iran

[۴] The Image of the City (1960) is a book by Kevin Lynch. The book is the result of a five-year study of Boston, Jersey City and Los Angeles on how observers take in information of the city, and use it to make mental maps. Lynch's conclusion was that people formed mental maps of their surroundings consisting of five basic elements.

[۵] scholar of Isfahan in Safavid era

indicators in three time frames, short-term (S), medium-term (M), and long-term (L) – each divided into ten time frames that can be defined by criteria that the use may choose. (Steward & Kuska, 2008)

For the purpose of this research set of indicators within the five domain described before have been established and tested.

Table ۲ -Sustainability Indicators for Creative City

Economic			Social			Technologies			Cultural		Environment			
Entrepreneurship	Affordable Housing	Locally owned businesses	Collaboration	Public Gathering places	Safety and Security	Business incubators	Start centers	Low carbon transit	Diversity	Public facilities	Accessibility	Identity	Walkability	Green Space

Conclusion

This cognitive framework will prompt the user to consider a more thorough brief on the limitations, information and interdependent opportunities for the goal of creating sustainable places. Cities are not built in a day, nor are they constructed as a whole. Urban development is dynamic, incremental and evolutionary. The "creative city" will be a combination of connected, interdependent – but distinctive, high quality – and culturally diverse places. More often traditional developer-driven planning, design and administration loses sight of long-term sustainability and the essential interdependencies and connections that are so necessary to creative cities.

Safavid city planning principles fall within the domains of sustainability indicators working towards creating a creative city. Planning and design of any large urban area within Isfahan should take into consideration the indicators described before. Combination of different dimensions within domains of economic, social, technological, cultural and environmental, bonds effectively with the Safavid City planning principles.

The proposed creative city philosophy along with the goal of sustainable development and the creation of happy city, in the merge of this economic crisis and the lack of quality life within Iranian people, seem to be the best possible answer for the design of any large urban area within Isfahan city. Use of start center idea and business incubators for the purpose of gathering new and creative ideas within the domain of folk arts along with promoting participation of people in shapeing the environment and their future while preserving for the next generation.

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