Role of urban sculptures in Beautification and Improvement of quality of urban spaces (case study: Fuman County)

Maryam SABOUR1,*, Mina SAMIE YOUSEFI2, Fatemeh SAMIE YOUSEFI3

1Msc at urban and regional planning, Qazvin Imam Khomeini International University,
2Msc at urban and regional planning, Qazvin Islamic Azad University
3Ma at Architecture, Guilan University

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Abstract. Urban spaces are the places in which citizens' civil and social life occurs. Hence, attention to design of these spaces causes improvement of quality and realization of urban life and interaction between citizens and city. Arrival of urban sculptures to public spaces has been mentioned as one of the suitable solutions for beautification and improvement of quality of urban spaces. Art of sculpture at public spaces directly associates to people, causing improvement of citizens' visual culture and improvement of quality of urban environments. Urban sculptures in addition to beautifying urban spaces can undertake positive and important features such as identity-building in urban spaces, building mental image, transferring valuable messages, transferring culture and history within community, causing more interaction of citizens at urban spaces through creation of interesting and high-quality spaces. In following, the concepts pertaining to sculpture and principles and regulations to use it have been elaborated. Fuman County well known with city of sculptures enjoys this art and important feature. Hence, the present research seeks to examine role of these elements in beautification and Improvement of quality of urban spaces. Library study, case study and distribution of questionnaire have been used as the research method, proving that the volumetric elements such as sculpture have a positive effect on urban spaces. Ultimately, several suggestions have been proposed to improve this art and expand it.

Keywords: Urban sculpture, beautification, quality, urban spaces

1. INTRODUCTION

The main purpose of urbanization is to create a healthy environment to provide comfort and convenience for living. Comfort can be defined in meeting people's needs, yet richness of life emerges when the spirituality of art develops in urban environments. Urban sculpture as one of examples of urban art refers to an element that plays a potential role in defining space and meaning and encompasses different aims such as beautifying urban spaces, assisting for cohesion and integration of public spaces, reducing visual norms, urban eligibility, cultural events and improvement of individuals' public knowledge and etc. this art at urban context raises development of recognizable and memorable signs in public spaces and development of a special image of city. Urban sculpture as a part of urban elements can serve as a persistent media to transfer valuable concepts within community and remove the uniformity existing in urban spaces with presence in suitable places and improve visual quality of cities and increase citizens' vitality. Hence, the present research seeks to examine role of sculptures in meeting the citizens' perception of beauty and create solutions and suggestions to improve quality of urban spaces.

2. LITERATURE REVIEW

History of sculpture dates back to five thousand years ago in Iran. In recent decade, communication has played a potential role in revitalization of art of sculpture in Iran (Vaziri, 1994, p. 39). Without doubt, it can say that the sculptures in ancient Iran have worked out as a media (Aberi, 2006, p. 2); according to the announcement by master Hamid Shans, contemporary sculptor, social developments have occurred in art of sculpture and visual arts by starting 20th century, in order that

* Corresponding author. Email address: sanaz.sabouri@gmail.com

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Sculptural installation has prevailed in cities of Iran copied from industrial cities (Shahla Pour & Ali Mohammadi, 2008, p.1).

The studies that can be mentioned here include:

Master Hamid Shans, sculptor, has conducted an article entitled "generalities in principles and standards of urban sculptures" in sculpture magazine; Dr Hossein Soltanzade has conducted an article entitled "sculpture at urban spaces" in statue magazine; Fahimeh Mozayanani has conducted an article entitled "urban, beautiful and ugly sculptures" in municipality magazine; Solmaz Naraghi has conducted an article entitled "sculpture in public spaces" in statue magazine; Dr Hassanali Poormand and Mr Mohsen Mousivand have conducted an article entitled "sculpture in urban spaces" in Journal of Fine Arts & Visual Arts.

3. DEFINITIONS AND CONCEPTS

3.1. Urban sculpture

Urban sculpture refers to a three-dimensional volume with artistic form and expression that it can look into it from different aspects. Indeed, this sculpture has been regarded as a part of urban furniture that has been considered out of closed space. The main function of sculptures is to create sense of place and identity and induce a special spirit to space or enhance the spirit of a space. The main function of sculptures lies on decorating, building identity or transferring a message to the lookers, that the materials including stone, concrete, metal, wood and fiberglass are used to build sculpture. The most important differentiation between urban sculptures and the sculptures which exist in close space lies on this fact that numerous viewers look on sculptures at open space. Hence, the people who are not even literate look upon the sculptures in open space. Urban sculpture is undertaken by sculptors, designers of landscape and urban furniture, urban planners and designers, coming to realize by urban managers' conductance and support. Sculpture is built by sculptors that other experts play a potential role in selecting suitable scale and place. This collaboration is targeted to emerge the highest visual pleasure in addition to observance of functional considerations (Reid, 2004, p. 46).

3.1.1. Functions of sculpture

1. Enhancement of sense of place: building sense of place, inducing a special spirit to space or enhancing spirit of a space have been mentioned as the most important functions of sculpture. Place has been regarded as a part of space that has been preoccupied by means of a person or object, having a valuable meaning. Under harmony between sculpture and environment and enhancement of visual cohesion in surrounding environment, citizens feel more sense of comfort and satisfaction, resulting in enhancement of sense of place.

2. Building identity in urban spaces: identity implies a certain place to the extent that the person can recognize a place differentiated from other places, so that it can attribute a certain and distinctive character to it. The sculptures with creative and artistic design can build identity.

3. Improving quality and creating vitality in urban spaces: the space without art has no interesting point, under which lack of interesting point reduces quality of spaces and avoids creating sense of vitality in urban space. Sculpture can raise improvement of quality and creation of vitality in urban spaces.

4. Improving public awareness and introducing cultural values and symbols: Statues and descriptions attached to them can improve knowledge level and citizens' public awareness concerning cultural events or other areas. For instance, improving public awareness and introducing cultural values and symbols can familiarize people at a region with personalities or historical characters at a region or introduce the cultural symbols at a region.
5. Introducing function and spirit of square or environment in adjacency of square or associating cultural or historical function of square: distinctive historical events occur in most of squares, that a sculpture representing this historical event will associate this event for years; further, current function of square can be elaborated via sculpture.

6. Definition for center of gravity of square: sculpture as an element at the center of square which is seen and understood from both sides can represent the center of square, under which most of designers were installing sculpture at the center of gravity even in the squares empty of vehicles so as to crate sense of centralization and visual order.

7. Creation of an urban sign: urban sign represents leading elements of urban landscape. In point of view of Kevin Andrew Lynch, signs refer to the factors to detect different parts of city, that characteristics of sign must be in a way to recognize them among numerous factors. If signs have a clear form contrasting with the environment in surrounding them, it can simply recognize them, under which there will be more possibility to assume a meaning for them, that sculptures especially big sculptures can be proposed as a sign in neighborhood, region or city in most of cases.

8. Building motivation to improve environment by citizens: installing a favorable sculpture in square and improving it cause the citizens around square to be motivated to build quality at environment and make an attempt to create a distinctive environment.

9. Location: location implies that designer designs the sculpture and its surrounding environment in a way to associate a space especially a battlefield, pastures, or forest.

10. Harmonization of square: the sculptures can be designed at the squares without historical background in a way to stabilize the name of square in viewers' mind, e.g. a symbol of tulip has such a function.

11. Introducing art traditions and styles: sculptures introduce art to people, thus they can familiarize people with old or new art styles and add their art knowledge and visual literary (Shans, 2006).

3.1.2. Concepts of urban sculptures

Issues, themes and concepts contributing in building urban sculptures are classified in issues below:

1. Historical, cultural, political, academic celebrities including Ferdowsi, Abū Rayḥān al-Bīrūnī, Mir Emad Hassani and etc

2. Fighters, heroes and martyrs,

3. Athletes such as Gholamreza Takhti

4. Mythical stories and personalities such as fighting between Garshasp and Dragon

5. Mythical creatures such as Simurgh

6. Religious themes such as pure worship and monotheism

7. Religious and political themes such as martyrdom

8. Historic, political, sporting and civil monuments such as Enghelab monument in Enqelab Square and monument of World Cup in Bandar Ganaveh, war monuments and etc

9. Affective or emotional themes such as mothers' sculpture
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10. Economic and living issues such as the sculptures that introduce lifestyle and production in a city or region, including statue of fisherman, tea, the shepherd

11. Mass production in city and region such as statue of pistachios, wheat, water

12. Natural and ecological themes such as the statues which represent nature or animals within a special region, including statue of birds or native animals

13. Traditional and cultural themes such as the statues which represent lifestyles, cultural habits, feeding treatment, desired drinking and etc, including statue of teapot and cup

14. Functional concepts such as statues which represent function of a place, including statue of mountains in Tehran which represent sports identity at this region

15. Abstract, cultural and social concepts and messages including loneliness of man, freedom, contrast between modernism and tradition, poverty, suffering, Homelessness, decline, prosperity, efforts and etc (Sabouri, 2012).

3.2. Beautification of urban space

Beautification of urban space refers to any informative action which results in closer relationship between city and citizen; without doubt, beautification has been regarded as one of the aspects of public benefits which legitimate existence and activity of executive entities. Nowadays, fundamental concepts must be considered in beautification of urban spaces which include: organizing space and form of city, cultural identity and attachment, security of city and citizen, citizen's health, sustainable economy, welfare and comfort (Abdolah zade fard, 2010, p. 10).

Aesthetics develop an important part of human's perception and action under all life conditions, and city appears as a combination of man-made and natural elements and manifests thought of community. Beautification of city is not just under influence of buildings, but urban walls, public spaces and visual qualities influence beautification of city (Abdolah zade fard, 2010, p. 3).

The principles below must be examined to recognize beautification of city:

1-Beauty of elements
2-Beauty of public landscape of city
3-Behaviorial beauty of townsman
4-Beauty of social relationships within city
5-Beauty of urban space (Naghizade, 2007)

3.3. Urban public spaces and public art

Urban public spaces refer to tangible places that affect our life. These spaces require the characteristics such as vitality, mobility, sustainable development, continuity and discontinuity. More specifically, all social groups can involve in these spaces. Public art can be included of any artwork. Yet, the spaces with statues differ from the artworks which are displayed at a public place such as museum, gallery or any public place and the artworks which are kept in the personal art collections. It should be noted that public art is not a reason for lacking value of artwork. These artworks should have been attempted to increase visual literacy and aesthetic sense in the places which have no addresses but face mass of people (Poormand & Mousivand, 2010, pp. 52-53). In general, the term "urban art" includes all the arts which have been designed for a certain area of
city with special and planned intentions. This art paves the pave for access to face an artwork. All the historical artworks, monuments and urban sculptures can be accounted as the oldest urban artworks (Shahbaz, 2009, p. 3). The effect and role that public artwork especially urban sculptures create in social and urban context are as follows:

- Creation of vitality in urban spaces
- Eligibility and creation of identity
- Fostering mind
- Beauty and improvement of visual quality (Haghighat Naeini, 2003, p. 105)

3.4. Sculpture in urban spaces

Specifically, sculpture has a wide application in urban art that use of the materials that postpone destruction of materials can be a reason for it. A large space in city can appear as a means for the artists in city to provide the artworks which are not enable to be implemented and installed in workshops and galleries.

For instance, the artists such as Richard Long and Robert Smithson have created numerous artworks that are consistent with the environment replete with these sculptures (Shahbaz, 2009, p. 3). Urban sculptures widely contribute in beautification of public spaces, such that Henry Moore believes that: sculpturing more than painting belongs to public spaces (Henry Moore, 2006, p. 7). Urban elements and sculptures refer to those artworks that their function has been regarded as one of the most important factors. Physical function as well as semantic and conceptual function has been mentioned as the best facilities to bring about change in space and landscape of cities (Mohajer, 2007, p. 13).

3.4.1. Role of sculptures and elements in improvement of quality of public space of cities

Urban elements and sculptures due to diversity in issue, function, methods and form encompass a wide range. Therefore, position of urban sculptures as a planned behavior relies on relevance with policies, programs and orientations of environmental design. Hence, different aims and areas that their integration is considered in creation, maintenance and improvement of quality of urban environment result in development of modern issues of environmental sculpture (Soltanzade, 2008, p. 9). Sculptures have been appeared as symbols of culture, history and collective identity of people that emerge in both place and time and belong to the past and future, because the sculpture in cities manifest the community as a more cultural community (Ghareh Baghi, 2006, p. 2).

Art of sculpture at public spaces causes creation of visual diversity in urban space together with sense of belong to city, affecting creation of sense of comfort, satisfaction, reduction of pressures from life in crowded cities. In addition, such artworks in city have helped for enhancing people's tastes, assumed that the museums have appeared among people instead of going directly to museum.

3.4.2. Criteria and principles for relationship between urban sculptures and man-made environment

To take an action to introduce and expand people's cultural and religious values through urban sculptures, a method must be considered to detect what people believe in it and respect for it and represent it as a functional form. In point of view of Bahreini, values in urban design can be introduced in five ways. Analysis of people's values under cultural framework is accounted as the center of gravity in design of urban spaces.

Analysis of values in design of urban spaces encompasses the factors below:
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-the ability to understand the surrounding environment refers to what people see
-the power of worship, understand and use urban environment refers to what people admire
-access to urban spaces for daily activities refers to what people can use
-Recalling past experiences and memories of urban spaces refers to what people reminisce about
-symbolic, cultural, historical and spiritual aspects in urban spaces refer to what people associate

In table below, the criteria which have been suggested by Remsar(2001) about evaluation of public art can be considered as suitable criteria for design of urban sculptures(Moradi, 2007).

Table 1. Indicators for evaluation of public art in place (Remsar, 2001).

<table>
<thead>
<tr>
<th>Parameters of evaluation</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identity</td>
<td>Distinct, independent existence, integrity, independence of field</td>
</tr>
<tr>
<td>Structure</td>
<td>Color, shape, scale, form, materials</td>
</tr>
<tr>
<td>Meaning</td>
<td>Functional aspect, usefulness, identifiability, integration</td>
</tr>
</tbody>
</table>

3.4.3. Role of infrastructure in sculpture

The first point that must be taken into account in use of sculpture in urban spaces can be selection of a suitable place. 50% of identity of an urban sculpture relies on its position that half relies on influence and half on selection of a suitable place in city. Suitable position of a sculpture in city can revitalize it and vice versa (Sabeti Motlagh, 2009, p. 16). A variety of internal and external factors affect perception of a sculpture in public space, including social, cultural, climatic conditions and different customs and traditions that attention to them plays a major role in building place and creating meaning(Mozayanani, 2006, p. 2). Galson, a contemporary sculptor, knows a sculpture as an environmental sculpture that had been created for a certain place and believes that any site with different features can influence quality of sculpture. In following, a variety of suggestions to install sculpture in urban spaces have been proposed:

Urban sculptures can interact with individuals within community as an identity-based quality. Urban sculptures in parks and squares result in companionship with humans' daily life and transformation to a part of their social life. Hence, urban sculptures must follow a series of rules and criteria that the most important ones include:

1. Attention to generality and components of a sculpture for better eligibility: fundamental organizing of structure of sculpture and giving priority to visual beauty of sculpture through proper use of form, color, context and proportion will result in addressees' more attention. In other words, harmonizing form and function of sculpture and considering visual and content aspects will be followed by a useful experience.
2. Adjustment with people's thought: considering the urban sculpture in cultural expectations of a community has been considered as the most important criterion to evaluate an urban sculpture. When we engage in forming the urban space, we inevitably deal with its social content.
3. Attention to place of installing sculpture: the place of installing sculpture encompasses a wide range of urban spaces including parks, squares, green spaces and highways, empty environments next to governmental, commercial and sport buildings and etc. People experience urban spaces through movement inside it. For this, it requires examining results from this experience. Volumes must be installed, designed and implemented based on type of movement and individuals' interaction with place.
4. Attention to natural and climatic conditions in sustainability of artwork: considering atmospheric conditions, subjecting to wind, rain and erosion plays a major role in efficiency and permanence of sculptures. It can achieve facilities and limitations at the region under study through data collection.
and achieve the favorable result by accurate application of resistant materials in building sculpture. These factors include temperature, moisture, intensity and angle of solar radiation and amount of chemical pollutions and atmospheric conditions, sustainability of soil and ground slope.

Lighting: Lighting comes to realize in two natural and artificial ways in urban sculptures. Lighting can directly affect emphasis, intensification and induction of special sense, such as creation of a romantic or epic space and etc. a special aim can be induced by measuring extent light angle at different hours of day and by artificial light.

Harmony with environment:

5. Attention to type and height of adjacent buildings: rate of success or failure in building an urban sculpture relies on localization, examination of environmental structure and position of landscape. Harmony between body and surrounding environment finds a special meaning to reduce contrasts and maintain a special feature. Existing factors in appearance of buildings in adjacency of sculpture including form, height, and rate of space wasted out of building, density, ups and downs in components of landscape play a major role on how to design sculpture.

6. Attention to height and type of vegetation: the green space at region and its harmony with different types of trees and types of plants can intervene in early decision making for design of form, dimensions and type of body, so that there will be a good vision in sculpture (Poor asgharian, 2008).

4. RESEARCH METHOD

A descriptive-analytic method has been used as the research method, for which documentary survey has been used to collect data and books, articles and documents have been used to examine and analyze data. The first group of required information in this research includes those information that associate to theoretical literature of issue, developing the theoretical background and studies. The second group of information must be provided in relation to the sample under study so as to use them in our analysis and propose general suggestions through literature review and analysis of questionnaires.

Statistical population of research consists of citizens living in Fuman County under the conditions including the age group above 20 years old with residency about 5 years, which ultimately 70 questionnaires were provided regarding population of Fuman County. Samples have been selected through simple random sampling method.

5. An introduction into case study

Fuman City is accounted as one of the most important and historical coastal cities in northern Iran. The history of this city which dates back to pre-Islamic age is accounted as the seat of kings at different periods of time. This city has been accounted as the powerful centers at Bai'ah Pas, that Bai'ah Pas has been considered as the capital of Guilan till 980 AH, after which Rasht was replaced with it.

Fuman County has been located at northeast direction mentioned as the capital of Fuman, mentioned wider than now in sake of extent and area. Nowadays, Fuman County with an area of 28.76 km² at plain area has been located at geographical coordinates 49 degrees 18 minutes east longitude , 37 degrees 13 minutes north latitude (Pandi, 2006, pp. 41-42). According to census, population of Fuman County has been about 97,400 individuals in 2006. Residents of Fuman County develop from Gilak and Talesh people, that the mountainous villages located in west of Fuman County develop from people with talesh language. Fuman County is a city which has been enclosed through farms and gardens. Tobacco cultivation and rice growing have been mentioned as the major activities in Fuman County, seen around this city (http://www.wikipedia.ir/, 2011). City
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of sculptures is the only titular called to this city. This titular which has been granted to this city till the late of second Pahlavi age is found due to different sculptures that have been scattered around city. These sculptures which have been found with 26 sculptures represent symbol of a special thing from the past of this city and people living in it. These sculptures have been building during kingdom of the mayor of this city by the famous painter, Master Gholamali Arjank, during 1967-1969(Pandi, 2006, p. 92).

5.1. An introduction into the sculptures in Fuman County

1. Anahita sculpture in two parts of the world in Fuman County and Paris represents symbol of water and lightness in old culture of this city, rooted in people's old traditions and customs.

![Figure 1. Anahita sculpture at the square of Fuman county, 2010.](image1)

2. Chahar Dokhtaran sculptures which represent a symbol of women's efforts in harvesting products of tea, rice, tobacco, cookie and etc.

![Figure 2. Chahar Dokhtaran sculptures in front of park, 2010.](image2)

3. Shekarbanan sculpture which represents symbol of hunting among people of this city especially in rural regions has been placed at the early Fuman road to Masooleh.
4. Happy children's sculptures inside the park represent people's happiness and local plays at this region. There are old sculptures in the façade across the park.
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Figure 7. Fruit sculptures inside the park, 2011.

Figure 8-9-10. Rest of sculptures inside Fuman park, 2011.

5. Sculpture of souvenir and costume at Fuman

Figure 11. Sculpture of cookie and rural woman with costume, 2010.

6. Sculpture and protome of famous people in Fuman city
6. FINDINGS OF RESEARCH

In this section, research data which have been collected through questionnaires will be examined and analyzed.

In table below, obtained results have been displayed.

<table>
<thead>
<tr>
<th>Statistics</th>
<th>First priority</th>
<th>Second priority</th>
<th>Third priority</th>
<th>Sum</th>
</tr>
</thead>
<tbody>
<tr>
<td>sculpture</td>
<td>No of frequency</td>
<td>Criterion 3</td>
<td>Percent of frequency</td>
<td>No of frequency</td>
</tr>
<tr>
<td>Anahita sculpture</td>
<td>32</td>
<td>96</td>
<td>45.5</td>
<td>19</td>
</tr>
<tr>
<td>Park sculptures</td>
<td>13</td>
<td>39</td>
<td>18.6</td>
<td>14</td>
</tr>
<tr>
<td>Shekarbanan sculpture</td>
<td>5</td>
<td>15</td>
<td>7.1</td>
<td>12</td>
</tr>
<tr>
<td>Mirza Kouchak sculpture</td>
<td>3</td>
<td>9</td>
<td>4.3</td>
<td>7</td>
</tr>
<tr>
<td>Shion sculpture</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Chahar Dokhtar sculptures</td>
<td>17</td>
<td>51</td>
<td>24.3</td>
<td>13</td>
</tr>
<tr>
<td>Squares' sculpture</td>
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<td>0</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Gol agha sculpture</td>
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<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>None</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Sum</td>
<td>70</td>
<td>210</td>
<td>100</td>
<td>70</td>
</tr>
</tbody>
</table>

Diagram of obtained results is as follow:
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7. SUGGESTIONS

1. There must be harmony in urban sculptures so as to result in increasing beauty and visual qualities throughout city
2. Urban sculptures must be designed in a way to influence addressee and transfer their concept to citizens
3. It can use successful sculpture samples throughout the world corresponding to the historical, cultural and ecological features
4. Repairing the existing sculptures and building new sculptures for news spaces must be taken into account
5. Communicating with sculptors
6. Inducing the ones interested in this art by developing the workshops to train traditional sculpture method
7. Holding competitions to design sculpture can be useful
8. Allocation of financial resources for this urban art
9. Introducing this element in Fuman city through photos, film and other advertising options to other cities and provinces, resulting in attraction of tourists to this city
10. Sculpture can be considered as tourism attraction by improving this art, resulting in improvement of economy of this city
11. Role of color in urban sculptures must be taken into account
12. Employing competent forces to expand art of sculpture
13. The art of sculpture must move forward by maintaining originality of each region towards globalization
14. The materials used in sculptures must enjoy suitable quality and sustainability
15. Any urban space has special historical and cultural positions, thus a sculpture which is considered in an urban space must adapt with position and culture of citizens
16. Urban sculptures should have been conceptual, having a theme relevant with features of city and urban space
17. Analysis of status of existing sculptures

8. CONCLUSION

Urban spaces play a major role in planning and urban design due to a huge effect on cultural and social aspects of cities. For this, use of historical and cultural elements in these spaces is of great importance. To reduce stresses at machine life, the urban authorities must pay a particular attention to quality of spaces to improve quality of urban spaces and increase citizens’ satisfaction. Use of
sculpture in urban spaces is one of the approaches to improve quality of urban spaces and increase citizens' satisfaction. Urban sculpture must harmonize with environment in surrounding urban spaces, being relevant with cultural, historical and climatic features of city. Observing principles of visual arts and knowing the relationship between space and sculpture proportions are mentioned as other factors which must be taken into account. Further, some approaches and plans to improve this art must be considered in urban plans.

REFERENCES