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## The Role of Urban Spaces and Structures in Increasing the Social Vitality of Citizens with an Emphasis on Urban Design Approaches

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### Abstract

As the greatest symbol of civilization, city has been found in order to provide human beings with safety, security, welfare, and composure; this human product has and will have a permanent and inclusive impact on his life. From the very beginning of life on earth, human beings have shown a desire for social life and living together. A close analysis of the process of economic, cultural, scientific and social developments throughout history reveals men's insatiable need and quest for a society in which they can easily experience social institutions and products derived from collective life; Basically, it can be claimed that the birth and the development of human talents and abilities are the direct product of socialization and the use of diversity and multiplication of society. Therefore, humans have always tries to provide required social spaces for the development of scientific and specialized talents, for cultural exchanges and for spending leisure time. Machine life, continuous and permanent endeavors of citizen to enjoy family life, economic problems, and many other difficulties have made human beings procure comfort and psychological well-being through seeking social vitality. Thus, it is necessary for people to establish a vibrant community and make urban transform urban space into a safe place for the development of healthy social relationships and increase the community's mental security by creating a joyful atmosphere with proper planning and matching the needs of the people, in order to finally escape problems, the ultimate results of which are mental disorders and psychological stress. The present study used documentary and library method in order to assess views; theories and topics related to the subject of research; then, it extract effective indicators for creating urban happiness. Required data was collected through field method (questionnaire, observation, interviews and field surveys); finally, some solutions have been presented in order to enhance the level of social vitality in the city.

Keywords: Social Vitality, Urban Design, Sarab City, Urban Place

### 1. Introduction

The presence of social vitality enhances consensus, solidarity, social affiliation, desirable social interactions, life satisfaction, as well as mental and social health of individuals; by a logical parallel, it decreases, or mitigates, social harm and increases motivation for work and effort in society; consequently, such a society has found the path to progress and advancement.

Some inevitable characteristics of modern life and society include urbanization, greater access to technol-

ogy, numerous challenges, imposing multiple stresses on individuals, high cultural interactions and the risk of weakening cultural identity, reducing emotional connections among people and increasing mental disorders. Some sociologists believe that Iranian society is not as happy as it should be, and that it suffers the lack of the bases and grounds for expressing happiness in a collective and public way. In other words, there are limited known and conventional practices for collective and public happiness which, by itself, is in conflict with social order and security. In regard with social vitality, Iran has a low rank in the World Health Organization and depression is relatively high in Iran. Inconsistency between people expect and what they actually have, the lack of coherence of the urban fabric, low per capita space culture, green space and sports and economic problems are some of the most important factors that reduce the vitality of the city. However, various factors can help enhance, promote, and reform social vitality, the most important of which is the opportunity to develop urban environments, including the creation of spaces for spending time.

### 2. Research Methodology

The present study applies descriptive and analytical method with a quantitative approach.

### 2.1 Definitions and Theoreticians

#### 2.1.1 Mental Health Theory

This theory, which keeps cautious about the impact of industrial cities, recommends the citizen's participation in shaping the city and points to the role of planning as a factor in reducing delinquency; followers of this theory pay attention to the problems of per capita, thresholds, and practical criteria in urban life and land use. (Mortazavi, 2000)

### 2.1.2 Social Function of Space Theory

Space is of fundamental importance in terms of the value and social role of comfort, security, beauty, prosperity and quality of human life. (Bahraini, 2014)

### 2.1.3 The Theory of Functionalism

Based on the principles of rationality and cost-benefit, the use and utilization of urban landscapes is considered as a tool for facilitating urban functions and enhancing urban efficiency; this theory emphasizes the need for rational and optimal use of land and space. (Shamaei, 2015)

### 2.1.4 The Theory of Naturalism

This theory recommends the liberation and release of man from the artificial environment, and it emphasizes the establishment of nature and the consideration of natural uses as leisure and free time activities. (Pakzad 2014)

### 2.1.5 Social Vitality in Urban Spaces

Vitality is a sustainable and timeless feeling of self-esteem and internal pleasure. As an emotion that generates pleasure, joy is not necessarily and always accompanied with laughter. Although definitions of urban land use planning abound, they all emphasize some basic common points. (Athari, 2015)

Urban land use planning and spatial organization of urban activities and functions are based on the needs and demands of the urban community, and constitute the core of urban planning (Pourahmad, 2014)

Urban land use planning means the spatial or geographic distribution pattern of different city functions, since residential, industrial, commercial, and retail spaces are allocated for administrative use, institutions, social symbols and leisure activities. (Sotoudeh, 2008)

### 3. The Relationship between Urban Nature with Social Vitality and Health

Uncontrolled urban development, unified zoned users, and the deterioration of natural resources have undesirable effects on the functioning of natural systems, such as plant coverings, trees, the network of surface and underground streams of water, the quality of air in the city, the health of human communities, which have encountered numerous threats and challenges, the emissions of pollutants from cars, the gradual degradation of natural resources, such as irrigated orchards, and degradation of fertile soils. (Lang John, 2007)

It is necessary for urban planners and designers to conduct joint workshops with public health professionals on the one hand, and with urban transport professionals on the other hand, in the decision-making process on the shape of urban environments in order to create urban spaces that promote the physical and human health of citizens. Following items are the main models for promoting physical and mental health through planning and designing. Physical activity and walking introduce a pattern of healthy urban life, with the presence of sidewalks, pedestrians, pedestrian shopping malls, and bicycle paths. (Talebian, 2011)

### 3.1 Definition of Joy and Vitality

Vitality is an ever-positive emotion; in other words, while positive happiness can be transformed into joy, false happiness does not result in joy and elation of human spirit; even, experience has shown that false happiness gained by various stimuli such as narcotics, drugs, alcohol, music, and making fun of others will ultimately result in sadness and depression. Thus, it is never possible to attain and realize eternal joy. In terms of religious education and the attention to mental health features, happiness is quite limited, although the identification of these limits depends on the level of cognitive and social development of the individual and. (Pakzad, 2014)

Table1. Indicators of Urban Quality of Life from
Different Perspectives

Researcher	Environment quality indicator
Jane Jacobs 1961	Ensuring proper activities before considering the visual configuration of the environment, considering multi- perspective use in terms of age and taste in a specific area, attention to the element of the street, the permeability of the tissue; i.e. the use of smaller urban blocks, social mixing and adaptability of spaces
Appleyard and Okamoto 1968	Sound, light, smoke, dust, micro- fluidity, privacy of valuable activities and local identification environments, social interaction
Lansing and Marines 1969	Openness, comfort, attractiveness, maintenance, sound and their relationship with the residents of their neighborhood
Sanof and Sony 1972	Fire-safety, security, access to schools, garbage collection, communication with neighbors, convenient pedestrians, convenient distance from friends, proper distance from relatives, parking in front of the house
Appleyard and Lintel 1972	Traffic hazards, stress, noise and pollution, privacy, home territory, neighborhood and meeting, identification and attachment
Karp et al 1976	Safety, beauty, sound, neighbors, mobility and access, persecution
Kevin Lynch 1981	Access, vitality, Consistency, Controlling, Efficiency, and Justice
Professor Dohel 1984	High level of health based on acceptable health indicators and accessibility for all residents, high quality of the environment, housing, presence of active and involving neighbors, ability to meet the basic needs of each citizen, the existence of social relations at a reasonable level, the existence of diverse and self-sufficient economics, diversity of cultural activities, proper urban planning model

Bentley et al 1985	Visual consistency, diversity, permeability, readability, flexibility, personalization, energy efficiency, cleanliness and wildlife efficiency
Allen Jacobs and Donald Appleyard 1987	Vitality, identity, control of access to opportunities, imagination and happiness, originality and meaning, social life and community, urban self- reliance, an environment for all
Michael Southworth 1989	Structure, readability, form, sense of place, identity, sights and landscapes, human scale or pedestrian
Romana Et al 2003	Waste, water pollution, air pollution, noise, traffic jams

### 3.2 Factors Affecting the Vitality of Urban Community

Urban design can be quite effective in the emergence of social vitality through compliance with native and spiritual architecture, proper organization of use in cities and villages, and principled urban design. (Nasiri, 2000)

# 3.3 The Impact of Urban Spaces on the Vitality of Citizens

Upon hearing the concept of vitality in relation with city, the first thing that springs to the mind is an alive city which can be analyzed from three perspectives; firstly, from the point of view of urban access - a living city where citizens can easily access urban infrastructure; secondly, the visibility of justice and fairness in regard with distribution of facilities; and, thirdly, the participation of citizens in the affairs of the city. (Sotoudeh, 2008)

## 3.4 Factors Decreasing Social Vitality in Cities

Urban development, the increase of the number of vehicles, and destruction of environment have had damaging effect on the city's environmental-physical structure and, consequently, on the physical and mental health of its citizens. Lack of citizens' safety in the face of accidents, insecurity in urban and rural spaces, isolation, depression and social disturbance in urban areas, and the excessive dependence of citizens on cars and the lack of mobility in different classes of are some of the most serious complications of urban life. (Shi'a, 2000)

Therefore, identifying the adverse impacts of urban development on the general health of citizens and promot-

ing healthy urban living is necessary. The poor quality of urban environments, air pollution, inadequate urban waste management, noise pollution, and the harmful effects of toxic chemicals and heavy metals such as lead and vivid can threaten the lives of metropolitan residents. Also, the impact of the design and quality of the city environment on people's behavior and their mental health has been proven by environmental planners such as William White, Appleyard, and Kevin Lynch Wallace. (Pakzad, 2014)

### Social Vitality in Urban Environment

New cities are facing physical, economic, and social problems due to not observing sustainable development indicators; urban public places continue to play no role within cultural and social continuum which, in turn, exacerbates the crisis of identity and lack of vitality. (Pour Mohammadi, 2015)

Considering the importance of sustainable urban development in urban planning literature, it seems necessary to address the principles and criteria for the development of sustainable vitality, as one of the indicators of sustainable development, in urban public spaces. Nowadays, providing urban vitality and liveliness as become one of the main concerns of urban management systems, especially in developed countries. (Hanachi, 2007)

### The Impact of Color in Urban Environment and Social Vitality

The use of sharp, cheerful and contrasting colors in children's playgrounds reinforces the sense of joy and helps them enjoy every single moment of their free time. Even in some countries, children are given required equipment for playing and paint the playground the way they like on certain dates; then, when the break is over, they are made to fix everything and re-paint the playground back to its basic color. (Moini, 2000)

### Environmental Psychology in Urban Design

This perspective seeks to analyze human behavior and factors that influence them; actually, a behaviorist psychologist examines how to behave in order to find out how influential factors affect behavior or what humans do. Based on this, there are four key concepts to be considered in examining behavior in this perspective: stimulus, motivation, response and reinforcement. (Salehi, 2008)

Investigating urban environment indicators (Shi'a, 1997)

## An Overview of Sarab City Texture and Context

The city of Sarab has an area of 3560 square kilometers in the southeastern part of East Azerbaijan Province. Northwards, this city is limited to Meshkin Shahr and Haris; eastwards, it is limited to Ardebil province and it is limited to Bostanabad and Mianeh westwards and southwards. The height of the city is 1650 m from the sea level. Sarab city comprises 6.7% of the total area of the province, making it sixth among all cities and town of the province. (Field studies)

### **Reviewing Present Status**

In order to study the current status of Moshaver (Consultant) street, one piece on the two sides of the street from the intersection of Ferdowsi Avenue to the intersection of Shahid Beheshti Avenue has been studied; the number of floors, the stability of buildings, and their arrangement were examined during land use studies and collected data was inserted into and processed by relevant software. (Sarab Municipality, 2016)

The results of field studies indicate the activity of commercial use on both sides of the street; due to its close proximity to the main market of the city, which has both urban and trans-urban functions, Motahari Street has become one of the main commercial spaces of the city that can meet the needs of different types of business and services for residents. There are branches of different banks, large stores of carpets, cloths, household appliances and the like, indicating the performance of the street in the urban and commercial service sector. (field studies)

## Visual Presentation of the Present Status of the City





**Figure 1.** The current status of the Sarab Park is not considered in this area of climate issues, and Sarab City does not provide services to urban users for the most part of the year; photo by Isazadeh; winter 2016.

### Ultimate Objective of the Research

The main objective of the present study was to provide a comprehensive knowledge about the set of factors and causes of the formation of urban problems in Sarab city and to provide suggestions in relation to urban planning issues. Reviewing factors affecting different aspects and providing scientific and logical solutions for reducing the rate of burnout and recovery and returning life to these tissues with the aim of providing minimum essential requirements, including providing emergency and relief services to residents, increasing the coefficient Permeability, modification of the transit network, redefining urban uses with the aim of being close to per capita and standard indicators, and ultimately preventing genuine and indigenous residents from migrating have been the most important concerns of the present study. In this regard, in addition to analyzing the needs and problems of the inhabitants, the scope of each of the effective organizations and institutions and their interactive role in the management cycle of the worn tissues has been examined; additionally, legal ambiguities and vague issues which might complicate management and enforcement cycle and prevent the immediate resolution of problems have, also, been addressed as much as possible.



**Figure 2.** A Survey of Ferdowsi Street in Sarab; due to the current status, there is turbulence in the urban landscape on this street, mainly due to the inadequacy of the walls, lack of attention to the design of the sky line, the lack of green space and urban furniture, low passageways, and no sense of social vitality in the urban environment; photo by Isazadeh; winter 2016.

Sarab City			
Objective	Solution		Policy
	Low noise	Reducing noisy activities	Removing noisy activities Removal of activities that create noise by attracting a large population of non-residents.
co		Car noise	Establishing an obstacle on the floor to prevent the car from passing easily Setting the streets leading to the field in such a way that car does not create traffic Establishing the appropriate distance from the main transit routes.
	Low concentration of people	Reducing the number of cars	Removing the vehicle from the space of the field by closing down the road leading to it Predicting required collective parking at the appropriate distance to units and field
		Absence of non- residents	Avoiding the use of non-resident individuals Avoiding the ease of availability of space for offenders
	Lack of non- innocent verbal	Compliance of activities with the environment	Including activities in proportion with the capacity of the neighborhood
	happenings	Low physical excitement of space	Avoiding tension Balancing space textures Avoiding the extreme variety of materials and colors of the facade
d be	Surveillance of inhabitants on	Space Forecasting Capability	The simplicity of the floor and the fuselage Avoiding the use of hidden corners
	space	The presence of various social groups	Appropriate deployment of adjacent units to facilitate easy traffic between private and public areas Possibility of comfortable presence of women and the elderly, adequate light of night, avoiding spatial ambiguity, minimum level differences

#### Table 2. The Analysis of Present Situation in Regard with Social Vitality; Isazadeh; Summer 2016.

#### Table 3. Proposed Design in Form of a Table; Isazadeh; Summer 2016

Conclusion			
Objective	Policy and strategy		
Peace	Low noise	<ul><li>Reducing car noise</li><li>Controlling disturbing noise generating activities.</li></ul>	
and con	Low concentration of cars	<ul><li>Reducing congestion of passing cars.</li><li>Reducing traffic congestion.</li></ul>	
composure	Hierarchy	<ul><li>Clarity of street sings and instruction</li><li>Appropriate connection of alleys and impasse to the local street.</li></ul>	
	Space predictability	<ul><li>Having physical clarity in street space.</li><li>Clearance at the intersection.</li></ul>	
	Social surveillance	<ul><li>Seeing space from inside the bodies.</li><li>The presence of people in space.</li></ul>	
	Presence of natural elements	<ul><li>Choosing the right vegetation.</li><li>Proper vegetation establishment.</li></ul>	

Intimacy	Not overcoming human beings	<ul><li>Having a human scale.</li><li>Ensuring proper secrecy.</li></ul>
lcy	Responsible approach to space usage	<ul><li>Participation in the management and maintenance of space.</li><li>Possibility to interfere with users in space.</li></ul>
	Monopoly of space for neighborhood residents	<ul><li>Activities on a local scale.</li><li>Removing Urban Traffic.</li></ul>
	Enjoying the freedom of movement and activity	<ul><li>Prioritizing the walker-by over drivers and riders</li><li>The existence of outdoor activities.</li></ul>
Safety	Pedestrian safety	<ul><li>Safety at the time of walking</li><li>Safety at the time of immobility</li></ul>
	Biking safety	<ul> <li>Safety of biker riders against drivers</li> <li>Bike safety against pedestrians.</li> <li>Bike safety against static obstacles.</li> </ul>
	Passenger safety	<ul> <li>Safety of drivers against other drivers</li> <li>Safety of drivers against biker riders</li> <li>Safety of drivers against pedestrians</li> <li>Safety of drivers against static obstacles</li> </ul>





**Figure 3.** Proposed design for Sarab city Park. The use of roofed elements for the complex due to adherence to the climate of the city of Sarab, Designing the route for walking and morning exercise; Isazadeh; summer 2017.

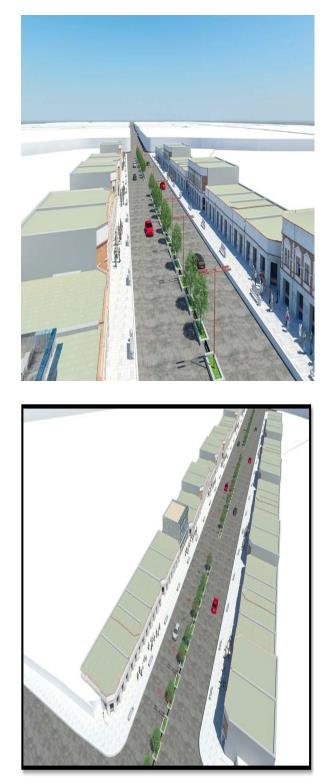


**Figure 4.** Proposed design for Sarab city Park. The use of green space, watercolor and element and spaces for children to play to enhance social vitality;Isazadeh; summer 2017





**Figure 5.** The design proposed for Ferdowsi Street in the city of Sarab with the aim of creating social vitality with the reinforcement of the design of gardens, urban furniture, and green spaces; Isazadeh; summer 2017



**Figure 6.** Bird-eye-view ofdesign proposed for Ferdowsi Street in the city of Sarab; Isazadeh; summer 2017

### 4. References

- 1. Athari, Kamal. (2015). *An Overview of Urban Design*. Publisher of Iran Center for Urban & Architecture Studies and Research.
- 2. Bahraini, H. (2014). Analysis of Urban Spaces in Relation to User Behavior Patterns and Design Criteria. Kasra Publishing House.
- 3. Pakzad, J. (2014). *The Alphabet of Environmental Psychology for Designers*. Armanshahr Publications.
- 4. Pour Ahmad, A. (2014). *Urban Design and the Art of Urban Architecture*. Tehran University Press.
- Pour Mohammadi, Mohamad Reza. (2015). Urban Land Use Planning. Tehran, Organization for the Study and Compilation of Humanities Books of Universities, Department of Human Sciences Research and Development.
- 6. Setoudeh, Ayatollah. (2008). *Social psychology*. Tehran: Avaie Noor.
- 7. Shamaei, A. (2015). *Urban Improvement and Modernization*. Tehran University Press.

- 8. Shi'a, A. (2000). *City and Region in Iran*. Iran University of Science and Technology.
- 9. Hanachi, P. (2007). *Housing, Architecture and Urban Development.* Tehran University Press.
- 10. Salehi, A. (2008). *Environmental Features of Secure Urban Areas*. Center for Urban and Architectural Studies Press.
- 11. Talebian, M. (2011). *Architectural Performance*. Tehran University Press.
- 12. Long, John. (2007). *Creation of Architectural Theory, the Role of Behavioral Sciences in Environmental Design*. Tehran University Press and Publishing Institute.
- 13. Mortazavi, Sh. (2000). *Environmental Psychology and its Application*. Tehran University Press.
- 14. Moini, M. (2000). Urban Development. Azarakhsh Publications.
- 15. Nasiri, A. (2000). *Urban and regional urban planning*. Publisher of the Ministry of Roads and Urban Development.