# The evaluation of urban quality and vitality of the Istanbul historical peninsula- Eminönü district

### Gülden Demet ORUÇ, Cengiz GİRİTLİOĞLU

Istanbul Technical University Faculty of Architecture Istanbul TURKEY

Received: October 2007 Final Acceptance: July2008

#### Abstract:

Historical urban centres are negatively affected and have lost their attractiveness and charm due to the changes of life styles and preferences within time. Recently, the importance of the central areas of urban settlements has been recognised, and the search for the components of a healthy city centre in order to recover such areas as vital parts of the city has become a priority. In this context, the concepts of vitality and viability have become the focus of the subject in relation with revitalisation.

A two-staged research was conducted to determine the degree of urban vitality in the Eminönü district of Istanbul, which represents most of the transformations and problems. In order to examine the changes in urban vitality over time, the data gathered in 1985-1988 and 2002-2004 were evaluated by creating a specific benchmark index. By taking the general characteristics of Eminönü into consideration, the number of dwellings, population, business areas and the m² unit prices of the land were used as urban vitality performance indicators. For a more sound explanation of the urban vitality change in selected neighbourhoods of Eminönü a public survey has been executed and evaluated by factor analysis.

According to the urban vitality assessment of Eminönü District, it has been seen that there is a value increase in Cankurtaran, Küçükayasofya, Mimar Hayrettin, Muhsine Hatun and Nişanca and a negative change on the other quarters. Depending on the findings of urban vitality assessment and survey results, necessary strategic approaches developed in addition to a model in relation with city centers revitalization process.

Keywords: Urban vitality, viability, revitalisation, historical urban centres, Eminönü.

#### 1. Introduction

Urban settlements extended their borders and their domains broadened with the differentiations in location decisions and variations of the functions they host as a result of the products of industrialisation, 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 in

important urban problems emerging in the old central areas of cities as well as in the economic, political and physical spheres.

Most historical city centres around the world, including those in Turkey, that have multi-dimensional characteristics have come to be associated with poor environmental conditions, deficiency of educational services, high crime, violence rates, etc. Yet, they continue to be the primary destinations of people emigrating from rural areas. Historical urban centres have suffered as a result, losing their appeal and charm because of their improper and dysfunctional usage, their users' substandard lifestyles that fall far short of ensuring healthy environmental conditions, and over-intervention or negligence.

- Factors contributing to the deterioration of historical urban centres include the following:
- Collapse of the urban economy resulting from external emigration and decline in the volume of commercial sales due to the decrease in the purchasing power of the inhabitants,
- Environmental problems such as crime, vandalism, antisocial behaviour and visual pollution,
- Transportation problems that make the urban centres less attractive to consumers.
- Old buildings with low living standarts,
- In many cities, centres have failed because of not responding to the needs of the time. Other contributing factors are standards that are far below the modern expectations of the customers, and the insufficiency and negligence of supporting services.

There are attractive attributes of the surrounding centres also contribute to the decline of urban historical centres: While urban centre functions, such as their traditional charm and personal services, have weakened, service speed, ease of access and comfort have come to be preferred because shopping has become an individual activity, rather than a social experience (Evans, 1997).

Recently, the importance of the central areas of urban settlements has been recognised, and the search for the components of a healthy city centre in order to recover such areas as vital parts of the city has become a priority. In this context, the concepts of vitality and viability have become the focus of the subject, and revitalisation applications have been used as a dominant method of intervention.

#### 2. Revitalisation

In the deprivation areas of cities, revitalisation has replaced interventions such as reconstruction and renewal, which were commonly applied during the 1950s and 1960s. This is particularly true in areas of historical value. By revitalisation, 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 success in revitalisation. Different approaches may arise depending on the locality and its properties (Tiessdell et al., 1996, p.201). Success may be viewed in terms of improvement in a variety of economic, social and physical conditions such as increased business investment, physical redevelopment, reduction in crime and infanty

mortality rates, increases in educational achievement (Wolman et al., 1994 p.835)

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

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

Thus, most successful urban centres offer the following:

- complex attractions for different user groups in different times such as shops specialising in different subjects offering alternatives and variety; financial, professional and administrative services; entertainment, culture and spare time activities, etc.,
- accessibility with effective transportation alternatives,
- local identity and character,
- 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, 1999).

In the United States and Europe, various programs like Business Improvement Districts, City Center Management schemes are playing a major role in enhancing the vitality and viability of city centres in the context of revitalisation (Balsas, 2000, Ratcliffe & Flanagan, 2004).

#### 3. Urban vitality concept and the indicators of vitality and viability

The concept of viability is concerned with long-term self-sufficiency, sustainability, adaptability, flexibility, the capacity to change, self-regeneration, responsibility and security. Urban viability is the capacity of cities to adapt and respond to changing circumstances. Such adaptability and responsiveness is greater in those cities whose economic, social, cultural and environmental dimensions are evenly developed to a level of self-sustainability. The recognition of the breadth of these concepts would give city centres a greater pool of resources to draw on for self renewal. (Bianchini & Landry,1994:21)

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

Relevant density level -business- (vitality) constitutes a significant component of new investment decisions (viability), and as a result, the continuous development of new establishments and opportunities (vitality) create an attraction for visitors (vitality) (Ravenscroft, 2000; 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 liveability of city centres, Balsas (2004) maintains that even if an urban area is alive, it cannot continue its vitality character unless it attracts new investments, and only the ceremonial and historical value of the city centre shall remain if the economic relation between customer and supplier is not established. Paul and Sanders (1997) claim that retailing is a basic component of urban life and makes great contributions to the revitalisation and vitality of cities.

On the other hand, a liveable place should be safe, clean, beautiful, economically vital, address a population having different characteristics, have an efficient management system, functional infrastructure, cultural activities and institutions, an 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 city centres (Paul and Sanders, 1997; Balsas, 2004; DoE, 1996; Bianchini & Landry, 1994). When the urban vitality is measured, the weak points of the urban area can be eliminated and the strong sides reinforced in order to create higher-quality city centres.

In his health index developed to evaluate revitalisation 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 centre, number of tourists attracted to the centre, and cultural parameters. (Tyler, 1998).

The performance indicators determined by ATCM can be classified as follows: demographic changes, employment and industrial structure related to the regional health; the number of visits to the city centre, parking availability, public transportation, safety, diversity, public activities, street maintenance and cleanness, possibilities for special needs, and city centre management activity related to the city centre development; and the retail trade vacancy rates, performance and sales related to the city centre 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 shop units, change in the number and quality of 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).

The hierarchy of indicators was refined by the Department of Environment in 1996, and nine criteria were defined: 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 behaviour, property trade value, and physical structure of the centre (DoE, 1996).

These indicators might be used to compare the centres, or to evaluate the possible effects of out-of-centre developments (DoE, 1996).

#### 4. Case of Istanbul-Eminönü district

The Eminönü district, which represents most of the above-defined transformations and problems and lies in the historical centre of Istanbul, was chosen as a case study, not only owing to its geographical location, but also its cultural and historical value. A two-staged research was conducted to determine the degree of urban vitality. First, differences in urban vitality indicators were examined in selected neighbourhoods of the Eminönü district. The neighbourhoods were ranked with regard to urban vitality, and the changes in determined time periods were analysed. In the next stage, physical, economical, social and cultural evaluations of users living and working in the selected neighbourhoods were made to guide the interpretation of the change in urban vitality.

## 4.1. An evaluation of the development process of Eminönü district in the Istanbul historical peninsula

Along with the monumental structures, urban pattern and architectural values that are products of its cultural and historical past going back to the 700s BC, the Istanbul Historical Peninsula, located in one of the most important metropolises on the world stage carries out many functions within the region and the country (Figure 1).

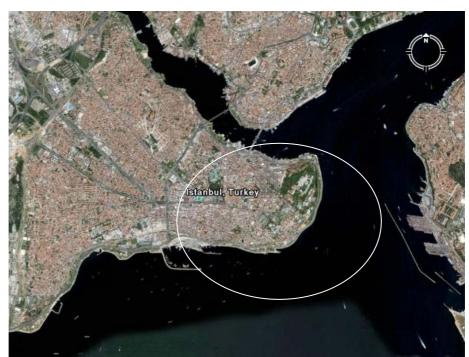


Figure 1. Istanbul historical peninsula

The first planning studies of the city were commenced by the Hermann Elgoetz plan (1933). After that Henri Prost (1936), Martin Wagner (1938), Piccinato (1960) plans were delivered.

A new era commenced in the 1950s with the beginning of immigration to the city. In the 1970-80 period, CBD developed in Eminönü and along the Vatan-Millet roads (Berköz, 1996).

In this period, continuity of the central development of the Historical Peninsula, pressure from the manufacture centres other than wholesale shops, especially in the residential areas of the Eminönü district, meant that the dwellers of the district started to prefer new residential areas developing in different sections of Istanbul. Although some quarters such as Cankurtaran and Süleymaniye continued to be used as residential areas, since the newcomers were members of different social groups than previous users, these quarters quickly started to go through a deformation process.

Decentralisation of the Istanbul MİA continues alongside the enlargement of the urban area. Improvement of transportation and communication facilities had an accelerating effect on this process. As an historical city centre that has entered a deterioration period and started to lose its attractiveness, the outward migration has increased. Studies revealed that low land and rent fees in the region have contributed greatly to this process (Dökmeci & Berköz, 1991).

The Historical Peninsula is included on UNESCO's World Heritage List in 4 different zones: 1) Sultanahmet Archaeological Park, 2) Süleymaniye Mosque and surrounding conservation area, 3) Zeyrek Church-mosque and surrounding conservation area, 4) Istanbul City Walls in 1985 and in 1995 with decree No. 1 of the IKTVK (Conservation of the Cultural and Historical Assets of Istanbul) Board, the Urban and Historical Site and the Urban and Archaeological Site were determined, and the interior of Sur-u Sultani (Historical Peninsula) declared as a 1<sup>st</sup> degree archaeological site (IBB,2003, p. 2-58-59).

In parallel to the increase of the population of Istanbul away from the Historical Peninsula, social and economic development on the local and international scales have played an important role in the change of the day and night populations of the Peninsula (IBB, 2003). There is a decrease in the number of 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.

Seven out of the 33 neighbourhoods of Eminönü (Hobyar, Beyazıt, Tahtakale, Dayahatun, Mercan, Rüstempaşa and Sarıdemir) have developed a dominant trade business, but number of residences and population are very low due to the transformation of ex-dwellings into manufacturing buildings.

Buildings with historical and architectural value continue their existence, however, since 30% of these buildings are in bad condition, it can be said that there is physical deterioration.

The new buildings, most of which were constructed for profit without any architectural consideration, have caused a quality loss of the physical organisation space of the city.

Although the Historical Peninsula has great potential owing to its historical infrastructure and existing values, these negative developments have rendered it chaotic .

#### 4.2. Determination of the sample areas (sampling design)

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

By clustering the 33 neighbourhoods, a total of 4 quarters groups were obtained (Figure 2). Three neighbourhoods were chosen for each quarter group, with Nişanca representing the 2<sup>nd</sup> group as a single unit (Table 1).

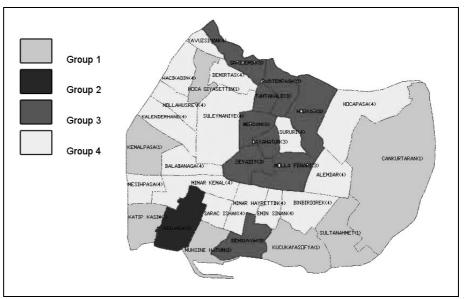


Figure 2. Neighbourhood clusters in Eminönü

Table 1: Quarters Representing the Groups

Groups	Quarter names
Group 1	Cankurtaran, Küçükayasofya, Muhsine Hatun
Group 2	Nişanca
Group 3	Hobyar, Mercan, Tahtakale
Group 4	Alemdar, Mimar Hayrettin, Süleymaniye

#### 4.3. Evaluation of urban vitality in Eminönü district

In this study carried out for the evaluation of urban vitality, changes in defined urban vitality performances were examined on a quarter's basis at defined time intervals, and the direction of the change was determined. In order to examine the changes in urban vitality over time, the data gathered in 1985-1988 and 2002-2004 were evaluated by creating a specific benchmark index (Oruç, 2005).

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

In studies on the subject, urban vitality evaluations carried on different scales of the city such as streets, quarters, city centre and the overall city, specific indicators, chosen from among economic, social and physical areas in parallel to the research subject and data collection availability, have been determined and interpreted using several analysis techniques.

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

The main limitation of the study was that some determinants that should have been taken as\_indicators of the validity of the analysis (such as the crime rates) could not be included in the research due to lack of data. Change in accessibility was disregarded since the Eminönü district is located in the centre of the Istanbul metropolitan area, where several transportation alternatives exist.

Information on rental fees was gathered from the questionnaires carried out at the business units and dwellings. For land fees in the Eminönü district, reports of the Ministry of Finance on unit values per m² were used. Demographic values were obtained from the demographic census reports of DIE. Values related to the residential and business areas were gathered from the studies of the Istanbul Metropolitan Municipality Planning and Public Works Office (2004) and the Istanbul Historical Peninsula Conservation Development Plan Report published in 1988. Ground floor trade functionality area values were taken as to the importance of ground floor function distribution on the urban vitality.

In the study, values obtained in the quarters compiled in the indexes issued separately for each period were taken as a reference, and the manner of change on urban vitality in each quarter 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 give an impression of the direction of future changes (Ravenscroft, 2000). Like the relation between present performance tendencies and past performance situations, it is one of the most significant determinants of the future.

Table 2 presents data on urban vitality performance of selected neighbourhoods in the Eminönü district for the 1985-88 period.

Table 2. City centre vitality performance values for the 1985-88 period

Table 21 City Control Vitality performance values for the 1000 co pence								
Neighbourhoods	Number of	Population	Trade area/ Neighbourhood	Land price per				
	dwellings	. ораналон	area rate	m <sup>2</sup>				
Alemdar	127	649	0,33	493				
Cankurtaran	1068	3813	0,00	133				
Hobyar	21	188	0,38	1272				
Küçük Ayasofya	1896	7123	0,01	64				
Mercan	29	151	0,74	1005				
Mimar Hayrettin	450	3132	0,18	183				
Muhsine Hatun	1046	3893	0,05	107				
Nişanca	3291	12714	0,03	83				
Süleymaniye	302	1360	0,10	337				
Tahtakale	15	81	0,41	898				

Table 3 tabulates the values for the same performance indicators for the 2002-2004 period.

**Table 3.** City centre vitality performance values for the 2002-2004 period.

Neighbourhoods	Number of dwellings	Population	Trade area/ Quarters area rate	Land Price per m²
Alemdar	41	1365	0.21	179
Cankurtaran	773	2865	0.04	134
Hobyar	6	191	0.30	375
Küçük Ayasofya	1515	4454	0.07	47
Mercan	2	132	0.43	416
Mimar Hayrettin	215	1295	0.44	147
Muhsine Hatun	852	3197	0.16	127
Nişanca	2402	7526	0.24	108
Süleymaniye	117	932	0.09	254
Tahtakale	0	58	0.49	386

The Süleymaniye quarter 1985-88 period values were taken as a reference for benchmarking comparison, and a vitality performance index for each period was obtained. A mean index was found by using the values obtained (Tables 4 & 5).

Table 4. Eminönü district over the 1985-88 period

Neighbourhoods	Dwelling index	Population index	Trade index	Land index	Mean Value
Alemdar	42,1	47,7	244,7	146,4	120,2
Cankurtaran	353,6	280,4	42,4	39,4	178,9
Hobyar	7,0	13,8	341,2	377,8	184,9
Küçük Ayasofya	627,8	523,8	84,6	19,0	313,8
Mercan	9,6	11,1	486,6	298,6	201,5
Mimar Hayrettin	149,0	230,3	505,7	54,3	234,8
Muhsine Hatun	346,4	286,3	177,7	31,9	210,6
Nişanca	1089,7	934,9	270,4	24,5	579,9
Süleymaniye	100,0	100,0	100,0	100,0	100,0
Tahtakale	5,0	6,0	556,2	266,8	208,5

Table 5. 2002-04 Eminönü district over the 2002-04 period

Neighbourhoods	Dwelling index	Population index	Trade index	Land index	Mean Value
Alemdar	13,6	100,4	160,1	53,3	81,8
Cankurtaran	256,0	210,7	433,8	39,7	235,0
Hobyar	2,0	14,0	271,2	111,3	99,6
Küçük Ayasofya	501,7	327,5	1148,6	13,8	497,9
Mercan	0,7	9,7	280,7	123,7	103,7
Mimar Hayrettin	71,2	95,2	1262,6	43,6	368,1
Muhsine Hatun	282,1	235,1	588,2	37,8	285,8
Nişanca	795,4	553,4	2216,1	32,1	899,3
Süleymaniye	38,7	68,5	88,7	75,4	67,8
Tahtakale	0,0	4,3	666,6	114,5	196,4

When the mean values for the two periods are compared, it can be seen that there is an increase in urban vitality in Cankurtaran, Küçükayasofya, Mimar Hayrettin, Muhsine Hatun and Nişanca and a negative change in the other quarters.

Figure 3 plots the variation in urban vitality of the quarters, evaluated for the 1985-88 and 2002-04 periods.

In the literature on urban centres, the importance of observing urban vitality and its direction of change has been emphasised. In addition, it is important to create data records of physical, functional, social and economic indicators in order to obtain more detailed and reliable results.

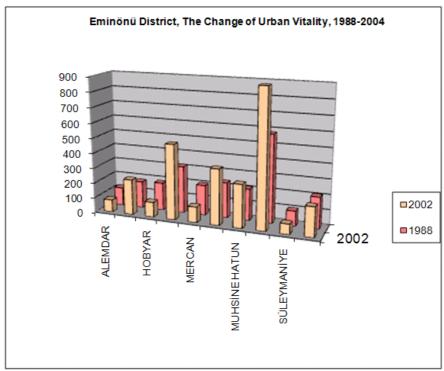


Figure 3. Eminönü district urban vitality performance change

For a more sound explanation of the urban vitality change in selected neighbourhoods of Eminönü, it has been necessary to execute a public survey in the same area.

#### 4.4. Public survey on user evaluation in the Eminönü district

The target population of the survey was people living and working in the Eminönü district of the Historical Peninsula. Those who only visit the Eminönü district for various reasons and/or stay in collective residences such as hospitals or dormitories have not been included in the survey.

In determining the number of questionnaires, the goal was to reach the minimum number 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 of the average family size in each neighbourhood separately and according to the number of workplaces in each neighbourhood. Thus, 616

questionnaires were applied to 184 households and 432 workplaces in 10 neighbourhoods selected from the total of 33 neighbourhoods in the district. The questionnaire was so prepared as to be applicable to both households and workplaces and consisted of 45 questions grouped under five topics.

Questions under the "functional quality and variety" topic were aimed at evaluating the level of user satisfaction of the functions in the environment and identifying other functions that users may deem necessary or be disturbed by.

In the third section entitled "socio-cultural quality - urban safety and social services quality", questions targeted the evaluation of social activities and participation levels of the inhabitants in activities in their neighbourhoods, their sense of safety in different parts of their neighbourhood over different time periods and the quality of services intended to ensure\_general safety.

There are also questions in this group targeting the evaluation of local governmental services and the inhabitants' level of and enthusiasm for participation in planning activities in their neighbourhoods.

In the fourth section, users' opinions about the physical components of the urban space they inhabit were investigated.

## According to the general assessment of the overall survey results for Eminönü:

The **general user profile** consists of families with low education (73% graduated from primary school) and low income (83% have an income of 500 YTL or less), coming from cities other than Istanbul (71%), mostly from the Eastern and Southeastern Anatolia Regions (39%), preferring to live in Eminönü because of low prices and proximity to the workplace.

The businesses located in the region have low-income (44% earn 750 YTL or less per month and 26% earn 750 YTL or more), and most are tenants (79%) preferring Eminönü so as to be near other companies in the sector and thus attract customers (83%), working on an 08:00-18:00 basis.

When **Functional Quality and Diversity** were taken into consideration, it was determined that even though the working and shopping availability can be adequate, their insufficient quality falls short of attracting different users. Education, health, social and cultural functions are deemed unsatisfactory even by continuous users, and the lack of green areas and car parks, along with the heavy traffic, are regarded as the most significant problems. In addition, usage of historical buildings for warehousing and manufacturing has a negative effect on the general space quality. Existing coastal areas are difficult to access and unsafe, the related\_arrangements are inadequate, and the tendency of the dwellers to use these areas is low.

In the evaluation of **Social Cultural Quality and City Safety**, the lack of cultural activities, which play an important role in achieving urban attractiveness and security, especially at night, is found to be an important problem, and the precautions taken to eliminate this problem are insufficient.

The analysis of **Quality and Attractiveness in Urban Space** revealed that the arrangement and organisation of the public spaces do not meet the needs and expectations of the users; the traditional urban pattern has been subject to deformation due to uncontrolled urbanisation and unqualified new

buildings. Also, historical buildings in bad condition have a negative effect on urban space quality (Oruç, 2005).

#### 4.5. Factor analysis

In order to make an evaluation on the basis of neighbourhoods, variables in relation to functional quality and variety, urban safety, local governmental services and physical structure were used to execute a factor analysis.

Coefficients in the table below represent the relationship of variables with those factors (factor loading). Factor loading, a coefficient varying between – 1 and 1, indicates a stronger relationship as its absolute value approaches 1. It also reveals whether the correlation is positive or negative.

Nine factors were derived from the 32 variables that were analysed. In the first factor group are environmental components such as appearances of buildings, streets and parks, building colours and facades, and numerical and qualitative conditions of city furniture. In the second are leisure areas such as parks, gardens, cinemas and cafes and the illumination level of parks.

General police protection, efforts to prevent crime, precautions to enforce traffic rules, street illumination and precautions against 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., concerts, constitute the fourth factor group. The fifth factor group comprises variables concerning local governmental services, while in the sixth group, there is a second variable set of safety issues that concentrates on the health aspect, including variables of fire safety, ambulance services, city illumination and control of stray animals. 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 (Table 4):

**Table 6.** Neighbourhood factor score averages

Mean	Physical Env.	Leisure Time	Safety	Functional Variation	Services	Safety 2	Shopping & work	Sign- boards	Traffic & Parking Lots
Alemdar	-0,44	-0,14	-0,12	-0,61	-0,13	-0,34	-0,26	-0,17	0,16
Cankurtaran	-0,46	-0,10	-0,41	-0,88	0,25	0,32	0,24	0,14	-0,40
Hobyar	0,07	0,06	-0,26	0,51	0,18	0,45	-0,27	-0,34	0,12
Kayasofya	0,04	-0,12	-0,56	-0,30	-0,02	0,07	0,20	0,32	-0,20
Mercan	0,34	0,00	0,06	0,46	-0,33	0,06	-0,39	-0,10	0,17
Mim Hayrettin	0,14	-0,08	0,35	0,04	0,03	0,14	0,04	0,06	0,06
Muhsine H.	0,42	0,06	0,37	-0,14	0,21	-0,47	0,43	0,16	-0,01
Nişanca	0,11	-0,01	0,56	0,12	-0,09	-0,71	0,39	0,57	0,11
Süleymaniye	0,09	-0,06	0,05	0,09	-0,26	0,11	0,59	-0,16	-0,08
Tahtakale	-0,14	0,51	-0,19	0,56	0,52	0,04	-0,74	0,18	-0,17
Total	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00

Since the scores on the questionnaires were in ascending order from "fairly sufficient" to "not sufficient at all", negative (positive) values represent a positive (negative) relation.

#### 4.6. Evaluations

The analysis of change in urban vitality and the factor analysis of the questionnaires reveals the following on the basis of **neighbourhoods**:

A positive relationship is established between **Cankurtaran**, where urban vitality values changed positively between 1985 and 2004, and variables such as physical environment qualities and safety. 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. This can be linked to the existence of a traditional pattern, increasing enterprises in tourism, increasing traditional commercial activities and a better-balanced functional dispersion compared to other neighbourhoods in Eminönü (Fig.4).









Figure 4. Cankurtaran, Eminönü

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. Replacement of the formerly prevalent traditional press-broadcast functions, and physical and social collapse within the changing user group should be highlighted for this neighbourhood.

In **Hobyar, Tahtakale and Mercan**, all of which exhibit a negatively changing urban liveliness performance value, users have criticized the environment they inhabit in terms of functional variety and safety. From these values, it is possible to argue that commercial functions, although important components of urban vitality, alone are 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 (Fig. 5).



Figure 5. Hobyar, Tahtakale, Mercan

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 cre5te vitality in the daytime. This does not prevent these areas from becoming 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 accommodations and other developing commercial activities have positively contributed to the urban liveliness. However, it is still difficult to say that they are sufficient. The quality and quantity of the city furniture in the neighbourhood were evaluated negatively. In addition, the inconvenience arising from the visual pollution of signboards etc. should be emphasised (Fig. 6).

In **Mimar Hayrettin, Muhnise Hatun** and **Nişanca** neighbourhoods, urban vitality values have increased more than in Tahtakale, Hobyar, Mercan, Alemdar and Süleymaniye. Mimar Hayrettin is a settlement in which sales of leather and leather products have increased in recent years. Nişanca is a neighbourhood dense with people who have migrated from East and Southeast Anatolia, 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 rise 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 (Fig. 7).









Figure 6. Küçük Ayasofya, Eminönü







Figure 7. Mimar Hayrettin and Muhsine Hatun

The decrease in the urban vitality value in **Süleymaniye**, an important settlement with its present potential, 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 negatively, the inhabitants presented this as an indicator of deprivation of urban area qualities (Fig. 8).





Figure 8. Süleymaniye, Eminönü

On the basis of the findings:

- While functional diversity causes an increase in urban vitality in the quarters with a certain level of population and dwelling areas, it causes a loss in value in the quarters with a single dominant function
- Although they are few, 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 urban areas.
- In the settlement areas, where the traditional urban pattern is dense and dwelling functions continue, while the urban vitality value shows a definite progress, in the quarters, where the manufacture industry and wholesale areas increased, a negative change occurred despite the existence of a traditional urban pattern.
- Emphasis was given to the requirement for and the significance of checking the vitality levels of the city centres at certain intervals in order to define the negative developments that might occur within the multidimensional relations system of the city. But healthier and clearer results can be obtained from the studies only if the values of indicators used in such evaluations are recorded. In this study, some problems in the accessing of such data were encountered. This is considered 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 continues in the same negative way.
- In spite of the existence of a dense trade function, Eminönü district is a
  region where urban vitality cannot be obtained because of the
  inadequate level of the standards of other usage types, physical space
  quality, safety, etc. This shows that the contribution of the trade function
  to urban vitality is limited unless the other parameters are changed.

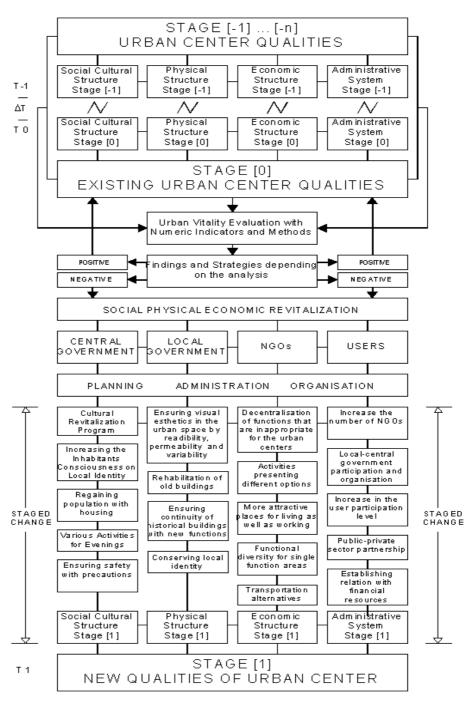
#### 5. Conclusion

In this research, development strategies for the future by developing a method to make evaluations on the urban vitality concept were determined. The process complete with a model is presented below (Figure 9). The city centre, consisting of physical, economical and social structures and an administrative system and management style, represents current qualities that exist at Stage 0. The present order of the city centre is shaped in accordance with the physical, economical and social structure qualities that are all related 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 that make up the city centre, affects the other structures over time. It is effective on city centre structure groups at Stage 0 formed at the end of the  $\Delta T$  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 and the direction of progress in case no intervention is 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 indicates that there is corruption in a structure group or groups at the  $\Delta T$  time period and the necessity for regeneration interventions.



**Figure 9.** A model for urban vitality assessment within revitalisation strategies (Oruç, 2005)

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 for finding immediate solutions to emerging problems before they become complex. Thus, the system would continue reliably and with continuous improvements

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.

#### References

- Balsas, C. J. L. (2000), City Center Revitalization in Portugal Lessons from Two Medium Size Cities, **Cities**, Vol.17, Issue.1, p.19-31
- Balsas, C. J. L. (2004), Measuring the Livability of an Urban Centre: An Exploratory Study of Key Performance Indicators. **Planning, Practice & Research**, Vol. 19, No. 1, 101-110.
- Berköz Akkal, L. (1996), "Metropoliten Değişim Sürecinde İstanbul Kent Merkezi **Istanbul 2020 Sempozyumu**, İTÜ Mimarlık Fakültesi, Şehir ve Bölge Planlaması Bölümü, İstanbul, Belbim Matbaası. ",(Istanbul Urban Centre in the Process of Metropolitan Change, Istanbul 2020 Symposium, ITU Faculty of Architecture, Urban and Regional Planning Department, Istanbul, Belbim Press)
- Bianchini, F. Landry, C. (1994), "A Methodology for Assessing Urban Viability and Vitality" **The Creative City Working Paper3**: **Indicators of a Creative City**, COMEDIA
- DoE (Department of the Environment), (1996). "Town Centres and Retail Development", **Revised Planning Policy Guidance Note 6**, London: HMSO
- Dökmeci, V. & Berköz, L. (1991). İstanbul'da Şehir Merkezi Odaklarının Tayini, İstanbul DPT Destekli Araştırma Projesi. (The Determination of Urban Centre Focuses in Istanbul Research Project supported by DPT –Government Planning Organisation-)
- Ergun, N. & Giritlioğlu, C. (1996), "Istanbul Metropoliten Alanında Eski Merkez ve Alt Merkezler Arasında Belirlenen Ilişkiler", **İstanbul 2020 Sempozyumu**, İstanbul, Belbim Matbaası. (Determined Relations between Old Centre and Sub Centres of Istanbul Metropolitan Area Istanbul 2020 Symposium, Istanbul, Belbim Press)
- Evans, R. (1997), Regenerating Town Centres, Manchester University Press
- Green, A. E. & Champion, A. G. (1991), The Booming Towns Studies: Methodological Issues, **Environment and Planning A**, 23, 1393-1408.
- IBB (2003), Tarihi Yarımada 1/5000 ölçekli Koruma Amaçlı Nazım İmar Planı Raporu, İBB Planlama ve İmar Müdürlüğü
- Kuban, D. (2000), **Istanbul Bir Kent Tarihi**, Tarih Vakfı Yurt Yayınları. (Istanbul An Urban History, History Foundation, Yurt Press)
- Montgomery, J. (1995), Urban Vitality and the Culture of Cities. The Planner, April, 20-21.
- Oruç, G. D. (2005), Sehir Eski Merkezlerinde Mekansal Degisim ve Yeniden Canlandırma Stratejileri İstanbul-Tarihi Yarımada: Eminonu Orneği, (Spatial Differentiations of Historical Urban Cores and Revitalisation Strategies: Istanbul Historical Peninsula-Eminönü District), PhD Thesis, I.T.U. Institute of Science.

- Paul, J. & Sanders, E. (1997), Measuring the Effectiveness of Town Centre Management Schemes: An Exploratory Framework. **International Journal of Retail and Distribution Management**, Vol. 25, No. 2, 70-77.
- Ratcliffe, J., Flanagan, S., (2004), Enhancing the vitality and viability of town and city centers The concept of the business improvement district in the context of tourism enterprise, **Property Management** Volume 22 Number 5 2004 pp. 377-395
- PAN 59, (1999), Planning Advice Notes Improving Town Centers, Scottish Government.
- Ravenscroft, N. (2000), The Vitality and Viability of Town Centers. **Urban Studies**, Vol. 37, No. 13, 2533-2549.
- Tiesdell, S., Oc, T., Heath, T. (1996), **Revitalizing Historic Urban Quarters, Great Britain**, Architectural Press,
- URBED (Urban and Economic Development Group), (1994). Vital and Viable Town Centers: Meeting the Challenge. London: HMSO.
- Tyler, N. (1998). Evaluating the Health of Downtowns, Center for Community Economic Development, University of Wisconsin, No. 23.
- Wolman, H.L., Ford III C.C., Hill, E., (1994), Evaluating the Success of Urban Success Stories, **Urban Studies**, Vol.31, No.6, 835-850

#### İstanbul tarihi yarımada Eminönü bölgesinde şehirsel canlılık değerlendirmesi

Şehir eski merkezleri, çağdaş yaşam standartları ve sağlıklı çevre özelliklerinden uzak, aslına uygun olmayan fonksiyonel kullanım ve kullanıcılar, ihmal ve diğer nedenlere bağlı olarak, canlılığını ve çekiciliğini kaybetmiş ve son dönemlerde bu alanların yeniden canlandırılması ve sahip olması gereken nitelik ve standartlara kavuşturulabilmesi için çalışmalar başlatılmıştır.

Günümüzde şehir yeniden canlandırma uygulamalarıyla ilişkili şehirsel canlılık ve sürdürülebilirlik kavramları gündeme gelmiştir. Canlılık 'vitality', şehir merkezinin farklı zaman dilimlerinde farklı konumlardaki yoğunluk düzeyi ile ilişkiliyken, süreklilik 'viability', merkezin yatırım çekme kabiliyetinin devam etmesi ile ilgilidir. (Ravenscroft, 2000, s.2534) İlgili yoğunluk düzeyi (canlılık) yeni yatırım kararlarının (süreklilik) önemli bir bileşeni olmakta ve sonuç olarak, yeni kuruluş ve imkanların (süreklilik) devam eden gelişimi ziyaretçiler için bir çekim (canlılık) oluşturmaktadır. (Ravenscroft, 2000, s.2534)

Şehir merkezlerinin canlılık ve sürekliliğinin izlenmesinin gerekliliği ve önemi konusunda bir çok araştırmacı ve kurum hemfikirdir. (Paul ve Sanders,1997) (Balsas, 2004) (DoE) Daha nitelikli şehir merkezleri yaratabilmek amacıyla şehirsel canlılığın ölçülmesi ile şehirsel alandaki zayıf noktaların üzerine gidilmesi ve güçlü yönlerin desteklenmesi mümkün olacaktır.

Tarihi Yarımada, tarihten gelen altyapısı ve mevcut değerleriyle çok önemli bir potansiyele sahip olmakla birlikte içinde bulunduğu negatif gelişmelerle bir kaos mekanına dönüşmektedir. Bu çalışmada, İstanbul Tarihi Yarımada Eminönü Bölgesinde bir şehirsel canlılık değerlendirmesi yapılmıştır. Şehirsel canlılık değer değişiminin açıklanmasında yönlendirici olacağı kabuluyle aynı mahallelerde Eminönü İlçesi sürekli kullanıcılarının yaşadıkları çevreyi fiziksel, işlevsel ve sosyal anlamda değerlendirmelerine ve alanın yeniden canlandırılmasında öncelik verdikleri konuların saptanmasına yönelik bir anket araştırması yapılarak, faktör analiziyle değerlendirilmiştir.

Şehirsel canlılık değerlendirmesinde ilçeyi temsil edecek mahallelerin tespit edilebilmesi için Eminönü ilçesindeki mahallelere ait ekonomik ve fiziksel göstergeler

bir araya getirilmiştir. Bu veriler spss programında kümelendirme çözümlemesi yöntemiyle 'quick cluster analysis' değerlendirilerek, mahalleler gruplanmıştır. Bu kümelendirme çalışması sonucunda toplam 4 adet mahalle kümesi elde edilmiştir.

Her kümeyi temsil etmek amacıyla büyüklüğe oranlı olasılık ilkesi 'probability proportional to size' temelinde görüşme yapılacak mahalleler seçilmiştir. Her mahalle kümesinden 3'er mahalle seçilmiş, 2. kümeden ise kendi kendini temsil eden birim olarak Nişanca mahallesi alınmıştır.

Şehirsel canlılık değerlendirmesine yönelik olarak, belirlenmiş örneklem alanlarında kira değerleri, arsa metrekare birim değerleri, ticaret ve konut alanları ve nüfus şeklinde kabul edilen şehirsel canlılık gösterge değerlerinin, 1988 ve 2004 zaman dilimlerindeki değer değişimi 'Benchmark endeksi' oluşturularak değerlendirilmiş ve şehirsel canlılığın değişim yönü belirlenmiştir.

Mahallelerde yapılacak görüşme sayıları belirlenirken mahalle bazında istatistiksel analiz yapmaya izin verebilecek en düşük sayılara ulaşılması hedeflenmiştir. Her mahalle için ayrı ayrı işyeri sayısı ve nüfusun ortalama aile büyüklüğüne bölünmesiyle elde edilen hane sayıları oranları doğrultusunda yapılacak anket sayıları belirlenmiştir. Araştırma kapsamında Eminönü genelinde 33 mahalleyi temsilen 10 mahallede 184 hane ve 432 işyeri olmak üzere toplam 616 anket uygulaması yapılmıştır. Araştırmayla ilgili olarak hazırlanan anket föyü hane halkı ve işyerlerine sorulmak üzere beş başlık altında toplanmış 45 sorudan oluşmaktadır.

Araştırma kapsamında gerçekleştirilen şehirsel canlılık değişimi analizi ve uygulanan anketlerin faktör analizi değerlendirmeleri sonucunda mahalle bazında aşağıdaki sonuçlara varılmıştır:

1985-2004 tarihleri arasında şehirsel canlılık değerlerinin olumlu yönde değişim gösterdiği **Cankurtaran** ve fiziksel çevre kaliteleri, güvenlik gibi değişkenler arasında pozitif bir ilişki saptanmıştır. Mevcut problemlerine rağmen kullanıcılar, çeşitlilik anlamında işlevsel dokuyu olumlu yönde değerlendirmişler, ve iki değişken arasında yüksek pozitif yönlü bir ilişki bulunmuştur.

Alemdar'da şehirsel performans canlılık değerinin günümüze doğru negatif yönlü değişimine rağmen kullanıcıların fiziksel çevre kalitesi ve çeşitliliği olumlu yönde değerlendirmeleri, Sultanahmet'e konumsal yakınlığın bir sonucu şeklinde açıklanmıştır. Hobyar, Tahtakale ve Mercan'da negatif yönde bir değişim gösteren şehirsel canlılık performans değerleriyle de ilişkili olarak kullanıcılar yaşadıkları çevreyi işlevsel çeşitlilik ve güvenlik açısından negatif yönde değerlendirmişlerdir. Bu değerlerden de, şehirsel canlılığın önemli bir bileşeni olmakla birlikte, ticaret fonksiyonunun, tek başına olması gereken canlılık düzeyinin sağlanmasında yeterli olamayacağı, fiziksel, kültürel ve işlevsel diğer bileşenlerle desteklenen bir şehirsel çevrede olumlu etkisinin artacağı sonucuna ulaşılabilir.

Küçük Ayasofya'da konut ve nüfus değerlerinde düşüş olmakla birlikte, turizme yönelik konaklama ve gelişen diğer ticaret türlerinin etkisiyle Cankurtaran'a benzer şekilde şehirsel canlılık değerlerinde bir artış görülmüştür. Mimar Hayrettin, Muhsine Hatun ve Nişanca'da şehirsel canlılık değerleri, Tahtakale, Hobyar, Mercan, Alemdar ve Süleymaniye'ye göre bir artış göstermiştir. Tespit edilen artışın, mahallelerde konut alanlarının da dönüşümüyle birlikte, toptan ticaret alanlarında bir artış olduğu ve şehirsel canlılık değerlendirmesine bir gösterge değer olarak alınan zemin kat ticaret alanlarında perakende ve toptan ayrımı yapılamaması nedeniyle sayısal bir değer yükselmesinden kaynaklandığı söylenebilir. Her üç mahalledeki şehirsel güvenlik değişkenlerinin yetersiz şekilde değerlendirilmesi bu durumu daha anlasılır kılmaktadır.

Mevcut potansiyelleriyle Eminönü İlçesi'nde önemli bir yerleşme alanı olan **Süleymaniye**'de, şehirsel canlılık değerlerindeki düşme, bölgede yer seçen plastik ve diğer imalat türlerinin yoğunlaşması ve nüfusun mahalleyi terk etme eğilimiyle ilişkilendirilmektedir. Bölgenin alışveriş ve çalışma olanakları açısından negatif yönde

değerlendirilmesi, şehirsel alan niteliklerindeki bozulmanın bir göstergesi olarak kabul edilmiştir.

Araştırma sonucunda Cankurtaran, Küçükayasofya, Mimar Hayrettin, Muhsine Hatun ve Nişanca'da şehirsel canlılıkla ilgili bir değer artışı, diğer mahallelerde ise negatif yönde bir değişim tespit edilmiş, ilçe genelinde şehirsel dokunun genel olarak negatif yönde değişmeye devam ettiği belirlenmiştir.

#### Araştırma sonucunda,

- işlevsel çeşitliliğin, belirli düzeyde nüfusun ve konut alanlarının yer aldığı mahalleler de şehirsel canlılık değeri artış gösterirken, tek fonksiyonun hakim olduğu mahallelerde bir değer kaybı ortaya çıkmıştır.
- sayıca az bile olsa yapılan yeni yatırım ve girişimlerin mevcut potansiyellerin farkına varılmasını ve şehirsel alana olan talebi artırarak dolaylı olarak şehirsel canlılık değerlerinin olumlu yönde değişimini etkilediği görülmüştür.
- Geleneksel dokunun yoğun olduğu ve konut fonksiyonun devam ettiği yerleşme alanlarında şehirsel canlılık değeri belirli bir yükselme gösterirken, imalat sanayinin ve toptan ticaret alanlarının arttığı mahallelerde, geleneksel dokunun varlığına rağmen negatif yönlü bir değişim ortaya çıkmıştır.
- Belirli düzeyde şehirsel ve toplumsal güvenliğin artışı ile şehirsel canlılık değer artışı arasında bir ilişki kurulmuştur.