For more creative environments: an evaluation of urban quality and vitality of Istanbul Historical Peninsula

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1. Introduction

Urban settlements extended their borders and their domains broadened with the differentiations in location decisions and changes/variations of the functions they host, as the products of industrialization, technological changes, innovations in communication systems and rapid population growth.

Usage of urban areas that are in mutual interaction and variations of lifestyles in connection with the transformations in our lifeworlds resulted with important urban problems emerging in the old central areas of the cities as well as in the economic, political and physical spheres. Changes and transformations in our era are unprecedented in terms of certain aspects. This transformation process that affects different dimensions of urban life realises unpredictably fast and in a more comprehensive way, and it causes various deprivations and declines in the urban areas.

Most of the historical city centres both in the world cities and Turkey that have multi-dimensional characteristics now remind low environmental conditions, deficiency of educational services, high crime and violence rates etc. On the other hand, they are still the primary destination of people, who migrate from rural areas. As a result, historical urban centres are affected negatively and have lost their attractiveness and charm because of the life standards that are far away from the modern and healthy environment conditions, the improper and disfunctional usage and users, over-intervention or negligence etc.

Contributing factors that cause the historical urban centres to lose their quality are as follows:

- Collapse of the urban economy resulting with external migration and decline in the volume of commercial sales due to the decrease in the purchasing power of inhabitants,
- Environmental problems such as crime, vandalism, anti-social behaviours and visual pollution that emerges in the urban centres,
- Transportation problems that make the urban centres less attractive to consumers,
- In many cities, centres have failed because of not responding to the needs of the era. Other contributing factors have been standards that are far behind the modern expectations of the customers and insufficiency and negligence of supporting services.

On the other hand, there are attractive factors for the surrounding centres that contributes to the decline of urban historical centres:

- Offering various alternatives of food and durable consumer goods has increased the commercial activities at the surrounding centres.
- Shopping centres that are located out of the city are cleaner, safer, more accessible and comfortable and they offer activities that are not related to business for adults and children,

While urban centre facilities such as their traditional charm and personal services have weakened, service speed, easy access and comfort have become more important and preferential because shopping has become an individual activity rather than a social experience (Evans, 1997).

Recently, the importance of the central areas of the urban settlements has been recognized and searching for the components of a healthy city center has become much more significant in order to recover such areas as the vital parts of the city. Under this content the concepts of vitality and viability has become the focus of the subject and revitalization applications have been used as a dominant method of intervention.
2. Revitalization

In the deprivation areas of the cities, revitalization has replaced the interventions such as reconstruction and renewal, which were commonly applied during the 1950s and 1960s. This is particularly true in the areas that have historical value. By revitalization, these areas are targeted to become living parts of the cities again in order to regain their attractiveness for living, working, spending leisure time and investing.

There is no standard formula for revitalization to succeed. Different approaches may arise depending on the locality and its properties. (Tiessdell, et al, 1996)

There are physical, functional, legal and locational aspects of the deprivation areas as well as the issues of image. Revitalization of historical urban regions, just like the other urban areas, requires variety in economic base and balance between different needs and demands. While bringing different functions together allows the area to keep its desirable conditions longer, revitalization on one single function is prone to fail. (Tiessdall et al, 1996)

In order to improve the general condition of a centre; the aim should be set to develop a lively, dynamic and liveable sphere that have opportunities for new refreshing activities, in which people feel safe and live securely and businesses may flourish.

In this respect, most of the successful urban centres offer the following:

- They have complex attractions for different user groups in different times such as shops specialized on different subjects offering alternatives and variety; financial, professional and administrative services; entertainment, culture and spare time activities etc.,
- They provide accessibility with effective transportation alternatives,
- They have local identity and character,
- They present a clean, safe and attractive ambience in terms of urban image, public space and streets,
- And finally, they are planned, administered and developed in a positive manner. (PAN 59)

3. Urban Vitality Concept and the Indicators of Vitality and Viability

While the vitality refers to how busy an urban center is at different time zones and different locations, viability relates to the continuing ability of that center to attract investment (Ravenscroft, 2000; p.2534).

Relevant density level -busyness- (vitality) is a significant component of the new investment decisions (viability) and as a result of this, the continuous development of the new establishments and opportunities (vitality) create an attraction for the visitors (vitality) (Ravenscroft, 2000; p.2534).

The urban vitality concept of Montgomery(1995) includes the vital power of the “place”, animation, people on the streets at different times and human variety. In other words it can be defined as activity, diversity and transactions.

In his article on the measurability of livability of the city centers, Balsas (2004) says that even if an urban area is alive, it can not continue its vitality character unless it attracts new investments and only the ceremonial and the historical value of the city center shall remain, if the economic relation between customer and supplier is not established. Paul and Sanders (1997) also says that retailing is a basic component of urban life and have great contributions on the revitalization and vitality of the cities.

On the other hand a livable place should be safe, clean, beautiful, economically vital, address a population having different characteristics, has an efficient management system, functional infrastructure, cultural activities and institutions, effective public transportation system and offer wide opportunities for employment. Furthermore, there should be a sense of community (Balsas, 2004).

There is agreement on the requirement for and the significance of monitoring the vitality and viability of the city centers (Paul and Sanders,1997; Balsas, 2004; DoE, 1996). When the urban livability is measured, the weak points within the urban area can be eliminated and strong sides can be supported in order to create better qualified city centers.
In his Health index developed in order to evaluate the revitalization efforts, Tyler used several parameters such as the mix of offices and shops, active tradesman associations, occupancy of storefronts, nice-looking streetscape, parking facilities, crime rates, demographic changes, shopping availability, local administration activities, upper floor vacancy rates, descriptive reference points at the center, number of tourists attracted to the center, cultural parameters and etc (Tyler, 1998).

On the other hand, the performance indicators determined by ATCM can be classified as follows; demographic changes, employment and industrial structure are related to the regional health; the number of the visits to the city center, parking availability, public transportation, safety, diversity, public activities, street maintenance and cleanliness, possibilities for special needs, city center management activity are related to the city center development; and the retail trade vacancy rates, performance and sales related to the city center health (ATCM, 2000). Optional and city specific indicators were defined as tourism and night economies.

While URBED considers the pedestrian flows and property yields as the two most significant indicators, demand for the shop units, change on the number and quality of the major retailers, the relative use of space for different activities, security, vacancy rates for shop units, accessibility and vehicle parking facilities are deemed to have second degree significance (URBED, 1994).

Hierarchy of indicators was refined by the Department of Environment in 1996 and 9 criteria were defined as diversity of uses, business representation and their tendencies to change representation, shop rents, proportion of vacant street level property, pedestrian flow, accessibility, user views and behaviors, property trade value, physical structure of the center (DoE, 1996).

These indicators might be used in order to make a comparison between the centers or they can also be used to evaluate the possible effects of the out of center developments (DoE, 1996).

4. Case of Istanbul-Eminönü District

Eminönü district that contains most of the defined transformations and problems and is in an historical central location in Istanbul with not only its geographical location but also its cultural and historical values, is chosen as the case of the study. A two-staged research has been carried on at Eminönü district in order to determine the degree of urban vitality. First, differences in urban vitality indicators have been examined in the selected neighbourhoods representing the Eminönü district. Rank of the neighbourhoods with regard to urban vitality has been created and changes in determined time periods have been analysed. In the next stage, physical, economical, social and cultural evaluations of users living and working in the selected neighbourhoods have been determined to guide the explanation of change in urban vitality.


Besides the monumental structures, urban pattern and architectural values that are the products of its cultural and historical past going back to the BC 700s, Istanbul-Historical Peninsula, as being a metropolis that is in a significant place in the international arena and aims to be a world city, carries out many functions within the region and the country (Figure 1).

Historical Peninsulas were included in the World Heritage List of UNESCO with 4 different zones as Sultanahmet Archeological Park, Suleymaniye Mosque and Surrounding Conversation Area, Zeyrek Church-mosque and Surrounding Conversation Area, Istanbul City Walls in 1985 and in 1995 upon the decree numbered 1 of IKTVK (Conservation of the Cultural and Historical Assets of Istanbul) Board the Urban and Historical Site, Urban and Archeological Site were determined and the inside of Sur-u Sultanı (Historical Peninsula) declared as the 1st degree Archeological Site.

A new era commenced in 1950s with the beginning of immigration to the city. In 1970-80 period CBD developed in Eminönü and Vatan- Millet Roads (Berköz, 1996).
In this period the continuity of the central development of the Historical Peninsula, the pressure of the manufacture centers other than the wholesale shops especially on the residential areas of Eminönü District caused the dwellers of the District started to prefer new residential areas developing in different areas of Istanbul. Although some quarters such as Cankurtaran and Süleymaniye continued to be used as residential areas, with the new users, who are members of a social group that is different than the previous ones, the mentioned quarters started to live the deformation process, which has already started in an accelerated manner.

Decentralization of the Istanbul MIA continues in parallel with the enlargement of the urban area. The improvement of the transportation and communication facilities has an accelerating effect on this process. As the historical city center, which entered to a deterioration period, losing its attractiveness, the enlargement in outwards direction increases. The studies performed revealed that low land and rent fees in the region has a great contribution in this process (Dökmeci & Berköz, 1991).

In parallel with the increase of the population of Istanbul out of Historical Peninsula, social and economic developments in local and international scales played an important role on the change of the day and night population of the Peninsula. (IBB) There is a decrease on the number of the residents within the Historical Peninsula and while the Eminönü District hosts a population of 2.5 million in the daytime, its night population is only 50,000. Although the Historical Peninsula has a great potential due to its historical infrastructure and existing values, as a result of the negative developments it has been turning a chaos space.

4.2. Determination of the Sample Areas (Sampling Design)

In order to determine the quarters representing the Eminonu District, the indicators related to the economic and physical structures of the neighbourhoods were gathered first. These data were evaluated by quick cluster analysis method using the SPSS program.

By clustering the 33 neighbourhoods, total 4 quarters groups have been obtained. 3 neighbourhoods were chosen from each quarter group, and Nişanca were taken from the 2nd group as a self representing unit.
Groups | Quarter names
---|---
Group 1 | Cankurtaran, Küçükayasofya, Muhsine Hatun
Group 2 | Nişanca
Group 3 | Hobyar, Mercan, Tahtakale
Group 4 | Alemdar, Mimar Hayrettin, Süleymaniye

Table I: Quarters Representing the Groups

4.3. Evaluation of Urban Vitality in Eminönü District

In this study carried for the evaluation of the urban vitality, the change of the defined urban vitality performances were examined on quarters basis on defined time intervals and the direction of the change was tried to be determined. In order to examine the change of the urban vitality within time the data gathered in 1985-1988 and 2002-2004 periods were evaluated by creating a specific benchmark index.

Green and Champion (1991), Ravenscroft (2000) were used the same method in their studies on the measurement of the urban performance.

In the studies on the subject, the urban vitality evaluations carried on the different scales of the city such as street, quarters, city center and overall city, specific indicators, which are chosen among the economic, social and physical areas in parallel with the research subject and data collection availability, are determined and interpreted by using the several analysis techniques.

In the process of the urban vitality evaluation of the Eminönü District, among the defined values only those that give data on quarter basis and for definite time intervals were used in the study. By taking the general characteristics of Eminönü District into consideration, number of dwelling houses, population, business areas and the land m² unit prices were used as the urban vitality performance indicators.

The leading limitation of the study is some determinants that are to be taken as the indicators to check the validity of the analysis (such as the crime rates) were not taken under the research content due to lack of data.

In the method of the study the values obtained for the quarters brought together in the indexes issued separately for each period, the values of any quarters at any period were taken as a reference and the manner of change on the urban vitality in each quarters within the evaluation period was examined by taking the mean of the other changing values according to these reference values. The determination of the indicators within time gives us ideas on the direction of the future changes (Ravenscroft, 2000). Like the relation between the present performance tendencies and the past performance situations, it is one of the most significant determinants of the future situation.

<table>
<thead>
<tr>
<th>Quarter names</th>
<th>Number of dwellings</th>
<th>Population</th>
<th>Trade area/Neighbourhood area rate</th>
<th>Land m² unit price</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALEMDAR</td>
<td>127</td>
<td>649</td>
<td>0.33</td>
<td>493</td>
</tr>
<tr>
<td>CANKURTARAN</td>
<td>1068</td>
<td>3813</td>
<td>0.00</td>
<td>133</td>
</tr>
<tr>
<td>HOBYAR</td>
<td>21</td>
<td>188</td>
<td>0.38</td>
<td>1272</td>
</tr>
<tr>
<td>KÜÇÜK AYASOFYA</td>
<td>1896</td>
<td>7123</td>
<td>0.01</td>
<td>64</td>
</tr>
<tr>
<td>MERCAN</td>
<td>29</td>
<td>151</td>
<td>0.74</td>
<td>1005</td>
</tr>
<tr>
<td>MİMAR HAYRETTİN</td>
<td>450</td>
<td>3132</td>
<td>0.18</td>
<td>183</td>
</tr>
<tr>
<td>MUHSİNE HATUN</td>
<td>1046</td>
<td>3893</td>
<td>0.05</td>
<td>107</td>
</tr>
<tr>
<td>NişanCa</td>
<td>3291</td>
<td>12714</td>
<td>0.03</td>
<td>83</td>
</tr>
<tr>
<td>SÜLEYMANİYE</td>
<td>302</td>
<td>1360</td>
<td>0.10</td>
<td>337</td>
</tr>
<tr>
<td>TAHTAKALE</td>
<td>15</td>
<td>81</td>
<td>0.41</td>
<td>898</td>
</tr>
</tbody>
</table>

Table II: City center vitality performance values for 1985-88 period

In Table II the data on urban vitality performance of the neighbourhoods chosen from Eminönü District for 1985-88 period was brought together.

In Table III, the values of the same performance indicators for the 2002-2004 period was given.
### Table III: City center vitality performance values for 2002-2004 period

Süleymaniye quarter 1985-88 period values were taken as a reference for the Benchmarking comparison and vitality performance index for each period was obtained. A mean index was obtained by using the values obtained (Table IV & V).

<table>
<thead>
<tr>
<th>Number of dwellings</th>
<th>Population</th>
<th>Trade area/Quarters area rate</th>
<th>Land m2 unit price</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALEMDAR</td>
<td>41</td>
<td>1365</td>
<td>0.21</td>
</tr>
<tr>
<td>CANKURTARAN</td>
<td>773</td>
<td>2865</td>
<td>0.04</td>
</tr>
<tr>
<td>HOBYAR</td>
<td>6</td>
<td>191</td>
<td>0.30</td>
</tr>
<tr>
<td>KUÇÜK AYASOFYA</td>
<td>1515</td>
<td>4454</td>
<td>0.07</td>
</tr>
<tr>
<td>MERCAN</td>
<td>2</td>
<td>132</td>
<td>0.43</td>
</tr>
<tr>
<td>MİMAR HAYRETTİN</td>
<td>215</td>
<td>1295</td>
<td>0.44</td>
</tr>
<tr>
<td>MUHSİNE HATUN</td>
<td>852</td>
<td>3197</td>
<td>0.16</td>
</tr>
<tr>
<td>NIŞANCA</td>
<td>2402</td>
<td>7526</td>
<td>0.24</td>
</tr>
<tr>
<td>SÜLEYMANIYE</td>
<td>117</td>
<td>932</td>
<td>0.09</td>
</tr>
<tr>
<td>TAHTAKALE</td>
<td>0</td>
<td>58</td>
<td>0.49</td>
</tr>
</tbody>
</table>

### Table IV: Eminönü District in 1985-88 period

<table>
<thead>
<tr>
<th>Dwelling Index</th>
<th>Population Index</th>
<th>Trade Index</th>
<th>Land Index</th>
<th>Mean Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALEMDAR</td>
<td>42,1</td>
<td>47,7</td>
<td>244,7</td>
<td>146,4</td>
</tr>
<tr>
<td>CANKURTARAN</td>
<td>353,6</td>
<td>280,4</td>
<td>42,4</td>
<td>39,4</td>
</tr>
<tr>
<td>HOBYAR</td>
<td>7,0</td>
<td>13,8</td>
<td>341,2</td>
<td>377,8</td>
</tr>
<tr>
<td>KUÇÜK AYASOFYA</td>
<td>627,8</td>
<td>523,8</td>
<td>84,6</td>
<td>19,0</td>
</tr>
<tr>
<td>MERCAN</td>
<td>9,6</td>
<td>11,1</td>
<td>486,6</td>
<td>298,6</td>
</tr>
<tr>
<td>MİMAR HAYRETTİN</td>
<td>149,0</td>
<td>230,3</td>
<td>505,7</td>
<td>54,3</td>
</tr>
<tr>
<td>MUHSİNE HATUN</td>
<td>346,4</td>
<td>286,3</td>
<td>177,7</td>
<td>31,9</td>
</tr>
<tr>
<td>NIŞANCA</td>
<td>1089,7</td>
<td>934,9</td>
<td>270,4</td>
<td>24,5</td>
</tr>
<tr>
<td>SÜLEYMANIYE</td>
<td>100,0</td>
<td>100,0</td>
<td>100,0</td>
<td>100,0</td>
</tr>
<tr>
<td>TAHTAKALE</td>
<td>5,0</td>
<td>6,0</td>
<td>556,2</td>
<td>266,8</td>
</tr>
</tbody>
</table>

### Table V: 2002-04 Eminönü District in 2002-04 period

When the mean values for both periods are compared, it can be seen that there is a value increase in Cankurtaran, Küçükayasofya, Mimar Hayrettin, Muhsine Hatun and Nişanca and a negative change on the other quarters. Urban vitality change graph for the quarters evaluated in 1985-88 and 2002-04 periods are given in Figure 2.

In the literature on urban centres, the importance of observing urban liveliness and its direction of change have been emphasised. In addition, it is presented important to create data records of physical, functional, social and economic indicators in order to reach more detailed and reliable results.
Therefore, creating a guide for explaining the change in urban liveliness in the selected
neighbourhoods at the Eminönü district was found necessary and a public survey has been
executed with this purpose.

4.4. Public Survey on User Evaluation in the Eminönü District

People, living in houses and working in workplaces at the Eminönü district in the Historical
Peninsula is the population of the survey. People who only visit the Eminönü district for
various reasons and/or stays in collective residences such as hospitals and dormitories have
not been included to the survey population.

In determining the number of questionnaires to be executed, it was aimed to reach the
minimum numbers that would allow reliable statistical analysis on the basis of the
neighbourhoods. The number of questionnaires was calculated according to the number of
households, which was defined by dividing the population to the average family size in each
neighbourhood separately and according to the number of workplaces in each
neighbourhood. In this context, a total of 616 questionnaires were applied with 184
households and 432 workplaces in 10 neighbourhoods that are selected among the 33
neighbourhoods at the whole Eminönü district.

The questionnaire that was prepared to apply to both households and workplaces consists of
45 questions grouped under five topics.

Questions that are grouped under the “functional quality and variety” topic target to evaluate
the level of user satisfaction on the functions in their environment and to determine the other
functions that they either require or are disturbed with their existence.

In the third section grouped under the topic of “social cultural quality - urban safety and social
services quality”, questions target to evaluate social activities and participation levels of the
inhabitants to the activities in their neighbourhoods, their feeling of safety in different parts of
their neighbourhood in different time periods and the quality of services that are intended to
ensure the general safety issues. Moreover, there are questions in this group targeting to
evaluate the local governmental services and the level and eagerness of the inhabitants to
participate the planning activities in their neighbourhoods.

In the fourth section of the questionnaire, users’ opinions about the physical components of
the urban space they live in were investigated.
4.5. Factor Analysis

In order to make an evaluation on the basis of neighbourhood, variables in relation to functional quality and variety, urban safety, local governmental services and physical structure were used to execute a factor analysis. Coefficients on the table present the relation of variables with those factors (factor loading). Factor loading is a coefficient varying between −1 and 1, presenting stronger relation as its absolute value approaches to 1. It also states whether there is a positive or negative relation. Nine factors were derived from the 32 variables that were analysed. In the first factor group, there are environmental components such as appearances of buildings, streets and parks, building colours and front coatings, numerical and qualitative conditions of city furniture. In the second, there are leisure areas such as parks, gardens, cinemas, cafes and illumination level of parks.

General police protection, efforts to prevent crime, precautions to obey traffic rules, city-street illumination and precautions to drug usage make up the third factor group. Education and health facilities and opportunities and functional diversity variables such as public area activities – e.g., theatres, concerts etc.- establishes the fourth factor group. In the fifth factor group, variables concerning the local governmental services are gathered, while in the sixth factor group there is a second variable set of safety issues, which concentrates on the health aspect of the issue, including variables of fire safety, ambulance services, city illuminations and control of animals living in the streets. Work environment and shopping opportunities make up the seventh factor group and traffic problems and parking lots form another factor group.

When these factor groups are evaluated on the basis of neighbourhoods, neighbourhood factor score averages are found as the following:

<table>
<thead>
<tr>
<th>Neighborhood</th>
<th>Physical Env.</th>
<th>Leisure Time</th>
<th>Safety</th>
<th>Functional Variation</th>
<th>Services</th>
<th>Safety 2</th>
<th>Shopping &amp; work</th>
<th>Signboard &amp; Parking Lots</th>
<th>Traffic &amp; Parking Lots</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAH IRC</td>
<td>REGR fac score 1</td>
<td>REGR fac score 2</td>
<td>REGR fac score 3</td>
<td>REGR fac score 4</td>
<td>REGR fac score 5</td>
<td>REGR fac score 6</td>
<td>REGR fac score 7</td>
<td>REGR fac score 8</td>
<td>REGR fac score 9</td>
</tr>
<tr>
<td>Alemdar</td>
<td>-0.44</td>
<td>-0.14</td>
<td>-0.12</td>
<td>-0.61</td>
<td>-0.13</td>
<td>-0.34</td>
<td>-0.26</td>
<td>-0.17</td>
<td>0.16</td>
</tr>
<tr>
<td>Cankurtaran</td>
<td>-0.46</td>
<td>-0.10</td>
<td>-0.41</td>
<td>-0.88</td>
<td>0.25</td>
<td>0.32</td>
<td>0.24</td>
<td>0.14</td>
<td>-0.40</td>
</tr>
<tr>
<td>Hobyar</td>
<td>0.07</td>
<td>0.06</td>
<td>-0.26</td>
<td>0.51</td>
<td>0.18</td>
<td>0.45</td>
<td>-0.27</td>
<td>-0.34</td>
<td>0.12</td>
</tr>
<tr>
<td>Kayasofya</td>
<td>0.04</td>
<td>-0.12</td>
<td>-0.56</td>
<td>-0.30</td>
<td>-0.02</td>
<td>0.07</td>
<td>0.20</td>
<td>0.32</td>
<td>-0.20</td>
</tr>
<tr>
<td>Mercan</td>
<td>0.34</td>
<td>0.00</td>
<td>0.06</td>
<td>0.46</td>
<td>-0.33</td>
<td>0.06</td>
<td>-0.39</td>
<td>-0.10</td>
<td>0.17</td>
</tr>
<tr>
<td>Mim hayrettin</td>
<td>0.14</td>
<td>-0.08</td>
<td>0.35</td>
<td>0.04</td>
<td>0.03</td>
<td>0.14</td>
<td>0.04</td>
<td>0.06</td>
<td>0.06</td>
</tr>
<tr>
<td>Muhsine H.</td>
<td>0.42</td>
<td>0.06</td>
<td>0.37</td>
<td>-0.14</td>
<td>0.21</td>
<td>-0.47</td>
<td>0.43</td>
<td>0.16</td>
<td>-0.01</td>
</tr>
<tr>
<td>Nişanca</td>
<td>0.11</td>
<td>-0.01</td>
<td>0.56</td>
<td>0.12</td>
<td>-0.09</td>
<td>-0.71</td>
<td>0.39</td>
<td>0.57</td>
<td>0.11</td>
</tr>
<tr>
<td>Süleymaniye</td>
<td>0.09</td>
<td>-0.06</td>
<td>0.05</td>
<td>0.09</td>
<td>-0.26</td>
<td>0.11</td>
<td>0.59</td>
<td>-0.16</td>
<td>-0.08</td>
</tr>
<tr>
<td>Tahtakale</td>
<td>-0.14</td>
<td>0.51</td>
<td>-0.19</td>
<td>0.56</td>
<td>0.52</td>
<td>0.04</td>
<td>-0.74</td>
<td>0.18</td>
<td>-0.17</td>
</tr>
<tr>
<td>Total</td>
<td>0.00</td>
<td>0.00</td>
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Table VI: Neighbourhood factor scores averages

Since the scores on the questionnaire forms were in ascending order from “pretty sufficient” to “not sufficient at all”, negative values present a positive relation while positive values present a negative one.

4.6. Evaluations

As a result of the analysis on change in urban vitality and the factor analysis of the questionnaires, we can argue the following on the basis of neighbourhoods:
A positive relation between Cankurtaran, where urban vitality values changed positively between 1985 and 2004, and variables such as physical environment qualities and safety is determined. Despite their existing problems, users have changed the functional pattern positively in terms of variety, and a highly positive relation has been found between the two variables. Existence of a traditional pattern, increasing enterprises in tourism, increasing traditional commercial activities and a better-balanced functional dispersion compared to the other neighbourhoods at Eminönü can be related to this finding.

In Alemdar, despite the negative changes in the urban performance liveliness values in time, users’ positive approach to the physical environmental quality and variety can best be explained as a result of the neighbourhood’s proximity to Sultanahmet. Replacing the traditional press-broadcast functions that had existed intensely at Alemdar, and physical and social collapse with the changing user group should be highlighted for the neighbourhood.

In Hobşar, Tahtakale and Mercan, connected with the negatively changing urban liveliness performance value, users have evaluated the environment they live in, in a negative way in terms of functional variety and safety. From these values, it is possible to argue that commercial functions, although they are important components of urban vitality, alone is not sufficient for a desired vitality level. Their positive impacts are expected to increase in an urban environment, in which they are supported with physical, cultural and other functional components.

While Tahtakale was evaluated positively as a shopping and working area, local governmental services were found negative in all three neighbourhoods. In these neighbourhoods, where night populations are minimal varying between 50 and 200, commercial and manufacturing functions create vitality in the daytime but this does not prevent these areas to become the city’s dangerous points after certain hours. Although, there is a decline in residence and population values in Küçük Ayasofya, there is also an increase in urban vitality value similar to Cankurtaran. Tourist accommodation and other developing commercial activities have contributed the urban liveliness positively. However, it is still difficult to argue that they are sufficient. Quality and quantity of the city furniture in the neighbourhood were evaluated negatively. In addition, the inconvenience arising from the visual pollution from signboards etc. should be emphasised.

In Mimar Hayrettin, Muhnise Hatun and Nişanca neighbourhoods, urban vitality values have increased more than Tahtakale, Hobşar, Mercan, Alemdar and Süleymaniye. Mimar Hayrettin is a settlement, in which leather and leather products sale have increased in recent years. Nişanca is a neighbourhood, where people migrated from East and Southeast Anatolia have intensely settled in, but at the same time, residence and population numbers have decreased as a consequence of the increasing manufacturing activities and wholesale functions. It can be argued that the determined increase results from a numeric increment caused by the increase in wholesale areas with the transformation of residential areas. Since there is no distinction between retail and wholesale in the ground floor trade areas, the high scores obtained from the neighbourhood can be misleading. Insufficient evaluation of the urban safety variables in all three neighbourhoods makes this comment more reliable.

The decrease in urban vitality value in Süleymaniye, where is an important settlement with its present potentials at Eminönü district, can be related to the intensifying plastic and other manufacturing activities and the tendency of the inhabitants to leave the neighbourhood. Evaluating the shopping and working possibilities of the area negative, the inhabitants presented this as an indicator of deprivation of urban area qualities.

On the basis of the findings;

1- while functional diversity cause an increase on the urban vitality in the quarters with a certain level of population and dwelling areas, it causes a loss in value in the quarters with single dominant function
2- although, they are few, the new investments and incorporations cause a consciousness on the existing potentials and cause an indirect positive effect on the urban vitality by increasing the demand for the urban areas.
3- In the settlement areas, where the traditional urban pattern is dense and dwelling functions continue their existence, while the urban vitality value shows a definite
progress, in the quarters, where the manufacture industry and whole sale areas increased, a negative change occurred despite the existence of traditional urban pattern.

4- The emphasize was given to the requirement for and the significance of checking the vitality levels of the city centers in certain intervals in order to define the negative developments that might occur within the multidimensional relations system of the city. But more healthier and clear results can be obtained from the studies only if the values of indicators used in such evaluations are recorded. In this study, some problems were encountered to access such data and it is considered as a serious problem.

The urban vitality evaluation carried out by the obtained indicator values, showed that there is an economic, physical, social and functional deterioration in the city, and the city development continued in the same negative way.

In spite of the existence of a dense trade function, Eminönü District is a region, where urban vitality can not be obtained because of the inadequate level of the standards of other usage types, physical space quality, safety and so on. This reveals that the contribution of the trade function to the urban vitality shall be limited unless the other parameters are not changed.

5. Conclusion

In this research, it was aimed to determine the development strategies for the future by developing a method to make evaluations on the urban liveliness concept. We can explain the process with a model presented below. (Figure 2) City centre, consisting of physical, economical and social structure and an administrative system and management style, represents present qualities that exist at stage 0. Present order of the city centre is shaped in accordance with the physical, economical and social structure qualities that are all in relation to each other.

Stage –1…–n contains qualities of the same interrelationary system at different times retrospectively. At any stage, a change in any of the physical-economical-social and administrative structure groups, which make up the city centre, affects the other structures in time and it is effective on city centre structure groups at Stage 0 that has been formed at the end of \( \Delta T \) time period. Accepting Stage 0 as the time being lived in, and by making a value comparison between city centre qualities at the stage before \( \Delta T \) amount of time (accepting there is no problem of urban liveliness at that stage) and qualities of today’s city centre, there appears a possibility of evaluating the direction of change that has emerged and the progress direction in case no intervention has been made. While an increase in the positive direction presents continuity of urban liveliness and the potential of keeping the urban lively, a change in the negative direction presents that there are corruptions at a structure group or groups at the \( \Delta T \) time period and the necessity of regeneration interventions.

In this context, as a result of the regulations applied in the directions of the strategies that are determined in social, physical, economical and administrative structures between T0 and T1, the urban centre would reach a new quality (Stage 1). However, checking the previous stage periodically is important in finding immediate solutions to emerging problems before they get complex. Thus, the system would continue reliably and improve.

It is suggested that at the application stage of the regulations, several non-governmental organisations should come together and take a part as negotiators between the local government and users, and establish a progress-controller unit.
Fig. 2. A model for urban vitality assessment within revitalization strategies (Oruc, 2004)
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