# LIVENARCHIII

contextualism in architecture

3rd INTERNATIONAL C O N G R E S S

livable environments

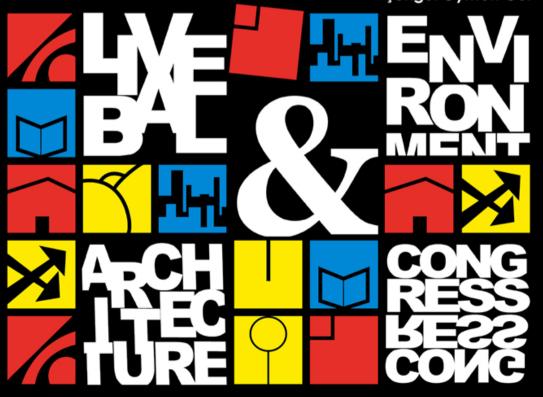
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Karadeniz Technical U n i v e r s i t y Faculty of Architecture Department of Architecture

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# LIVENARCH III

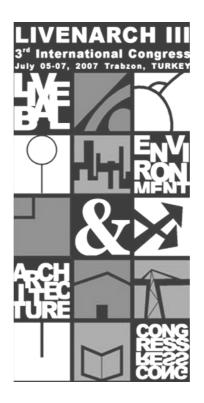
LIVable ENvironments and ARChitecture

3rd international congress
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karadeniz technical university, faculty of architecture DEPARTMENT OF ARCHITECTURE

## **CONTEXTUALISM IN ARCHITECTURE:**

contextualism as the resolution of identity-creativity dilemma



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#### CONTEXTUALISM IN ARCHITECTURE:

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Prof. Dr. Şençül Öymen Gür The Chair of LIVENARCH III Karadeniz Technical University Department of Architecture July 5, 2007

#### **PREFACE**

#### LIVENARCH 2007-Contextualism in Architecture

Since their original structures have been dramatically changed by the effects of modernization and globalization cities and their architecture demand challenging approaches to planning, urban design and architecture in order to safeguard livability at every scale and meaning. However due to the impact of the economic forces of the dominating "center" of globalization, the loss of identity, character and integrity is a much graver issue in the less developed "periphery". The Modernization process with its radical interventions has devastating affects on traditional settlements. Recent design actions have contradicted, transformed and de-structured the essential character of traditional settlements on the one hand and according to many critics, have failed to produce livable new environments on the other.

Neither the palliative 'Neo-rationalist' postmodern discourses which profess identity and sustainability by revisiting social memory as a remedy nor the 'Minimalist' approach of the global "product-form" approaches offer critical solutions to "place-form". Misunderstood regionalism gives way to utterly populist appearances; Minimalist glass cubes produce sterile environments.

In order to counteract the homogeneity and sterility of contemporary urban environments conditioned by speculative tendencies of power and maximized technology, reconstructive ideas concerning urban transformation such as "urban surgery" or "urban acupuncture" are proposed in the hope of reinstating social-physical integration, continuity and sustainability. In addition local values of building culture are advocated, attempts to deregulate power through participation and communication are esteemed, sustainable 'low rise-high density' urban "mega forms" are recommended as ameliorative urban transformation strategies. Is this the way to proceed?

LIVENARCH III (LIVable ENvironment and ARCHitecture) with the subheading "CONTEXTUALISM IN ARCHITECTURE: Contextualism as the resolution of identity-creativity dilemma" has been organized to provide a forum for the presentation and discussion of new ideas and approaches. The goal of the "Contextualism in Architecture" conference was to critically examine ways of mediating the totalizing and homogenizing effects of globalization, especially on urban form and architecture-city relationships. The objective was for scholars and professionals to discuss modes of interventions which do not retreat to imitation, dissimulation or minimalism, but rather to argue for creative solutions emerging from geographical and cultural locale.

Design research is for the main part still adhering to the conviction that scientific research efforts will increase planning capacity and predictive power with respect to the success of design solutions. Historical and empirical evidence however, cast doubt on this modernistic assumption. Hence the forthcoming conference is also set to challenge the knowledge based approaches and attitudes to architecture and urban design in favor of the indeterminate and uncertain field of design: imagination and projection.

The field as sketched above was not at all well-structured. Therefore we proposed a number of very general themes and sub-themes with metaphorical character. They were to serve as suggestions for possible contributions to the LIVENARCH (LIVable ENvironment and ARCHitecture) and for the final organization of topics at the conference.

We anticipated that theoretical foundations, frameworks, and concepts with philosophical, ethical and social implications could and should be addressed in relation to designing for social/cultural/contextual particularities and extremesclimate, geography, devastated cities, specially protected areas, the underprivileged, the peripheral and the marginal, etc. Of utmost importance were the contributions made by papers categorized as the theoretical and the historical: "The Fallacy of Contextualism in Architecture: Site, Building and Context" by Açalya Allmer who examines contextualist rhetoric by re-reading Colin Rowe and Fred Koetter's seminal book Collage City (1978). In doing so, she focuses on the metaphors of textile and weaving, which Rowe and Koetter used in order to symbolize the interwoven relationship between a building and its site. "Grounding an escape, questioning context" by Levent Sentürk questions the idea of context as a potential center of power and thus the architectural knowledge which according to him is itself the context. "From Materialistic Contextualism to Metaphoric Contextualism In Architecture" by Nezih Ayıran points out that Roweian strategy of contecxtualism refers to existing urban volumes and scales, surrounding buildings, street patterns, bodies of water and the materials used etc. and is materialistic in this sense. He asserts that that the multi-layered, profound, sophisticated and dynamic approaches to design that are based on metaphors, embracing both past and future aspects of life, social development, narratives etc. exercised by contemporary architects are better contextual strategies. "Punk Ethic and Architecture" by Işıl Çokuğraş brings to the fore the value of diversity as the most vital element of context to which architecture should respond. Anand Ramakrishnan, in "Designing for a Bi-cultural Future - Modeling assimilation in the context of globalization" argues that globalization and the accompanying plurality should be viewed by the designers as a wonderful opportunity to create bi-cultural (multi-cultural) objects, which relate to more than one culture simultaneously thus resolving the identity-creativity dilemma. "A Critique of Environmentalism in Architecture: Comparative Analysis of World Expositions of 2000 and 2005" by Aysen Ciravoğlu questions the integrity of the efforts to contribute to the environment and reveals the loss of meaning/context in environmentalism through exhibitions; Ozan Öztepe in "Ideas For Livable Environments After the Loss of Utopia" asserts that "The cities which became increasingly isolated from nature after the Industrial Revolution, should be integrated with the nature again... Economics should be considered as a basic criterion that vitalizes social, cultural, technological, ecological and political parameters". Ironically, T. Didem Akyol Altun and Gülden Köktürk discuss the possibility of "other" utopias, as the title implies, in their "Will Utopias Be Real? Micro technology and Living Architecture"

The interconnectedness of the term context and history strongly transpired through the papers submitted by a group of much resourceful contributors: "The Window of De Laborde: The Birth of the Historical Context of Architectural Site" by Yusuf Civelek suggests the embedded creativity in negotiating between the local and global, between the building and its site by referring to Félix Duban, Henri Labrouste and Léon Vaudoyer who persistently propagated the mixture of historical epochs pertaining to the context of the building and its site, and stating that they believed that antithetical things gave birth to something new, which would take place in the future; "Historical examples of contextualism in architecture" by Gamze Kaymak-Heinz brilliantly illustrates the containment of the context through the use of types, by the absorption of the types where some details are modified, as well as in the absorption of details by utilizing re-used material (spolia) and imitating ornaments, also where the system is modulated.

"The Duality of Localism and Universalism: The Interpretation of Critical Regionalism at Istanbul Hilton and Izmir Efes Hotels at the down of Tourism Architecture In Turkey" by Ahmet Erdem Tozoğlu, "Changing Life Styles, Transforming Traditional Houses: Corum as a Case" by Ömer İskender Tuluk, "Ottoman Architecture in Trabzon: The Case Studies of the Cami-i İmaret-i Amire-i Hatunive and the Cami-i Merhum İskender Paşa", by Halil İbrahim Düzenli and Evrim Düzenli; "Constructing The Republic in Trabzon: Discussions of "Square", "Monument", "Museum", and "Cinema" at the Municipal Proceedings (1936-1958)" by Evrim Düzenli and Halil İbrahim Düzenli are extraordinary papers underlining the double fold effects of "Modernization" in Turkey: the centre of decisions set examples for the periphery but the re-interpretation of mainstream of ideas by the periphery lack the meanings obliged by the centre. By drawing on the complexities involved in understanding the context they shed light to the hermeneutics of local histories of architecture. "From Astakos to İzmit: A Cultural Context of The City's Architectural Continuity" by Sonay Ayyıldız and "Effects of Westernization/ Modernization on Turkish Life Style In Interior Design of House Buildings: From The 19th Century To The Present" by Deniz Demirarslan and Özgür Algan, Typological Analysis of the Doors in the British Period; the Case of Kyrenia, Cyprus" by Nazife Ozay and M. Selen Abbasoğlu, are histories of transformation on different scales of meaning. "Spatial Organization of Ninetieth Century Greek Houses in Balıkesir, Turkey" by Yasemin İnce Güney and Hatice Uçar through their meticulous work advocate that in a world where the totalizing and homogenizing affects of globalization are increasingly felt in every domain of life it is important more than ever to bring forth the specific characteristics of places, places that are endowed with architectural artifacts that are reflections of "creative nucleus" of different cultures.

Worldwide transformation cases came in abundance and underlined the "pros" and "cons" of current transformation practices. Cases of socially appropriate solutions in terms of context, style and appearance regarding urban transformations (streets, squares, open spaces, etc.), examples of context-sensitive architecture, building elements, furniture and objects were duly introduced by distinguished authors. "Isparta Çarşamba Bazaar Urban Design Project: The Effects of Changes In Local Administrations onto The Project Process" Hasan Hastemoğlu, Kamertap Sarı, Feyza

Sezgin betrays how political-administrative decisions retard the processes and operate on illegal monitory gains by the parties involved. "Issues of Urban Adjustment: The Saal Process 30 Years Later" by Madalena Cunha Matos and Tânia Beisl Ramos is an extraordinary contribution dealing with SAAL housing project, which was thought out as a means to give voice and power to the social movements that were rapidly growing in Portugal, at a time marked by a severe housing deficit. Their assessment of SAAL Project in terms of state of conservation, extent of change, and integration with the enfolding city highlights the importance of scale of the planned areas, density and location in the city and of initial conditions, including human factors of cohesion. "Cultural Identity Concern During the Process of Urban Transformation" by Tuğba Kiper and Pınar Köylü; "Renewal Design Centered on Local Identity: The Case of A Dismissed Manufacturing Architecture" by Erminia Attaianese, Gabriella Duca, Gabriella De Margheriti; "An Interpretation of Transformation in the Production and Consumption Culture: the Case of Bursa" by Mehtap Sağocak; "Ermenek In The Context of Articulation Problem" Neslihan Serdaroğlu Sağ, Esra Yaldız and Arif Sağ; "Presentation of Consumption-Based Spaces In A Postmodern Spatial Restructuring Within The Process of Globalization: Case of Forum Bornova- Izmir" by Eylem Bal and Ahu Dalgakıran exemplify either successful or disappointing cases of transformation from different cities and are very illuminating in this respect. "Contextualism and Adaptive Reuse: An Evaluation of a Case, La Rue Française" by Nilay Kayaalp and E. Özen Eyüce; "Revitalization of One of The Main Streets of Izmit" by Mehtap Özbayraktar; "Functional Transformation of Historical Pattern Within A Tourism-Based Development Strategy: Case of Kemalpasa Street, Alacati – Izmir" by Ahu Dalqakıran and Eylem Bal mainly concentrate on transformations of old streets which has been a hard core element of Postmodern historic trend.

Some valuable papers were concerned with cities as a whole: "A Method Context of Urban Planning and Urban Design" by Yelda Aydın Türk emphasizes a comprehensive method which comprises the context specific issues. In "A Context-Sensitive Model to Redistribute the Property Rights in An Urban Transformation Project" Levent Ünverdi and K. Mert Çubukçu states that there is no global approach to urban problems, and urban transformation projects are no exception. As an alternative to this "one-size-fits-all" approach, they propose a context-based model based on the local social, economic, demographic and physical structure to redistribute the post-project property rights in an urban transformation project. Some researchers focused on neighborhoods: In "Imaginary Remedies for Urban Diseases: Utopia Neighborhoods" Akin Sevinc discusses the past utopias and anticipates that new imaginary projects will guide us to the future. "The significance of neighborhood in Istanbul" by E. Ümran Topcu and A. Nilay Evcil discusses satisfaction with modern vs. traditional neighborhoods as part of the context. "The Effects of Lighting on the Silhouette of a City: The City of Safranbolu" by Nurhan Koçan, Koray Özdal Özkan and Selcen Özgül Özkan deals with specific problematic such as lighting and interestingly points out the fact that lighting of a city may cause a major difference in the perception of cities in general.

Landscape was also seen as one vital groundwork aspect of the context per se: "Transformation of Public Culture and Life in Ankara: Analysis of Contemporary Approaches in the Design of Turkish Public Spaces" by Aydın Özdemir, "Transformation of Landscapes" by Meltem Erdem and Ebru Erbaş Gürler, and

"Transformation of Ankara's Open Spaces: A Case Study of Çankaya Botanical Garden" by Neslihan Kulözü concentrate on the affects of major transformations on urban landscapes and raise vital concerns regarding identity. Environment and behavior issues were also raised by some authors at landscape level: "A Model For Perceptual Illusion Usage In Environmental Design" by Serap Yılmaz Civelek and Sema Mumcu, "Positive Effects of Native Flora on User's Environmental Preference: Trabzon as a case" by Emrah Yalçınalp, Müberra Pulatkan, Mustafa Var and A.Gözde Ömeroğlu are such papers.

At a more theoretical level environment and behavior issues were challenged by Pınar Dinç in "Redefining the Role and Frame of Environment & Behavior Research In Terms of Its Effective Use Regarding the "Context" Issue". Allan Parsons and Rakhi Rajani in "The Performative Edge: Place Exploration" propose a "performative approach" which includes generation of a more informed understanding of the anthropology of place; its better integration with the engineering of place; and the need to create transdisciplinary teams who consider the integrated performance of the social reality into which the design is to intervene. Beria Günal Bayezitlioğlu in "Searching for the Psycho-Social Quality of Dwelling in the Context of Human-Environment Communication Model" discusses the primacy of psycho-social quality factors in designing space, and B. Ayşegül Özbakır in "Can We Map Our Feelings for the Quality of Urban Places?" ventures a method of appraising human feelings.

Housing comprised a significant concern among the contributors: "Amelioration of the context of architecture, design principles for better housing environments" by Özlem Atalan and Ismail Günur, and "Condominiums as the New Housing Alternatives of Global Cities" by Rengin Zengel and Burcu Deneri focused on better housing principles in the age of globalization. "Examination of The Ataköy Housing In Terms of Physical and Social Context" by Hande Egel and Seda Tönük betrays fits and misfits in housing projects in general. Ayhan Bekleyen and Bahar Acar in "Evaluation of the Houses Constructed in the Scope of Return to Village and Rehabilitation Project" point out the difficulties involved in rehabilitation projects which address the immigrants from villages due to terrorist activities and aims at welcoming these populations back with allusions for better living standards. "Developing Contextualism and Assessing User Preferences for Landscape Design in Mass Housing Areas; A Case Study in Trabzon" by Yalçın Yaşar, Cengiz Acar and Banu Bekçı, as well as "How To Design a House in The Country" by Hüseyin Egeli bring up sustainability and contextuality issues simultaneously, the latter of which actually demonstrates convincing solutions. It is interesting to note that the term "contextualism" was almost coined by sustainability by a great many researchers, and this situation in itself can be taken as a token of assessment of "contextualism in architecture" or that the architecture should be contextualist.

For example, "The Issue of Sustainable Environment In The Building Codes, Regulations And Standards In Turkey" by Özlem Erdoğdu Erkarslan and Eray Bozkurt; "Architecture and Urban Planning in Nature/ Zoning Law Interaction" by Fikret Okutucu and Sibel Ecemiş Kılıç; "An Infra-free (IF) Project: Sustaining Human Life in a Biological Reserve Area" by Bahar Baser and Robert Schmidt III; "Ecological Design for Livable Traditional Settlements: A Study on Ayaş, Ankara" by Hülagü Kaplan, Özge Yalçıner Ercoşkun and Leyla Alkan; "An Investigation of Ecologically Based Principles of Recreation and Tourism Planning on Cal Village High Plateau

Settlements" by Zeynep Pirselimoğlu and Öner Demirel; "The Identity of Place as Constituted by The Bioclimatic High Rise Building" by Mesut B. Özdeniz and Isaac Lerner were such significant contributions to the notions of "context" and "future". "Design Principles of Traditional Antakya Houses from Energy Conservation Point of View" by Gülten Manioğlu and Gül Koçlar Oral, and "A Contemporary Construction System Usage in the Context of the Sustainability of Vernacular Architecture: Eastern Black Sea Region as a Case" by Nilhan Vural, Nihan Engin and Serbülent Vural were rational protracting. Even the city components were brought up as matters of sustainability: "A Research about the Evaluation of the Playgrounds in Istanbul from Sustainability Perspective" by Pınar Karakaş and Pınar Yavuz, "Life Culture: Sustainable Principles for Infilling in Historic environments" by Özlem Karakul, for instance.

High quality Papers which took environmental issues as points of departure enriched the congress. Especially noteworthy is "Interoperability for Building Performance Software" by Mustafa Emre İlal and Sibel Macit, which take a comprehensive well-grounded look into environmental assessment of buildings. "A Design Model For Post-Disaster Settlements: The Case Study in Dinar/Turkey" by Evren Burak Enginöz investigates the ways of coping with natural disasters for high risk contexts. Acoustics come up as an imperative issue in "Noise Control in Industrial Zones and in the Inner Spaces of Industrial Buildings" by Mustafa Kavraz and Ramiz Abdülrahimov. In "Thermal and Structural System Performance of a Steel House in İstanbul" Şule Filiz Akşit and Halet Almila Büyüktaşkın discusses thermal issues. Safety has become a prime problem in today's cities both in closed and open spaces, "The Factors Influencing the Feeling of Safety in Urban Open Spaces" by Sema Mumcu, Serap Yılmaz and Ali Özbilen, and "Designing Safe and Peaceful Environments: Spatial Determinants of Non-Violent Urban Crimes" by İrem Ayhan and K. Mert Çubukçu are very illuminating in this respect.

Under the sub-heading of creative design methods and tools, new design guidelines, methods, and processes congruent and contingent with the contemporary problems facing urban design and architecture were expected of contributors, as well as any finishing narratives, myths or fantasies. Papers falling under this group could be loosely grouped as design issues in general, architectural design topics and architectural education related ones. Emel Birer looked into the mental processes involved in designing in her study "Design, Emotional Intelligence and Creativity" and Rabia Köse daringly inquired the subject-object relations in "The Architect and His Building: The Nature of Subject and Object Interactions"; Sertac Erten and Devrim Cimen analyzed and criticized the determining effects of urban design competitions in forming the preferences in design practice in "Urban Design Competitions: The Context Makes The Design Guidelines". "An Evaluation of Conceptual Editing in Basic Design Education" by Veyis Özek and Gülay Dalgıç, "Reinforcing Sensitivity To Context In Basic Design Course" by Özgür Hasancebi and Aktan Acar, "Architectural Design Studio: A Case Study for a Context-Conscious Approach" by Sema Soygeniş and Irem Maro Kırıs all deal with sensitizing students to milieu and site related issues. "Architectural Styles, contextual compatibility and design education on perceived quality of buildings" by Ebru Cubukçu and İbrahim Akgül demarcate interconnected and entangled issues of context, sensitive design and education.

Valuable papers such as "New Architecture, Influential Elements, Contemporary Designs" by Tülin Görgülü, Ebru Erdönmez and Selim Ökem traces contemporary architecture worldwide and critically examines the expensive, impressive and sometimes utopist architectural designs that come out as consequences of differentiation desires, and discusses their possible negative effects on the physical environment; "Myths and Fantasies in Architecture of Dubai: The Loss of Architectural identity" by Zafer Sağdıç and Aysun Aydın undermines one such example almost as a case of the former. "Defining an Urban Public Space for Children: The Child Attraction Center" by Sibel Ertez Ural, Sezin Tanriöver, Serpil Özaloğlu, Nerkis Kural, Deniz Hasırcı conceives children as a significant element of social context and considers them as agents of change, interaction, innovation, and democracy; and believes that they have a catalytic role in the community. Thus they propose a conductive environment for them which will aid into the solidarity of context. "Living under the Materials' Powerful Expression of Architectural Dominance" by Didem Bas Yanarates, expound on advanced technology of materials, and regrets that buildings are erected as the sculptures of materials' expressions which merely refer to the domain of "someone" instead of "somewhere".

In a more general setting building assessment is discussed in architectural education in "A Field Study on Reconstruction of Architectural Education" by Emel Düzgün Birer and Gamze Özkaptan Alptekin and performance of architectural offices in "A Model for Computer-Aided Architectural Design Office Standards" by Şengül Yalçınkaya and Ayhan Karadayı.

Especially interesting is the discussion rendered by Nilgün Çarkacı and Semiha Yılmazer on the borders and demarcation of disciplines of architecture and interior design, in relation to the concept of context in their paper "Forming The Enclosure or Mass". Regarding the interiors Müge Ertemli brings up the indoor quality "Indoor Air Quality: Construction Materials Selection Criterion for Sustainable Artificial Environment Design" and Tülay Özdemir raises an important issue related to ecological design in her paper titled: "Eco-design approach in furniture design"

Poster submissions in line with the congress theme were encouraged in this convening. Accompanying the abstracts two standard sheets [50X70cm] were presented by the poster contributors. A team of key speakers and referees are instituted as the jury in-situ for open discussions and evaluation. The first three of contributors are awarded prizes of excellence. Poster submissions to this congress have been as successful as the main body contributions. All poster submissions present a design idea either idealized mentally or proposed as a project at some level of education. Samples of magnificent submissions are to be found at the end of the third volume.

Şengül Öymen Gür The Chair & Editor July 5 2007 Trabzon-Turkey

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#### **DESIGN IN HISTORIC URBAN QUARTERS**

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#### INTRODUCTION

Contemporary interest in Historic Urban Quarters reflects concerns about loss of local identity and character, such areas offer local distinctiveness and one-of-a-kind experiences. Contemporary urban design and planning emphasises the local context informing design through continuity of local character, historic fabric and street pattern. Robins (1991: 34) notes how: "... Modernist planning was associated with universalising and abstract tendencies, whilst postmodernism is about drawing upon the sense of place, about revalidating and revitalising the local and the particular.". One dimension of this is the notion of urban quarters. Many cities have distinctive neighbourhoods, the essence of such areas was their relatively small size, mixed uses, a pedestrian friendlyenvironment, and variety in the type and size of buildings, with diverse patterns of tenure and land ownership.

A key quality of historic urban quarters is their scarcity. Although a number of such areas exist, because so many have been lost and therefore do not exist to be revitalised, a sense-of-loss pervades those that remain. Some of this loss, especially in continental Europe, was due to the general destruction of the 1939-1945 War but much also came through post-war reconstruction and comprehensive redevelopment. Where such areas exist, they have a scarcity value and, in recent years at least, have been protected by a variety of conservation controls.

This sense-of-loss (but also, paradoxically, the value of the surviving buildings) is compounded by what is known as the 'endowment effect', whereby individuals asymmetrically weigh losses and gains. Surviving areas have often benefited from the sense-of-loss caused by the clearance and demolition of others areas. Through endowment effect, and over time, the remaining buildings also become more highly valued. Although, due to conservation controls, the buildings cannot be demolished nor the areas cleared comprehensively and redeveloped, their original and existing uses are often in decline or have vanished from the historic townscape. Physical revitalization results in an attractive, well-maintained *physical* public realm. Mere physical revitalization may be unsustainable and short-lived. Such areas often need to retain a viable economic function and, in the longer term, a deeper economic revitalization is required because ultimately it is the private realm - the activities within the buildings - that pays for maintenance of the public realm.

In the absence of large public subsidies directed at keeping the quarter as a public outdoor museum, historic forms must be occupied and used by economic activities providing the sustained investment required to refurbish and maintain the buildings, and indirectly for the spaces between those buildings. Thus, revitalising HUQs involves both the renewal of the physical fabric and active economic use of those buildings and spaces. Rehabilitated buildings merely provide the 'stage set' - the physical setting for the public realm; the public realm is also a socio-cultural realm, which must also be revitalised and animated. The quarter's vitality and animation also needs to be 'authentic' rather than contrived or prettified - a 'genuine' working, functioning quarter that is naturally animated.

Places change over time. Sense-of-place is a HUQ's most important quality. But it is sense-ofplace in David Lowenthal's sense - that is, a continuing narrative involving past, present and future. What is important therefore is how they change and whether the changes develop and respect the sense-of-place or destroy it. Many places have, nonetheless, retained their identities through significant social, cultural and technological change - and, hence, though subject to constant change, some essence of an urban place's identity is retained. Typically there is significant physical continuity – if not necessarily of buildings, then certainly in terms of street patterns and property boundaries. By identifying and recognising patterns of stability within change, elements either not changing or changing over longer periods of time (which, in turn, give a measure of consistency of character and identity) can be differentiated from those changing over shorter periods of time. Although space and particularly patterns of urban space (i.e. the pattern of urban blocks and the public space network) are generally more enduring than individual buildings, some buildings often the most important or elaborate - have lasted for hundreds of years, helping to further sustain and contribute to sense-of-time within the place. In aggregate, and with each contributing to a greater whole, buildings are a major contributor to place identity.

Building design and urban space design in HUQs is always a contribution to a greater whole – that is, to the sense- and, more generally, the quality-of-place. While most contemporary urban space and, to a lesser extent, building/architectural design are informed by sense-of-place, all design interventions in HUQs must respond to the existing context – even where the response is to substantially ignore it. As MacCormac (1983: 751) argues "... design cannot isolate itself from vocabulary and precedent because they are inherent in the process of thought itself. There can be no Tabula Rasa.". Furthermore, because of the generally more complex and challenging design contexts typical of HUQs, designers often have a privileged position because developers are compelled to yield 'opportunity space' to designers. Moreover, because design becomes a necessary part of their business strategies (i.e. an integral part of their profit-making), design may matter more to developers and investors (Tiesdell & Adams, 2004). Intriguingly such design might actually be easier for designers: "Designers are aware that it is easier to plan when there are some commitments than it is when the situation is completely open ... The fixed characteristics restrict the range of possible solutions and therefore ease the agony of the design search." (Lynch, 1972: 38).

This paper discusses the challenges of design and change with regard to the quarter's physical – that is, spatial and visual - character. After discussing physical character and the role of design controls, it examines design issues concerned first with rehabilitation and second with integrating new developments.

#### **VISUAL & SPATIAL CHARACTER**

A HUQ's physical character can be considered to be the aggregate of individual building characters plus that of the spaces between those buildings – the whole, however, is always greater than the sum of the parts. In his book *Townscape* (1961), Gordon Cullen observed how one building standing alone in the countryside was experienced as a work of architecture, but several brought together made an 'art other than architecture' possible - an 'art of relationship'. Consideration of the characters of individual buildings is a useful approach to discussing the integration of new development into HUQs.

While buildings and other development have real clients, a different perspective is given by Sir Terry Farrell's observation that "... the place is the real client" (Farrell, 2006). The desired qualities in all development are

- Respect for the quarter's physical character.
- Character each act of development should bring something of its own, thereby,
- contributing new character.
- Intrinsic design quality buildings built now will represent the current zeitgeist in the future and arguably ought to be worthy of protection by future generations.

While historic sense-of-place is an important attribute, overall quality-of-place (which includes current and future sense-of-place) matters most. (Figure 1)

SPACE SYSTEM	Either buildings as objects-in-space (i.e. figural buildings/'open' space) or buildings- defining-space (i.e. figural spaces/contained spaces) or hybrid.
STREET PATTERN	Organic/deformed grid or regular (orthogonal) grid, including combinations & meetings of different grids.
Urban grain VISTA & VIEWS	Key view corridors
SITING	Siting concerns how a building sits on its site and how it relates to other buildings and to the street or other urban spaces. Respect for existing street patterns and block/plots sizes helps harmonious integration - plot amalgamation, for example, alters the scale of city buildings and breaks down the traditional grain of urban areas. Respect for the established building line and street frontage is also important in ensuring continuity and definition of external space. To maintain the quarter's grain and scale, amalgamation of historic plot divisions should be resisted. As it coarsens the quarter's grain, the amalgamation of individual street blocks should also be resisted.
HEIGHT & MASSING	Massing is the three-dimensional disposition of the building volume. The impact of new development needs to be considered from various viewing points and angles.
PROMINENCE OF SITE	Wells-Thorpe (1998: 113) suggests that, when a <i>more</i> contextualist approach is appropriate, the following qualities of the existing surroundings should be considered:
	<ul> <li>Extent</li> <li>Worth (i.e. their quality)</li> <li>Consistency (i.e. their homogeneity)</li> <li>Uniqueness (i.e. their rarity)</li> <li>Proximity (i.e. if seen in the same sweep of the eye)</li> </ul>
SPATIAL CONTRASTS	Areas of different spatial character – single spatial character throughout the area or distinct areas with differing spatial characters.

Figure 1. Elements of Spatial Character

Visual character is distinct from spatial character. The colour, texture, and detailing of the surfaces defining urban space contribute to visual character. The vertical and horizontal rhythms, arrays and patterns of solid and void, masonry and glazing on building elevations contribute more to visual character than particular buildings. In urban contexts, buildings are seen *en mass* as ensembles – as groups rather than individual buildings. Furthermore their facades are usually viewed in oblique perspective. A useful concept in identifying common themes is that of 'rhyme'. Rhyme involves (some) similarity in elements and presupposes the simultaneous existence of both complexity (i.e. a mass of visual detail and information) and patterns. Over time, as the mind organises and makes sense of the information, the patterns become more dominant, but not in an obvious way.

Spatial and visual characters come together in the design of the spaces between buildings and the three-dimensional objects - street furniture and the like - within those spaces. High quality, wellmaintained spaces between buildings produce positive externalities, enhancing the economic value of the surrounding buildings. As well as the vertical walls to an urban space, a key component of physical character is the design of the floorscape. In many HUQs, there have been schemes both to enhance visual quality and to improve pedestrian comfort, such as the widening of pavements, street closures, and traffic calming. Such schemes are generally best when the design demonstrates awareness of and sensitivity to how people actually use urban public spaces [Figure 2].

SCALE	Scale is different from size. Size is the literal dimensions of an object; scale is the perception of that object relative to other objects around it (e.g. other buildings; construction methods; construction materials; etc).  Human scale is the building's dimensions & all its parts relative to the dimensions of a human being.  Contextual scale is the building's dimensions relative to those of its setting. Hence, a building can be of human scale or not and, separately, in or out of scale with its surroundings.
ARCHITECTURAL STYLE, MOTIFS & THEMES	Some quarters are clearly unified through repetition of a particular architectural 'style'; others exhibit great variety but are unified by common underlying design patterns or motifs. Unifying elements may be present in, for example, consistent plot widths; fenestration patterns; proportions; massing; the treatment of entrances; materials; details; scale; style; etc
VISUAL INTENSITY OF DETAIL	Detail holds the eye. Façades can be appreciated in terms of visual 'richness' and 'elegance'. Richness relates to the visual interest and complexity that holds the eye. Elegance relates to the proportions that the eye finds pleasing and harmonious. Where facades are elegant, detail is normally used sparingly. Two further issues regarding visual detail are the intensity of the overall visual detail and, second, the distribution of that visual detail (i.e. detail might be concentrated around entrances or window openings or at ground or roof level). Across a façade, areas of detail contrast with area lacking visual detail.
PROMINENCE /EXPRESSION	Position in townscape may suggest opportunities/rationales for greater elaboration of visual detail. Landmark buildings
PROPORTION	Proportion is the relation between the different parts of a building and/or between any one part and the whole (e.g. major sub-divisions of the façade; solid-to-void in building façade; fenestration patterns; window proportions; etc. New buildings in established contexts may be more harmoniously integrated when their proportions compliment those of existing buildings.
VERTICAL ORGANIZATION/ RHYTHM	Traditional urban facades are often organized into three elements (i.e. 'base', 'middle' & 'top'). Ground floor is often more richly decorated; the middle is often more visually restrained, while the top and skyline are again more visually complex.
HORIZONTAL ORGANIZATION/ RHYTHM	Rhythm is the arrangement and size of the constituent elements of a building's facade (i.e. its windows or bays), which are normally repeated. Rhythm may come from the proportion of wall to window (i.e. solid-to-void) in a façade & the expression of historic plot divisions or structure (e.g. structural bays) in the building facade.
VERTICAL/ HORIZONTAL EMPHASIS MATERIALS	While most facades have both vertical & horizontal elements, one or the other tends to dominate (e.g. the emphasis is shown by the tendency to look up and down or along the façade). Individual windows or the fenestration pattern as a whole are often key elements in determining the emphasis.  Providing a building with colour and texture, materials also help establish local
	distinctiveness. A consistent use of local building materials can give a quarter a strong sense of visual unity. Their use in new development helps it to integrate visually.

Figure 2. Elements of Visual Character

Building design should exploit the site's potential within its wider townscape context. In regular grid layouts, there are generally fewer opportunities to elaborate the basic spatial character. Opportunities exist, however, at street corners; where streets visually terminate in buildings (e.g. the Merchant City's numerous *points-de-vue*) and on the development parcels where different grids meet. In irregular, organic layouts,

character may derive initially from the spatial character, but sensitive development frequently and memorably fuses the quarter's spatial and visual characters.

Valid questions are whether the quarter's spatial and visual character, first, is identifiable and, second, has coherence and/or homogeneity. Some quarters possess significant architectural homogeneity and coherence, often deriving from a concentrated development period and the buildings' functional requirements combined with either consistent use of local building materials (e.g. in the Lace Market or Denver's LoDo) or from extensive use of a particular constructional method (e.g. cast iron-fronted buildings in New York's SoHo).





Illustration 1, 2. Lace Market, Nottingham; LoDo, Denver

Although distinctive in other ways, some quarters do not have a consistent visual character – often because they have developed over a longer period of time with buildings from many historical periods in existence (e.g. Glasgow's Merchant City). Alternatively their original coherence may have been lost or fatally weakened through insensitive incremental development The strength of the quarter's existing visual character may influence the design response.

In the UK, local planning authorities are now required to undertake and publish conservation area appraisals. A HUQ's physical character can be considered at two interrelated levels – in terms of its spatial character (i.e. the shape, form and enclosure of external space) and in terms of its visual character (i.e. the surfaces defining and enclosing the external urban space). Key elements of spatial and visual character are presented in Figures 1 & 2. These are both criteria for appraisal and prompts for design. Appraisals should also distinguish between what is fundamental to the sense-of-place and should not change and what is less important and can change.

The decline of orthodox Modernism and the emergence of postmodernism permits and encourages greater tolerance of and respect for difference and localities, legitimising approaches drawing on architectural precedent and tradition and allowing greater freedom with style, idiom, articulation, decoration and ornament. Paulo Portoghesi defined as postmodern "... any building that breaks the modern prohibition against historical reference, whether with ironic self-commentary or with vernacular earnestness." (Kolb, 1990: 89). Historical reference and allusion is fraught with accusations of superficiality - Hewison (1987: 135), for example, asserts that postmodernism and the heritage industry are linked in conspiring: "... to create a shallow screen that intervenes between our present lives, and our history. We have no understanding of history in depth ... instead we are offered a contemporary creation, more costume drama and re-enactment than critical discourse.". It can also be interpreted as mere repetition of what has gone before and as 'kitsch'. Richard Rogers (1988: 879-880) warns how, in all fields, "... it is generally accepted that to learn from past is the way forward and that history is a prime generator. But to imitate historical form without recognition of the content is to degrade its very importance.".

Limitations of traditional construction methods and materials often resulted in homogeneity of style and size, but a major change since the quarters were substantially constructed has been further development in construction and material technology. Many now historic landscapes were the product a less globalized world. Contemporary designers have much greater freedom and are not bound or limited the construction techniques and materials of that period nor any particular necessity to recreate the physical landscape. The issue is often one of self-restraint and the extent to which the designer *chooses* to ignore, imitate, interpret or contrast with the local architectural tradition or context and, equally, to express or reflect the prevailing *zeitgeist*.

Whether it is possible to maintain the character of a historic landscape without the distinctive culture and economic conditions that created it in the first place is highly debatable, design control policies could impose some requirements (e.g. a requirement to use particular building materials on facades) and/or require new developments to respond to or enhance local distinctiveness. Conversely seeking to retain local distinctiveness through public prescription may inevitably result in a superficial local distinctiveness and/or further dilution of the sense-ofplace.

### **DESIGN CONTROLS**

Managing change usually requires some form of control. The degree and extent of those controls, however, is almost always a matter of judgment. Protecting, maintaining, repairing, restoring and rehabilitating historic buildings and areas all involve judgments and negotiation between competing claims. As Sir Hugh Casson (1984: ix) wrote: "The essence of sound conservation is judgment."

Most conservation controls also restrict the amount and nature of change to buildings. While the degree of permitted change for any particular building varies, it is usually more restricted for 'listed' or 'landmark' buildings – although such buildings usually have greater eligibility for Grant aid and other assistance. Grant aid also

usually requires a certain standard of workmanship, on pain of forfeiting the grant, and is usually paid in arrears to ensure the work's quality.

In the UK, listed building consent (LBC) is an additional layer of controls; conservation areas are an additional set of considerations within normal planning controls. LBC is required for most changes to listed buildings, while a building's location within a conservation area will usually be a material consideration in applications for planning permission. Many local planning authorities have *ad hoc* advisory panels for applications in conservation areas. In addition, as a matter of good practice, local planning authorities consult with local amenity societies, such as the Victorian or Edwardian Society. At the national level, CABE (Commission for Architecture & the Built Environment) and English Heritage in England and Architecture & Design Scotland and Historic Scotland in Scotland can make representations on planning applications.



Illustration 3. Car Park in Lace Market, Nottingham

Except where required by a local ordinance, changes to historic buildings in the USA do not normally require permits. In the USA, most historic preservation districts have a Review Board that permits or refuses changes to the exterior of buildings. Review Boards place a discretionary layer of control over the zoning system.

- Every reasonable effort shall be made to provide a compatible use for a property which requires minimal
  alteration of the building structure, or site and its environment, or use a property for its originally intended
  purpose.
- The distinguishing original qualities or character of a building shall not be destroyed. The removal or alteration of any historic material or distinctive architectural features should be avoided when possible.
- All buildings, structures, and sites shall be recognised as products of their own time. Alterations which have
  no historical basis and which seek to create an earlier appearance shall be discouraged.
- 4. Changes which may have taken place in the course of time are evidence of the history and development of a building structure, or site and its environment. These changes may have acquired significance in their own right, and this significance shall be recognised and respected.
- Distinctive stylistic features or example of skilled craftsmanship which characterise a building, structure, or site shall be treated with sensitivity.
- 6. Deteriorated architectural features shall be repaired rather than replaced, wherever possible. In the event replacement is necessary, the new material should match the material being replaced in composition, design, colour, texture and other visual qualities. Replacement of missing architectural features should be based on accurate duplication of features substantiated by historic, physical or pictorial evidence rather than conjectural designs or the availability of different architectural elements from other buildings or structures.
- The surface cleaning of structures shall be undertaken with the gentlest means possible. Sandblasting and other cleaning methods that will damage the historic building materials shall not be undertaken.
- Every reasonable effort shall be made to protect and preserve archaeological resources affected by, or adjacent to, any product.
- Contemporary design for alterations and additions to existing properties shall not be discouraged when such alterations and additions do not destroy significant historical, architectural or cultural material, and such design is compatible with the size, scale, colour, material, and character of the property, neighbourhood or environment.
- 10. Wherever possible, new additions or alterations to structures shall be done in such a manner that if such additions or alterations were to be removed in future, the essential form and integrity of the structure would be unimpaired.

Figure 3. US Secretary of Interior's Standards For Historic Preservation

By identifying what is preferred (and, usually by omission, what is not), design guides and codes inexorably narrow down the range of options and design possibilities. As a consequence, such guidance frequently keeps out the inspired as well as the mediocre. The effect may be comparable with Muzak, where the original music is "... re-arranged, re-recorded and electronically processed so that all the major variations in tonal range, in noise level and in rhythm are compressed into a narrow band." (Relph, 1987). As Porteous (1996, p.154) notes, by deleting the extremes and the idiosyncrasies, melodies end up sounding the same.





Illustration 4. Lace Market, Nottingham Illustration 5 Lace Market, Nottingham

#### REHABILITATION

Rehabilitation retains both the historic building stock and the historic urban space. Rehabilitation includes not only dramatic cases of change requiring a certain amount of internal and external alteration, but also bringing the building into line with the expectations of contemporary users in terms of, for example, safety and comfort standards. As Lynch (1972: 32) notes, even this poses questions of the building's aesthetic integrity: "To what degree does contemporary utility, however discreetly provided, rupture the sense of historical integrity?". Fitch (1990: 46-47) identifies various types of change to historic buildings - preservation; restoration; efurbishment; reconstitution; conversion; reconstruction; replication; facadism; and demolition & redevelopment.. Rehabilitation is used here to include refurbishment and conversion.

There are often continuing debates about rehabilitation's fidelity with a building's historic character. The critical dilemma is encapsulated at the level of minor repairs should the repair blend in and effectively be invisible (i.e. typically a visual management approach) or should the new work be uncompromisingly new so that what is old and what is new is easily discerned and preferably reversible. As most old buildings have already seen much change, the building's supposed purity and authenticity may already have been compromised.

Rehabilitation can be undertaken with different degrees of fidelity to the original building. Appleyard (1979: 26) discusses 'surface' and 'deep' rehabilitation, preferring deep or 'gut' rehabilitation that includes both external and internal rehabilitation - a purist concern for the aesthetic and architectural integrity of the entire building.

By retaining the building's original function, <u>deep rehabilitation</u> is also <u>refurbishment</u>. While deep rehabilitation may be desirable, maintaining both a quarter's physical and functional character *and* the original integrity of its architecture, it may not be possible for a variety of reasons, including the existing use not being sufficiently profitable to yield the return enabling comprehensive refurbishment.

<u>Surface rehabilitation</u> is primarily concerned with the façade and its contribution to an area's townscape and is akin to <u>conversion</u> or adaptive re-use, as well as refurbishment. It is a 'townscape' or visual management rehabilitation - where only the building's external shell is refurbished. While conversion generally involves greater change than refurbishment, capacityfor- change is limited by a number of factors - the existing building's dimensions; its visual character; the constraints imposed by special historic building controls on permissible change; the planning policy context; the environmental consequences of the change of use, particularly in terms of traffic generation and management; the market for such changes (i.e. the reaction of possible investors and users to the change of use); etc – and is often examined through detailed feasibility studies. Accommodating new or different land uses can have a range of impacts and there will inexorably be conflicts and compromises with regard to degree of change and respect for the building's original character.





Illustration 6, 7. Interior and exterior of the Italian House, Merchant City, Glasgow

Debates about facadism - the most extreme example of change to a historic building and which arguably goes beyond rehabilitation and creates a wholly new building behind a retained façade - highlight the differences between surface and deep rehabilitation [Box 1].

#### Box 1 – FACADISM

Façades contribute significantly to the continuity of visual character. But concern only for a building's façade in isolation can reduce wider conservation concerns to a much simpler concern for mere townscape (i.e. merely visual management). Short of demolition, facadism represents the most extreme change to a historic building and therefore merits particular attention. Lynch (1972: 32) describes a design doctrine distinguishing between 'inside-and-private' and 'outside-and-public' where "... only the external historical shell need be preserved or reconstructed. It can then shelter current, active uses, and internal physical modifications suitable to those new uses are allowed. 'Outsides' are public, historic, and regulated, while 'insides' are private, fluid, and free.". While Lynch's interior-exterior/public-private dichotomy is a convenient distinction, it is an over-simplification and must be qualified - there is a reciprocal relationship by which the visual effect of the interior informs the exterior. For example, Lynch (1972: 32-34) describes converting the Nash terraces around Regent's Park in London to office use. Here the façades were rebuilt according to the original designs, but enough of the former internal arrangements was also required to give the view from the street the appropriate sense of depth.

In facadism, two principles come into conflict. The first is more pragmatic - as the building's chief conservation value is its contribution to townscape, preservation of (at least) street elevations is paramount. The second is more architectural and purist - buildings are designed as an aesthetic 'whole' that cannot be separated into an interior and an exterior except to the detriment of that whole.

There are instances where a façade has been designed to give overall unity to an urban space but in isolation from the buildings that will stands behind it. Inigo Jones, for example, designed the facades of the buildings surrounding the Covent Garden Pizza but not the buildings themselves. Similarly, at the Royal Crescent in Bath, the façade was designed as a single element but was built by a number of developer-buildings who each put buildings with different floor plans behind that façade.

Facadism can be justified as a valid method of urban conservation, enabling retention of familiar historic streetscapes or formal set pieces of urban design (Richards, 1994: 2). As many buildings have utilitarian interiors, facadism permits provision of up-to-date accommodation (Richards, 1994: 2), thereby, addressing a building's functional obsolescence — albeit by effectively destroying the building - while respecting its contribution to the street scene's continuity and perhaps more importantly historic patterns of development. Facadism also allows contemporary architects to put vibrant spaces behind more staid historic elevations.

### Restoration

Rehabilitation frequently involves an element of restoration. Restoration might also be an objective in its own right, but also presents a fresh set of dilemmas. A distinction might be drawn between a conscious, scholarly and knowing restoration and those that at unconscious and unknowing. In the absence of meticulous and very detailed research, restoration involves superstition and guesswork about how the building was and, hence, an element of idealisation. Restoration also involves choosing which 'past' should be restored (Ashworth & Tunbridge, 1990: 24). The choices made in rehabilitating and restoring Boston's Quincy Market, which resulted in all accretions were stripped away to return the buildings (largely) to their original

design. The end results, as Barnett (1982: 50) concluded, was "... a successful adaptive re-use, [but] ... not necessarily a happy example of historic preservation.". Similar criticism has been made of the Covent Garden market buildings, the extent and quality of rehabilitation of which has "... removed the visible effects of its use as a market. This wear and patina is what one associates with an historical market and it can be disorientating to find it so entirely removed when the market is turned into an uncharacteristically elegant shopping centre." (Hareven & Langenbach, 1981: 121).

These issues can be illustrated through examples of rehabilitation in Glasgow's Merchant City and London's Shad Thames. The Houndsditch Building, in the former, is a new building behind a retained façade. It was argued that the only feasible way to convert it to residential use was to demolish and rebuild it behind the stone façade – an argument accepted by the planning authority (Johnson, 1987: 42). With three floors with very high ceilings, the existing building was ill-suited to the relatively small rooms required for residential use. Furthermore, the architects were unwilling to run new floors across the tall windows. The solution involved a new building behind the original façade. There are still three floors to the front, but two of them have mezzanine gallery bedrooms.



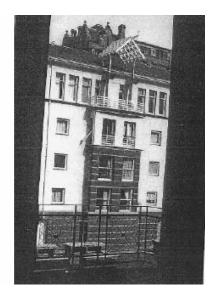


Illustration 8, 9. Merchant City, Glasgow

In Shad Thames, the first warehouse to be converted to residential use - New Concordia Wharf - established "... a standard of taste and technical excellence for later architects to follow." (Edwards, 1992: 96). In appearance, the building remains a typical Victorian warehouse. On its waterside façades, balconies were inserted where loading doors once opened. These do not visually jar - by respecting the original fenestration pattern, they add detail where the eye anticipates greater visual complexity. The detailing of the railings also carries an appropriate visual weight. To

gain additional units, the developer chose to adapt the roofline by inserting a further floor and to add conservatories. Although conserving a historic building's façade is paramount, retaining the original roofscape is also important - particularly the part seen from the public realm. To insert extra space and/or create roof terraces, developers often want to add roof top extension and/or cut back the existing roof profile. Roof top extensions adding extra floors usually adversely alter a façade's proportions and balance and together with the associated paraphernalia of railings and temporary sun shades and umbrellas, such changes inevitably reveal the residential function and, unless handled sensitively, harm visual character.



Illustration 10. Butlers Wharf, Shad Thames, London

Completed in 1873, when it was the largest wharf on the Thames and converted in the mid- 1980s into residential apartments, the main Butlers Wharf building is an example of facadism. The riverside elevation has a bold architectural treatment with prominent end pavilions, rusticated quoins, massive bracketed cornices and pedimented parapets. To permit an additional rooftop storey and basement car parking, a concrete frame was inserted within the existing brick shell, with the front and rear walls fronting onto public spaces being carefully restored. The addition of balconies where loading doors previously existed communicates the residential function without detracting from the building's monumentality. To the rear, along Shad Thames, the cast iron bridges were repaired. New openings for shops and restaurants were formed with yellow stock bricks and engineering brick dressings. Edwards (1992: 95), however, considered the results 'over-sanitised': "Butler's Wharf is not so much the preservation of a group of buildings as their restoration to a rather idealized and convenient version of the original."

Adjacent to Butlers Wharf, the former Anchor Brewhouse was converted into flats, office space and a health club. The building's pre-existing idiosyncrasies allowed conversion to residential use without compromising its character.

### **NEW DEVELOPMENT**

While rehabilitating existing fabric may be preferred, new development is often inevitable. It usually involves infill development of gap sites, but may also involve the redevelopment of whole street blocks or even larger areas. New development should respect, complement and enhance the quarter's spatial and visual character - the intention being harmonious relation with the existing context. Whether or not a building harmonises with its context, however, is ultimately a matter of individual judgement. As noted previously, the regulatory regime should give opportunity for distinguished urban space design and building/architectural design.

### Respecting spatial character

The space systems of the quarters featured here tend to be based on traditional outward-facing urban blocks and contained, well-defined and conceivable urban spaces. As retaining existing buildings keep the historic urban space and form intact, new developments should (following a morphological approach) retain the overall massing, form and 'footprint' of buildings previously occupying the site. This need not be a slavish adherence, merely that the spirit/identity of the spatial character is respected. In terms of achieving harmonious relation with the existing context, siting and massing may be more important than any particular architectural language – that is, respecting spatial character is often more important than respecting visual character.





Illustration 11, 12. LoDo, Denver; Design Museum, Shad Thames

In terms of the appropriate massing, a key issue is vertical height in redevelopment—whether to retain the height of the demolished building or respond to the remaining buildings' height. Contemporary buildings will often be taller than historic buildings as there are often economies gained from building taller buildings. When lower-rise buildings are demolished, what should be the appropriate height of new development? In the Merchant City's Ingram Square development, two options were available for the design of the new building on the corner of Brunswick Street and Wilson Street - either to refer to the existing height of Brunswick Street, largely that of

the original three or four storeys, or to refer to the height of the 1930s warehouses further to the south (Johnson, 1989: 48-51).

Most design guides for HUQs advocate an urban healing (that is, a morphological approach based on working within the grain of the place) approach, respecting street pattern and street frontages to enhance street containment and enclosure. This approach generally limits scope and opportunity for the design of buildings as sculptures or objects-in-space without concurrent and positive design of that space. The aesthetic effect of object-buildings works through contrast with the existing fabric and/or by using the existing fabric as a foil (i.e. the object needs a ground to stand out against). In street environments, it is often not possible to stand sufficiently far enough back to appreciate object-buildings. Locations where highly sculptural or landmark buildings might be appropriate are at significant points for the townscape's legibility, such as street corners or the termination of a particular view or vista, where the building's sculptural form can be appreciated.

## Respecting visual character

New development in HUQs is intrinsically 'street' or 'urban' architecture, which, for the purpose of this discussion, can be considered to encompass buildings responding and contributing positively to the public realm's spatial definition. The design task becomes primarily (but not exclusively) one of elevation or façade design - more precisely, it is the design of buildings that can both front and define urban spaces. Successful facade design is a contemporary design problem. While variety is of particular value in the creation of visually interesting street scenes, certain principles apply enabling new buildings to better harmonise and integrate with the existing context. In an attempt to understand what made a 'good building', the Royal Fine Art Commission (RFAC) identified six criteria - the sixth of which was integration. It then identified six criteria for integrating new buildings into existing contexts - siting; massing; scale; proportion; rhythm; and materials (Cantacuzino, 1994: 76-79). An extended version of these criteria can be used as a frame (i.e. a set of prompts) for analysing visual and spatial character (i.e. for character appraisal) and/or as a guide for design review. As strict adherence to 'the rules' often leads to mediocrity, generally desirable principles should not become dogmatic imperatives. The RFAC, for example, was careful to stress a building could embody every criterion without being a 'good' building.



Illustration 13. Lace Market, Nottingham

### INTEGRATING NEW DEVELOPMENT

Integration is an often controversial area of urban architectural design. Integration – or, as it is sometimes disparagingly (and incorrectly) called, 'fitting-in' - does not require slavish adherence to a certain architectural style. Setting too much store by style limits opportunities for innovation and excitement. Other criteria might often be more important. Many successful groups of buildings have dramatically different materials and styles - and, indeed, the visual experience of HUQs is enriched by the myriad relations between different buildings. The chief quality sought in the design of new developments in HUQs is 'harmony' - the creation of "... a visually integrated not necessarily - homogeneous townscape." (Brolin, 1980: 16). Reflecting different design philosophies, there are three basic approaches. At one extreme, matching involves imitating or copying local character. At the other extreme, juxtaposition or contrast involves few apparent concessions to local character. Between these lies interpretation involving interpreting and developing of local character. The approaches may be distinct with regard to spatial and visual character – it is possible. for example, for development to juxtapose with visual character but to match spatial character.

Before these approaches are considered, it is important to note that a certain threshold quality of development is needed - in essence, the design must positively engage with the place. Many historic areas have seen a proliferation of ersatz warehouse-style buildings. This is an anywhere (but nowhere) architecture; an architecture of calculated indifference, inoffensive but anodyne. In practice, while it might be said to be inoffensive, it is offensively inoffensive. As noted previously, the three key qualities sought are respect for the sense-of-place, character and intrinsic design quality, such that the new development makes a positive contribution to the place - such designs fail in terms of the latter two qualities.

## Matching

Matching involves copying or imitating local character. The matching can be with either the quarter's visual character or spatial character, or both. As the spatial character of most quarters featured here derives from buildings-enclosing-space, matching this character is relatively uncontroversial. Imitation/matching allows a shallow and superficial engagement with the place; continuity necessitates a deep engagement with the place. Examples of matching visual character abound in the HUQs.





Illustration 14, 15. Lace Market, Nottingham; Lace Market, Nottingham

## Juxtaposition/Contrasting

Juxtaposition involves deliberate contrast, usually to express newness (i.e. modernity) and to attain aesthetic frisson. The notion of juxtaposition is congruent with Modernist ideas and the challenge of the zeitgeist. The juxtaposition can be with either the quarter's visual character or spatial character or both. As the spatial character is usually buildings-defining-spaces, spatial juxtaposition normally involves designing a building as an object-in-space – a practice frequently damaging to spatial character. The most common form of juxtaposition is through different materials – especially the sue of white render in areas predominantly of stone or brickwork. Another common form of juxtaposition is the use of large areas of glazing, including curtain walls that are wholly glazed. Glazed facades can complement and not compete with neighbouring developments, but they rarely contribute much themselves.



Illustration. 16 Prague





Illustration 17, 18. Shad Thames, London; Shad Thames, London

Contending harmonious order can result from "... the juxtaposition of buildings of different epochs, each one being the expression of its own time", Richard Rogers (1988: 875) uses this argument to justify the Pompidou Centre in Paris and the Lloyds Building in the City of London. More contemporary examples would include Frank Gehry's designs of in Bilbao and many other cities — albeit his work now expresses the underlying homogeneity of global cities.

At Shad Thames, the existing visual character was strong and new development of the late 1980s and 1990s expressed itself in an uncompromisingly contemporary manner. As Edwards (1992: 93) states:

"The dominating presence of yellow brick (yellow at least after cleaning) warehouses, and the industrial machinery often mounted on their façades, has provided a robust urban framework for new buildings ... It is an approach to urban infill which would not look right in Bath or even Westminster, but here in tough and rugged historic Docklands the resulting environment has great diversity and character."

What is significant is that the juxtaposition is with the quarter's visual rather than its spatial character. Buildings breaching this principle were less successful. As Edwards (1992: 96) describes: "The Design Museum makes no reference to anything in sight: it ignores the grain of historic Shad Thames, it refuses to be tall at the river edge and it disdains pitched roofs."

Part of Shad Thames's vibrant new character results from the LDDC's relaxed planning policies. Although no overall development framework had been considered necessary, the area benefited from 'enlightened' developers whose landholdings necessitated consideration of the composite value of their holding and the need to ensure the quality of all developments in the area. Given the relatively large number of historic buildings, the smaller new developments generally fit into the remaining gaps. Larger developments - Spice Quay, The Circle and Horsleydown Square - all respect the spatial character and the existing street pattern. There is a fine balance between old and new. If demolition of older warehouses continues and the proportion of new build schemes increases, this balance will not be maintained. The challenge, therefore, is to ensure continuity of spatial character, so that the vibrancy of controlled juxtaposition is maintained rather than sinking into visual chaos. While the early developments (i.e. those of the late 1980s through to the mid-1990s) displayed more juxtaposition, the more recent development in land has been in the form of generally well-proportioned brick warehouse-style developments. These self-effacing buildings are inoffensive but mundane. En mass, on the one hand, they dilute character, but, on the other hand, they provide a foil to the area's juxtaposing buildings.





Illustration 19, 20. Shad Thames, London

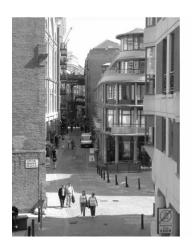




Illustration 21, 22. Shad Thames, London; LoDo, Denver



Illustration 23. LoDo, Denver

### Interpretation

This approach reflects a desire for new development to reflect, interpret and develop the existing sense-of-place. Although interpretation can be with either the quarter's visual or spatial character or both, it is typically with a quarter's visual character. Interpretation develops, but does not destroy the local character (i.e. it contributes new character that has an evident continuity with the existing character). Rather than dissimilarities, it stresses continuity between time frames and the historical continuity of place. This is an approach advocated by Giancarlo De Carlo:

"To design in an historic place one should read its architectural stratification and try to understand the significance of each layer before superimposing a new one. This does not mean to indulge in imitation, as this would be a mean-spirited approach, saying nothing about the present and spreading confusion about the past. What is called for is the invention of new architectural images to be authentic and at the same time reciprocal with existing images." (from MacCormac, 1991: 39).

Provided it is informed by the context and the site's history and there is positive engagement with the area's architectural tradition, it is interpretation rather than imitation or pastiche.

Glasgow's <u>Merchant City</u> contains several examples of interpretation, where new developments exhibit significant responsiveness to local context and tradition. <u>Ingram Square</u>, for example, is a vibrant mix of refurbishments, facadism and new build elements. As Johnson (1989: 37) observes, the building on the corner of Brunswick Street and Wilson Street: "... stands out as a skilful and serious attempt to create a new contextual urban language based on scale, proportion and massing rather than on playing stylistic games."

Inland at <u>Shad Thames</u>, where local cues and references are weaker, a new context and character was established almost from scratch. The Circle in Queen Elizabeth Street is an extraordinary development of nearly 300 flats, offices and shops grouped around a dramatic cylindrical central circus - the internal face of which is finished with bright blue glazed bricks – with a chunky dray horse statue stands at its centre. As Edwards (1992: 99) comments: "After the confinement of Shad Thames and the busy squares of Horsleydown, The Circle has a theatrical unreality.".

#### MATCHING, JUXTAPOSITION OR INTERPRETATION?

The three approaches discussed above exist along a continuum with matching and juxtaposition at each pole and interpretation somewhere in the middle. As stated at the outset, the three desirable qualities in all new development are respect for the quarter's spatial and visual character; new character; and intrinsic design quality. In principle all approaches – matching, interpretation and juxtaposition – have legitimacy. Two particular combinations, however, are problematic - matching visual character (i.e. visual matching) and juxtaposing with spatial character (i.e. spatial iuxtaposition).

	MATCHING Uniformity Imitation	INTERPRETATION Continuity	JUXTAPOSITION Contrast
SPATIAL CHARACTER	$\odot$	$\odot$	
	Respects sense-of-place	Respects sense-of-place	Damages sense-of-place
VISUAL CHARACTER		$\odot$	$\odot$
	Damages sense-of-place	Adds positive Character	Adds positive character

Figure 4. Harmony with Spatial & Visual Character

Straightforward matching of visual character results in dilution and weakening of the qualities it seeks to retain and often fails because it does not add sufficient new character. Here we encounter the problem of what is usually termed 'kitsch'. Usually a pejorative and derogatory term, kitsch is used to categorize art considered an inferior copy of an existing style or, more loosely, any art considered pretentious or in bad taste. Kitsch is typically contrasted with 'real' or 'genuine' art. It is said, for example, to be a gesture imitative of the superficial appearances of art, relying on merely repeating convention and formula and lacking the sense of creativity and originality displayed in genuine art.

Postmodernism has served to further blur the borders between kitsch and (high) art. Though usually used to criticize, postmodernism permitted kitsch to also be used as a compliment (e.g. kitschy artwork might be enjoyed for its 'retro' value or unintentional, ironic humor or garishness). Despite difficulties in defining its boundaries with art, the term kitsch remains a label for anything felt in bad taste.

Although historic areas need historical continuity, Freeman (1975: 115) argues that to replicate the past "... automatically eliminates the possibility of adding value to a project or area through sensitive and high quality new design ... If it is poorly executed, the reproduction will be a sham that undermines the setting of nearby structures." Matching can also become a superficial and unchallenging 'pastiche'. Such designs "... blur the line between real and fabricated history, distorting the context in which what is genuine can be appreciated and understood." (Hareven & Langenbach, 1981: 121). Jameson (from Hewison, 1987: 134), for example, condemns pastiche as "... speech in a dead language", while Hewison (1987: 134) suggest the 'emotional equivalent' of pastiche is nostalgia, which "...deliberately falsifies authentic memory into an enhanced version of itself. It is a strangely powerless emotion, a sweet sadness conditioned by the knowledge that the object of recall cannot - indeed, must not - be recovered."

Achieving its effect by contrast with a relatively homogeneous context, extreme contextual spatial juxtaposition should only be an occasional device. While there can be vibrant and entirely successful contrast, the approach is eminently capable of producing disastrous results. New developments need a context with which to juxtapose. Without sufficient regard for the whole, such juxtaposition creates context-destroying monuments. Too much spatial diversity destroys spatial coherence, continuity and enclosure. As discussed previously, there is an important part/whole relation, in which the balance between the parts and the whole is critical to the HUQ's sense-of-place. Sense-of-place is a consequence of the whole, of the totality rather than any single part. The problem (and challenge) is that developers (and their designers) are principally concerned with their part.

#### CONCLUSION

This paper has not sought to dictate design approaches in HUQs. Instead, in common with Brolin (1980: 17), it has sought to suggest "... a way of looking at the whole of the architectural context which will encourage architects, planners and entrepreneurs to consider thoughtfully the visual effects of additions to their surroundings.". Whatever the design guidance and the process of design, the final effect requires individual judgement as to whether or not it is harmonious with its context. There is no mystic process by which following a due process inexorably creates a harmonious effect. Kolb (1990: 179) expresses the dilemma: "We care how what we build relates to what is around, but we cannot rely on some secret essence or unified spirit of the locality.". The quality valued in design and development in historic urban contexts is respect for that context. It is, however, necessary to see through the formal appearance and consider the experience of the place - places have physical (spatial and visual), socio-cultural and economic dimensions. The key design question - "What kind of place has been created?"

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## **TRANSFORMATION**

Moderator: Aykut Karaman

Urban Design Competitions: The Context Makes the Design Guidelines

Sertaç Erten, Devrim Çimen

Renewal Design Centred on Local Identity: The Case of a Dismissed Manufacturing Architecture Erminia Attaianese, Gabriella Duca, Gabriella De Margheriti

Cultural Identity Concern during the Process of Urban Transformation

Tuğba Kiper, Pınar Köylü

## URBAN DESIGN COMPETITIONS: THE CONTEXT MAKES THE DESIGN GUIDELINES

Sertaç ERTEN, Devrim ÇİMEN

SekizArtı Architecture and Urban Design

#### **ABSTRACT**

Urban design competitions are very important platforms regarding their contributions to creative thinking and exploration of innovative ideas. Most of the time, competitions are based on specific problems that belong specifically to that area and participants are expected to offer ideas to that situation. This specificity is "the context", which is in general defined in the booklets of urban design project competitions. However, the interpretation of the context differs from one group of participants to the other. Different approaches and interpretations will change the representation of that context.

This paper will basically ask what this context is; what components it has; what is the difference between basic design that refers to space and urban design that refers to place; and how architecture and urban design differ from each other in terms of context. The last question is that whether it is possible to compose a set of design guidelines for urban design projects in order to represent proper interpretations of the context.

**Keywords:** Urban design, Urban design competitions, Context, Design guidelines

#### INTRODUCTION

The paper is structured in two parts. In order to develop a conceptual framework to the questions defined in the abstract; the *concept of context* in urban design competitions will be reviewed in the <u>first</u> part. Discussions will be held on the relationship between basic design and urban design, description of context in urban design and architecture, and grouping of scales of contextual frameworks which can lead an urban design competition project.

The <u>second</u> part will be on how authors use the contextual frameworks in competitions and how they compose their design guidelines in accordance with the context of the given site. Experiences of the authors in urban design competitions will be presented in this respect. The study will cover the period 2001-2007, the time that the authors actively participated in eleven competitions, and won nine prizes, and have developed a sensation for the contexts of project sites. The paper will analyze

some of these urban design competitions and the author's contextual solutions to specific problems, underlying how they have re-formulated design guidelines each time in accordance to the context of the project site.

#### PART 1-HOW TO DEFINE THE CONTEXT IN URBAN DESIGN COMPETITIONS?

Urban design is mostly defined by planners as a field that focuses on detailed aspects of urban planning- like pedestrianisation, townscape/streetscape studies...etc. Architects on the other hand, think that urban design is a larger extension of architecture, while landscape architects convince that landscape architecture is urban design (Greed 1998). Although each definition has a grain of truth, urban design is not only dealing with physical but also social dimensions of the society. In our understanding, urban design is a field that makes *relations*, and that connects *solids and voids*, that draws a broader vision for a physical environment and makes the spatialisation of this vision. Despite that urban design has it roots in basic design, there is a significant importance between the two: the context.

## Basic design and urban design: "Context" makes the difference

Basic design is in its very essence the knowledge of the relationship between the solid and void, figure and ground. Many art branches like painting, sculpture have their foundations on this knowledge. It is the *abstract space*, in which composition, balance, distribution gets importance. The main difference between basic design and urban design lies in the context, which is the principal element of *relative space*. Context can be defined as the character of the natural or built environment created by the *land*, *topography*, *natural features*, *buildings*, *land-use* types, *activities* on streets and a broader area created by the surrounding neighbourhood or district. The term *genius loci* can be used in order to refer to the context. In the Roman mythology, *genius loci* is the protective spirit of a place.

## Urban design competitions: Three contextual scales proposed

When we review booklets of national urban design competitions that are prepared by the jury that is a composition of academics and professionals from architecture, landscape design and city planning, we can suggest that there are mainly three scales of context and three main aspects that structure these scales (See Table 1). Depending on the scale and content of the competition project, the weight of these aspects and scale of context vary. Nevertheless, competition booklets draw the main framework for competitors. However, competitors can enrich the drawn context of the project site. The jury in fact expects such contributions from participants in evaluating the contextual setting of the site.

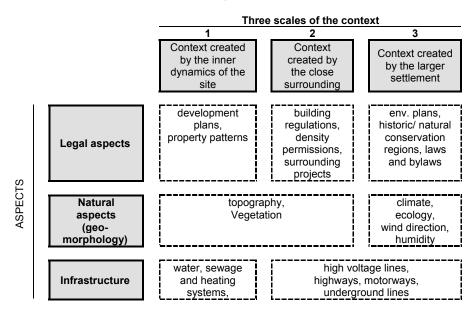
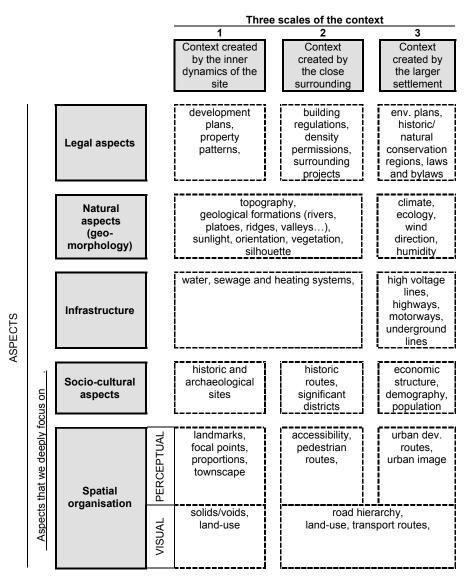


Table 1. The context drawn in urban design competition booklets.

### PART 2 - HOW WE INTERPRET CONTEXT IN URBAN DESIGN COMPETITIONS?

Every group of designers produces different approaches. *Our approach* in urban design competitions follows this sequence: We <u>first</u> go deep through the booklet in order to understand the main reason behind the competition. <u>Second</u>, we analyse the main contextual framework (see table 1) that is drawn by the jury. <u>Third</u>, we make a deep sightseeing, observing spatial characteristics, and making social analyses via conversations with local people.

Table 2. Our interpretation of context in competitions. In addition to the given contextual framework by the booklet of the competition, we deeply focus on spatial organisation and socio-cultural aspects of the given site.



Then, when we back from the site, we start to develop scenarios for our proposal. Before designing, we first re-organise the relations of the project site with its surrounding in order to put the project in its right position. It is not only a matter of drawing/ designing for us in the first sense, it is a matter of developing a set of

relationships. This forces us to use our basic design abilities, which underline relations among things, objects, shapes, figures and grounds. We absolutely agree on Gestalt theory, which claims that "the whole is different from the sum of its parts". So our approach seems to go from a broader scale to a deeper focus on the site (from 3<sup>rd</sup> to 1<sup>st</sup> scale of context). However, this is a grift and non-hierarchical process, within which there is a continuous feed-back mechanism. Nevertheless, the upperscale scenario is always dominant and when it is strong enough and inner consistencies are drawn in accordance to this scenario, then the project will have a right approach to the context of the site.

Table 2 is a summary of the set of design guidelines that we generally set up our competition projects. The first three aspects (legal, natural, infrastructural aspects) are generally given in the competition booklets. We always try to enrich these aspects (like analysing silhouette, orientation) and add new aspects like *spatial organisation* (which we generally analyse as visual and perceptual values) and *socio-cultural aspects*.



Figure 1. Selçuk / Pananos Beach Urban Design and Architecture Competition (1<sup>st</sup> Prize). We started from a 1/25.000 scale (seen in top left) in order to link the beach to the city of Selçuk, which would strength the use of the area by the inhabitants.

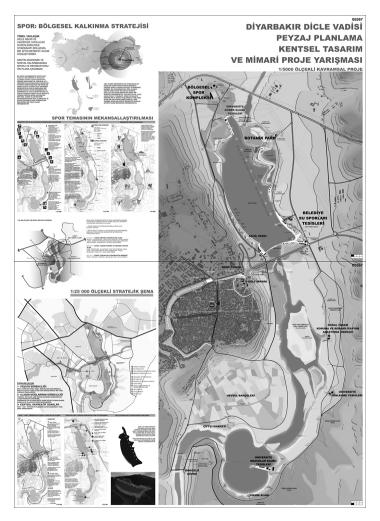


Figure 2. Diyarbakır / Dicle Valley Urban Design and Architecture Competition (1<sup>st</sup> Prize). We started from a very broad scale, from Turkey map seen in top left, in order to write a scenario for the city of Diyarbakır in national scale. We claimed that Dicle Valley would re-shape the socio-economic face of the city.

Figures 1,2,3 and 4 shows our competition projects within which we had an attempt to develop solutions to the contexts of project sites. We abstain from repeating the same spatial organisations to each site, instead we add "place" to our basic design knowledge. If we only use basic design rules, that are basically continuity, contrast, balance, similarity and proximity, then we come up with similar spatial organisations in our projects. Therefore, we try to understand the context of the site, which provides us to develop contextual solutions in urban design competitions.

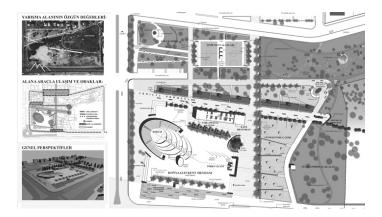


Figure 3. Antalya / Konyaaltı City Square Competition (2<sup>nd</sup> Prize). We underlined social needs and climate aspects of the site, and we designed evening/summer nights promenades which were supported with small-scale tea-houses. We also took into the consideration the Toros mountains perspective, the existing old and magnificent tree, the rocks specific to the site.



Figure 4. Bursa / Kızyakup Urban Park Competition (3<sup>rd</sup> Mension). Our approach in the project is to observe main routes used by the local inhabitants, which has shaped the route of the main promenade of the park (seen in blue dots in the upper image).

### CONCLUSION

The paper tried to draw a framework for the fundamental components of "context". These components certainly guide urban designers. The paper will claim that the proper interpretations of the context with proper questioning of the urban problem will lead to success in urban design practice and in project competitions. The context makes its own design guidelines specific to that place.

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## RENEWAL DESIGN CENTRED ON LOCAL IDENTITY: THE CASE OF A DISMISSED MANUFACTURING ARCHITECTURE

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#### **ABSTRACT**

Referring to architecture identity could represent the set of qualities and characteristics that we can consider permanent features of the buildings or places, able to resist to the passing time changes.

In this vision built environment can be seen as a system of values expressing his *sense* to the people. They consist in cultural-perceptive values, morpho-dimensional, constructive and materials related aspects. If we consider local identity values as resources expressed by built environment, renewal design could be seen as a process finalized to identify and use them in order to assure adequate use conditions of existing buildings respecting their architectural means.

The aim of the paper is to present a renewal design methodology of existing buildings based of preservation of local identity, expressed by built environment values and local users needs and behaviours. Analysis steps to identify local identity different components of buildings and places will be showed together with evaluation criteria to assess their potentiality in the reuse of the old architectures.

Presented methodology is applied to a case study concerning the renewal design of a concrete structure dismissed manufacturing architecture in Naples.

**Keywords:** Architectural identity, Preservation, User needs, Design methodology

## RENEWAL DESIGN CHARACTERISTICS AND FINALITIES

In a technological approach renewal design can be defined as the whole of the operation and activities oriented to control built environment preservation and transformative process, preserving documents, values and resources but also responding to the new requirements coming from new behaviours.

The word "design" itself comes from the latin "de-signare" refers to the process of originating and developing a plan for a product, structure, or component but

indicating a separation, a process always connected to something still existing. To conception of built environment as a static entity we can substitute it with the dynamic vision coming from the idea of generative system, where relationships between the different components are regenerated by a sort of active factor.

Renewal design has to be considered as a process finalized to preserve buildings and environment combining conservative and innovative actions, not only in relation to architectural heritage but referred to the whole existing settlement.

To get this goal renewal design has to be referred rules founded on the sense of memory, in order to assure protection of local identity not only in terms of materials preservation but as a process oriented to maintain the links between human and their settlement.

Building renewal design concerns the necessity to re-use, in terms of "to use again" all available resources to assure adequate conditions of utilization but respectful of architectonic system specificities.

#### **BUILT ENVIRONMENT AS SYSTEM OF VALUES**

In philosophy, identity is whatever makes an entity definable and recognizable, in terms of possessing a set of qualities or characteristics that distinguish it from entities of a different type. Or, in other terms, identity is whatever makes something the same or different. Expressing the whole of characteristics data able to understand a particular realty, identity is the way in which something is detectable and recognizable in relation to all the others.

Referring to architecture identity could represent the set of qualities and characteristics that we can consider permanent features of the buildings or places, able to resist to the passing time changes.

In this vision built environment can be seen as a system of values consisting in cultural-perceptive values, morpho-dimensional, constructive and materials related aspects.

Cultural-perceptive values are the mostly psychological dimensions which can be used to describe historical, aesthetical and psychological elements characterizing building use, able to affect its identity perception by inhabitants. They concern the history of the buildings or places, their strengthen image and all the intangible conscious and unconscious connections that people establish with the living environment. An important role is played by the consideration of model of use expressing the original and intrinsic utilization sense of the built environment by users.

Constructive and materials related values concern materials, structures and traditional technical systems of buildings, which protection can assure physical and technological maintenance of building. Both these aspects concern the concept of "material culture" and refer to both the psychological role, the meaning, that all physical objects in the environment have for people in a particular culture and to the

range of manufactured objects that are typical within a socio-culture and form an essential part of cultural identity.

Morpho-dimensional values are related to the shape and form of buildings in order to preserve dimensions, volumes and features, and all the elements characterizing spatial qualities of buildings in terms of size relationships, geometrical proportions and conformations of the single rooms and of the building in the whole.

## A DESIGN METHODOLOGY FOR EXISTING BUILDINGS RENEWAL COMBINING PRESERVATION OF LOCAL IDENTITY AND QUALITY OF USE

Main scope of the proposed methodology is to provide some tool for built environment knowledge in a system-performance based approach, shaping a design strategy respectful buildings' potentiality and vocation and assuring the quality of use by building users.

Building preservation depends on the correspondence between two group of elements: available technical performances first, considered as resources, and users' needs required by each function, on the other hand, in order to allow adequate activities accomplishment for people living and working in a building.

The integrated approach to issues coming from both users needs and architectural identity preservation calls for a renewal process model allowing the integration of all heterogeneous aspects concurring to renewal scenarios. This approach assigns a key role to users expectancies towards built environment, interpreting buildings as human-activities interface. Moreover, it applies usability framework to model an user-oriented design methodology able to lead to renewal interventions achieving a twofold goal: to optimize building available resources creating a working and living environment best fitting to users needs and, on the other hand, to preserve identity values of the built environment.

In order to perform renewal designs matching the architecture preservation goal, an approach centred on building identity appears as truly necessary. Physical characters (e.g. shapes, materials, dimensions, etc.) and immaterial characters, as aesthetics and history, can be considered as resources to be employed, empowering strategies that optimizes actual building performances for users requirement satisfaction. Therefore, knowledge oriented to the assessment of a potential model of use for a building should be developed along two parallel line, one oriented to detect all these characters defining the building identity, the other one aimed to understand if and how the renewing building is/should be able to support users in their tasks accomplishment, without cancelling its identity. Potentialities of building identity adequacy to dwelled functions can be clarified knowing and understanding its dimensional, morphological and environmental aspects by mean of their specific connotations related to:

- perceptive-cultural values, that are the whole of historical, aesthetical and psychological aspects related to built environment
- morphological values, with which we consider the preservation of geometrical and dimensional characters

- material-constructive values, including all necessary condition for the preservation of building systems and workcraft's material qualities.

The framework of specific connotation investigated following criteria above will make possible to find out building uses/functions vocation and aptitudes.

The proposed methodology for existing buildings renewal is founded on the four following steps:

Step 1: analysis of identity characters, in order to organize the built environment knowledge and find out the data set to be input in the renewal design process;

Step 2: identification of constraints and resources for renewal design coming from the built environment knowledge;

Step 3: survey of the use requirements and needs, and clarification of the whole of "goals of use";

Step 4: Assessment of constraints and resources in relation to goals of use and setting of design choices

A key step of the proposed methodology is the first one, since the appropriate consideration in the design process of the built environment values descends mainly on first step outcomes, that affect the suitability and the general architectural quality of renewal design choices. Built environment aspects investigated in this design stage are material and constructive aspects, layout aspects, microclimatic and physical aspects and, finally, aspects distinguishing traditional image and use.

The analysis of these aspects allows to find out the key architectural elements marking the site identity, as elements being a sign of traditional functions during the time, recurring elements in traditional construction culture, significantly valuable elements with regard to the context and architectural elements arrived unchanged at present days.

The conclusion of the first step offers all data necessary for the second step, when the system of unchangeable and changeable aspects of built environment, that could represent a constraint or a resource during next stages of the design process, is defined.

Also the third step of our renewal design methodology is a basic one. In fact, it defines the whole of performances required to the existing building by activities dwelled in it. This means that, in this design phase, building usability requirements are defined as well as "goal of use" are set in relation to human actions that shall be supported by the renewed building. In that way, safety, health and human supportiveness become primary instances which the preservation-transformation balance is moulded around.

"Goals of use" are expressed by mean of technological and spatial requirements lists, with correspondent indicators and their acceptability range values. On these data actual performances of renovating building can be evaluated and the nature of

inhabitants-spaces interaction can be clarified to better understand the human component of a place identity.

## RENEWAL DESIGN OF A DISMISSED MANUFACTURING ARCHITECTURE: A CASE STUDY

## **Existing Building: History and Geographical Site**

The renewal area is located in the east side of the city of Naples, in a dismissed industrial district, showing now days a deep divergence between the high area width and the low people density. The intention to design architectural interventions combining industrial and residential development was planned in this area since 1870, but was realized without the respect of an organic improvement. This situation produced during the time a dissemination of uncontrolled constructions contributing to give, until now, a general sense of confusion. On the other hand the area expresses a strong sense of memory related to the industrial nature of its function. The localization of many firms gave to this part of the city the image and sense of a productivity place, where manufactured architectures with residential buildings of workers where sited together. The studied building is located in a dismissed chemical plant which rule was very important for economy of the city until sixties of last century.

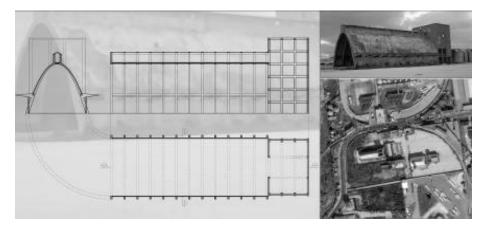


Figure 1. Site and state of the building

#### ANALYSIS OF IDENTITY CHARACTERS

The study of identity characters has been carried out observing the building in the four perspectives proposed with the methodology, that are material and constructive aspects, layout aspects, microclimatic, physical and environmental aspects and, finally, aspects distinguishing traditional image and use. For each of elements

category bringing a testimony of the building identity, key architectural elements were highlighted, as in tables that follow.

ELEMENTS BEING A SIGN OF TRADITIONAL FUNCTIONS DURING THE TIME				
material and constructive	layout	microclimatic, physical and environmental	traditional image and use	
Frame structure, for a free plan suitable for an industrial function Parabolic vault, assuring a bigger internal spaces height and width Reinforced concrete buttress, with variable section "Walkable" central stage, crossing the building, for machinery manoeuvring	<ul> <li>Free plan and free internal partitions</li> <li>Two side by side volumes, with two different shapes for two different functions: production appurtenances.</li> </ul>	The continuous brick walls don't' allow the natural light to lighten the inside of the factory  External walls have an interruption for air circulation and pollutants outflow.	The shape of cross section is typical of this kind of industrial buildings  The shape of cross section is typical of this kind of industrial buildings  The shape of cross section is typical of the section is the section is typical of the section is typical of the section is typical of the section is typical of the section is typical of the section is typical of the section is typical of the section is typical of the section is typical of the section is typical of the section is the section is the section is typical of the section is the section is the section is the section is the section is the section is the section is the section is the section is the section is the section is the section is the section is the section is the section is the section is the sec	

RECURRING ELEMENTS IN TRADITIONAL CONSTRUCTION CULTURE			
material and	layout	microclimatic, physical	traditional
constructive		and environmental	image and use
<ul> <li>Reinforced concrete for retaining wall</li> <li>Continuous brick external walls</li> <li>Plastered exteriors</li> </ul>	<ul> <li>"Walkable" central stage, crossing the building, for machinery manoeuvring</li> </ul>	Dark inside     Not reversible or dismissible constructive technique	White plastered exterior, with visible not plastered concrete ribs

SIGNIFICANTLY VALUABLE ELEMENTS WITH REGARD TO THE CONTEXT				
material and constructive	layout	microclimatic, physical and environmental	traditional image and use	
<ul> <li>Parabolic reinforced ribs, particularly wide and grandiose</li> <li>Big reinforced concrete buttresses, with variable section</li> </ul>	■ Free and wide plan	Very good ventilation, due to the break in the external walls	<ul> <li>General architectural quality higher than the surrounding industrial hangar.</li> </ul>	

ARCHİTECTURAL ELEMENTS ARRİVED UNCHANGED AT PRESENT DAYS			
material and constructive	layout	microclimatic, physical and environmental	traditional image and use
Retaining concrete structure     External brick walls	Original     volume and     plan shared in     two     distinguishable     parts	Original lighting and ventilation systems and performances	<ul><li>Colours</li><li>Volume</li></ul>

### Identification of Constraints and Resources for Renewal Design

After having focused building knowledge on architectural aspects characterizing building identity, these aspects have been evaluated as assets system for the renewal design or as a constraint to be considered in design solutions.

#### Resources detected are:

- the availability of a wide space, useful for public functions
- a symbolic relationship between internal and external spaces
- the possibility to move in the building emphasizing all the three dimensions, thanks to internal stages and external buttresses
- the elegance and evocativeness of the architectural volume
- the availability of two structures, very well differentiated making possible to create differentiated spaces
- the internal stages can be used for technical functions, without grooving the volume integrity and "purity"
- the presence of a "secondary" space makes available a spaces for vertical connections improvement

- the good ventilation
- the maintenance of concrete structures could reduce the environmental impact of their dismissing
- integrity of structures and walls require light and few expensive restoration intervention.

On the other side, constraints whose respect will allow the identity preservation in building transformation for the new use are:

- weak aptitude of the concrete structure to be modified
- external plaster homogeneity doesn't give the appropriate emphasis to the volume character of the building
- dark inside requires artificial lighting
- the original "plastered" image of the exteriors is less "fascinating" than the signs left by the time with plaster lack and visible brick wall.

## Survey of the Use Requirements and Needs, and Clarification of the Whole of "Goals of Use"

Main finality of the renewal design is focused on reuse of the manufacturing building to allocate a museum of the work. The decision to assign this function to the building rises from the necessity to respect the nature of the place characterized by the manufacturing activities for a long time. Human work, distinguishing this kind of buildings, has given it a sacred symbolization, with a permanent sense of identity to the city inhabitants. The building, on the other hand, expresses an evident spiritual dimension, suggested by a rising shape and a wide distributive freedom. These elements give to the building a clear vocation to assign it a public utility, reinforced by the addition of a new, not regular, cylindrical volume, which shape reflects the oil container still present in the zone. The fruition is planned respecting bipartition of the building, shaped by the parabolic vaulted hall and the prismatic element used for stairs, elevator and services, that allows the communication with the new cylindrical hall. Starting from the beginning of the hall we can walk along the ground floor or do it upstairs, on the balustrade walk path realized using the external buttress as well as in the inside, on the crossing stages connecting the two vault sides.

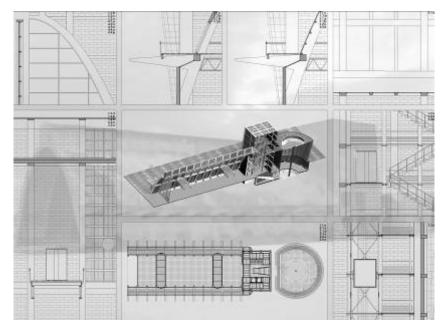


Figure 2. Overall view of the renovated building and technological details

## The Design Solution: The Renewed Building

The architectural design proposes a wide glass surface to close the shortest façade of the hall, assuring natural lighting. Moreover, the solidity and weight of the brick-concrete building is emphasized by the introduction of reticular steel elements, fully reversible; homogeneity and opacity of bricks are balanced by glass brightness and colour and transparency of micro-holed laminate copper, replacing brick wall in five of the spans.

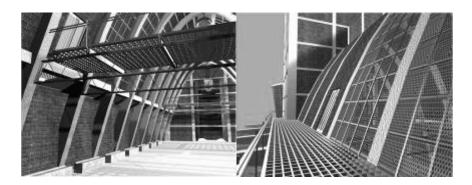


Figure 3. Inside and outside walking paths

Stairs and raised walking path are all self-retaining and transparent because in glass or mesh, leaving completely intact the original structural behavior of the building and fully perceivable its volumes.

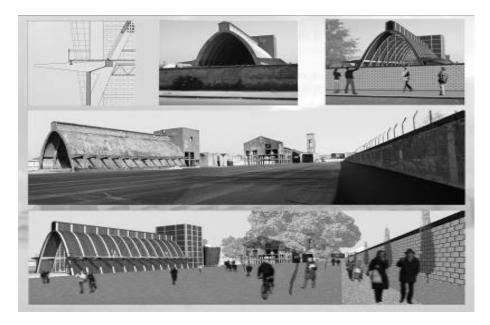


Figure 4. General rendering of the architectural project

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# CULTURAL IDENTITY CONCERN DURING THE PROCESS OF URBAN TRANSFORMATION

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#### **ABSTRACT**

Urban transformation projects, which come under many names including reviving city centers, restoring historical buildings for the public, bring about significant changes on the face of a city. Rather than taking into account as integrated projects that aim public service, urban transformation projects are fuelled by marketing and conducted by commercial and partitioned considerations. During this transformation, there is a growing concern about that cities transform into a single model with progressively similar physical aspects and public's life style. Therefore, there is a danger that cities loose their unique local, historical and cultural values. The identity of a city is hidden in its historical and cultural values.

In preparation of urban transformation projects, an important point is that cultural identity characteristics reflect natural and cultural environments, or existing environments reflect cultural identity. Only then, local identity comes forward and cities with different characters can be constructed.

The answer of the question "how a city should be planned as a place for living" lies behind the demands and the potential of local population. Hence, this study has been conducted so as to point the necessity for the significance, preservation and sustainability of cultural identity. The study area was the city of Tekirdağ due to its potential for natural, cultural and historical landscape values.

Surveys have been conducted on the residents of Tekirdağ to determine their level of consciousness and expectations on cultural identity. How the concept of cultural identity should be evaluated regarding city image, visual quality and ecological balance in urban transformation projects have been asked. Completely randomly selected volunteers have been personally interviewed for the study.

This study demonstrates the significance of the concept of city identity on Tekirdağ sample with the users' expectations prior to commending the planning process of city transformation. This study also emphasized, for other cities, city transformation practices in which the concept of identity came forward for constructing ecologically and aesthetically balanced, healthy, identity-preserved cities.

Keywords: Cultural identity, Urban transformation, Tekirdağ

#### INTRODUCTION

Loss of cultural-historical and natural resources is an important destruction not only for today, but also for future. However, it is our duty to conserve and transmit these assets so that they will be sustainable. These environmental values, whose subsistence is threatened by the development of urbanization and industrialization, are the products of a city's social, economic and technological data and values.

The location, the physical elements and the people living within a place constitute the identity of that particular place (Köylü 2003). Thus, streets, open spaces, topography, green spaces, street furniture, people and social environment constitute identity of cities. These environmental factors form uniqueness of a settlement, thus support urban identity of that particular settlement. Urban identity factors, being related to either natural environments, or cultural environments, are set up within time and they witness particular periods (Suher, 2005). Thus, cities gain importance and richness where the past and present meets, and they receive their identities from their historical developments (Altınoluk 1998).

Contemporary technology and techniques substitute traditional materials and techniques at today's newly created urban districts. Thus, environments that reflect the cultural structure of a society, are replaced by monotonous and complex environments. Local-cultural living styles of cities become anonymous by the rise of standard consumer society and the quality of living places is diminished. Hence, residents become unfamiliar and insensitive to where they live (Şerefhanoğlu and Yenen 1993; Velioğlu and Tavşan 1993).

Evolution and progress are unavoidable for each society and for the products being manifested. Yet, this evolution should be compatible with the society, be embraced by that society, and sustain the attributes of that particular society. But, the most important of them all is that, it should not abandon cultural factors (Velioğlu and Tavşan 1993). At this point, it is an important concept that, we need to sustain urban identities of settlements by preserving their natural and cultural values.

In this regard, tendencies towards localization have been increasing. As a result, local and regional priorities, that have been gaining importance in the agenda of planning and conservation acts, have evoked pursuits that aim participation of residents as a partner or an actor in the process, not just as recipients of that project or program. That is, the concept of "participation" is not only limited to searching out the thoughts of residents' and involving them in the practices. Rather, participation is an active process, in which the recipients or the clients orient the course and the practice of a development project, by their incomes and income distribution, as well as by certain values (Anonymous 1995; Anonymous 1998).

Different cultures constitute cities. Within cities where differences, conflicts and similarities occur, local residents' definitions of the 'city' become a key factor. Developing the meaning of a city from the residents' viewpoints in urban transformation projects, brings-about not only physical planning, but also socioeconomic planning. In this regard, the aim of this paper is to determine the thoughts and the expectations of the residents of Tekirdağ within the frame of cultural identity.

# The Concept of Urban Transformation

Urban transformation projects are realized for various objectives. First, urban transformation projects are significant tools for the renewal of desolated public spaces. The urban transformation project for the Ruhr Area in Germany is the most well-known case. In this area, old factories have been transformed to museums, while the factory estate has been transformed to a park.

Second, urban transformation projects manipulate rebuilding of districts, dense with historical buildings. Modernism and its results on life styles, have initiated the desolation of historical sites. Besides, the pattern of historical sites is deteriorated and even disappeared because of being very close to places where the urban interest rate is maximized.

Practices intended for conservation and sustenance within urban spaces that have to be conserved, involves two processes conflicting with each other. Both renovation efforts that aim to accommodate economical alterations and its results, and conservation practices, that aim to conserve buildings, take part simultaneously within urban spaces. Thus, urban conservation plans and practices seek for ways for adapting to social and economical alterations, as well as involving management of alterations and consistencies that prevent deterioration of the character of a particular place (Yücel 2005).

Third, urban transformation projects are implemented at squatter areas that are constructed after intensive migration. As a result of increased rates and sociological factors, people living in those areas cannot accommodate themselves to places where they live and seek for new neighborhoods.

Fourth group of urban transformation projects include those that are implemented at places which have faced or are likely to face with natural disasters. These types of projects mostly involve appraisal of land uses as open-green spaces.

Urban transformation projects emerge with an objective which integrates these places with the rest of the city, and which develops rationale and appropriate land use. By these projects, certain areas within cities are renovated, thus rates are increased at those neighborhoods. However, cities are not places just for accommodating. Beyond this, cities are places where the society is presented. Hence, it should not be forgotten that, urban transformation projects realize not only qualified transformations of physical settings, but also transformation of value systems and culture of societies.

# **MATERIALS AND METHOD**

#### Materials

City center of Tekirdağ is the main material of this research. Tekirdağ has been chosen as the case study area since it possesses historical, cultural and natural characteristics, located behind the periphery of İstanbul.

Tekirdağ is located in the Thracian part of the Marmara Region. On the north the province of Kırklareli, on the northeast The Black Sea, on the east the province of Istanbul, on the south the Marmara Sea, on the southwest the province of Çanakkale, and on the west the province of Edirne border the province of Tekirdağ. The city of Tekirdağ covers an area of 1033 km² (Dokumacı 2001). According to 2000 Census of Population, the population of the province is 623.591; whereas, the population of the central district is 142.105. The population growth rate of the city center of Tekirdağ is 28.7%.

Migrations, invasions, trade and cultural connections have linked Europe and Anatolia over Thrace. Thrace has a strategic position being on the cross-roads of sea-lanes and highways. Since its climate and soil characteristics are suitable for agriculture, various civilizations have inhabited within the region (Dokumacı 2001).

By the decision of High Council of Immovable Antiquities and Monuments, dated 09.02.1980 and numbered 11768, the central district of Tekirdağ was proclaimed as an "Urban Conservation Area". Although, the number of historical buildings which were recognized as historical assets was 365 at this time, by the year 1987, the number of registered buildings as historical assets, was diminished to 260 because of lack of consciousness for conservation and lack of financial incomes.

Natural and cultural landscape values that constitute the city identity of Tekirdağ are shown in Table 1.

Other materials of this study include residents older than 18 years from various socioeconomic classes, questionnaires used for the determination of the residents' tendencies towards cultural identity, and literature regarding the topic of the study.

Table 1. Natural and cultural landscape values that constitute the city identity of Tekirdağ

Natural landscape factors	Cultural landscape factors	
Diversity in agricultural products	Examples of civil architecture	
(sunflower, grape, cherry, olive)	Significant buildings (Rakoçzi Museum,	
Climate allowing production of regional	Rüstempaşa Mosque, Archaeology and Ethnography Museum, fountains vb.)	
products	Ethnography Museum, fountains vb.)	
Soil	Local living styles	
Sea and seaside	Traditional productions (vine-growing,	
	fishing, wine-making)	
	Traditional cuisine (meatballs, cheese	
	halvah)	
	Regional products (wine, rakı)	

#### Method

This study constitutes of four stages. First, the scope and method of the study have been determined. Second, literature, regarding the subject of the study and the study area, has been reviewed. Third, survey research has been conducted by using questionnaires. And finally, the results of the survey have been evaluated.

Questionnaire survey has been conducted by using standard forms in this study. The formula used by Akten (2000) and Mansuroğlu (2006) has been applied for the determination of sample size (Table 2).

Table 2. Formula for the determination of sample size

n: Z2 NPQ/N2D+Z2PQ

n: 1.96x142.1051.96x0.95x0.05/142.105x0.05x0.05+1.96x1.96x0.95x0.05

n: 73

n: Sample size

**Z**: Confidence coefficient

**P:** Probability of the availability of the existence of the characteristic to be calculated in the subject group

**Q**: 1-P

**N:** Size of the main subject group (Population of the central district of Tekirdağ 142.105)

**D:** tolerance for sampling error (sampling error of 5% has been accepted for this study)

The number of the subjects has been determined by considering the population of the study area within 95% confidence level. A minimum of 73 subjects were determined to respond to questionnaires. Thus, 80 people, older than 18 years, from the main subject group were selected by simple randomization.

The questionnaire included a battery of sample identification data; such as age, gender, marital status, education, the number of children, and the length of residence in the city; respondents' perceptions of urban transformation, their awarenesses and preferences for the natural and the cultural resources of Tekirdağ. Participants were asked to answer 10 close-ended questions. Questionnaires were evaluated by using "SPSS-14 for Windows".

# **FINDINGS AND DISCUSSION**

As mentioned before, 80 people (48,8% male and 51,2% female) participated to the questionnaire survey. 55% of the participants is married, and 45% is single. 52,5% of the married respondents does not have children, whereas 15% of the married has 3 and more than 3 children. Distribution of the respondents according to age groups, education, professions and the length of residence in Tekirdağ is tabulated in Table3.

Table 3. Socio-economic characteristics of the participants

Age gı %	roups	Education	%	Profession %		Length of residence Tekirdağ	
18- 29	37,5	Primary school	13,8	Professional occupation	31,3	1-5 years	53,8
30- 39	43,8	High school	45,0	Housewife	13,8	6-10 years	12,5
40- 49	13,8	University, masters,		Student	33,8	11 years+	33,8
50 +	5,0	doctorate	41,3	Co- professional occupation	21,3		33,0
Total	100	Total	100,0	Total	100,0	Total	100,0

Table 4 demonstrates the distribution of the participants' perceptions for urban transformation. 42,6% of the participants defines urban transformation as standard planning practices fitting for modern urban profile for all cities.

Table 4. Perceptions of urban transformation

	Frequency	Percentage %
Practices involving transformation of squatter areas into urbanized areas	15	18,8
Renovation of traditional and historical buildings akin to their prototypes	8	10,0
Practices involving adaptation of traditional and historical buildings to modern city life	23	28,8
Standard planning practices fitting for modern urban profile for all cities	33	42,6
Total	80	100,0

Participants mostly prefer seeing sea and seaside as natural resources (mentioned by 51,3%), and old Tekirdağ houses, which are examples of civil architecture, as cultural resources (mentioned by 42,5%) (Tables 5,6).

Table 5. Distribution of the participants' preferences for natural resources

	Frequency	Percentag e %
Sea and seaside	41	51,3
Vegetation comprising trees and bushes	18	22,5
Agricultural lands where vegetables adapting to the region are grown	7	8,8
Orchards and vineyards where cherry, olive, grape are grown	14	17,5
Total	80	2,5

Table 6. Distribution of the participants' preferences for cultural resources

	Frequency	Percentag e %
Old Tekirdağ houses which are examples of traditional civil architecture	34	42,5
Small businesses serving regional foods	15	18,8
Traditional pavements such as cobbles	12	15,0
Traditional production methods such as carpet weaving, fishing, wine-making, silk culture	19	23,8
Total	80	100,0

Respondents' thoughts about natural and cultural resources that distinguish Tekirdağ from other settlements are sea (mentioned by 42,5%) and wine and rakı (mentioned by 53,8%) (Tables 7, 8).

Table 7. Distribution of natural resources that distinguish Tekirdağ from other settlements

	Frequency	Percenta ge %
Sea	34	42,5
Vegetation	11	13,8
Agricultural products such as sunflower, grape, cherry, olive	28	35,1
Topography	7	8,8
Total	80	100,0

Table 8. Distribution of cultural resources that distinguish Tekirdağ from other settlements

	Frequency	Percenta ge %
Wine and rakı	43	53,8
Traditional houses	19	23,8
Significant buildings (Rüstem Paşa Mosque, Old Mosque, Middle Mosque, fountains vb.)		5,0
Tekirdağ meatballs and cheese halvah	į	11,3
Cherry festival	Į.	6,3
Total		
	80	100,0

Participants were asked whether or not the advantages of natural and cultural resources were made use of good-enough in the present situation. 87,6% of the participants thinks that the natural resources, and 91,3% thinks that the cultural resources are not made use of good-enough (Table 9).

Table 9. Distribution of participants' thoughts for the appreciation of natural and cultural resources within the study area

	Frequency	Percentage%
Do you think the natural resources are	e made use of good	l-enough?
Yes		
	10	12,6
No		
	70	87,6
Do you think the cultural resources ar	e made use of goo	d-enough?
Yes	7	
	,	8,8
No	73	91,3
Total	80	100,0

When the present situation is considered, the participants mostly worry about the deterioration of the old Tekirdağ houses (mentioned by 30%). Other choices, are substantially close to this answer (Table 10).

Table 10. Distribution of the characteristics that the participants mostly worry about

	Frequency	Percentag e %
Desolated spaces where the deteriorated traditional Tekirdağ houses are found	24	30,0
Second houses incompatible with the coast	22	27,5
Residential areas incompatible with the historical areas and also with each other	21	26,3
Lack of green areas in Tekirdağ	11	13,8
Lack of public spaces (parking lots, social facilities, resting areas, etc.)	2	2,5
Total	80	100,0

When the factors for the availability of success in planning practices are considered, 'determination of the natural and cultural resources of the province and arrangement of places that make use of these resources' was mentioned by 63,8% of the participants. 'Preservation of the present situation' was the least answered choice (mentioned by 13,8%) (Table 11).

Table 11. Distribution of the factors for the availability of success in planning practices

	Frequency	Percentage %
Active participation of the residents	29	36,3
Preservation of the present situation	11	13,8
Determination of the natural and cultural resources of the province and arrangement of places that make use of these resources	51	63,8
Creation of open-green spaces by using living and non-living landscape elements	38	47,5

Results related to the questionnaire survey conducted at the study area can be summarized as follows:

Participants' definition of urban transformation as 'standard planning practices convenient for modern urban profile for all cities' (mentioned by 42,6%) suggests that the plans being implemented at the present time mostly consider only this aspect of urban transformation. No matter what the objective of urban transformation projects is, they do not reflect the city identity. Standardized and similar plans of urban transformation projects confirm that the concept of urban transformation has not been well-understood yet. That's why, only a small percent of participants (10%) stated that the urban transformation projects involve renovation of traditional and historical buildings akin to their prototypes.

- Sea is the most striking natural resource (mentioned by 42,5%), whereas
  wine and rakı are the most striking cultural resources (mentioned by 53.8%).
  These factors need extra consideration during the process of urban
  transformation in Tekirdağ.
- A high percentage of participants think that natural and cultural resources within the study area are not appreciated good-enough. In terms of natural resources the percentage is 87,6%, whereas in terms of cultural resources it is 91,3%. This means, both natural and cultural resources do not reflect the city identity.
- Participants are bothered about the samples of civil architecture in Tekirdağ, as the old houses are deteriorated and spoil the image of the city. This suggests that attempts should be taken for conservation and development of old examples of civil architecture.
- Most of the residents (% 63,8) hope for determination of natural and cultural resources of the province and arrangement of places that make use of these resources. That means residents are positive for the practices that give priority to the city identity. Only small portion of the participants (%13,8) wants preservation of the present situation.

#### CONCLUSION

Urban transformation projects do not have effects only on the physical settings of cities. They have great influences on socio-economical factors as well. Demands and desires of the residents play important roles on the planning of cities. The answer of the question "how a city should be planned as a place for living?" lies behind the demands and the potential of the local population. It is essential to know the thoughts and the potential of the residents for setting up the outline of the urban transformation plans. Most of the urban transformation projects ignore the multi-purposed relations among social, cultural and psychological aspects of cities. Rather, physical settings of cities are conceived as aesthetically and financially.

As a result, clear definition of urban transformation projects, consciousness of residents, effects of socio-cultural factors and residents' thoughts will offer more realistic decisions when an urban transformation project is to be practiced in a city. The importance of professional knowledge and experience for solving the present problems and for those that will likely to occur in the future should be considered forever. It is important to awake public awareness about natural and cultural heritage potential and sustain the city identity as well.

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# **TRANSFORMATION**

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Revitalization of One of The Main Streets of Izmit

Mehtap Özbayraktar

# FUNCTIONAL TRANSFORMATION OF THE HISTORICAL PATTERN WITHIN A TOURISM-BASED DEVELOPMENT STRATEGY: CASE OF KEMALPASA STREET, ALACATI – IZMIR

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#### **ABSTRACT**

Alternative areas that satisfy the varying tourist demands have been rapidly becoming one of the components of tourism activity through the development of place-marketing and image reconstruction strategies. Alacati, located in Cesme peninsula of Izmir city, stands out as a town that became a favorite tourist destination by the beginning of 2000s and deserves to be the concern of this paper in general context. Recently, a functional transformation process is taking place in the historical core, where buildings formerly used for different purposes are integrated in urban economy as commercial units through successful restoration projects.

Kemalpasa Street, existing within the historical pattern, constitutes the focal point of the research where aforementioned transformation process is experienced the most dramatically. The street has gained a new functional identity via the characteristics transferred from the unique architectural context of the settlement and has become the most popular pedestrian space, where café, restaurants and boutique hotels are located each having specific aesthetical concerns consistent with the local spatial structuring.

On the other hand, several concerns exist relating the alterations in economic and social dimensions specifically within the historical core. The new image of the street displays an inviting character for the high-income groups while it has an externalizing effect on low-income groups. A shift in particular of user groups has taken place on the street, which once possessed a public meaning for the local people, and the new functional structuring gives the initial signs of the commercialization of public space. Consequently, this research aims at examining the characteristics of the tourism-oriented and consumption-based functional transformation that has taken place in Kemalpasa Street and the social and economic outcomes of the new image for the key constituents of the society.

**Keywords:** Tourism-based development, Place-marketing, Image reconstruction, Historical pattern, Transformation of the functional context

#### INTRODUCTION

Cities are dynamic structures evolving in time through a process of continuous change and transformation. In today's globalized world, "every place is subject to internal growth and decline cycles as well as to external shocks and forces beyond this control" (Kotler et al., 1993: 4). Growth and decline are successive and dynamic phases in the life cycle of cities which can be accelerated by sudden changes in the economic situation. However, neither growth, nor decline is reversed as well especially when a clear vision of the future continuous. Urban growth has certainly an end since it inevitably involves destructive effects. The decline of urban areas can be development exists that is accepted and actively supported by different groups of the society with a high degree of involvement. According to Smyth (1994), the vision for future development arises out of the most innovative element of recent urban development that is the process of marketing the city.

The development of appropriate strategies in dealing with the growth and decline phases has become one of the most significant issues concerning the urban management of cities. In this context, place-marketing and re-imaging processes have emerged as significant urban phenomena particularly from the post-1980 period onwards during when significant changes emerged in production and consumption patterns. In marketing their places for attracting investments, tourists and residents, cities have taken particular advantage of the changing trends in tourism and tourist preferences. During this process, alternative areas that satisfy the varying tourist demands have become one of the components of tourism activity in parallel to the place-marketing strategies and the preferences increased in favor of sustainable forms of tourism.

Essentially, such a restructuring of the urban area is mostly the outcome of a crisis faced in urban economy since each crisis and each necessity for restructuring faced in cities imply new demands for change namely transformation. Transformation, which refers to comprehensive structural changes that emerge not only in the spatial pattern of the city, but also in social structure and economic relations, has become an inevitable process for the places particularly engaged in a new economic sector through place-marketing strategies.

In this context, located in Cesme peninsula of Izmir city with a declining economy based on mainly agricultural activity until the beginning of 2000s, Alacati stands out as a town that became a favorite tourist destination in both national and international scales and deserves to be the concern of this paper in general context. Recently, Alacati has experienced a shift in its major economical activity due to the general recognition of tourism-based development strategy as a spur to economic and environmental regeneration and image reconstruction perceived as the most feasible point at which to break into the city's cycle of decline. Since then, the settlement has gone into a significant functional transformation mainly in its historical core through the formations which can be evaluated within the context of image reconstruction.

Kemalpasa Street - the main axis existing within the historical pattern, constitutes the focal point of the research as being the place where aforementioned transformation process is experienced the most dramatically. This paper initially examines the characteristics of place-marketing and image reconstruction processes emerged in

the form of elite commercialization of public space in particular of Kemalpasa Street and focuses on the social and economic outcomes of this new image for the key constituents of the society.

#### PLACE-MARKETING AND IMAGE RECONSTRUCTION

It is now explicit that in order for the cities to survive and face competition in local as well as in global scales, urban management strategies should be in a more competitive and entrepreneurial sense and they must be strategic, market-oriented and able to respond to the trend for increasing competition (Deffner and Liouris, 2005). In recent years "much of the effort expended by the regional and local development agencies established to regenerate the economic base of those cities, which have lost their traditional industries, has focused on the objective of attracting inward investment" (Paddison, 1993: 339). In realizing this objective, the concept of 'marketing of cities/places' has gained considerable attention as a means of enhancing their competitiveness and has become a leading economic activity in most of the cities.

Essentially, place-marketing and re-imaging strategies have come to the forefront of the urban agenda in the 1980s as responses to social and economic problems emerged in urban areas as a result of deindustrialization, globalization, economic restructuring and so on (Page and Hall, 2003). Since place-marketing strategies are playing an increasingly important role in the reconstruction of the image and fostering the local economy, local authorities are enthusiastic in participating in the process due to the fact that there is always the risk of economic stagnation and decline in the absence of these strategies (Kotler *et al.*, 1993).

Several definitions have been developed concerning the term 'place-marketing'. According to Page and Hall (2003: 298), "place-marketing is based on the principle that the city is a place product that can be marketed and promoted to potential customers" while Kotler *et al.* (1993: 18) emphasized the satisfaction of target markets in designing a place. The main purpose of place-marketing has been outlined by Smyth (1994: 2) as "to create strategies to promote an area or the entire city for certain activities and in some cases to 'sell' parts of the city for living, consuming and productive activities". Similarly urban imaging process aims at selling the place as a destination product for tourists and investment through the commodification of particular aspects of place that mainly focuses on place images (Page and Hall, 2003).

The restructuring of cities around tourism industry and the development of place-marketing and image reconstruction strategies have raised certain critics. Some of these critics focus on the issue of sustainability and address the question of whether this type of development can lead to sustained economic growth while some focus on the social structure addressing the question of who benefits from these developments (Shaw and Williams, 1996). Underlying these debates is the concern that place-marketing should be more than merely 'selling of places' otherwise it makes the city a product that is packaged to be sold. These debates have put forward that the marketing of places necessitates a more holistic interpretation which associates the economic promotion and development of the city with its physical and social planning

so as to produce the 'harmonious city' able to satisfy the requirements of different users, its citizens, investors and visitors (Paddison, 1993). Place-marketing strategy can achieve its goals particularly when all the citizens in the society are satisfied and all the expectations of visitors and investors are met (Kotler *et al.*, 1993).

Conservation of historical sites within their own contextuality emerges as a significant issue that must be dealt with. Place-marketing strategies, mostly perceived as significant motives in the conservation of historical pattern through enabling the integration into economic life, bring about certain outcomes concerning the spatial, social and economic structure of the area. Through the adopted place-marketing and re-imaging strategies, historical areas, spatial and social identities of which have been defined through a historical process, are utilized as a 'scenery' due to the interest of tourists in what is 'historical'. A new image is constructed through the commodification of several aspects of these places, which are 'unique' in terms of their buildings, streets and inhabitants.

The functional transformation, which the historical core of Alacati has been going through since the beginning of 2000s, can be evaluated within the context of placemarketing and re-imaging strategies primarily led by the demands of private investment. Following a brief information on the causalities underlying the economic stagnation during 1980s-1990s and the growth period in 2000s, this paper attempts to display the physical and social outcomes of the imaging process in the case of a public street existing in the historical core.

#### ALACATI IN 1980S AND 1990S - A CITY IN DECLINE

Before focusing on the causes underlying the economic stagnation process, which the city has gone through during 1980s and 1990s, it will be useful to examine the population movements in the history of the settlement as they play a significant role in the formation of its spatial pattern. Alacati was originally a Muslim village in 1800s. In 1830s, Greek workers inhabiting in Chios were invited to the area to be employed in the drainage of marsh area existing in the south part of the settlement. In time, these people constructed the new Alacati settlement in one kilometer north of the coastal area and inhabited the area. They have developed the work of vine-dressing and soon Alacati wine became famous worldwide. The success of Greek population has been a motive for the migration of other Greek population living in Chios to Alacati. In the early twentieth century, there were 13000 people inhabiting the area, 80% of which consisted of Greeks (Atilla and Ozture, 2006).

The compulsory exchange of Orthodox Christian living in Anatolia and Muslim population living in Athens and Aegean islands as a result of the Treaty of Lausanne, which was signed between the New Turkish State and the Greek State in 1923, has been a significant breaking point in the history of Alacati effecting the spatial, social and economic structure. In fact, it was not only the exchange of population but also the exchange of cultures and life practices eventually leading to a new economic restructuring and spatial pattern in Alacati. The Muslim population inhabiting the area did not continue the work of wine-making as wine was not a part of their culture and did not know the method it required either. These people, who were forced to migrate from a different geography, lacked the basic information concerning the appropriate

agricultural product for the region and began the work of tobacco growing instead which was then defined as a mistake. The inappropriateness of the soil for tobacco-growing accompanied with the economic and agricultural policies of the country in the post-1980 period have resulted in the decline of the agricultural activities of the city.

The economic recession process, which the settlement has gone into during 1980s and 1990s, most probably prevented the construction of new buildings particularly in the historical core but inevitably caused the depravation of historical buildings in the same area. The economic insufficiencies of the citizens have in one sense led the conservation of historical pattern, which then served as the main potential during the economic restructuring of the city based on tourism activity. In the beginning of 1990s, with the effects of the incentives in construction sector and changing trends in holiday concept, Alacati turned out to be a place occupied by secondary homes. Specifically, in the north of historical city centre significant developments have taken place in the form of secondary homes, most of which are totally inharmonious with the identity of historical pattern.

#### ALACATI IN 2000S - THE RISE OF THE CITY AS A TOURIST DESTINATION

In parallel to the changing trends in global scale, traditional tourism types simply based on sea, sand and sun, were replaced by new types of tourism which present different experiences to visitors related to history, culture, arts, gastronomy, sports and so on. The rise of Alacati as a tourist destination by the beginning of 2000s can be interpreted as an outcome of these changing trends. Soon the city became a popular tourist destination thanks to its heritage potential including the unique samples of Turkish and Greek architecture and natural characteristics available for sea sports particularly windsurfing. Shallow and year-round windy small bays in the coastal area provide an ideal setting for windsurfing and enable the organization of many events and contests in national as well as in international scales.

Historical core of Alacati, which is being conserved at present, has a significant role in the increasing tourism popularity of the settlement. As a part of this increased interest in the historical centre, buildings formerly used for several purposes such as dwelling and storage are integrated in urban economy as commercial units and small hotels through successful restoration projects. Essentially, the functional transformation faced in the historical pattern since the beginning of 2000s, can be regarded as the natural corollary of the vision envisaged by the local government as making Alacati a 'worldwide brand'. In realizing this vision, the local government seeks to utilize the natural potential and historical assets of the settlement within the context of placemarketing strategies. This type of approach becomes tangible through the development of flagship projects in the south coastal area. Though it has been subject to several criticisms of non-governmental organizations, Port Alacati is one of those projects, which aims at drawing the sea inwards through the canals and constructing dwellings for the high-income groups. In the historical core, the placemarketing strategy becomes tangible mainly with the commercialization of the main street through re-imaging strategies and functional transformation dominantly led by the individual entrepreneurial.

# Re-imaging of a Public Space: Case of Kemalpasa Street

Kemalpasa Street, existing within the historical pattern, constitutes the focal point of the paper as being the place where functional transformation of the existing building stock is experienced the most dramatically. The street has gone into a new structuring process that is completely different from the former land use pattern and the historical housing pattern existing on the street has transformed into a different function in the form of commercial units and boutique hotels particularly for the affluent members of the society.

The initial signs of the re-imaging process date back to 2001, during when two restaurants and a boutique hotel were opened. The apparent success of these uses has in a short time inspired many investors who were encouraged by the increasing interest of affluent, selective tourist group in the historical identity of the area. By the year 2006, 18 small hotels and approximately 60 café and restaurants exist in Alacati, most of which are located on Kemalpasa Street.



Figure 1. Land use pattern in Kemalpasa Street in 2006 (Source: Alacati - 2006)



Figure 2. Listed buildings existing on Kemalpasa Street (Source: Conservation Plan of Cesme-Alacati)

According to the land use analysis of Kemalpasa Street obtained during the analytical survey that has been carried out in Alacati in July-2006, 71 commercial units and 8 small hotels exist on the street. Within the framework of the mentioned survey, questionnaires were applied to both commercial units and hotels. The

findings support the above-mentioned evaluations concerning the continuing process on the street. According to the findings of the questionnaire survey, in which 70% (50 units) of the commercial units participated;

- 22% of the units were established before 2000 and most of these uses are in the form of traditional small retailers oriented towards the satisfaction of basic consumer needs such as grocery, bakery, coffee-house, wholesaler, etc.
- Majority of the units established in the post-2000 period are engaged in cafébar and restaurant business (56%) as appropriate to the place-marketing and re-imaging strategies adopted during this period.
- High rates of tenancy (76%) indicate the increased dynamism of the street in terms of commercial activities in parallel to the increased popularity of the settlement in recent years.
- High level of satisfaction with the spatial size of the building (74%) indicates the appropriateness of the new functional use of buildings with the existing structure.
- 90% of the firms are satisfied with their locations while only a few of the firms (10%) have mentioned their desire in moving to a larger unit in a quieter area.

Similarly the findings of the tourism questionnaire, in which all the firms (8 firms) existing on the street participated, indicate that;

- Appropriate to the increased interest in the settlement, all the units were established between 2001 and 2004.
- 75% of them are boutique hotels while others are in the form of guest houses.
- 63% of these uses exist in listed buildings under state conservation.
- 63% of them were transformed from dwelling use.
- 50% of them are open throughout the year.

Aesthetical appearance of the street is consciously raised through the use of urban design components in signs, colors and paintings of the building facades, the use of planting and so on. Consequently, the street has gained a new image via the characteristics transferred from the unique architectural context of the settlement accompanied with recent efforts and has become the most popular pedestrian space, where café, restaurants and boutique hotels are predominantly located each having specific aesthetical concerns consistent with the local spatial structuring.



Figures 3, 4. Views from Kemalpasa Street (Photos taken by A. Dalgakiran)



Figures 5, 6. Views from Kemalpasa Street (Photos taken by A. Dalgakiran)

Essentially, the tourism movement initiated by individual entrepreneurial indicates that the continuing transformation of the street did not begin as a part of a planned marketing strategy. The success achieved by individual efforts in the restoration of historical buildings and integration with the new commercial use has in one sense created a domino effect for the functional transformation of other buildings existing in close proximity. Since the 2000s, vacant houses, storages and even the stables existing on the street have been transforming into commercial units mostly in types of cafés and restaurants.

Soon the creation of new jobs and the physical improvement of the historical core through the re-imaging of the street were welcomed by the local government and several precautions were taken concerning the area. In 2004, borders of the historical core, which was declared as conservation area in 1998, were expanded and hence the number of buildings to be conserved has increased up to 680. The conservation plan of the area was completed in 2006. The local government also developed a set of rules for the commercial units existing in the historical core mainly concerning aesthetics that will contribute the success of the street such as banning the use of plastic tables and chairs that will harm the characteristics of the historical pattern, prohibiting the cooking of meals that cause disturbing smell and so on.

#### Social and Economic Outcomes

The new image constructed for the old street of Alacati in recent years has raised the status of the settlement as a popular tourist destination however, caused the emergence of significant outcomes for local people, property owners, investors and tourists as being the different groups in the society. Before 2000, commercial units existing on the street in relatively small number were oriented towards the supply of convenience goods to the local people. Buildings surrounding the street were dominantly used in their own contextuality as residential, storage and so on. And hence there was a spontaneous balance among the land use types existing on the street where local people constituted the main user group.

However, in the post-2000 period, with the adoption of a tourism-based development strategy, a significant alteration in the characteristic of the commercial activity has emerged in favor of specific types in the form of cafés, restaurants and boutique hotels. This was undoubtedly a part of the place-marketing strategy that aimed at attracting tourists and new investments to the settlement through utilizing the historical pattern as scenery. However, the reconstructed image has eventually led to the elite commercialization of public space and caused inequalities among the user groups. The silent street of the past, once belonged to the local citizens of the settlement, now targets the affluent members of the society who have lifestyles based on sophisticated commodity aesthetics. As Bramham et.al. argued in 1989 (cited in Shaw and Williams, 1996: 220) "such patterns of development ignore or at best neutralize local ways of life merely by reproducing the leisure interests of the wealthy". This is exactly the case in Kemalpasa Street.

The existing historical buildings on the street, which belonged to the people of Alacati for centuries, have been systematically transforming into uses such as cafés and restaurants that aim at reproducing the leisure interests of the high-income visitors in a way that externalize the local people. These uses, which became dominant in the land use pattern of the street, benefit the unique architectural context of the buildings and target mainly the high-income visitors through creating a unique atmosphere with their elegant interior and exterior designs. The outdoor dining facilities of these units densely used in summer season continue to externalize local people from the 'street' too. Under these circumstances, it is possible to say that the recent functional transformations give the initial signs of the commercialization of the street as being a space which once possessed a public meaning for the members of the local society.

On the other hand, this improvement in the image of the street has certainly a different meaning for the householders as well as the investors. After a long period of economic stagnation, the increased interest of both visitors and investors in the area and the enormous increase in real estate prices have encouraged this group in selling their houses to investors or in becoming the managers of their own businesses. Similarly the local authority is in a desire to sustain this development as long as possible since it increased the popularity of the settlement and contributed the physical improvement of the historical area.

#### CONCLUSIONS

The experience of Alacati illustrates that place-marketing and re-imaging strategies lack a holistic approach as the expended efforts until the present day have mainly aimed at 'marketing' the historical area through reinventing place images in attracting investments, visitors and tourists. Essentially, such a process is to what extent satisfactory and beneficial for all the members of the community is still debatable. This becomes more explicit when the major social outcomes of the process appear as the elite commercialization of the public use of street, and the emergence of a process during when the actual users of the street have been transformed into passive 'observers' due to the externalizing effects of the new uses.

There is a strong need for developing comprehensive, strategic and holistic tools and techniques which will enhance the success of place marketing process in physical.

social and economic terms and satisfy the requirements of different users in the area. In the absence of such a holistic approach in marketing strategies, the achieved physical improvement in the visible places of the historical areas may be successful in the short term, but in the longer term will be overcome by the social and economic outcomes leading to an another exchange of the population in the history of the settlement but this time rather voluntarily. Consequently, the city is in a critical point and needs to determine its vision whether it is a place to be sold on the tourism market or a place to live in.

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# CONTEXTUALISM AND ADAPTIVE REUSE: AN EVALUATION OF A CASE, LA RUE FRANÇAISE

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#### **ABSTRACT**

The idea of adaptive reuse, as a planned and organized effort is a relatively recent concept that is related with contemporary approaches in the transformation of the physical environment, although the conversion of buildings for political, economical and ecological purposes was an ever going practice. Adaptive reuse being one of the major components of sustainable development has been implemented for its cultural and economical benefits for the society. Preserving the collective memory of a society and conserving the urban identity of the environment for the sake of sustainability, adaptive reuse can not be discussed without contextualism.

In the recent understanding of adaptive reuse, the historical, architectural and cultural identity of a building or an urban precinct has to be preserved concurrently fulfilling the requirements of contemporary standards. The changing needs and developing technology necessitate new uses for old buildings. While providing this functional shift, the urban identity has to be preserved for a sustainable context.

This paper aims to analyze and discuss the impacts of adaptive reuse, with a specific project in urban scale namely, French Street in Beyoglu district of Istanbul.

In this study, the aesthetic and architectural concerns, spatial quality, contextual background, and economical impacts of the French Street project will be evaluated: The limits of interference to the existing buildings; The regulations and legal restrictions towards adaptive reuse processes; Meeting the contemporary needs without compromising historical values; The relation between the new functions given to the province and its original context; The tension between the existing habitants and the newcomers; The goals of the project and the degree of success in achieving these goals.

Keywords: Contextualism, Adaptive reuse, Sustainibility, Urban scale

# **URBAN CONTEXTUALISM**

Today, most of the problems of contemporary urban environment are believed to derive not from the buildings but from the city itself. Man was not able to offer a satisfactory proposition to this problematic since the shift from the medieval totalitarian town to the modern city. With the beginning of industrialization, the urban core kept being destructed/restructured with an increasing pace, revolutionizing all the balances of urban life perpetually. These new balances create new definitions for the 20<sup>th</sup> century city which can be analyzed as a system of society, system of politics, system of economy; and can be described as an artwork, a network, a tool of communication, a historical artifact.

In this complex system there are several approaches in planning, designing and understanding the urban. The social approach defines how people shape their environment and how physical environment affect people. The interactive relation between human and the built environment are crucial inputs in understanding the space-human relation. [1] Social theorists use the distinction between public and private to analyze the organization of modern societies and the spatial divisions of the city. [2] The concept of space is not only limited with the interior space (endocosmos), but also the outer shell of buildings create a perceivable exterior space (exocosmos). A space is defined with the boundaries and architecture occurs in the boundary as an embodiment of the world. Heidegger defines boundary from which something begins its presencing not at which something stops. [3] Urban life takes place within the pattern of streets, roads, squares, piazzas, parks; anywhere a boundary is defined in the continuity of space. The buildings either define the boundary of urban space or implement its internal flow, creating a setting for social, cultural, economical and political interaction.[4]

These interactions were studied and classified in Jan Gehl's book *Life Between Buildings* which focuses on the relation between the exterior physical environment and the type of outdoor activities. Three types of outdoor activities are defined as necessary/compulsory activities; optional activities; and social activities that depends on the presence of others and interaction with them. Especially social and optional activities are heavily dependant on the identity of the space. The social activities are mostly correlated with the context in which they occur. This context results in a familiarity of people around a certain point of interest. The possibility of social interaction can be improved with an organized architectural and planning effort to create a well defined void. [5]

The solid-void distinction can be observed in the contemporary city which is a combination of two different forms: the traditional city and the city-in-the-park. [6] The traditional city is composed of a continuous mass of buildings, emphasizing the exterior space and de-emphasizing the building volume. In the case of the traditional city, the exocosmos is well-defined with boundaries, as if it is carved out of solid masses and this defined *place* carries certain spatial quality. Istiklal Street in Beyoglu is a model for a linear urban void, highly emphasized with the row of attached buildings. On the contrary, the city-in-the-park emphasizes the building itself without defining an exterior space and they could be interpreted as highlighted *solids*. The outdoor space defined by the traditional city can be defined as emphasized *voids*. The solid – void relation can be depicted as figure – ground scheme. In the case of the

traditional city, the voids become the figure and the built environment becomes the ground. If a well-defined urban void within the city identifies the **urban context** for social and cultural interaction, the buildings define the **physical urban context**.

There were two controversial architectural approaches in twentieth century town. One romantic and historicist tendency is to preserve the past and to keep the traditional city center as it was. New additions replicate the old forms, looking for a spirit that has been lost for long. The modernist approach on the contrary, runs after a utopia without any resemblance to the past. The rational, machine-like architecture destroyed everything for the sake of progress without any resemblance to history. [7] According to Thomas L. Schumacher the ongoing tension between the contemporary and traditional city can be answered with contextualism.

Preserving the historical heritage is crucial for cultural sustainability. Formation of cultural content is possible if the historic knowledge can be carried out from past to future, from today to tomorrow. Architecture, presenting social, cultural, political and economical identity of a society, has a very specific role in the formation of culture. Neither to replicate the old forms for the sake of historical respect nor to ignore centuries of tradition and knowledge in the name of modernity is acceptable. New Historicism approach accepts that neither direct revival nor absolute denial is the solution, it proposes utilizing the essence of traditional heritage without casting aside contemporary architecture. [5] This approach, especially in urban scale, is crucial for a society to create social identity and cultural consciousness. As mentioned above, cultural development takes place within the urban context. If the identity of a society is to be transferred among generations, it is important to preserve the traditional urban void. The actual cultural and historic heritage of a society is hidden in the narrow alleys of the traditional neighborhoods not behind the monumental facades.

Istanbul is no exception for the aforementioned facts. The historic urban pattern of the city has corrupted with an increasing pace in the last 50 years. Especially Beyoglu and Galatasaray districts came across a severe cultural and social transformation. Lately, a consciousness for preserving the historic and architectural heritage arose in the community. Restoration and preservation work, especially for significant buildings took place. However, in Istanbul conservation or reuse projects in urban scale are still exceptional. That is why La Rue Française, namely the French Street located in Galatasaray, is chosen as the topic of this paper. It is one of the first examples of adaptive reuse in urban scale in Istanbul. Not only the buildings were renovated but also a new space/place in urban fabric is created. The voids of the city were filled with a new function and a new style of life.



Figure 1. Location of French Street in Istanbul

# **ADAPTIVE REUSE**

After demolishing and detrimenting the traditional urban centers for a century and half, finally consciousness for conservation, preservation, reconstruction and renovation of the built environment has been revealed -at least- in Istanbul. The New Historicist tendency supports the idea that man and his institutions could be studied in relation to the context of historical development so it is crucial to become aware of history without being seduced by it.

According to 14th ICOMOS Charter - Principles for the Analysis, Conservation and Structural Restoration of Architectural Heritage in 2003, basic principles and guides for architectural preservation were established. [8] The titles below point out the importance of building - context relation.

- Value and authenticity of architectural heritage cannot be based on fixed criteria because the respect due to all cultures also requires that its physical heritage be considered within the cultural context to which it belongs.
- The value of architectural heritage is not only in its appearance, but also in the integrity of all its components as a unique product of the specific building technology of its time. In particular the removal of the inner structures maintaining only the façades does not fit the conservation criteria.

As mentioned above, there is no simple formula for preserving the architectural

heritage. The only solid fact is that, the built environment gains meaning with its context. The natural, historical, sociological aspects of the environment have to be considered and taken into account in restoration or renovation projects to retain buildings' or urban environments' integrity.

Theoretically the physical life of a building is longer than its functional life. These functions can be classified as connotative function, aesthetical function, territorial function, expressional function and stimulation function. [9] Apart from its function a building can be of intellectual, emotional and use/exchange value. Buildings, old or new, while fulfilling certain functions, carry specific values. The function — value relation is not always linear. A building of great (for example, intellectual/historic) value may not perform its function well. For example, Ataturk Kultur Merkezi in Taksim, due to some functional necessities, is facing destruction; but the center -apart from its exchange value- definitely carries certain emotional and symbolic value. That is why the demolition of the complex is fiercely protested. When a building with certain intellectual, emotional or use value becomes obsolete in relation to its functional, technological, social, environmental, structural or economical incapability, there are several measures to take; to demolish the structure or to preserve and protect the building.

Adaptive reuse is a type of preservation, where a new function is affirmed for an existing building. There is a fine distinction between preservation and reuse. The former implies the act of keeping the building at a specific time and state; however the latter is offering a new function for an existing building. The building or the urban area could be incapable of meeting the technological and functional needs of the current environment and time but it can still be of historic, cultural, economic or even of nostalgic importance for public or for an organization or for an individual. The new function offered to the existing structure or to the urban region should be consistent with the social, cultural, economic, demographic and regional qualities of the area. Adaptive reuse being one of the major components of sustainable development has been implemented for its cultural and economical benefits for the society. Preserving the collective memory of a society and conserving the urban identity of the environment for the sake of sustainability, adaptive reuse can not be discussed without contextualism. Each and every piece of cultural heritage is a bridge between today and tomorrow, a bridge that makes a location a place, converts a piece of land to a country to die for, turn a building to a dwelling.

In the recent understanding of adaptive reuse, the historical, architectural and cultural identity of a building or an urban precinct has to be preserved concurrently fulfilling the requirements of contemporary standards. Ideally, an adaptive reuse project should be mutually beneficial for the society, owner and user. The changing needs and developing technology necessitate new uses for old buildings. The proposed new function should be carefully examined in terms of structural, economical, cultural, and socio-political coherence with its context. While providing this functional shift, the urban identity has to be preserved for a sustainable context. The building and the area has to have necessary qualifications to support this new function and create an added economic, emotional, intellectual or use-value. Otherwise the renewed structure(s) will face another form of obsolescence within a short period of time.

# CONTEXT AND HISTORY OF THE URBAN ENVIRONMENT: LA RUE FRANÇAISE

'La Rue Française' project was placed on Cezayir Street and the intersecting cul-desac. The street was a deserted area behind Lycee de Galatasaray in Beyoglu, Istanbul. Beyoglu is the name of the district located between Taksim Square and Tunel, running along Istiklal Street and the streets crossing it. Beyoglu was once called the "Pera" meaning "other side" in Greek, since Byzantine times. The district has become an embassies region starting with the French embassy built in 1535. During the 16<sup>th</sup> and 17<sup>th</sup> centuries English, Venetian, Dutch, Polish, Danish embassies established and an elite crowd of Europeans, levantine population and non-muslim Ottomans residing in the area. During the 19<sup>th</sup> century, Pera become the European face of the Ottoman Empire, inhabiting the first bourgeois class of Istanbul. French theatres, elegant parties, luxurious restaurants and cafes, fashionable boutiques, concert halls converted the district to a point of attraction and leisure. The common languages spoken in the area were French, Italian, German and English, due to the heavy European population - working mostly as merchants and interpreters. Numerous Churches, Synagogues, European schools (French schools like St. Pulcherie and Lycee de Galatasaray: Italian High School, German High School etc.) and hospitals (German, Russian, French and Italian hospitals) opened during 19<sup>th</sup> century were highly effective in the establishment of European culture within the area. [10]

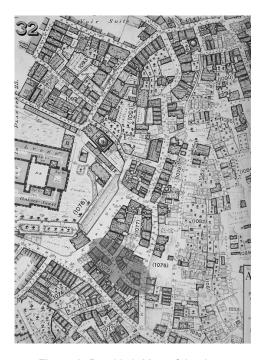


Figure 2. Pervititch Map of the Area

At the end of 19<sup>th</sup> century, the distinction between Istanbul (the historic peninsula) and Pera was very sharp. Opposed to its breath taking silhouette, Istanbul was ruined with fires, exhausted and even the greatest monuments needed serious renovation during the stagnation period of the Ottoman Empire. Galata was, however identified with western culture and civilization. The masonry architecture of the area with massive embassies, rich mansions, neoclassical hotels resembled a small European town. Actually it is stated that Beyoglu was dominated by Europeans and non-muslims, leaving Turkish citizens a visitor in the area. The words of De Amicis presented this fact clearly by:

"In Galata, it is possible to see Greek, Italian, French snobs, merchant nobles, embassy officials, marine soldiers and persons from all nations.... Europeans here, laugh louder than elsewhere, and make fun in the middle of the street. Here, Turks as if in a foreign country, could not keep their heads up with honor." [11]

The golden years of Beyoglu stagnated with the foundation of the new Turkish Republic. Termination of capitulations reduced the number of foreign merchants. Between 1927 and 1929, foreign embassies were transferred to the new capital of the republic. As a result the elite European population living in the area has moved to Ankara. Later in 1942, the special tax enforced to non-muslims (Varlık Vergisi) and the Second World War (1945-1949) had a negative impact on the foreign population. With the foundation of Israel, massive immigration of Jewish community from Istanbul had taken place. As a result of the Cyprus crisis in 1955, most of the Greek Orthodox community has left the country as well.

Consequently the face of the area has slowly changed; the Muslim population started dominating the district. The elegant restaurants, cafes, patisseries have left their place to traditional music halls, low rate night clubs serving the new rich class, acquiring financial power in a short time by war-time black marketing. Between 1940 and 1960, as a result of the dense immigration from central Anatolia to Istanbul, Beyoglu has lost its authentic quality and faced a severe cultural corruption. The vacant properties previously owned by the non-muslim population were occupied by the immigrants from Anatolia. Some of the houses were destroyed or demolished for the construction of new apartments. Most of the famous theatres of Beyoglu were closed down, the luxury boutiques and restaurants turned into low-rate mills and workshops. Eventually this multi-lingual, multi-cultural, privileged district of Istanbul, transformed into a center of crime, prostitution, unplanned housing, and low-rate entertainment. During 19<sup>th</sup> century Istanbul has faced a cultural and social context transformation and Beyoglu is one of the regions feeling this severe shift at its peak.

After 1980s, nostalgic renovation efforts and rejuvenation projects were established within the district. Istiklal Street (Grand Rue de Pera) was converted to a pedestrian axe of cultural activity and shopping with art centers, movie theatres, restaurants, shops, boutiques on its sides. The Tarlabasi Street was turned into a boulevard, demolishing the row of houses on the right-hand side, and connected Taksim Square to Sishane. Istiklal Street was closed to traffic and trams started operating from Tunel to Taksim square. Several artists and intellectuals moved into the area and renovated historic buildings. The efforts for converting the region back to its authentic atmosphere and sustaining the cultural heritage have intensified after 1990s.

As a continuation of these efforts, La Rue Française project was initiated by Afitaş Production Company as an example of urban adaptive reuse project on Cezayir Street. According to the Annuaire Oriental 1910 and 1922 records, the street was known as Rue d'Alger (Algerian Street) and was inhabited by middle income Greek Families.[12] The Street presented an example for the typical 19<sup>th</sup> century Beyoglu residential architecture with three to five storey-high masonry buildings located on two sides. The row houses with traditional Turkish bay windows with buttresses and European style plasters, stucco ornaments and window jambs compose the hybrid typology of the area. All the buildings located on the left side of the street were built by the French engineer Marius Michel, who has also constructed Karakoy and Eminonu piers and lived in Istanbul between 1890 and 1910. [13] Although the district was under complete neglect and misery, similar to many small streets behind Istiklal Street, the architectural characteristics of the apartments were mostly kept unchanged.

The owner of Afitaş Production Company and the chair of La Rue Française, Mehmet Taşdiken decided to go through such a project with the idea of renovating his own house located at Cezayir cul-de-sac. Being the only house rehabilitated building in the area; he has faced quite serious problems resulting from the neighboring inhabitants. So, he has decided to renovate the whole street and launched the *French Street* project, a small scale urban renewal development program. It is called the first street with a 'theme' in Turkey.

The company purchased or leased most of the buildings located on the street. The architectural measurements and surveys were conducted by students of architecture as a result of the cooperation between Afitaş and Mimar Sinan University Department of Architecture. An adaptive reuse project was established by MN Mimarlık. The 19th century buildings located in the street were restored, painted in lively colors, decorated with canopies and converted into restaurants, cafes, boutiques and art centers. The pavements were renovated, a new outdoor music and lighting system was implemented with Istanbul Municipality, Galatasaray Municipality and DYO paints sponsoring the project. [14]

The facilities within the street were asked to carry out an interior design project coherent with the 'theme' of the street. All restaurants, cafes, boutiques or stores have to reflect the French culture with its decoration, name, menu, and even with their music. The project aims to convert the district into a culture, entertainment and art center of Istanbul, reflecting the French culture.

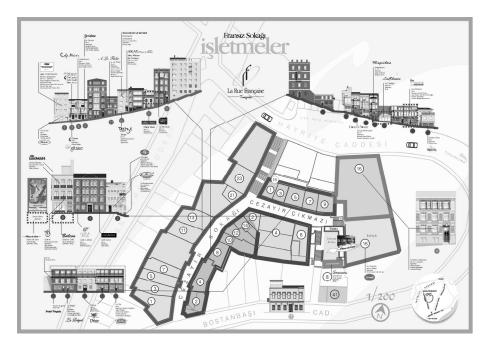


Figure 3. Facilities

The *French Street* claims to recapture the old sprit of Beyoglu and Galatasaray - once a truly European district at the hearth of Istanbul. The press release of the La Rue Francaise announced the project as the first 'themed street' of Turkey. They claim to become a center representing French art and culture, with selected restaurants, cafes, boutiques, shops, art gallery, education center, French culinary school, boutique hotel, French delicatessen. French language school, dance courses, antique shops and French bazaars, concerts and festivals were planned within the street. The project was completed and the street was opened in July 2004 and it symbolized a memorial for the French lived in Istanbul. One of the festivals organized by the street named 'Beyoglu recovering its essence!'. Being one of the first examples of adaptive reuse in urban scale, La Rue Française project was planned to create a long term urban transformation and gentrification process in Galatasaray.

Within the last twenty years, urban scale adaptive reuse or single renovation projects had gradually changed the face of Beyoglu. Although there is still much work to do, the district has become the center of cultural and social activity attracting hundreds of people from Istanbul, from Turkey and even from all around the world. Beyoglu has something to offer for all ages, all tastes, all social ranks, all income groups, and for all backgrounds. Today, Istiklal street is one the most dynamic and appealing place in Istanbul, alive for 24 hours of the day and 365 days of the year.

# **EVALUATION OF THE PROJECT**

The *French Street* was completed in July 2004 and the project generates great interest and impact after implementation with successful advertising and public relations. Approximately 65,000 people visited La Rue Française within the first four days of its opening. Turkish media covered the project in detail.



Figure 4. Before and After Adaptive Reuse

The project created two opposite public opinions. While some groups supported the project, other pole harshly criticized it. According to the survey conducted by Arkitera, 47% found the project important for rejuvenation of the district, 65% found the project successful in terms of street renovation, 35% claimed that the street has lost its identity, and 57% said a good idea with poor implementation. Architectural magazines and portals discussed the project in detail. Some people considered the project very artificial. The private security on the entrance of the street was accepted as an invasion of public space. One political criticism was to the name change of Cezayir (Algeria) Street to French Street -an unlucky transition in political and ethical sense. Some argued that the area has nothing to do with French culture and claimed the houses are typical Turkish houses painted in bright colors and French canopies.[15] Although this claim does not reflect reality, it is a good example for how people perceive Beyoglu. Once dominating European impact in Beyoglu has changed, the cultural and social context has transformed into something else, something more local. more Turkish. The project's motto was 'French Street, the culture that creates Beyoglu!' (Beyoglu'nu yaratan kültür!). [13] However it is nostalgia for something which does not exist anymore, that culture has been lost a long time ago.

There are of course many positive aspects of the project. First of all, it is very distinctive for being a renewal project in urban scale. The renovation was completed with minimum intervention to the existing buildings. Careful painting and basic repair of the facade was enough to give the street a brand new look, a brand new sprit. Renovating the street pavements and street lightings were the most essential tasks of the project. As the name of the project implies, a living outdoor space is created and a place with character was defined within the exacosmos of the buildings. The forgotten urban void was redefined and gained new identity. Visitors do not perceive the buildings one by one but feel the atmosphere created in between those solids.



Figure 5. Figure Ground Map of the District

The project drew public attention to the district and created a positive economic and sociocultural impact for the surrounding area. It is also an important example to demonstrate the impact of private enterprise on built environment. The project proved that not only local governments or state, but also persons can implement an adaptive reuse project in urban scale with their own funds. Here, the architectural and cultural heritage used as a tool for marketing and the traditional city as an object of consumption.

The first reuse example for consuming the central city districts as 'festival marketplaces' was the conversion of the old Boston Faneuil Hall and Quincy Market into an urban shopping mall by Rouse in 1823. La Rue Française is an interpretation of the same formula creating a setting for festive human interaction, made of food and boutiques as well as buildings.[16] Henri Lefebvre criticized this new role of traditional urban cores in his book Right to the City. "The aesthetic qualities of these urban cores play an important role in maintenance. They do not only contain monuments and institutional headquarters, but also spaces appropriated for entertainments, parades, promenades, festivities. In this way the urban core becomes highly quality consumption product for foreigners, tourists, people from the outskirts and suburbanites. It survives because of this double role: as place of consumption and consumption of place...... They become centers of consumption." [7]

Today, the glorious days of the French Street seems to be faded away. The street with a couple trespassers was not much crowded than the surrounding streets. In front of restaurants with a handful of customers on a Friday afternoon, stand the waiters hoping for new consumers. The deserted shops are waiting for new entrepreneurs to come and start decoration work. A waiter standing next to the empty tables informed us that, all the facilities within the street have decided to cut down their prices to attract customers. The street appears as fake as the dusty plastic flowers planted for decoration. It seems as forgotten as the Christmas ornaments placed here and there. Do the buildings look uglier, dirtier, older or do they just need some painting again? Or do they wait for the summer to come, the sun to shine and people to fill up the street again?



Figure 6. April 2007 Pictures from the Street

A manager from La Rue Francaise corporation accepted the fact that facilities does not work well in winter time, since customers came for the street and for the ambiance created in between buildings. Even though they have invested serious amounts for interior decoration customers do not want to stay inside the buildings. This actually proves that the project may not be commercially successful (as much as it was expected) but reached its goal in creating and defining an urban void in the traditional neighborhood of Galatasaray. However the summer-time customer interest does not seem satisfactory as well.

The neon lights inscribe 'Cezayir Street' rather than French Street and on the corner of the entrance there are at least tree street signs spotting 'Cezayir Street'. What is the underlying reason for emphasizing this name change so strongly? Is it a conceptual shift, or a political protest, or an ethical justification? Imitating a French street or creating an artificial French atmosphere is not an object of desire anymore. The cultural and political context had been transformed in this part of Beyoglu.





Figure 7. April 2007 Pictures from the Street Entrances

A similar transformation took place in the premise of the project. A Tarkan song mixes up with live Turkish music at nighttime, nobody seems to care about the rules for playing French music, serving French food, promoting French culture anymore. Before its opening, Mehmet Taşdiken emphasized that French Street is a culture project and they will not allow it to become a pubs and bars corridor; cultural and artistic activities related with France were to be organized. After all, the expected educational and cultural courses did not reach desired continuity and demand. Similarly the projects for organizing an antique bazaar in corporation with Cukurcuma (antique sellers' district) and French bazaar did not worked well and came to an end after a while.

One of the reasons why the project could not reach some of its primary goals might be the distinction between the main pedestrian axis of Istiklal Street and *French Street*. Apart from the physical disconnection, there is also a contextual gap among them. There was no natural pedestrian flow from Lycee de Galatasaray to Cukurcuma. This gap is slowly and naturally filling up with shops, cafes, bookstores and performance centers. The French Street, while trying to attain the lost historical context of the area, changed the existing social, cultural and physical structure.

The theory of design states that design is a combination of form with content. Functionalist approach puts more emphasis on content and formalist approach focuses on shapes and forms rather than function. However today, there is another component added to this formula: "Context". Today a comprehensive and successful design has three elements, an attractive form with well-operating content/function and context related and coherent with the existing physical and sociocultural environment. New Contextualism is not a nostalgic search for the memories of the past, but it is being coherent with the existing and transforming context while sustaining historical, cultural, social, architectural values of yesterday.

#### **ENDNOTES**

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# REVITALIZATION OF ONE OF THE MAIN STREETS OF IZMIT

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#### **ABSTRACT**

Izmit (Kocaeli) has been home to many civilizations, stretching from pre-historic times to now. With its fast-developing industrial base, İzmit has become in recent years a destination for increased migration in from other areas. Despite the rapid growth of Izmit's population, city-planning has not kept up with the times, and the result has been the rapid and jumbled growth of the north and south shores of İzmit Bay, with industrial sites cheek and jowl with residential areas. As a result of the expansion of the city in the periphery and the various centers, the old neighborhoods began to decline. The purpose of this paper is to explain strategies for revitalizing İzmit's old streets. Kapanca Sokak (Kapanca Street), one of two streets that has been relatively well preserved in its original state, was chosen for revitalization work.

Kapanca Sokak was proposed as one of the important streets to be restored and revitalized within the municipality of İzmit. A survey was conducted among home-owners on the main street as to whether to turn it into a pedestrian thoroughfare. Poll results showed strong favor for the idea, with owners indicating that they thought it would have a positive effect on the development of tourism, trade, handicrafts, cafes, shops, restaurants, hotels and pensions. This revitalization project for a pedestrian main street will lead the way to the renovation of the historic buildings, in addition to an increased demand for their use in different functions, which will in turn increase the vitality of the old neighborhoods. This project will also nurture the vitality of the community and encourage existing residents to remain in the area. These are results which should be of interest to policy makers, urban planners and investors alike.

**Keywords:** Revitalization, İzmit, Old street

#### INTRODUCTION

The worldwide transformation of the city center, especially in developed countries, has also been, and continues to be, the experience of Kocaeli. Besides the fact that it is an important historical city, it is also a `transit` city--the hub of a wheel with spokes leading out into Anatolia, an industrial center, and a `coastal` city in terms of its trade and tourism with the coasts of the Marmara Sea and the Black Sea. Since the 1960s, however, its near proximity to Istanbul, in terms of highway-railway-and waterway transportation routes, has meant that its industrial aspects have developed more quickly than its others (Akcan, 2006).

As a result of the expansion of the city into the periphery and the various centers, the old neighborhoods began to decline. The purpose of this paper is to explain strategies for revitalizing Izmit's old streets.

Due to their aesthetic attributes and scarcity, historic CBDs (Central Business Districts) have historic architectural settings and townscapes of economic value. There are several approaches to the revitalization of declining CBDs, which is a common and shared problem (Freiden, Sagalyn, 1989; Porter, 1995; Tiesdale, Oc and Heath, 1996). In the United States, the Main Street Program and the Business Improvement Districts have proven to be successfull programs in inner city revitalization (Keister, 1990; Robertson, 2004). Implemented in hundreds of cities, The Main Street Program is a compressive program that focuses on local opportunities in four areas: Economic restructuring, organization, promotion and design. Based on a national survey of 57 small American cities, Robertson (1999) found the Main Street Approach to be the most successful of 16 downtown development strategies evaluated. Although the application of Main Street Approach started with small cities, in the mid- 1990's the program was expanded to include neighborhood commercial districts in large cities (i.e. Baltimore, Boston, San Antonio, San Diego). Today 43 American states host Main Street Programs (Robertson, 2004)

Turkey also has been involved in nation-wide efforts aimed at neighborhood revitalization programs encompassing certain areas of the city or residential neighborhoods. These include such implementation programs as the ones being carried out in Safranbolu, Antalya Inner Citadel, Edirne, and Muğla, and the Germiyan Avenue project in Kütahya (Minez, Erdoğan and Dökmeci 2005); the endeavors on a neighborhood or street scale (Karaaslan, 1998; Doratlı, Hoşkara and Faslı 2004; Oruç, Giritlioğlu, 2006; Oktay, Önal Hoşkara, 2006;); the project located within Istanbul's historical peninsula that is being provided *UNESCO* support and encompasses the historical areas of Zeyrek, Süleymaniye, and Yenikapı; the Fener-Balat Project that is receiving a combination of *UNESCO* and *EU* support and is being conducted jointly by the Fatih Municipality and the *EU* (Kocabaş, 2006). The present paper deals with the revitalization of the old central business district (CBD) of Izmit, an area that has become problematic, as is also the case for many other cities in Turkey.

# **BACKGROUND OF IZMIT**

The environs of Izmit were first populated prior to the year 3000 BC. The founders of the Hellenistic city of Astakos dominated trade on the Black Sea during their period of rule. The city was then destroyed due to wars at the beginning of the 3rd century BC (Demir, 1994).

In 262 BC a new city named "Nikomedia" was built six kilometers northwest of the original city of Astakos, on a stretch of land in a relatively hilly area that leads down to the shore line (Zeyrek, 2005; Rose, 2005). In time this city became the center of the Bithnyan Kingdom.

In 74 AD the city came under Roman rule and was named capital of the Roman state of Bithnya. Rome built a temple here to demonstrate the esteem in which it held this city and in time the city became an important military and trade center. Because its strategic location afforded it command of the Bosphorus Strait, the Romans used it for a military land base and also positioned a fleet in its harbor (Yüce, 1998; Rose, 2005;Zeyrek, 2005).

In 284 AD Izmit became the capital of the Eastern Roman Empire (Rose, 2005). During this period the city was surrounded by defensive walls and included a palace, hippodrome, a mint, an arsenal, and homes for the use of the king's wife and daughter. At that time it ranked as the fourth largest city in the Empire, following Rome, Antakya, and Alexandria. Changing military fortunes, however, led to the move of the capital from Nikomedia to Byzantion (Constaninople) in 324 AD, leading to a substantial decline in the importance of the former. Never able to fully recover from a series of disastrous earthquakes, the city survived as a Byzantine fortress town (Foss, 1995; Zeyrek, 2005).

In later years, as the Byzantine empire began to lose strength, Anatolia began to fall under the sway of the Turks, and the Ottoman domination of the region began (Zeyrek, 2005). Nicomedia became, in the 1400s, an outpost of the Ottomans in Anatolia, gradually growing by the 1600s and then the 1700s into a trade and residential center. Until the 1800s, however, the city was relatively sleepy. In 1888, it became a proper sub-province, moving to third place in the production of silk and embroidery in the Ottoman Empire. At the same time, the number of textile and rug factories there began to increase. Against the backdrop of this increase in industry, Tartar, Circassian, and Georgian immigrants began to pour into Izmit to live. The city, however, lost this newfound liveliness in the post World War I period when it was occupied by English and Greek forces. It regained its independence in 1921 and in the Republican era in 1924 the city—now called Izmit—became the capital of the province of Kocaeli (Dilbaz, 2001).

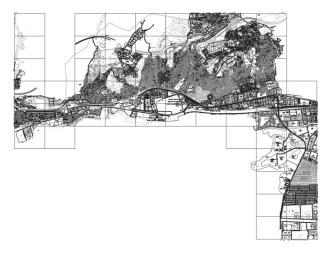


Figure 1. İzmit City Center

There are only a few places in modern Izmit where traces of the city's history and of traditional ways of life can still be seen and felt. These are primarily found in the Orhan, Akcakoca, Hacı Hasan and Veli Ahmet neighborhoods and less frequently in the Kozluk and Omeraga neighborhoods (Figure 1).

Kapanca Street was a part of the Armenian neighborhood of Izmit in 1914, though the name of that district was changed to Kozluk in 1927. Currently, the street falls inside the Akcakoca neighborhood. The official neighborhood boundaries from 1914 show that Kapanca Street represented a transit route to the "Çarsi-i Muslim" neighborhood. The "Çarsi-i Muslim" neighborhood was a shopping destination for villagers from the surrounding area and it was known that prominent residents of Izmit lived there (Durak, 2001). Kapanca Street was, therefore, an important passageway to the "Çarsi-i Muslim" neighborhood at the time. Kapanca Sokak (Kapanca Street), one of two streets that has been relatively well preserved in its original state, was chosen for revitalization work.

# **REVITALIZATION OF KAPANCA STREET**

Izmit's first efforts at preservation began in 1969 with the documentation and registration of 33 monument buildings considered to be of historical value. In 1979 the remaining historical fabric of the city was determined to be a conservation of historical area and 316 buildings were registered as conservation sites. In 1987 the number of the sites was decreased from the 1979 value of 316 to 180 and the Kapanca and Cukurcesme streets added to the list of conservation sites.

In 1995 a total of 170 examples of historical buildings were documented and registered. Added to the 1995 provision was "the construction conditions of the transition period" and the requirement to form a "zoning and development plan based on principles of preservation." According to this provision, two separate conservation areas were created: the "archaeological conservation cite" and the "urban conservation site." While the archaeological conservation site encompassed the inner citadel and its environs, the urban conservation site included the area bounded by Istanbul Avenue (Inonu Avenue) and Rasathane Avenue in the direction of the Inner Citadel down to the south (Koruma Plani, 2003).

The preservation principles of the zoning and development plan of 2003 redefined the concept of a conservation area and made new decisions about the areas marking the conservation sites. The areas previously defined as the "archaological conservation site" were now reclassified as 1st and 2<sup>nd</sup> Degree Urban Archaeological conservation sites. This was done in accordance with the proprietorship of the natural sites. While the number of examples of hictoric buildings was decreased to 129, the number of monuments was increased to 84 and a total of 15 natural heritage sites was documented and registered (Koruma Plani, 2003) (Figure 2).

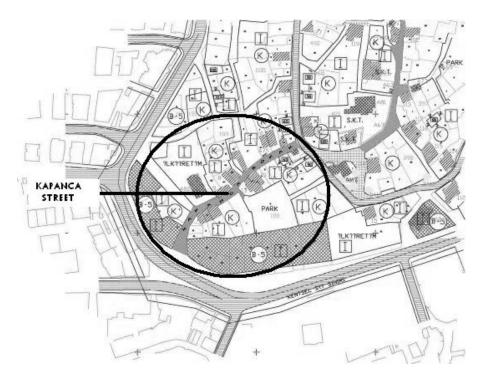


Figure 2. Kapanca Street in the Conservation Area.

Kapanca Street is an important thoroughfare in that it has succeeded, if only in part, to retain much of its traditional street texture in terms of original boundaries, landscape, materials, ratios and built/unbuilt characteristics. Built along a narrow and steep incline, the boundaries of the street are determined by the buildings built along it—buildings that developed according to the topography of the area—and by the walls surrounding gardens and yards. Two streets intersect this street.

Down its entire length, the street is lined by one and two story historical houses, for a total of sixteen houses. Most of these are examples of hictoric buildings dating to the late 19<sup>th</sup> century and twelve of these dwellings have been registered. The remaining four residences were built during the last forty years, three of them being apartment buildings and one a one story, brick and half-timber house. All sixteen of the buildings continue to function as homes. At the northernmost entrance to the street there is a fountain (Kapanca Sokak Fountain/ Zeliha Fountain) and a "cistern," now in ruins. At the southern most end is a "historic church," used today as a primary school.

The first revitalization efforts of Kapanca Street were undertaken within the auspices of the "A project to preserve and revitalize Izmit houses" (Izmit Evlerini Koruma ve Yaşatma Projesi" *İZEYAP*) (1). In 1994, 25 governmental and non-governmental organizational joined forces and signed the "Sırrı Pasha Agreement," thus providing a legal basis for the formal establishment of *İzeyap* ( Polat Şen, 1996). The purpose

of the project was to find solutions relative to the identity of the city of Izmit and to assume a leadership role in identifying and solving the city's problems. (İzeyap Bülteni,1995). The project divided the city from north to south (in a manner that included Kapanca Street) and joined that area with the shoreline area so as to include the clock tower and the ancient ruins. This area, known as the "Çukurçeşme" urban area includes historical places on both right and left sides that join seamlessly with natural areas ( Polat Şen, 1996). The *Galata Group*, a group connected to the Greater Municipality of Istanbul who work in coordination with the Chamber of Architects provided important input into the *İzeyap* project. It also ran several campaigns to publicize İzmit to the public. They gave talks at elementary and junior high schools and organized tours of Kapanca Street, while the *ÇEKUL* Foundation (Foundation for the Promotion and Protection of the Environment and Cultural Heritage) and the Istanbul Chamber of Architects also gave various seminars about the area. Project activities also attracted local media attention. Today, however, the *İzeyap* Project is no longer active.

The *Galata Group* carried out a complete survey and restoration plan of Kapanca Street and developed an urban design project plan (Figure 3). Following this work, *İzeyap* completed the restoration of ten of the roofs of the twelve registered historical house and replaced the wood siding on the first and second floors of the facades of seven of the buildings; however, none of the stone walls on the ground floors were repaired (Ayyıldız, Özbayraktar, 2005). The Saraybahçe Municipality Also Made New Signs As Part Of The *İzeyap* project.

In 1995, while the *İzeyap* project was still ongoing, the "preservation-purpose zoning and development plan" was drawn up; this plan included Kapanca Street within its auspices. The street was also included in the 2003 preservation zoning and and development plan as part of the "urban conservation" area" and is suggested as a tour site in the conservation plan.

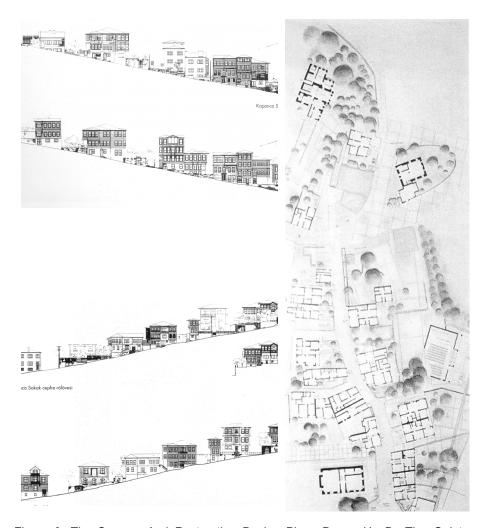


Figure 3. The Surveys And Restoration Design Plans Drawn Up By The *Galata Group* (Ekinci, 1993)

In 2005 the Kocaeli Greater Municipality, the Chamber of Architects, the Office of the Governor, the Saraybahçe Municipality and the Kocaeli branch of the Cultural and Tourism Ministry signed the 2<sup>nd</sup> Sırrı Pasha Agreement. According to this agreement a decision was made to "revitalize and preserve" the mansion of Sırrı Pasha, one of Izmit's most famous governors, along with the homes along Kapanca Street (Akcan, 2006). Since that date, the restoration surveys of two of the houses on the street have been completed.

# **CURRENT STATE OF KAPANCA STREET**

Unfortunately, the efforts to revitalize Kapanca Street that began in 1993 and have gone through several stages up until the present date have not been entirely successful. An evaluation of the revitalization work on Kapanca Street that took place between 1993 and 2007 is shown in Table 1.

Strong Factors	Weak Factors Potential for Develop	
- It is on the road	- It has retained its function	- It is on the tour route
leading to a historical	as a residential street only	included in the 2003
area that has	- Some of the historic	conservation plan
remained concealed	building features of the	- The conservation of the
- It has, for the most	facades of 7 of the buildings	neighborhood is
part, a historical fabric	have been repaired and	important to central and
that has not been	these buildings have	local authorities and to
changed.	retained their repaired state.	various NGOs (1994- Sırrı
- The restoration work	- Three of the registered	Pasha Agreement and
of Kapanca Street	buildings that have not been	2005- Sırrı Pasha
was started under the	restored are uninhabited and	Agreements are part of
auspices of the	are in a state of ruin.	the municipality's program
<i>İZEYAP</i> project, but	- Some of the buildings	for 2007)
was never completed.	whose facades have been	- The street has potential
- It is located along	repaired have inappropriate	for cultural tourism
the thoroughfare that	additions and inappropriate	ventures
in the past led from	colors.	
the main street to the	- The electric posts are ugly	
market located in the	and distracting	
"Çarşı-i Müslim"	-Before the conservation	
(Muslim Market)	plan was made, tall (7	
neighborhood	storey) buildings were	
(located along a	erected on the main street	
historic transit route)	(Inonu Avenue).	

Table1. An Evaluation of the Kapanca Street Revitalization Project Spanning 1993-2007

Just as they were in the *İzeyap* period, many of the houses along the street continue to be used as homes and the seven restored houses are being maintained in their restored state. Of two adjacent homes that were restored, one is occupied while the other is empty. Three of the registered homes that were not restored are empty and in ruined states. The facade of one of the historical houses has been plastered over and thus has lost its original facade features. Later additions to the buildings, repaired parapets, garden walls, entry gates and the materials/colors used on the facades do not accord with the originals. Because some of the buildings along the street have been restored, and others not, the street has a rather "unfinished" air about it. The electric posts are also visually polluting (Figure 4).



Figure 4. Wiews of Kapanca Street (Özbayraktar, 2007)

# CONCLUSION

This study is an investigation of the revitalization efforts of Kapanca street in İzmit. Like other existing empirical studies of the determinants of inner-city housing being renovated, the results of this paper are mostly inconclusive.

A survey was conducted among home-owners on the main street as to whether to turn the street into a pedestrian thoroughfare. Poll results showed strong favor for the idea, with owners indicating that they thought it would have a positive effect on the development of tourism, trade, handicrafts, cafes, shops, restaurants, hotels and pensions. This revitalization project for a pedestrian main street will lead the way to the renovation of the historic buildings, in addition to an increased demand for their use in different functions, which will in turn increase the vitality of the old neighborhoods. The revitalization project will not only ameliorate the physical structure of the street, but it will also increase the quality of life of those who live along the street.

With an aim at increasing the awareness of those visitors to regions that are the sites of buildings and traditional structures located within the conservation areas and registered as historical artifacts, the city has determined a special tour route (Figure 5). Along this tour route within the urban Conservation area are, in order; Kapanca Street, Sırrı Paşa Lane, Yeni Çeşme Street, and the Çukur Çeşme Street, leading into the 3<sup>rd</sup> Degree Archaeoligical Conservation Area of Orhan Avenue and Medrese Street (Koruma Planı, 2003)

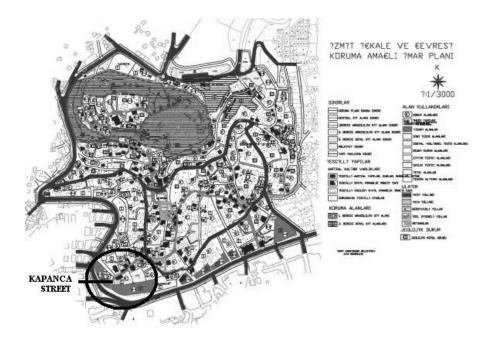


Figure 5. Tour Route Through The Conservation Area (Koruma Plani, 2003).

Because the Kapanca Street conservation area is at the very start of this tour, its revitalization project is very important. Still, the project itself can only be successful if the other streets along the route are also revitalized. The revitalization of the entire route will leave its mark on the identity that the city bears, while it will also be important as it sheds light on the city's history.

Successful projects that have taken place in cities of Turkey, such Safranbolu, Edirne, Antalya, Muğla can be examples for Izmit The Izmit project will also serve to nurture the vitality of the community and encourage existing residents to remain in the area. These are results which should be of interest to policy makers, urban planners and investors alike.

# **ENDNOTES**

(1) İZEYAP is a project that has drawn the wide support of the residents in the neigbhorhood, the local media, local NGOs, professional chambers, municipalities, the provincial govenor, the university, and government organizations and institutions. This project was also used as a model for the MEYAP (Project to preserve and revitalize the homes of Mugla) undertaken under the leadership of the Mugla governor (Polat, Şen, 1996).

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# **TRANSFORMATION**

Moderator: Tülin Görgülü

Ideas for Livable Environments After the Loss of Utopia
Ozan Öztepe

Ermenek in the Context of Articulation Problem
Neslihan S. Sağ, Esra Yaldız, M. Akif Sağ

The Transformation of Public Culture and Life in Ankara: An Analysis of Contemporary Approaches in the Design of Turkish Public Spaces

Aydın Özdemir

# IDEAS FOR LIVEABLE ENVIRONMENTS AFTER THE LOSS OF UTOPIA

## Ozan ÖZTEPE

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#### **ABSTRACT**

The Conflict: At the end of the 20th century the architecture lost its utopia (Karatani, 1995:12). The reality is started to be replaced by simulacrs. Today, reality is produced by matrixes, memories and order models - by means of this, it is becoming possible to reproduce reality infinitely. (Baudrillard, 2003:17).

The industrial revolution which emerged from Enlightenment science – the postrevolutionary social dynamics have gathered seemingly unstopable momentum. Nowadays mankind is struggling in front of the technology which is progressing with a momentum improportionate to the human nature, and trying to resist it. The Human, who eagerly embraced modernism at the beginning of the century, began to suffer a rapid alienation to his environment. The relationship between the "place" and the "space" got weakened, also by means of globalisation. While we were continued producing the traditional space typologies with local materials up until the end of 20th century, nowadays come up with similar spaces with similar materials in different locations. Within this "Similarity" in which the "meaning" has started fading, humankind suffers an identity crisis.

Due to ever-expanding communications networks and the immeasurable web of interrelations they generate, the world has shed the anachronism "global village" and is transforming into the more advanced state of the "metacity" (MVRDV, 1999:16).

Design Ideas: Today, while we discuss fenomelogy and hermenutic thought systems, it is possible to reach "The one which is ideal", not with a single but numerous ways. Every design problem shall be investigated among its context. Only by this, the homogenity of the techtonic environment can be overcome, and every design creates its unique form with a natural process. Large scaled urban projects in which infra-structure and programmes come together to form a new kind of urban planning that consisted of shifting about disjointed units. The new inclusive approach entails the comprehensive and seamless assemlage of construction, programme and circulation (UN STUDIO, 1999:16).

Socioeconomic And Cultural Design Ideas: The Poetica of the City; An environmental image may be analyzed into three components: identity, structure and meaning. As a result of the exposure of the machine aesthetics in daily life, structures became more and more similar and lost their poetic meanings; both in single building and general environmental scale. Architecture as metaphore points out a way to overcome the problem of "loss of subject". (Karatani, 1995:126). Metaphors can be regarded as the Cultural Sustainability; It is the interactionstarting point of creativity. and contunity between cultures of different eras. Sustainability can be considered both as cultural and physical / ecological sustainability. Ecostructure; The livable

environments are not only architectural or engineering problems it is also about finance. The macro and the micro economical policies Contextualism; Contextualism offers a middle-ground shouldn't be isolated. position between an unrealistically frozen past with no future development permitted, and urban renewal with the total loss of the urban fabric.

Physical Design Ideas: Breaking the form; What is a wall? (Herzog & de Meuron, 1998:186) What is a floor? What is a roof? These concepts all bespeak our perception of the physical world on a mental, spiritual level. Every single design searches its ultimate zero point. Zero point requires. Anchoring; Anchoring absolute loss of memory. (Tümertekin, 1999:57). symbolizes the metaphysical and phenomenological connection between architecture and its location (Holl, 1989:109). Architecture and site should have an experiental connection, a poetic link.

Ecological Design Ideas: Bio Nexus; A new conception of the city, a city no longer defined by its built space but by its absence or empty spaces (Koolhaas, 1993:331). The potential to establish ecological connectivity emerges as a dominant consideration in reprogramming the site. Bio nexus is the integrated, healty and natural environment which points out the biological network of the site (Yeang, Symbiosism; Symbiosism symbolizes the common life of the humankind 2006:16) and nature which have begun to dissolve from the beginning of the 20th century.

Technological Design Ideas: E-topia; The latest wave of urban infrastructural networking will play much the role that its predecessors did in earlier eras of technologically mediated metamorphosis – old roads, waterways, railroads etc. The basic design principles of e-topic cities are: Dematerialization, Demobilization, Mass Customization, Intelligent Operation and Buildings with Nervous Systems; Soft Transformation. (Mitchell, 2000:147) Technological developments suggest a new evolutionary stage for architecture. Following the industrial revolution, they acquired elaborate mechanical physiologies – heating – ventilation – air conditioning (HVAC) systems, water supply and waste removal, electric power and other energy systems, mechanical circulation systems etc. (Mitchell, 2000:59)

Keywords: Design, Urban transformation, Ecology, Poetica, Meaning

## **MODERNISM AND UTOPIA**

The process of change, started from rural to urban which began with the industrial revolution and the process of industrialization, evolved into an unforeseen mass at the end of 20<sup>th</sup> century. Modernism, which started with the industrial revolution and gained velocity by means of the need to produce mass houses, due to the destructive affects of World War 2, manifests its predictions about the future by several utopias. Utopias which express ideal society and ideal life, manifested among both economical and social areas at the beginning of 20<sup>th</sup> century, started to lose their meanings by the end of the century. (Karatani, 1995:16). The collapse of USSR which proposed communist society as the ideal society at 1989, digital revolution, the effects of capitalism on societies, the ground breaking effects of globalism, make it necessary to re-evaluate the social thoughts and the cities which were considered accordingly at the beginning of 20<sup>th</sup> century. The livable environment ideal of the past utopias and the recent situation contradict with each other. Modernism's utopias have made heavier and heavier demands upon our cities. As a result, they have grown ever larger, more crowded, more stressed and strained, and more desperately choked with traffic and pollution. It is obvious that we can not continue down this path for very much longer. In this paper, the utopias which are

manifested for ideal city and life, in 20th century, will be evaluated under the context of today, and thoughts for reaching a livable environment will be presented.

Starting with the effects of industrial revolution, and gaining a different velocity by means of the destructive effects of World Wars, urbanism has undergone a radical change at the first half of the 20<sup>th</sup> century. The proposed concepts of modernism, like simplification, saturation and tabula rasa, resulted in the reconsideration of the relations structured by mankind between nature and tradition. The spatial needs of industrialization, integrated artificial additions to the cities which were in their natural pattern of evaluation. The cities which confronted a rapid change under the mentioned context, began to be discussed structurally. A more fundamental critique of attempts to simplify the problem has been offered by Christopher Alexander, notably in his essay "A City is not a tree", in which he argued that such attemps were based upon a mistaken appreciation of the structural relationship of the city's elements which typically take the form of semi-lattices. The tree-like structure of most modern plans, from Tange's Tokyo Bay to Le Corbusier's Chandigarh, represents a "trivially simple" case of the semi-lattice structure, and one in which "life will be cut to pieces" (Gosling & Maitland, 1984:20). The new cities which are reformed or just appeared completely as a Tabula Rasa, tried to be predicted by means of different utopias, that depend on several images at the first half of 20<sup>th</sup> century. The design depended utopias proposed by modernism remained away from contextualism, keeping politics and social input behind, and object and image centered.

Under the context of social class separations, disappearance of borders among recent cities, and the effects of technology on daily life; utopia thoughts which are proposed with the intention of claiming ideal society and ideal cities, lost their Many similar plans of Voison plan, which was proposed by Le Corbusier, were constructed in differing scales among the world, under the context of tabula rasa. The intensified urban society which was proposed by Le Corbusier, became the major problem of many cities nowadays. On the other hand Frank Lloyd Wright put the idea of the integration of rural and urban by py proposing, in his ideal society who will live in the city he called "Usonia", giving every family an acre of land. In recent cities due to economical difficulties, suburban areas emerged between rural and urban as buffer zones. Neither Corbusier nor Lloyd did consider new societies' social or economical issues fairly. The Moving Cities proposed by Archigram in 60's became real in some sorts by means of telecommunication technologies, rapid progress of transportation systems, and effects of these into daily life. In 1960's, especially as a result of globalization, spaces on different topographies are becoming more and more similar, by means of capitalism same spaces began to be reproduced on different parts of the world. Distances between cities began to fade virtually with world wide web and other digital innovations. With the effect of globalization, people became nomads in the spaces they live, under the context Deluze put into literature. When generalized, our cities today, became capitalist attraction centers that suffer from social class conflicts, transportation, infrastucture and ecological problems. which consists of suburbs added to its center and near perimeter. We need to develop urbanistic and architectural ideas on these new urban conditions, using information from sociological, economic and geographical sources. Architecture cannot claim to shape the city in its own image. We can only conceive an entire set of relations between the city and architecure when we reject the idea that architecture gives form to the city as its own object.

Today there are 22 megalopolises all around the world. At the outset of the twentieth century, 10% of the population lived in cities. In 2000 around 50% of the world population lived in cities (Koolhaas, 2002: 20). Due to ever-expanding communications network and the immeasurable web of interrelationships they generate, the world has shed the anachronism "global village" and is transforming into the more advanced state of the "metacity" (MVRDV, 1999:55). We will be living realistically and legally in a one-town world for the first time in history.

#### THE LOSS OF UTOPIA

The term "utopia" itself means both a place and a state of things, and it is often difficult to separate the two. Utopia, with its plain meaning, is the place of nowhere, however, ideal images and progressive movements can be formulated by means of utopia . The utopian concept refers to Plato's proposal that a perfect environment is the result of a perfect society. Thus utopian planning proposals historically have been based upon particular utopian concepts of society, and assumed the creation of a newly mentality in mankind. Most such proposals have adopted rigid geometrical forms. Utopia concept was first put by Sir Thomas More at 1516 as a description of a future ideal society. (Meyerson, 1996:113). Two main traditions on utopia had emerged up until 20<sup>th</sup> century.. While literal utopias construct the desired future under the social context, design utopias operate under the context of spatial organizations.

Utopia is the fiction of perfect society. Utopical thoughts arose in different areas, from Ideal cities to ideal societies; from social and political speculations to science fiction; from realistic novels to cultural movies and television. It became a wide spread idea that utopia which dominated Europe's dreams for a better future, began to lose its effect. Today, not only the USSR but all utopia fictions seem to dysfunction. This crisis of socialism resulted in the domination of Western capitalist democracies. (Kumar, 2002: 106).

According to Popper the real weakness of 20<sup>th</sup> century utopias is that they propose the complete regeneration of the society depending on some absolute and rational thoughts. This is the thought that pushes utopia to violence and oppression. According to Popper utopianism is an act that starts with the intension of "producing the heaven on earth" however ends with solitude and returning the world to hell. The most negative aspects of utopia are; the claim of totality, absoluteness and uniqueness.

Although Utopias are technically non-existent concepts, they are described as projects, which present a real utopia image. By mid 20<sup>th</sup> century, modernism began to spread all around the world and began to fill the cities with real spaces urban images once thought as utopical. This situation reached its peak by the end of 20<sup>th</sup> century, and utopia, ironically, became real. Today the belief that mankind has the ability to change its environment radically by means of planning, is replaced by the belief that mankind lacks such ability.

# **IDEAS FOR LIVABLE ENVIRONMENTS**

# Data Design

Contemporary architecture is an information architecture. Information provides data to architecture in order to produce design models among technology, sociology, philosophy, politics, and phsycal environment. Architect, in accordance with his role in 21<sup>st</sup> century, should transfer the information, which is of its biggest amount in history, into design in single buildings or environmental scale by means of different design methods. The architect collects information that is potentially structuring, coordinates it, transforms it and offers ideas and images for the organization of public life in an endless, seamless system. City today, to a greater degree than ever before, actually is those data sets and is those networks of public equipment through which the data circulates. We all live in an information society.

Every design should be considered with the possessed information of its, in its own context (Tümertekin, 1999:54). Information, which is obtained as objective input, can be transformed into design data by means of diagrams. The diagram is a form of mediator; an external, 'found' element, between the object and the subject, which could be used to introduce other themes into a project. The role of the diagram is to generate ideas and to find inspiration in something that is purely organizational, rather than iconographic or metaphorical and to represent a strong, though not yet fully rationalized, conceptual potetial. Diagrams offer a new abstraction; unlike the reductionism of an urbanism based on Euclidean Geometry, that is proliferating, unfolding and generative, re-activating public life in urban planning (UN Studio, 2006:32). The search for new forms of ordering principles different from Cartesian geometry. Data design can be described in its general meaning, as, transferring the social, topographical, environmental information about the place, into design data with the help of diagrams or such simplified tools.. Several symptoms about place are manifested by means of diagrams. At this point the bond instituted with place is considered as objective as possible. We have to produce diagrams, that are not readily found and they have to be produced in relation with the "place". The diagram begins with defining its parameters. Defining user categories, for example, in relation to territorial and time-based parameters. Diagrams are made in order to extract parameters for the development of the site; functional relationships, car traffic flow diagram, mass transportation diagram, density of activities etc. The diagrams are tended to accentuate the effects of the interaction between different actors. This relational approach to diagramming generated new insights into the developmental potential of locations in an integral manner. Movement studies are important in determining the composition of a location; analysis of types of movement includes the direction of the various trajectories, their prominence in relation to the forms of transportation on the site, their links to different programmes, and their interconnections.

The information designer organizes a variety of data into structures that coordinate complex systems and processes in a clear way. A major focus of information design is the way in which the viewer links his own insights with the contents of such "data packages". Data design is therefore, a consequence of an increase in the amount of information available to the public. The emergence of data design represents an important step toward making the public domain – in both a physical and mental

sense more "public". Data design can be seen as a navigation system which, at its best offers insight into the processes that have created our complex society (MVRDV, 1999:213).

# **Bio Nexus of the City**

The relationship between mankind and nature weakened after the industrial revolution. While there are separations between natural and urban environments in our contemporary cities, at a larger scale it confronts global environmental problems. New solutions that strengthen the relation between city and nature should be searched. The balance between urbanisation and ecology is crucial for liveable environments. In comparison to the amount of study which has been carried out on the energy performance of building designs, little has been said on the comparable performance of towns. The ecological connectivity of the city emerges as a dominant consideration in urbanism. Ecological corridors can re-establish ecological connectivity as an integrated part of the city's urban fabric to provide opportunities for a rich and sustainable mix of passive and active uses working in harmony with the natural environment. The ecological approach is not one consisting of a hard-and-fast set of design rules that result in a deterministic set of built forms. Variations will be the natural outcome of responding to different site geometries and to the climatical data (Powell, 1999:72).

In general the city is described as the built spaces of its own. A new conception of the city can be described as a city no longer defined by its built space but its absence or empty spaces (Koolhaas, 1993:331). The empty spaces can planned as green spaces or even forests in towns. One kilometer of such forest (a mixture of birch, oak, pine and beech) absorbs 575 tons of CO2 per year. The photosynthesis reaction could be used to absorb the CO2 that is released by the burning of fossil fuels, by cars, by factories (MVRDV, 1999:106). Generally city should bear its meaning vertically while nature should be considered horizontally. The eco-corridors can be designed as vertical spaces even. Eco-corridors will produce a biological network among the city.

The ecological approach addresses the issues of conserving energy in a settlement and of reducing its waste products. The architect must address the issue of the extent of delivered energy embodied in the materials and equipment used in the buildings of the settlements.

Another issue for the bio nexus of the cities is minimizing the power needs. The natural climatic energies of the location should be employed to their fullest. The energy conservation issue that has been dealt with at the building scale until now needs to be thought of at a larger scale -the city. Solar power and wind power should both be considered as essential sources for sustainable energy resources.

# **Infrastructure Transforming into Architecture**

Architecture which usually bears over ground construction as object, however, under the context of livable cities, it should consider infrastructure and transportation facilities with engineers. Today infrastructure is an unseperable part of architecture. The shifting fields of engineering, urbanism and infrastructure form some of the most important parameters of architecture (UN Studio, 2006:55). Large urban projects in which infrastructure and programmes come together to form a new kind of urban node demand an architectural approach which is radically different from the traditional method of urban planning that is consisted of shifting about disjointed units. Urbanism, infrastructure, transportation and construction are issues that should be considered in accordance

Permiability is a similar concept with livability. Place, which is an important issue in our contemporary cities, usually increased by vertical structures. Underground presents an important potential for cities new layers. Infrastructure is a contemporary issue which architect should bear responsibility under the context of urban planning.

Today infrastructure concept does not consist of energy lines, water lines, sewage lines, like it was once; highways, land / water transportation, bridges, tunnels, metro stations, ports, airports etc, presents important infrastructure points of the city. In a way infrastructure produces cities sub layers The infrastructure connects the city in the underground which enables new public spaces. Designing these layers requires the collabration of engineers and architects.

# The Economical Approach

Economy can be regarded as the key word for livable environments by most people. The economist J.K. Galbraith has remarked that all of the problems of the city can be solved by the sufficient application of just one thing, and that thing is money. Such a view, of the city as a thing to be improved or cured by financial means, hides the fact that the city is itself a financial device, so important to the national economy that some authorities would regard the latter as little more than the sum of the urban economies it comprises (Gosling & Maitland, 1984:10).

Today's cities mainly serves as great finance devices. Most starkly in the case of the squatter settlements of the Third World, but also for the most sophisticated proposal for a developed metropolis, the economic context provides a crucial parameter. For most projects this fact simply entails a restriction in resources available to realize ends defined by other considerations. For a few, however, the operation of economic forces itself seems to provide a model for the form of development. Unlike social, engineering or formal models, for example, which can suggest some fixed goal to be realized, this particular source inspires no physical end state, but rather a sense of the city as, above all, a dynamic process. Economy equals to ecology equals to liveable city. The livable environments are not only architectural or engineering problems it is also about finance.

The economical approach requires a physical, social, cultural, ecological equilibrium around the context of economy (Yeang, 2006:12). The macro and the micro economical policies have to be planned simultenously with other diciplines. Every city should be considered economically in its context. While performing this consideration, collaboration should take place with the related disciplines, end economic issues evaluated accordingly.

## **FUTURE CITY**

At the end of the 20th century, information has become dematerialized and disembodied. Today, the digital revolution effects architecture and urbanism at all stages. New production techniques and materials are constantly evolving and leading to design innovations (Mitchell, 2000:106). Contemporary architects and urban planners should put their thoughts on the future cities, today.

In general future city can be described in these main points: dematerialization. demobilization, mass customization, intelligent operation, soft transformation. For the future cities space will be evaluated through an entirely modernized vocabulary: no longer is it geometrically composed or visualized but computed, calibrated, assessed, predicted, optimized (Koolhaas, 2002: 268). Since 1990 contemporary practice has been dominated by the revolution in digital technology Computer generated data can be used to inform the very fabric of building and to re-think our future cities. Complexity and uncertainty are unavoidable terms, which must be accounted for in any hypothesis about the future of cities. The era of the second modernity and of the post-Fordist societies is characterized by uncertainty and indeterminacy. The functions and values of existing urban elements, and radically remake their relationships will change in the future city. The resulting new urban tissues will be characterized by live / work dwellings, twenty-four-hour neighborhoods, electronically mediated meeting places, flexible, decentralized production, marketing and distribution systems, and electronically summoned and delivered services. This will redefine the intellectual and professional agenda of architects, urban designers, and others who care about the spaces and places in which we spend our daily lives (Alison, 2006:7). The industrial revolution forced the separation of home and workplace, the digital revolution is bringing them back together.

According to the new dynamics of the cities in the twenty-first century, new, high-speed, digital telecominications infrastructure will refashion the urban patterns that emerged from nineteenth and twentieth century transportation, water supply and waste removal, electric power supply and telephone networks. Todays public places, towns and cities have to be innovated and reinvented according to the requirements for the twenty first century. New techniques must be invented to allow the architectural imagination to find relevance in contemporary circumstances and to communicate its policy.

## CONCLUSION

Architecture and urbanism are complex fields of multiple forces. The urban space is basically a social spatial network, an anthropological space, which has cultural and historical dimensions that belong to it. The rigid dogmas of Modernism and standardization have been fundamentally challenged. Sociology, philosophy and urbanism have trained us to see the city as a functional system of relations and links. Architecture is no longer simply the play of masses in light. It now embraces the play of digital information in space according to the requirements of the 21<sup>st</sup> century.

Urbanism is a challenge facing all disciplines today. The new urban spaces and organizations can be understood only in relation with the technological, economic,

politic and cultural developments. The validity of the 20<sup>th</sup> century utopias, that propose strict solutions and images, should be thought again. After the loss of utopia, in order to imagine the livable cities of tomorrow, thoughts that focused on the process rather than the result, that are more flexible and which do not bear a claim of absoluteness are needed.

Data design has the ability to bring a new approach to contextualism by its qualities like producing design parameters with every kind of information about the place. The bio nexus of the city, bears a vital importance in order to make the post industrialist cities livable again. The cities which became isolated from the nature should be integrated with the nature again. The cities which became increasingly isolated from nature after the Industrial Revolution, should be integrated with the nature again. Infrastructure is an issue, which architects should take responsibility just like the engineers. As digital revolution taken into account, infrastructure will grow parallel to technology. Silicon will be a new kind of steel. Economics should be considered as a basic criteria that vitalizes social, cultural, technological, ecological and political parameters

All the ideas about liveable environments need physical, cultural, ecological, social and economic equilibrium. Due to the digital revolution, the 21<sup>st</sup> century cities needs re-thinking in designing, engineering, ecology and economy.

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# **ERMENEK IN THE CONTEXT OF ARTICULATION PROBLEM**

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#### ABSTRACT

"City, is a dram in the time, rather than being a space in locality."

Patrick Geddes. 1996

Cities are the "places" in which the relations of yesterday and today are maintained and which make connection with the past; they make themselves felt differently by people with their different spatial patterns. Besides the perception difficulty which is caused by today's continuous changing, altered city appearance and city image, city-dweller who always encounter such changes gradually lose their memory-memoir relations, and as a result the phenomena of total loss of the city memory is being experienced. In cities to sustaining the historical and local continuity, in addition to reproducing and protecting the traditional values, improving the principles and decisions of a suitable integration process for creating the local positive value in the production of the new gains importance.

Anatolia has become the host of many civilizations since pre-historic periods. Each one of Anatolian cities has been affected by these different periods and unique traditional patterns have been formed. Ermenek district of the province Karaman is an Anatolian city which has the most characteristic features of these traditional patterns and has not been spoilt or is not late for being protected, and which has been patterned since early 1900s, has been considered as valuable to be examined as pilot region. District of Ermenek which has been chosen as research area has a traditional city pattern which is placed close together in the valleys between Taurus Mountains, which is integrated with the greeneries, and which represents interesting surprises showing unity with the sloping land. The problem in the area is that there does not exist a city image which is not articulated with today's patched pattern and there does not exist an easilyreadable pattern language. Moving from such a point of view, in the framework of the research, how much the plans made for the historical pattern of Ermenek read the story of Ermenek, and how articulation, owning, cultural interaction between newly patterned areas and traditional patterns has been formed will be explicated. In this explication, all the plans made in historical process for the historical pattern of Ermenek will be examined, the findings and photos obtained from the scanning of literature related to the culture-space and time will be documented; induction method will be used; traditional pattern and newly patterned areas will be compared and the urban formation story of Ermenek will be tried to be put forth.

**Keywords:** Ermenek, Articulation, Traditional housing pattern, Interaction of culture-space and time

## INTRODUCTION

Cities are the "places" in which the relations of yesterday and today are maintained and which make connection with the past; they make themselves felt differently by people with their different spatial patterns. Cities form a sui generis personality by being affected by the ideologies and flows of different periods. In the cases when the cities become empty of personality and become uniform the diversity is sought, and in the cases when diversity becomes rampant, planning principles seeking simplicity are started to be considered. In the cities which have no identity as a result of globalizes world and which have been formed as a result of "uniformity", there exists always a status quo which is separate from each other, instead of a permanent existence and concentration. And, the reason of the differentiation of each "moment" is the change which the cities have experienced.

Change is continuous and is a consequence of the development. It is not a static phenomenon but the expression of the continuous change which is experienced in the appearance of a place, a building, a city. Besides the perception difficulty which is caused by today's continuous changing, altered city appearance and city image, city-dweller who always encounter such changes gradually lose their memory-memoir relations, and as a result the phenomena of total loss of the city memory is being experienced. However, memory of the city or in other words, social memory is composed of space-time-identity relation; there are compulsions in terms of changing quality, measure and meaning of spaces which have personality and which have gained definition and meaning in which social relations are formed. However, it is necessary that the city is protected together with its all structural assets, relations, social meaning and specific identity.

The most outstanding feature of the city without identity is that it is patched. Besides the fact that the localities resemble each other as a consequence of global effects, methods of designing and planning studies carried out on those localities resemble each other, too. However, everything as regards our physical and social life has a place in the locality. Each city has its own physical and social internal dynamics, potentials and problems. Approaching every city with traditional methods causes the ignorance of the memory, unique pattern and identity of the city. Trying to understand a locality and being able to read the story of the locality becomes the main condition in ensuring the spatial continuity. For providing the cultural continuity in terms of history and locality; re-animating and protecting the traditional one, developing the principles and decisions of a suitable integration process to form spatial positive value in forming the new gains importance.

# INTERACTION AND ARTICULATION OF CULTURE- LOCATION- TIME

Nowadays, social, cultural and economic changes and transformations affect world socities and this is effective upon the shaping of city and city units. Various ideologies such as globalization are phenomena which reveal the importance of localization and local identity and try to create specific and different local cultures and identities rather than creating a homogeneous identity (Özer, 1999).

Life styles, location formations and location interpretation processes having emerged with industrial revolution have undergone a different formation process together with the developments in current society. Time and location perceptions as an extension of the developments in communication and transportation technologies have differed. This situation enables location to be demolished through time and thus, locational barriers to be more easily overcome. Removal of locational barriers hasn't decreased the importance of location. On the contrary, the more locational barriers decrease, the more sensitive people become to locational disparities (Bektas, 2000).

However, cities, due to their locational qualities, tend to maintain an identity which will represent their existence in the period lived. In fact, this phenomenon brings to the agenda the efforts for conveying past memories to the future as hope, for enabling a cultural continuity with its historical and locational dimensions; in other words, for creating a cultural bridge (Harvey, 1997, Boyer, 1996).

Structuring process in Turkey developed parallel to rapid urbanization which the globalization has brought has been generally complained about. One of the points upon which these complaints focus is that cities lose their identities. Today, urban locations without identities have started to be produced, mostly by what is called planning. Planning works are generally considered as limited and pursuing economic interests. This has revealed the problem regarding the change the definition and meaning of location, and deterioration of unity of location and time relation, namely location- time- identity, as well as completely losing urban identity and location perception.

One of the basic conditions which provide locational continuity in this process depends on analyzing the story of this location accurately. The development of principles and decisions of an appropriate entegration process for providing cultural continuity in relation to history and location and for maintaining and protecting the traditional as well as for creating locational positive value for forming the new has gained importance. Providing cultural continuity means preservation of living areas rather than physical formations.

The problem with situations in which characteristics of traditional established fabric of historical cities are still not lost, is the existence of an unarticulated urban image which parted structure composed of old and new urban fabrics presents and urban pattern which cannot be easily analyzed. Social, economic and cultural changes affect physical location of city. Turkey has rapidly experienced the collective change and continues to experience it. The aim of this study is to analyze the articulation of old and new structurings in traditional fabric on the basis of changes in physical, cultural and social structure throughout time in the city of Ermenek, in order to embrace values of this city where changes experienced today are observed explicitly and which has a specific identity in relation to traditional fabric characteristics.

# **CASE STUDY: ERMENEK**

Anatolia has become the host of many civilizations since pre-historic periods. Each one of Anatolian cities has been affected by these different periods and unique traditional patterns have been formed. Ermenek district of the province Karaman is

an Anatolian city which has the most characteristic features of these traditional patterns and has not been spoilt or is not late for being protected, and which has been patterned since early 1900s, has been considered as valuable to be examined as pilot region. Ermenek is one of the most important cities of the historical region called "Kilikya" (surrounded by Antalya on the west; Isparta- Burdur and Konya on the north; Seyhan and Ceyhan Rivers on the east and Mediterranean on the south). Ermenek is an old city established in the middle of this basin surrounded by these cities and on Ermenek Brook, the biggest branch of Göksu river on the south, and it has served as a centre to other cities in its vicinity throughout the history (Photograph 1)

Ermenek district, which has been an important centre throughout the time has a traditional urban fabric which integrates with greenness located in valleys between Taurus Mountains and represents interesting surprises displaying integrity with inclined area. The problem in the area is that an unarticulated urban image with its current parted structure and pattern language of city which can easily be interpreted, do not exist. However, traditional urban fabric existing in Ermenek is an indispensable part of urban integrity. The prior necessity of planning the unity of old and new urban centres should be taken into consideration for decisions regarding the city.



Photograph 1. View of Ermenek city

# **Planning Process**

First settlement in Ermenek occurred when public started to gradually settle in the south section of castle after The Castle located at the north of the city in the rocky section which arises like a high wall was captured by Karamanoğulları. Settlement was taken over by Ottoman administration in 1475 and public started to disperse towards the south of city beginning from 1500's. Sparse and scattered dispersion towards the south continued until 1990. First planning works for Ermenek district were carried out in 1925. Dispersion towards the neighbourhood halted between 1900-1960. The settlement between 1900- 1960 emerged in the form of concentration in increase and renewal within the limits of period until 1990. The settlement between 1960-1990 occurred along the main road towards south. The settlement after 1990 also continued towards southeast (Figüre 1).



Figure 1. Historical Development Map

Dwelling briefly upon population development of Ermenek city will be useful so as to understand city's scale. Population of Ermenek city centre was 12,202 in 1980 and 15,410 in 1995. The reason for this is out-migration due to economical inadequacies and limits regarding educational opportunities. According to this population increase, it is possible that development potential of urban settlement areas aren't at the limit and arrangements to be made upon current structuring can be solved by small-scale interventions. The state of current structuring: it occurred in the form of concentration within the old fabric and renewal until 1960 (Photograph 2). Between 1960-1990, public started to disperse along the main road towards the southeast and initially Seyran District was formed and dispersion towards out started together with other developments. The development after 1990 was also towards southeast. Small industrial site on the northeast of TCK (General Directorate of Highways and housing developments on the west and southwest of the prison occurred during this period.



Photograph 2. Ermenek city over 1935

Although planning works in Ermenek city extend to republican period, only 1981 and 1996 plans were obtained from document research. First plan regarding Ermenek dates back to 1925. Second construction plan was made in 1959. Construction plan made by Osman Nuri Küçükgövez on 30<sup>th</sup> July 1981 and another construction plan made by Serdar Bandik on 2<sup>nd</sup> August 1996, which is still in effect, followed the second plan. Approximately 8,5 hectare area in Ermenek city was proclaimed "urban archeological site" by the Ministry of Culture in 1995. When the available plans are examined generally, we see that although preservation consideration should have been on the agenda of planning works regarding Ermenek city, of the last 1996 plan in particular, the fact that any plans aimg at preservation of urban archeological site have not still been made since 1996 laid the foundations for the formation of a standard stereotyped structure by not dealing with traditional urban fabric in detail (Figure 2, 3).

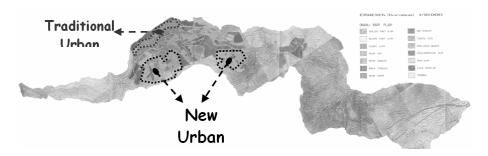


Figure 2. Development Plan of Ermenek, 1981

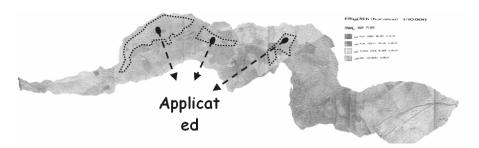


Figure 3. Applicated Areas in Ermenek of 1981 Plan

When the last construction plan, which is still in effect, is examined, it has been determined that CC plan has not made a positive contribution to the current fabric due to the effect of annuity concerns and that it has been insufficient in relation to fully shaping the development in current regions. When we consider 1981 and 1996 plans together, it is seen that there hasn't been any changes in structuring conditions and functioning decisions regarding the site despite the site decree proclaimed in 1995, and that the 1996 plan is an extension and an annex of the 1981 plan. Whereas, it is necessary that significant changes in the planning shaping the plan should be explicated and required arrangements should be made. The same problem confronts us in both plans within the context of articulation of the plan to the city; a grill planning schedule and a dense structuring suggestion exist in regions of the city newly opened to development. It is seen that decisions regarding development areas of the plan made in 1981 are not fully applied but still there are similar decisions in the 1996 plan. This causes us to make a negative judgement about the plan's articulation to and separation from the city which is the main problem (Figure 4).

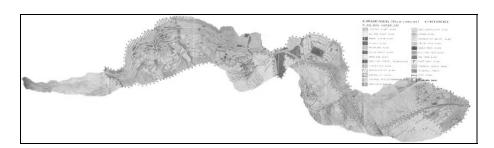


Figure 4. Development Plan of Ermenek, 1996

# **Analysis Regarding Ermenek**

It is known that mutual relations whose existence can be determined among the environment surrounded by social and cultural cycles in the city are an interaction process. In this process, planning approaches aming at pursuing limited economic interesets without consideration of conveying past memories to the future and by ignoring historical and locational dimensions have a significant role in the formation of unliveable urban locations ad fabrics where location-memory identity unity has been deteriorated. When Ermenek is in question, it is seen that main point of departure is not any consideration regarding conveying past memories to the future as regards the last state occurred due to current planning and development aiming at annuity rather than cultural continuity has been targeted. We can say that morphological structure playing the crucial role in the formation of urban fabric of Ermenek is in harmony with social gradation observed in social structure of past period.

Established fabric and historical centre of the city, as well as settlement areas which completed their development within close vicinity years ago, have mostly undergone concentration process by increasing with plan decisions due to increased pressures and in line with the demand regarding transforming them into higher and denser utilizations. The new geometrical urban structure developed in accordance with the plan could not integrate with traditional urban fabric of the previous organic formation and thus, some kind of disharmony, conflict and contradiction emerged. In Ermenek. as in many historical cities, wide roads opened and high structurings upon these aim at acquiring a modern city image and a western identity without aiming at providing adequate road capacity with new road arrangements with grids or radials placed on and beside organic settlement pattern in a contrary manner to the already established traditional fabric characteristics of Turkish city. The basic inaccuracy here is in the perception that geometry of the city will also shape functional distinction. The result of this perception has brought together the fact that the city has been consciously broken off from its history, urban regions are seperated from each other and are abstracted and cannot establish full relations. And this causes urban locational organizations to have a negative quality as well as demonstrating an urban image which cannot be articulated and interpreted in the old and new urban fabric (Photograph 3)



Photograph 3. which cannot be articulated and interpreted in the old and new urban fabric

The period when this fabric began to deteriorate was determined to be 1981, in the study carried out particularly upon traditional fabric and this process accelerated in 1996. As archeological site decision was not made in 1981, structurings upon this fabric were carried out at the desired level and continuation of deformations upon this fabric in 1996 demonstrates that the decision regarding archeological site was not articulated to the city. Important structures which will maintain continuity in relation to culture in the region proclaimed as urban archeological site have began to be threatened and receded by new structuring pressures.

Parcel boundaries and scales previously formed in the already established Ermenek fabric are not changed and are destroyed. In addition to this, each of them escalated and concentrated by renewal and there are areas which have gradually disqualified and lithified in terms of urban infrastructure and reinforcement. Both traditional organic fabric of the city which has maintained its existence until today and geometric urban fabric formed later can be observed simultaneously in this rapid and consistent change process in single structure scale. Many structures whose economic lives have been completed have been destroyed and demolished due to pressure in relation to transforming them into higher and denser utilizations. In fact, changes towards structural change and transformation process due to speculative pressures created upon city's territory were placed on a legal ground initially with the law on structures and roads. Later, construction law amended many times and construction plans defined in these laws, established upon a legal ground, as well as uniform templates without identities which are in disharmony with usual organic fabric characteristics, have been applied. Geographical and morphological characteristics, natural structure and flora, and social habits of the region have been ignored in this arrangement and a normative planning perception as well as the already established values of urban location have been neglected. It will be true to suggest that the reasons behind annuity pressures created upon city's territory are inadequacy of territory supply, infrastructure of which has been established as well as urban entrepreneurships which compete to take place in the limited urban location and interest conflicts. Common names of places and locations of old city were maintained after this lithification, inadequacy and loss of identity experienced; but, they became meaningless by losing their old definitions since the surroundings of these places were completely changed in physical terms.

An approach based on physical considerations has been presented generally in planning decisions made regarding traditional fabric in Ermenek planning works and functional differences and socio-economic considerations have remained in the background. This strategy constitutes the problem about unarticulation of the plan to location in Ermenek city. The main road passing through city centre is like a borderline where old and new dilemma begins to emerge in traditional fabric. The south of the road demonstrates a hierarchy composed of high-storey, dense and new structurings and the north part demonstrates a hierarchy which tries to preserve some characteristics of traditional fabric (Photograph 4).

It can be obviously seen that high-storey buildings have been built in the north section of city where traditional fabric takes place partially, and that these buildings are not in harmony with, in other words are not articulated to old fabric or buildings (Photograph 5).





Photograph 4, 5. The road of araund traditional fabric and new structuring; No articulated to old fabric or buildings

Moving towards the south of city centre, old buildings with human scale stuck among high-storey and dense buildings are the indicators of how new planning decisions may have a negative effect upon city silhouette (Photograph 6).

Moving towards the northeast of city, betweenness of traditional fabric and new structuring has been moved into a different dimension. It ceased to be a separator element in these sections (Photograph 7).





Photograph 6, 7. Negative effect upon city silhouette of new structuring; Betweenness of traditional fabric and new structuring

Interfaces in the form of meaningless spaces occurred in buildings with different elevations emerged due to new planning decisions are the most important elements emphasizing identitiy loss (Photograph 8).



Photograph 8. Emphasizing identitiy loss

# CONCLUSION

Effects of rapid, disorganized and uncontrolled urbanization in our country assert themselves in all regions, as well as in traditional fabric. This quality change in traditional fabric arises generally from problems regarding cultural, social and economic changes. Newly constructed buildings gradually bring erasion of historical fabric in urban settlements. As a result, these disintegrations in settlement fabrics result in loss of cultural and architectural identity. This loss of architectural identity does not facilitate the maintenance of traditional and modern architectural cultures through mutual exchanges within a process. And this has resulted in unarticulation of historical fabrics in cities such as Ermenek, in social, cultural and locational terms. The most important actors accelerating this process are plans made in disharmony with traditional fabric and template planning methods.

It is necessary that locational quality and specific fabric characteristics of the city should be preserved as a whole so as to maintain the cultural identity of the city and to provide articulation of plans to the city. It is necessary that immovable cultural and natural assets should be preserved and developed as a whole and adapted to modern uses by integrating them with other sections of settlement. The fabric which is wanted to be preserved with its unique qualities without deformations, and the sustainable development of which is wanted to be provided by purifying it from corrupt attachments, is not composed of a single structure and includes many elements such as positioning of structures according to each other, wall, garden, domicile uses. The reference point for the total preservation of this fabric and for providing location-memory-identity unity should be the plan decisions and to provide their articulation to the city. It should be known that unless these values are taken into consideration in the planning, traditional fabric will lose its characteristic one day and cultural assets will become structures which will be allowed to be destroyed after its photo is taken .

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# THE TRANSFORMATION OF PUBLIC CULTURE AND LIFE IN ANKARA: AN ANALYSIS OF CONTEMPORARY APPROACHES IN THE DESIGN OF TURKISH PUBLIC SPACES

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#### **ABSTRACT**

Urban activities that turn a city square into a public place have generally been considered political in Turkish society. Both contemporary and traditional public spaces have existed as stages of opposition groups and arenas for playing out the tension between classes. Hence, the city square, which had been a democratic public space, is now being reduced to limited functions such as traffic circulation; these spaces have generally been designed with the goal of solving traffic problems in metropolitan areas as opposed to providing space for pedestrian activities. The current trend in Turkish cities reflects the declining character of traditional public space and the rise of new emerging public spaces such as shopping malls.

The major purpose of this paper is to offer a perspective based on the transformation of public space in Ankara to understand the potential reasons of this transformation. In line with these discussions, this paper aims to explore how public space is transformed into quasi-public space with examining the cases of Kızılay square and AnkaMall. These cases clearly represent the transformation of the meaning and spatial qualities of public space, which will be the major theme of this paper. The paper questions whether the shopping mall is a realistic alternative to the public space in the city center.

To achieve a holistic understanding, the paper examines the dynamics of public space transformation following a socio-spatial framework of analysis, in which the urban environment is examined through its social and physical processes of development.

The data, retrieved while researching public spaces in Ankara, and which constitutes the basis of this paper, was gathered by literature research, participatory observations, photographic documentation, personal experiences, interviews and discussions with the general public.

Keywords: Public space, City square, Shopping mall, Cultural transformation, Ankara

## **INTRODUCTION**

The city center is dying in Turkey, as are city centers in other parts of the world. Things that people living in democracies value, such as free speech and the right to assembly, have become endangered as shopping malls, which are privately owned—as opposed to public places—and have a clear commercial purpose, become more and more common in Turkey. Shopping malls exclude all but the consumer and are a threat to the life of city centers.

Public spaces in modern cities, such as urban parks, are settings for face-to-face interaction and free speech; therefore, the existence of these spaces is crucial to our democratic societies. The increasing privatization of public places, however, has had an unfortunate result: the decline of social contact between citizens—any citizens, not just consumers. People use city centers and parks less and less for their intended uses, as shopping malls become ubiquitous in our cities. The shopping mall has superseded the traditional public place and intended to become the new public place, albeit an inferior one.

Turkey's capital, Ankara, now faces the challenging issues of this transformation of public space, as citizens express dissatisfaction with a lack of pedestrian accessibility, along with the dominance of automobile traffic in existing city squares. These issues reflect a need for the study of new trends in public space design so that the essential ingredients of successful public spaces can be preserved in new designs. From any arts and humanities perspective, the topic is not only very relevant, but also very timely. The thesis of this paper, that the shopping mall can never replace the vibrance of the bona fide public place, is so very obvious right now.

Although some theorists have studied the transformation of public space (Abaza, 2001; Banerjee, 2001; Dikjstra, 2000; Drummond, 2000; Law, 2002; Wynne and O'Connor, 1998; Mitchell, 1995; Cohen, 1996; Cybriwsky, 1999; Defilippis, 1997), specific causes and design and non-design components of this transformation have been underexplored. Additionally, scholars have discussed the concept of public space design and transformation in Turkish society (Osmay, 1998; Erkip, 2003, 2005; Aybars, 2001; Tunc, 2003). Thus far, however, scholars and designers have no systematic approaches or consensus regarding the reasons for this transformation. Therefore, this paper looks more critically at the Turkish public space to demonstrate the transformations of public life in Turkish urban environments with cases of Kızılay Square and AnkaMall; each illustrates the trends and consequences of privatization of public space in Turkish culture and public life (Figure 1). In this context, it is useful to understand how public places evolve over time and to contemplate public space as the stage for free interaction of citizens and the democratic way of life.



Figure 1. Map of Ankara showing the city center, Kizilay Square and AnkaMall

Ankara clearly reflects the characteristics of urban developments and the conditions of public spaces in the developing countries and economies. The transformation of public space in Ankara can be considered representative of similar transformations taking place in other major cities around the world. Understanding how Turkish people experience everyday life in public places will contribute to the assessment of urban social life in similar cultures.

# UNDERSTANDING PUBLIC SPACE AS THE SYMBOL OF DEMOCRACY

The design, form and quality of public places are directly related to their functions, such as the support of public, cultural and outdoor life, and human needs and expectations. Public spaces have the potential to create community and openness and to foster the goals of democracy, in which citizens are free to speak and to assemble; face-to-face interaction is required in this free and democratic communication that reinforces the fundamental aspect of the public place as a physical entity (Melucci and Avritzer, 2000). Defilippis (1997) defines public space as the spaces that those who are considered part of the public sphere have access to (p 414). This public sphere, according to Habermas (1991), mediates between a society and a state in a democratic manner; the outcome is a guarantee that the many

diverse users—citizens—become involved in every aspect of the public place. Every citizen needs to be a part of this place, has something to contribute, and therefore owns it. In this context, public space is the arena in which people express their concerns and their questions about the political and cultural contexts of their society (Halbert, 2002).

Public spaces are the result of social relationships within spatial structures. The meaning of these spaces comes not only from their spatial structure and design, but also from the social activities and interactions that occur in and around those spaces. To enhance social interaction and the success of public space, public space should provide a variety of accessible opportunities to people (Pasaogullari and Doratli, 2004) since location and design play a significant role in bringing people together (Calthrope, 1993). As Duffy (2003) states, one of the key attributes of public spaces is that they provide different and diverse groups of people with opportunities for various activities. However, current design practices result in places that are increasingly barricaded and policed, which impedes accessibility to public space. These trends will ultimately influence social relationships among urban groups (Low, 2000), altering the character of public places from the open and free, to the restricted and privatized. So many civic spaces are no longer democratic places, but rather centers for commerce and consumption.

### DECLINE OF PUBLIC SPACES IN TURKISH CITIES

When discussing contemporary Turkish cities, it is important to note the economic changes that occurred after the 1980s. This system introduced a free market economy, which promoted direct foreign investment (Tokatli and Boyaci, 1998). Changes in a wide range of aspects of socioeconomic life quickly influenced public life throughout the 1990s. The rise of private-car ownership, introduction of global and foreign trade, and the Western lifestyle affected how people engaged in everyday practices in urban public spaces.

In the case of Ankara, freedom of speech, pedestrian sovereignty, and publicness in the city center have waned with the new configuration of space, which includes extending the boulevard to accommodate automobile traffic, narrowing the sidewalks, forcing pedestrians to use tunnels, and allowing the center of city squares to become primarily bus and dolmush stops. When space is reconfigured, designers unfortunately prioritize the accommodation of vehicle traffic, rather than accommodation of pedestrian use. Current municipal policy seems intent on prohibiting traditional civic activity. For instance, policy aims to eliminate democratic gathering in parks and city squares. Designers are forced to create open spaces for recreation only, rather than for democratic free speech, and the local government has banned discursive political interaction.

All that is left are the dead public spaces in the city center and "quasi-public spaces" (Button, 2003) with a festive theme (Philips, 2002) promoting entertainment and consumption—shopping malls. These retail environments are rather hedonistic: they really do not contribute very much to public life and culture. The purpose of public spaces, like the mission of the city square, has shifted from the cultural, social and political, to entertainment and consumption (Mitchell, 1995). The next section aims to

define this shift in the case of Kızılay Square; perhaps the most significant example in Ankara, the space itself has a long and glorious history and is one of the most famous public squares in Turkey.

### THE CHANGING CHARACTER OF KIZILAY SQUARE

As a small Anatolian city with 20,000 inhabitants, Ankara was chosen to represent the new modernist ideals of the nation-state after the establishment of the republic in 1923. Public buildings, culture centers, parks, monuments and city squares were built for the new society of the modern age. Herman Jansen, a German planner who prepared the first official plans of Ankara, adopted principles of an ideal town: pedestrian city, garden city, and human scale (Altaban, 1998). In the plan, functions such as housing, industry and recreation were separated from each other with links of green corridors between them. Patches of public spaces as nodes and intersections of traffic routes were placed elsewhere (Tankut, 1990) (Figure 2).



Figure 2. Ataturk Boulevard and Kızılay Square in late 1930s; the boulevard used to have a width of 50 m. until late 1940s with 6 rows of street trees (Source: Bir zamanlar Ankara, 1999)

As an outcome of Jansen's plan, Yenişehir (New Town), located around the Kızılay district, reflected the culture of the time, a democratic life with symbolic meaning. A new modern lifestyle emerged in Kızılay and Yenişehir at the center of Ankara, which was to be the secular capital (as compared to Istanbul). Batuman (2003) defines this

movement as a new, national and bourgeois identity. In this spatial context, Kızılay Square was defined as the recreational open space where the inhabitants of Yenisehir gathered to stroll around and attend public concerts. Prior to the establishment of the republic, women had not been permitted from appearing in public places where men were dominant users. With Kızılay's modern design, including cafes and modern public places, women finally had the opportunity to visit these public spaces and interact with other citizens. Not only the square with its park, but also the Atatürk Boulevard, tying Yenişehir to the old city, had become a lively open environment with cafes, cinemas and bookstores (Figure 3).





Figure 3. Ankara city center and Kizilay Square in late 1960s shown in postcards. Kizilay building and the Millet Park on the right were demolished.

This ideal program of constructing an ideal city was abandoned after the economic crisis in the 1950s and the resultant rapid growth of the city because of the migration from rural areas to the city. Yenişehir and Kızılay districts continued to represent the exemplary urban setting with regard to citizens' gaining access to the public realm, especially for migrants from rural areas who lived in squatter settlements and continue to do so today. Daily activities such as shopping and sitting in a café connected the individual to the society and squatters felt themselves as part of the city and citizenry (Figure 4).



Figure 4. In 1979, Kızılay Square were allocated for bus stations. Now, the primary objective is the faster flow of traffic (Source: Original, 2005)

The massive migration caused immense economic turmoil across the space of the city (Batuman, 2003). Later, Kızılay was made the focal node of a new transportation network and formed as the Central Business District of the city (Bademli, 1987). Immigrants and locals became the integral part of the urban economy in Kızılay; these people became integrated into public life, from which they had been excluded before. Lefebvre (1996) defines this phenomenon as the right to the use of the city center.

Until the late1970s, the public space continued to gain importance for opposition groups for political demonstrations and meetings in Kızılay, which had become acknowledged, accessible space for citizens to participate in political activities The social classes met in the square and produced their own representational spaces. Batuman (2003) describes riots that took place almost everyday in Kızılay square. The space had the potential to generate identities and discourses for social groups where the mutual relationships between physical space and the social activities were consummated (Batuman, 2003).

Military intervention in 1980 aimed to control free speech by forbidding groups in the city center. The result was the destruction of public buildings and urban parks. For instance, Kızılay building and the adjacent Millet (Nation) Park, which were once the symbols of the square, were demolished and the central part of Güven Park was left to bus and dolmush stops in 1979 (Batuman et al., 2002) (Figure 5).



Figure 5. Current status of Kızılay Square shows the dominance of traffic and barricaded sidewalks (Source: Original, 2005)

After the military intervention, the image of the square as a political arena was abandoned, and the crowd was pushed out of the square. Entertainment activities were no longer permitted in the square; these activities were moved to the pedestrian streets meeting the boulevard. Since leisure was pushed aside, standing was regarded as a strange behavior in the square. The new traffic pattern with blocking the pedestrian crossings and left turns, pools and plantings was intended to promote faster vehicle traffic, and this resulted in the interruption of pedestrian access to the square; as a consequence, the square came to be regarded as nothing more than a traffic node (Batuman, 2000).

Today, Kızılay Square does not appear to represent the city square that reflects the daily culture and politics of cities in Europe and Latin America. It does not represent the ultimate architectural expression of social freedom and it is not allowed to political debates about governance, cultural identity and citizenship. The place has been transformed from a modern ceremonial place to traffic intersection. Patched space allocations allow fewer gatherings and social interactions. In political terms, this might be a goal to prevent illegal behaviors. A city square, however, should encourage many different types of activities including free speech.

# IS SHOPPING MALL AN ALTERNATIVE TO THE TRADITIONAL PUBLIC SPACE?

The modern public space is losing its public nature and this causing a decline in face-to-face interaction. The main purpose then becomes to develop an alternative to the public space and city center (Barlas, 2006). In this context, the shopping mall was defined as an alternative to the public space (Southworth, 2005; Uzzell, 1995; Aybars, 2001; Birol, 2005; Salcedo, 2003; Rybczynski, 1995), and a new type of small town center (Crawford, 2002) that combines the promotion of consumption and the use of surveillance in an artificial encompassing environment (Salcedo, 2003). The outcome of this new development is a type of property that is neither public nor private: they are places that are created to encourage consumer activities in an

enclosed area. These spaces bring and reflect tastes of global consumer culture rather on local culture and history, and easily lose their capacity for the social integration that was once so prevalent in public spaces in city centers (Voyce, 2006).

The shopping mall, some have argued, is a simulated public space that is developed against the problems of downtown public spaces (Voyce, 2006; Southworth, 2005). It is defined as a building type based on a rigid and highly inflexible format, largely determined by private sector needs rather than public needs (Crawford, 2002). Providing a secure environment in shopping malls attracts more users, thus more consumption. In this sense, the exclusion of marginal groups, such as nonconsumers and people considered to be disruptive, becomes a necessity for enhanced mall security. Since these people are not conducive to the purpose of the shopping mall (i.e. sales), and the owners of shopping malls have the right to exclude anyone they choose from their premises, malls become less homogenous. The public is welcome, but only as long as they are buying patrons of the shops and restaurants. In this sense, the shopping mall is not a public place at all, and the characteristics of the public places discussed earlier are lost in the interest of commerce. This exclusion reinforces segregation (since anyone can be excluded by the mall management) and undermines free speech, public dissent, and other common activities seen in the democratic urban park or public place.

The success of shopping malls lies in the ability of their owners and designers to associate a particular space with a particular lifestyle. To this end, the mall is defined as an integral feature of expanding urban and suburban landscape as a necessity of occupants to feel at city center in the shopping mall (Smiley, 2002). Victor Gruen, known as the inventor of the modern shopping mall, explained in the 1950s that malls could serve as an antidote to urban sprawl in American cities by affording opportunities for social life and recreation in a protected pedestrian environment. Gruen believed that shopping malls could become town squares for new suburban communities (Hardwick, 2004). Shopping malls, in Gruen's thinking, can morph into local downtown-type areas, with their basic organizing concepts, such as ambience and atmosphere.

Fishman (2002) questions whether the mall would be transformed into 21<sup>st</sup> century version of the town square. Aybars (2001) claims that the shopping mall can never become an authentic alternative to the city center and public space. However, we do see examples of malls as alternatives to downtown public space. Gruen's ideas were put into practice in these current shopping malls such as the Streets at Southpoint in the United States (Figure 6), and a recently opened shopping mall in Izmir, Forum Bornova (Figure 7). In these hybrid malls, the designers combine an indoor regional mall with outdoor shops and restaurants (Lockwood, 2001) and individualized storefronts in the mall to provide a seamless transition between street front and mall shopping. The primary goal is to create a replica of the spatial structure of the city street or downtown public space, so that the user has the experience of strolling in an urban open space. These new centers, as expressed by the retail manager of the Streets at Southpoint, reflect the idea that shopping malls can be community centers (J.A. Johnson, personal communication, March 06, 2004). They were built to reflect the values conducive to community and public life.

In some ways the shopping mall symbolizes the ideal city; it offers protection from pollution and noise, and it is controlled and secure. It is a simulated environment that attempts to evoke notions of the ideal city, along with the attractions of public spaces. Now, however, people complain about traffic jams around the shopping malls and crowded parking lots, especially on weekends. Shopping malls in major cities have started to look like city centers, including the traffic problems (Ozdemir, 2005).





Figure 6. Streets at Southpoint is an award winning hybrid mall development in the United States (Source: Original, 2005)





Figure 7. Forum Bornova, a recently opened shopping mall in Izmir, Turkey, is a recently built hybrid mall where outdoor public life is developed in a simulated built environment (Source: Original, 2006)

Fishman (2002) contends that shopping malls, rather than focusing on bolstering consumerism within the malls, ought instead to integrate the existing consumer-oriented functions of the city center into the malls themselves. The new trend of transforming the shopping mall into a community gathering place is nothing more than an attempt to enhance the commercial success of the shopping mall. It fails as a public place and does not serve the needs of citizens, but rather, serves the commercial needs of the owners of these private properties and their vendors, whose only motivation is profit. As a result, this new form of space, what is called "dream world of shopping," combining commercial, entertainment and recreational functions, becomes as a theme park rather than a city square or downtown (Banerjee, 2001).

These simulated shopping environments now determine how we behave and interact with others (Morris, 1993). In a shopping environment, consumers create their own identities (Voyce, 2006; Isin, 2002) and these identities thus establish proper behavior for the public place. The behaviors are influenced by the needs and motivations of the private owners, and whose pursuit of profits is enhanced by enforced order, exclusion of certain groups of people, and surveillance. The community is now defined as the shopping public.

# MALL DEVELOPMENT IN TURKEY AND ITS EFFECT ON PUBLIC LIFE: THE CASE OF ANKAMALL

The economic transformation of Turkey into a liberal society in the beginning of the 1980s was a driving force affecting the use of public space in Turkey. High demand of consumers made necessary the opening of large shopping centers and malls. Spending leisure time in the mall rather than in the square became a most popular activity. This new form of commercial public space may not fit Turkish public culture and does not allow for political, religious and social functions that were once so common in city squares.

According to Erkip (2003), the Turkish public is looking for a new modernity to escape the problems they experience in crowded city centers; consumption and leisure provided by semi-private, enclosed spaces, such as shopping malls, appear to be the chosen alternative for these people. The new economic prosperity since the 1980's promoted a rapid increase in openings of new shopping malls in major Turkish cities. Since the first mall, The Galleria, was built in Istanbul in 1988, the traditional Turkish public spaces have suffered a steady decline in use ("Yeni Çağın Tapınakları: Alışveriş Merkezleri," 2006 [Temples of the New Century: Shopping Malls]). The local mall, or a gigantic power center built in or outside the city on precious land, has the potential to destroy the public life in city centers in which the life of the city—its cultural and political heartbeat—is located.

Ankara faced a similar lifestyle transformation in the late 1980s, as did America with the development of suburban living on the outskirts of the cities. People could afford to live in satellite towns with nearby shopping malls like Galleria, Ankuva, and Bilkent shopping malls (Erkip, 2003). Going to a shopping mall and spending a considerable amount of time is an increasingly a common activity for Ankara city dwellers (Aybars, 2001). In this context, while Ankara is not historically comparable to Istanbul, in terms of culture and finance, new construction sites for housing and shopping have begun, bringing Ankara, the new capital, to a new level of development. There are currently 15 malls in Ankara, and 14 are in the planning stages ("119 Alışveriş merkezi var, 59 daha yapılıyor," 2006 [There are 119 shopping centers, and 59 are coming]).

The largest of these shopping malls, Migros Shopping Mall, opened in 1999 with total area of 126.600 m² and 125 stores; in 2006 it was enlarged to 300,000 m² and 300 stores and changed its name to AnkaMall. It is a rather typical mall, only bigger, its design following the golden rules of movement patterns that lead the consumer into the greatest number of stores (Figure 8). Every aspect of the mall encourages consumerism; the amenities exist to draw people to the mall, to get them to spend more money and to keep them shopping for longer periods of time. The shopping

mall is portrayed as a solution to the problems of everyday life; advertisements for AnkaMall suggest that is a "shopper's dream" and "a world of excitement" (AnkaMall, Ankara, n.d.).



Figure 8. AnkaMall is a regular shopping mall with rows of corridors and stores in a multistory complex (Source: Original, 2006)

The land AnkaMall stands on, a popular district at the intersection of a highway and the subway, was put up for sale cheaply by the state and quickly purchased by investors eager to make a profit; this sale was very controversial because the state sold off such precious public land so cheaply (Figure 9). (Eke and Ozdemir, 2003). Despite objections to the design of the proposed development by some community groups that were aware of the massive scale of the project, the mall plan was approved by the local state. AnkaMall had a huge impact on the economic development of the city, as well as on the social life. Small local shopkeepers and markets that exist in the city center or elsewhere could not get a location in the shopping mall, since preferred tenants are those with recognized labels and global brand names.



Figure 9. Exterior and interior features of AnkaMall aim to generate a public character in a simulated built environment (Source: Original, 2006)

The development on AnkaMall's land with the expansion project in 2005 seems to confirm that shopping malls quickly displace public space (Crawford, 1992; Cybriwski, 1999; Davis, 1992). AnkaMall recently expanded in its seventh year; a new mall was built next to the existing structure increasing the area twice, which is an unusual trend in developing countries.

This new emerging quasi-public space has dramatically changed the social context of Ankara; public spaces have been replaced with these retail environments. Direct observations reveal that AnkaMall has an urban center's characteristics. The use of AnkaMall as a public space directly related to the activities offered by the mall management and owners. The mall has a great number of commercial, recreational and entertainment services and a diverse range of other activities—exhibitions, fashion shows, public appearances of famous people, dance festivals, and special events for culturally important periods like the Ramadan—all intended to target specific social groups (Figure 10). Now, more and more people with their own vehicles are attracted to this mall, and they soon discover that they no longer visit the old city center. A generation is emerging that has been completely detached from the central city. Findings of Tunc's (2003) survey proves that wandering around in the city center of Ankara is still a pleasurable activity for many interviewees; however, in terms of comfort and peace while shopping, shopping centers are preferred.



Figure 10. Ramadan hangings and decorations inside the AnkaMall aim to create an ambience of a traditional Turkish street (Source: Original, 2006)

What people think of as a public space suddenly becomes private property after 10 PM, when the mall closes; the setting of mass consumption becomes meaningless and wasteful with the privatization of our cultural life. Together with the effect of increasing use of private spaces like shopping malls where public action is forbidden, public space is essentially losing one of its essential features: the production of common values and opportunities which have considerable influences upon transforming and reshaping existing social and spatial relations.

## SUMMARY AND FUTURE DIRECTIONS

As demonstrated by the history and development of Kızılay Square and AnkaMall, Turkish public policies seem to promote privatization of the public realm. Planning and management policies encourage the socio-economic segregation of Turkish cities, where true public spaces, such as streets and parks, are the only spaces left to the urban poor.

Based on the changing social and economic conditions and transformations of lifestyle, the city grows and renovates itself like a living organism. However, shopping malls are built in a very short time and are planned to produce immediate financial gains for their investors. Nothing is left to chance; every aspect is detailed and controlled. The environment of these places is therefore safe, predictable and sterile.

Even though shopping malls now serve as the town center for a huge segment of the population, they do not supply forums for civic activity. As a result, the mall cannot be an alternative to the ideal public space in the long term. This is evidenced in the need for renovation, remodeling and expansion projects of shopping malls; more space equals more consumption.

As a developing and nonwestern country, Turkey witnessed a different path to shopping mall development. In Turkey, many metropolitan people still prefer to stay in the city center. In contrast to the scenario in American cities, the city center of Ankara continues to offer entertainment and a viable city experience to those who choose to spend their leisure time. The shopping mall, on the other hand, is perceived as an expensive setting where even bargaining, a traditional Turkish habit and custom, does not take place. However, continuing trends show that the shopping mall will replace the city center including its functions and activities in the near future, and citizens will inevitably forget their customs and daily habits. American cities faced the decline of shopping malls over the course of a few decades, but Turkish cities will face similar decline in very short time. The tendency is the decline of public space use in the city center following the decay of the urban core, as seen in American downtowns.

Ankara is a city known for modern building, where the new modern is built on vast land in the middle of the Anatolia. The city's public spaces are transforming as a result of the continuing corporatization of development. As more shopping malls are built on the outskirts of the city, drawing activity and life from city centers, vacant shops and deserted city centers and streets will be the inevitable result. People can now live, work and entertain themselves without ever visiting the city center. Each city square has its own history, its own character and its own cultural setting, and each creates its own atmosphere of urbanness. These are unique qualities that a shopping mall will never have.

Inevitably, we will see more malls built in our cities. The design of these malls should establish a link between community life and shopping activities in city centers. The setting should combine a varied mix of everyday retailers and users. We need to question how these shopping malls can be reinvented to better serve the public, just as city squares have done for so long. A solution would be reconnecting the mall's central common space to the city street grid to establish a connection to the city center. Public spaces should be incorporated into development projects for democratic ideals, rather than to increase the flow of commodities into the city. The result should be an urban space that reflects the ideals of the public a place where citizens are valued as active individuals.

My intentions for this paper are to investigate the reshaping of public space and to examine the conditions that form new emerging sites for public life. Future articles should discuss the background and reasons for this transformation—and ask how the current view of the "new public space" came to be.

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# **TRANSFORMATION**

Moderator: Şinasi Aydemir

The Issue of Sustainable Environment in the Building Codes, Regulations and Standards in Turkey
Özlem Erdoğdu Erkarslan, Eray Bozkurt

Isparta Carsamba Bazaar Urban Design Project in the Context of the Effects of Changes in Local Administrations to the Project Process

Hasan Haştemoğlu, Kamertap Sarı, Feyza Sezgın

Interpretation of the Transformation in the Production and Consumption Culture Via the Case of Bursa

Mehtap Sagocak

# THE ISSUE OF SUSTAINABLE ENVIRONMENT IN THE BUILDING CODES, REGULATIONS AND STANDARDS IN TURKEY

Özlem ERDOĞDU ERKARSLAN, Eray BOZKURT

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### **ABSTRACT**

This paper mainly deals with the legal framework in Turkey regarding the issue of sustainable environment. As a result, the legal aspects concerning sustainable environment in Turkey will be listed, shifted, categorized and compared in regard of other countries. In addition to this comprehensive documentation, the sufficiency of the legal framework in our country will be discussed and criticized in regard of the international agreements and laws and legislation worldwide

Keywords: Sustainable architecture, Buildings codes, Regulations, Standarts, Turkey

### SUSTAINABLE DEVELOPMENT ISSUES WORLDWIDE

The concept of sustainability has become a key idea in national and international discussions following the publication of the Brundtland Report and the 1992 Rio 'Earth Summit'. It was given further prominence in the context of the 2002 World Summit on Sustainable Development held in Johannesburg.

The World Commission on Environment and Development led by the former Prime Minister of Norway, Gro Harlem Brundtland. This Commission argued that the time had come to couple economy and ecology, so that the wider community would take responsibility for both the causes and the consequences of environmental damage. The commission defines sustainable development as:

'development that meets the needs of the present without compromising the ability of future generations to meet their own needs' (Brundtland Report, 1987).

For the European Union the key to sustainable development is that: 'Economic growth, social cohesion and environmental protection must go hand in hand' (EC, 2001)

The built environment occupies a particularly significant position in sustaining and improving the quality of life, by virtue of its role in producing the infrastructure required for meeting growing human needs for food, transportation, energy and shelter. A great challenge for researchers and practitioners is the development of products, systems, methodologies and organizational arrangements that can be used to respond to the challenges of sustainability. Thus, there is a need for more construction related research on environmental issues. Such research should typically span the entire building life cycle, and include such activities as: the extraction of raw materials, manufacture, transportation and storage of construction materials, planning, design and construction of buildings, operation and maintenance of buildings, demolition, recycling and, ultimately, final disposal of waste.

In the context of the built environment, the sustainable dimension requires that:

- Critical natural resources should be conserved
- Waste and pollution should be minimized
- The natural environment should not be disturbed.

A key problem here is determining the system boundary. The system boundary is where inputs and outputs are determined to be irrelevant. For example, disturbances to the natural environment that are associated with the building procurement process may occur within or remote from the building site, or perhaps even in another country, which complicates environmental management. From an economic point of view, however, the system boundary issue is rarely relevant because the costs of upstream requirements are rolled into the price of a product. Other requirements for sustainability in the built environment include:

- preserving the integrity and functionality of constructed facilities under changing environmental conditions
- preserving health and productivity of users of constructed facilities
- development of environmental awareness for built environment practitioners.

Sustainable development issues begin from the larger perspective, an international attitude. For instance, Chapter 8 of Agenda 21 of Rio Conference calls on countries to adopt National Strategies for Sustainable Development (NSDS) that should build upon and harmonize the various sectoral economic, social and environmental policies and plans that are operating in the country In 2002, the World Summit for Sustainable Development (WSSD) urged States not only to "take immediate steps to make progress in the formulation and elaboration of national strategies for sustainable development" but also to "begin their implementation by2005"[1]

In addition, integrating the principles of sustainable development into country policies and programmes is one of the targets contained in the United Nations Millennium Declaration to reach the goal of environmental sustainability.

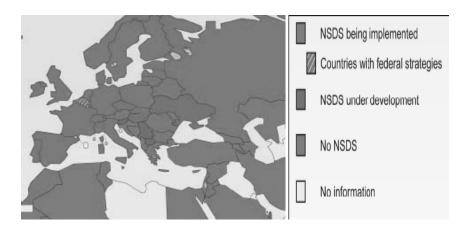


Figure 1. National Sustainable Development Strategies Map (Source: UN Sustainable Development).

UN Nations developed a map (Figure 1) to monitor the National Sustainable Development Strategies (NSDS). The map tracks progress towards the WSSD 2002 target for countries to formulate and begin implementation of national sustainable development strategies by 2005. According to this map, Turkey has not yet developed the national strategies for sustainable development as well as the USA. However in the EU, NSDS is implemented or under development.

Following the Rio Conference in 1992 where all IEA member states except Turkey signed the UN Framework Convention on Climate Change, many governments declared targets for the reduction in energy use in their own buildings. There are a number of benefits for the climate friendly technology industry both in governments declaring a national target for reduced national emissions of CO2, and in locally applied targets set by governments for their own facilities, industry or other institutions

In the NATIONAL INFORMATION DAYS 2000 Hotel IBIS Luxembourg-Findel meeting, specific recommendations for each of the key sustainability issues are given in the matrix. Some more general recommendations are given below:

- Government should undertake a fundamental review of the Building regulations in the context of sustainable development.
- Accepting that fundamental overhaul of the Building regulations will take some time to put in place, advantage should be taken of the significant opportunities for updating existing
- Existing regulations should be upgraded to keep in line with sustainable development targets.
- Building regulations should be kept in line with EU environmental targets.

- A revised Building Regulation Approved Document relating to materials should be introduced. This should require the use of materials with low environmental impacts and reused/recycled materials. The toxicity of materials should also be considered. This could be trialled by introducing requirements for minimum percentage of all new construction materials being
- Additional funding, resources and training (where required) should be provided to local authorities to allow more stringent enforcement of existing and future housing standards.
- There should be greater synergy between planning, building regulations and environmental health

The housing standards were emphasized in the general recommendations. Local conditions need to be improved for better future.

Several countries have introduced stringent energy-related building regulations and have increased research efforts on energy-efficient and pollution-reducing technologies. Life cycle costing of certain categories of buildings at the building design approval stage has also become a statutory requirement in several countries. Life cycle energy and life cycle environmental assessments are still voluntary in almost all countries, yet being identified as an 'environmental-conscious' organisation now appears to have commercial advantages, and may be required for organisational survival.

Building regulations ensure acceptable minimum standards. There have been minimum projects that direct feedback from performance of real buildings into regulations. This has made it difficult to pick up new trends and assess the impact of changed regulations. Until the 1990s, the regulations were entirely about heating, not rapidly rising electricity use; despite its rapid growth since the early 1980s, AC is only now about to be included. Current Building Regulations is now under way and all the indications that are sustainable design will be promoted increasingly to ensure to meet EU commitments to environmental protection

In the last few years, with growing concern over the impact of emissions on the global environment from energy use, targets for reducing emissions have been adopted. Annual energy consumption in residential buildings averages 150–230 kWh/m2. The fuel and amount of energy used in residential buildings varies from country to country, depending on living and comfort standards, per capita income, natural resources and available energy infrastructure. In general, households in developed countries use more energy than those in transitional or developing nations.[2]

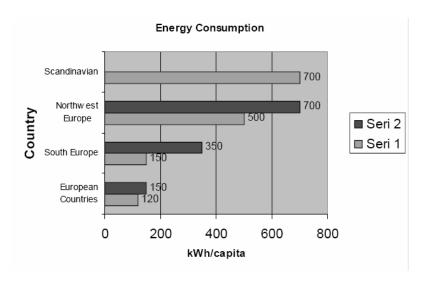


Figure 2. Energy Consumption in Europe (Source: Energy and Environment Agency)

Although the fuels used for space heating and the production of sanitary hot water varies from country to country, the recent trend has been toward natural gas and away from oil, coal and biomass (i.e., wood and peat).

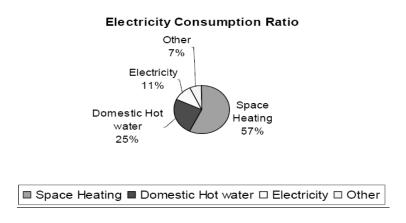


Figure 3. Electricity consumption ratio (Source: Energy and Environment Agency)

During the past decade, residential energy use has declined in Eastern Europe and the former Soviet Union, and space heating tends to be the most energy-intensive service. The use of coal and wood for space heating is more widespread than in the developed nations. In Europe, national energy efficiency standards that mandate the use of thermal insulation in the construction of the building's envelope have been

introduced over the past few decades, starting from northern countries (Sweden, Norway and Germany) during the 1950s. Thermal building codes exist in many variants, relying on as many different approaches as there are countries and according to the World Energy Council can be classified in different categories including:

- a. envelope component and/or entire building envelope approaches, which specify maximum thermal transmittance values for individual building components (i.e., walls, roof and windows) and/or the entire envelope with some flexibility on the individual components;
- b. heating/cooling demand per unit floor area or volume, which specify maximum values while taking into account the contributions from ventilation losses/gains, passive solar gains and internal heat gains;
- c. building energy performance per unit floor area or volume, which specify maximum annual primary or final energy consumption for the entire building as a system and integrate the heating/cooling demand along with other equipment for heating and air conditioning systems, energy for ventilation, hot water production, pumps, elevators, etc., and other gains from solar energy (i.e., collectors and photovoltaic's);
- d. building life cycle, which in addition to the building energy performance accounts for the embodied energy in buildings and is expected to be the future trend for standard evolution. (WEC, 2001)

In Denmark the first building regulation about the thermal performance of building components was issued in 1961, resulting in reduction of energy consumption. National Danish Energy Information Centre report proves that energy consumption in households was reduced by approximately 25% during the period 1972–1999. Low-e double-glazing is a current standard practice and is also mandatory for any window which is replaced.

The most relevant regulations are the Building Act, the Working Environment Act and the Act of Environmental Protection. The regulations are both national regulations and EU regulations in directives.

Different health effects are concerned: severe illness as lung-cancer, asthma and allergy, irritations in the mucous membranes in the eyes and upper airways, irritations of the skin and common comfort. New regulations have to be based on some kind of scientific evidence to ensure the validity. One of the greatest difficulties in improving indoor climate legislation is the limited knowledge about the effect of chemical pollutants on the human organism in low doses combined with the exceedingly large number of pollutants found in the indoor climate.

In the past the Building regulations in Denmark had indoor climate legislation concerning pollutants from building materials like formaldehyde, asbestos, man made mineral- wool fibres, fly ash and clinker from coal firing and radon. The formaldehyde is until now the only pollutant being regulated with respect to a harmonised European standard since 1. April 2003.

## The regulations deal with:

- total bans.
- · limits for contend.
- · limits for release.
- · performance for the building construction product or the whole building,
- specific code number for products,
- how to use the materials.
- · an elaborate system for re-use.

In the two Building Regulations in force there is a long history for having a number of specified requirements concerning home layout, sanitary conditions, insulation for heat and sound, energy consumption, fire safety, recreational areas, provision for the disabled, structural conditions etc. From 1995 the Regulations also have an indoor climate chapter with specified requirements concerning ventilation, contamination from building materials, other contaminations and temperature.

The origins of the building codes in the USA lie in the great fires of American cities for instance, Chigago developed a building code in 1875 after the fire of 1871. The various city codes and often conflicting codes have been refined over the years and began to be brought together by regional non governmental organisations to develop model codes. The first model codes were written from the point of view of insurance companies to reduce the fire risks. Model codes are developed by private code groups for subsequent adoption by local and state government agencies as legally enforceable regulations. The first major model code group was the Building Officials and Code Administrators (BOCA), founded in 1915 and currently located in Country Club Hills, Illinois. Next was the International Conference of the Building officials (ICBO), formed in 1922 and now located in Whittier, California. The first edition of their Uniform Building Code Congress, founded in 1940 and headquartered in Birmingham, Alabama, published the Southern Building Code.

Over the past few years a real revolution has taken place in the development of model codes. There was recognition in the early 1990s that the USA would be best served by a comprehensive, coordinated national model building code developed a general consensus of code writers. There was also recognition that it would take time to reconcile the differences between the existing codes. To begin the reconciliation process, the three model codes were reformatted into a common format. The International Code council, made up of representatives from the three model-code groups, was formed in 1994 to develop a single model code using the information contained in the three current model codes. While detailed requirements still varied from code to code, the organisation of each code became essentially the same after the mid- 1990s. This allowed direct comparison of requirements in each code for similar design situations. Numerous drafts of the new International Building Code were reviewed by the model-code agencies along with code users. A single model code is formed, maintained by a group of representatives of the three model-code agencies, the International Code Congress, headquartered in Falls Church Virginia.

In addition to the International Building Code (IBC) is the International Residential Code (IRC). This code is meant to regulate construction of detached one- and two-

family dwellings and townhouse that are not more than three stories in height with a separate means of egress.

There are also specific federal requirement that must be considered in design and construction in addition to the locally adopted version of model codes. Among these are the Americans with Disabilities Act of 1990 and the Federal Fair Housing Act of 1988. Building energy regulations have been revised in several European countries, towards more strict and complex standards, considering the energy consumption of the entire building system. For instance, in Italy as of 1991, in Denmark as of 1996, in most Austrian Provinces as of 1997, in the Netherlands as of 2000, in Switzerland as of 2001 and in Germany as of 2002. More strict regulations have resulted in significant energy savings for heating, especially in northern Europe: for example, in Germany with up to 30% energy savings compared to the previous standards, in France with 10% savings and in Ireland with 22–33% savings. Thermal insulation of buildings (external walls, roof and floor) and double pane windows (even triple glazing with low-e and argon in northern countries like Baltic States, Finland and Sweden) reduce annual energy consumption for space heating, by lowering heat losses through the building's envelope, and improve thermal comfort conditions.

Throughout Europe, national regulations are underway in compliance to the new EU Directive on the energy performance of buildings (EC, 2002)

The Directive mandates that all EU member states bring into force national laws, regulations and administrative provisions for setting minimum requirements on the energy performance of new and existing buildings that are subject to major renovations, and the calculation of performance-based indicators for energy certification of buildings. Additional requirements include regular inspection of building systems and installations, an assessment of the existing facilities and advice on possible improvements and on alternative solutions. The cumulative energy saving achieved for new dwellings, compared to dwellings built before the 1970s, averages about 60% in the EU, while the additional savings that are targeted with future revisions in the national standards will range from 20 to 30% (WEC, 2001) The impact of the new EU Directive on the energy performance of buildings by 2010 is estimated to be primary energy savings of 9 Mtoe (EC, 2004)

Buildings are also a major pollution source. They account for about 50% of sulphur dioxide emissions, 22% of nitrous oxide emissions and about 10% of particulate emissions. They also contribute to about 35% of carbon dioxide emissions that is closely related to climate change (Vine, 2003). The introduction of the Kyoto Protocol (KP) in 1997 represents the first serious step for the reduction of emissions of the six greenhouse gases (CO2, CH4, N2O, HFCs, PFCs and SF6). Therefore, buildings constitute an important sector in the effort to reduce environmental emissions. The environmental building emissions are related to the energy consumption during operation and to the use of materials during construction and throughout their lifetime as a result of renovation and refurbishment, or even demolition.[3]

The impact of the new EU Directive on the energy performance of buildings by 2010, as a result of the estimated primary energy savings of 9 Mtoe, is expected to reduce CO2-emissions by 20 MtonCO2eq (EC, 2004)

Recently, more attention is also been given to the embodied energy of building materials and components, and their assessment over a building's life cycle. [4]

## SUSTAINABLE DEVELOPMENT ISSUES IN TURKEY

Sustainable development issues in Turkey are not drawn with strict boundaries of legal framework because of inconsistency, incoherency and lack of long-term vision in the national environment policies (Çelebi, 2004) When comparing the conditions in Turkey with other European Countries, it is necessary to consider the problem of economic growth and development. Since these two generally seem to be in binary opposition. Turkey had to follow one or the other in certain intervals in the historical perspective. Because of this problematic relation Turkey could not develop a holistic environmental policy throughout years. "However a sector-based, fragmented and compartmental structure of policy-making precluded the emergence of joined-up engagement with sustainability politics." (Celebi 2004) Sustainable Development in Turkey accelerated after the International cooperation. National policy discussion on changing production and consumption patterns was held in Turkey in 1993, together with the governmental authorities, consumer groups, NGOs at large, the media and the National Standardization Body. The importance of product standards, the adoption of a national scheme for an environmental quality management system and public awareness-raising were stressed as the means to achieve the objectives of changing consumption patterns. On the basis of the discussion, the Directorate General for the Protection of Consumers and Competition was set up in the Ministry of Industry and Trade, and the Act on the Protection of Competition, as well as several regulations on consumer protection, was adopted.

The Ministry of Environment and Forestry has signed declarations and protocols with different sectors of the economy to decrease their environmentally harmful loads. For instance, a declaration was signed with the Cement Industry Union whereby the cement industry representatives made a firm promise to decrease and control the environmental pollution produced by this sector (http://www.tcma.org.tr). In 1995, for the reduction of air pollution from transport, Turkey intends to follow the developments in the European Union, production of cars equipped with catalytic converters was initiated with a protocol between the Ministry of Environment and Forestry and the car manufacturers the number of cars by 2010 will be 20 millions and the total rate of CO 6.7 million tons annually. According to investigations the use of catalytic converters will decrease emission by 90 percent. After 1995 gradually the conversion of car production to catalytic converter equipped cars and after 2000 completely production of cars with catalytic converter will decrease CO 2.4 times by 2010. Finally at 2010 the annually rate of CO will be 2.8 millions tone [6]

In order to protect the atmosphere, the Government of Turkey promotes policies and programmes in the areas of energy efficiency (UN, EE 2000), environmentally sound and efficient transportation (EC, EURO 93), industrial pollution control, sound management of marine resources, and management of toxic and other hazardous waste.

With regard to achieving sustainable energy development and efficiency, the Government considers the development and use of safe technologies, promotion of

R&D relating to appropriate methodologies, public awareness-raising, product labelling, and EIA as the most important means. To reduce harmful emissions into the atmosphere from industrial activities, industries are encouraged to develop safe technologies. The Government gives high priority to the promotion of R&D relating to appropriate methodologies, EIA within industry as a whole, life-cycle analysis of products and ecoaudits. Concerning the phase-out of CFCs and other ozone depleting substances, the phase out of Annex A and Annex B substances is planned

The Ministry of Health is responsible for transboundary atmospheric pollution control. The Air Quality Control Regulation, which entered into force in 1986, has not been revised in the light of Agenda 21. Regulations related to industrial accidents are being planned.

The Ministry of Interior, State Institute of Statistics [5] Hacettepe University and the Institute of Demographic Studies [7] are primarily responsible for demographic issues in Turkey. In addition, the Ministry of Agriculture, the Ministry of Environment and Forestry, the State Planning Organization (SPO) and the State Institute of Statistics are engaged in integrated policy coordination in the field of population, environment and development. A Demographic Dynamics and Sustainability Working Group has been set up under the National Environmental Action Plan (NEAP) [8] to coordinate the different actions in the field of population, environment and sustainable development. Turkey has a NEAP for the years 1996-2000. It is a binding document to the public sector and serves as a guidance document to the private sector. In addition, certain sectors such as tourism, industry, energy, transport and agriculture are working for the integration of environmental considerations into this work.

In 1995, Turkey launched a preparatory process for the development of a National Agenda 21 under the UNDP [9] technical cooperation programme entitled the National Programme for Environmental Institution and Management in Turkey. The NEAP and the Seventh Five-Year Development Plan (1996-2000) are used as an important reference in the formulation of the National Agenda 21. As part of the preparations, Agenda 21 was translated into Turkish, and a Task Force, with representatives from the Ministry of Environment and Forest, State Planning Organization, Non-Governmental Organisations (NGO), academic institutions, local authorities, private sector and the UNDP was established to lead the preparatory work. A National Committee involving representatives from all relevant government agencies, NGOs, local authorities, academic institutions, private sector and the media has also been set up to draft the action plan, and regional workshops have been organized to review the drafts.

Environmental impact assessment became a legally required procedure on 7 February 1993. 26 % of Turkey's surface area is covered by forests, and approximately 50% of these forests are already degraded. In addition to afforestation, an erosion control and range improvement measure, the National Mobilization and Erosion Control Act was put into force in 1995. The main objective of the act is to ensure participation and contribution of all related governmental and non-governmental organizations, private sector and local people, and to provide additional financial resources for combating deforestation and erosion control activities at national level.

In order to develop an integrated approach to the planning and management of land resources, the Government of Turkey has developed policies and policy instruments. Planning and management systems have been improved, and public participation promoted.

With regard to the advancement of scientific understanding in this field, pilot projects to test research findings have been launched and information systems have been strengthened. Turkey promotes the integration of planning and management of land resources also through regional and international cooperation.

The Prime Ministers State Planning Organization, the Ministry of Public Works and Settlement, the Southeastern Regional Development Agency, local governments and municipalities, the Ministry of Environment and the Ministry of Agriculture are primarily responsible for the planning and management of land resources.

The relevant legislation in this field are the Planning Law No. 3194 (1985), the Environment Law No. 2872 (1983), the Law of Village No. 442 (1924), the Cabinet Decree No. 338 for SRDA (1989), the Law of Municipalities No. 1580 (1930) and the Law Related to the Administrations of Greater City Municipalities No. 3030 (1984).

The ever increasing population living in cities and the urban-rural disparity has become the top priority issues in Turkey. Among others, increasing housing demand and traffic problems result from this phenomenon. Due partially to the insufficient supply of serviced land for housing within or around the city, there has been an extreme increase in illegal housing, often without even the most basic amenities. Insufficient land supply and the lack of viable investment alternatives in the Turkish economy in general have given rise to speculative investments in the real estate markets, making it even more difficult for the low-income households to attain homes. Financing of housing, primarily by individual savings, is another aspect of the problem.

Local authorities are under pressure for the increased service requirements, ranging from the disposal of immense amounts of solid wastes to the provisions of parks and play areas. Due to their financial dependency on the central government and legislation limiting their capacity in decision-making, the local authorities in Turkey are unable to provide these services at the required level.

The Government of Turkey had a dual role in its preparatory work for the Habitat II Conference. Turkey prepared, in close cooperation with a considerable number of public agencies and NGOs, a National Plan of Action. It is based on an enabling strategy, addressing the issues of human settlements in both urban and rural areas, including the assessments of shelter, infrastructure and service needs, the review of the effectiveness of existing urban policies and the identification of issues and bottlenecks to local development that call for action.

Since the great initial public push created in 1984, housing cooperatives financial crediting power has diminished from a fixed percentage rate of 83 to below 30% in 1995. And while the inflation level has prompted the prices of construction materials to grow 154 times (within the same time period of 11 years), the housing cooperatives credit allowances have grown only 55 times. So the number of poor

people in housing cooperatives has steadily been falling during the last decade, a fact contributing to the increase in slum construction and figures.

Apart from this, land is a very limited resource. Sixty-three percent of Turkey is affected by soil erosion. In addition, 92% of the total land area and 95% of the total population are under the risk of medium to high level seismic movements.

With regard to legislation in this field, the (City) Planning Law, No: 3194/1985; the Gecekondu (Squatter Housing) Law, No: 775/1966; the Mass Housing Law, No: 2985/1984 and the Public Housing Law, No: 2946/1983 are the main laws governing housing policies in Turkey.

A technical cooperation project to promote sustainable human settlement development was initiated in October 1994, between the Government of Turkey and the UNDP, and it is being executed and financed by the Prime Ministry Housing Development Administration.

Drinking water resource management is the most important subject for sustainable development. For this reason a project titled "Protection Sapanca Lake as a Drinking Water Resource" was implemented by the Ministry of Environment and Forestry. The philosophy of the project was integrated management of potable water resources and beneficial use and protection of the basin. On the basis of the project, a plan was prepared for the beneficial use and protection of the basin and presented as 1/25,000 scale maps. These maps, which included land use limitation criteria, will be used by land use planners during the preparation of a 1/25,000 scale basic land use plan.

The total amount of usable water is estimated to be 111 billion m3/year or 47 % of total resources. Major sources of pollution are domestic and industrial wastewater discharges and agricultural run off. Approximately 70 % of the population is adequately served, while 7 % of the population has no continuous supply.

Rapid growth of the urban population is leading to uncontrolled wastewater generation and pollution loads. Solid waste production in Turkey amounts to 61,137 tons/day in 1,974 municipalities (DIE, 2000). About one per cent of this waste is deposited in a sanitary landfill, 1.71% is composted, approximately 81% is dumped into the municipal dumping sites, and approximately 16% is dumped into water bodies. The industrial solid waste production is estimated to be 5.379.000 tons per year. Out of 34 million people living in urban areas, only 6% are served with proper treatment facilities. Istanbul, Ankara and Izmir have sewage treatment projects by establishing a collection system in each city and building waste treatment plants.

Industrial wastewater is of much importance due to high loads and toxic nature. Only 20% of the industries have proper treatment facilities.

In Turkey the Regulation on Control of Solid Waste Management was published in the Official Paper dated 14 March 1991 (No. 20814). According to this regulation the municipalities are responsible for the collection, transportation, recycling and disposal of solid waste.

Deposit schemes and recycling rates are being applied effectively on packaging waste, and rates of up to 65 % are being achieved.

Since 1995, the World Bank in conjunction with the Ministry of Environment and Forestry has financed the Mediterranean Environmental Technical Assistance Programme (METAP) for developing a national solid waste management throughout Turkey. The objectives of the project are

- to take a broad view of Turkish solid waste management institutions, policies and systems for administration and control;
- to identify barriers and constraints to successful implementation of solid waste management; and
- to propose strategies for removing those barriers and constraints in order to achieve consistent and improved practices and standards.

In addition to the above mentioned intricate and fragmented legal framework related with sustainable environment in Turkey, construction sector is ironically the less regulated one among all. The current regulations have fair limitations about total bans, limits for contend, limits for release, performance for the building construction product or the whole building, specific code number for products, how to use the materials, an elaborate system for re-use.

When evaluating the regulations about energy consumption in European countries, especially in regard of WEC 2001, the building codes in Turkey only bring adequate standards for specify maximum thermal transmittance values for individual building components and for

heating/cooling demand per unit floor area or volume. When reviewing the building codes and regulations in Turkey, it can be seen that all energy performance problems are only described in the context of heating requirement whereas cooling in buildings is accepted as a luxury and circumstantial use which can be ignored in the regulations. However, in the last five years, the use of AC for cooling in housing has become widespread in the big cities of Turkey. Building energy performance and building life cycle are also left out of concern. Although the policy-makers in the country have already established the aims and targets, the planning phase has not been completed yet since the standards and norms are not included.

Architects do have a role to influence the public with their approach to building design and have a large share of responsibility for reducing negative environmental impact and quantities of required energy to inhabit and maintain buildings. However in the lack of presence of legal framework for a sustainable environment, this responsibility becomes only a ethical problem in the profession and can be only fulfilled in regard of knowledge and personal skills of the architect.

### **ENDNOTES**

- (1) http://www.un.org/esa/sustdev/natlinfo/nsds/nsds.htm
- (2) Space and water heating account for most of the energy used by households in the industrialized countries (North America, Western Europe and industrialized Asia).
- (3) The most polluting fuel, in terms of CO2, SO2, NOx and particulate emissions, is coal, followed by oil. Natural gas burns much more cleanly, can be used more efficiently in

- domestic boilers and produces only 60% as much CO2 per unit of energy as coal. Natural gas, oil and electricity are the most important energy sources in the domestic energy market (Griffin, and Fawcett, 2000). Natural gas has the largest share of the domestic energy market in The Netherlands (82%), the UK (66%), Italy (60%), Germany (35%) and France (34%). Oil is most commonly used in the residential fuel market in Luxembourg (54%), Belgium (42%), Spain (39%), Ireland (31%), Finland (28%) and Austria (25%). Electricity is the major energy source in Sweden (43%) and Finland (28%). (EC 2004)
- (4) Embodied energy results should be in considerable emissions of water pollutants to the rivers and oceans, and of air pollutants contributing to Green House Gas (GHG) emissions. The initial embodied energy in buildings includes the energy consumed in the acquisition of raw materials, their processing, manufacturing, transportation to the site and construction. The initial embodied energy has two components. The direct energy used to manufacture and transport building products and equipment to the site and to construct and equip the building with the necessary installations. The indirect energy is the energy use associated with processing, transporting, converting and delivering fuel and energy to its point of use. Recurring embodied energy in buildings represents the non-renewable energy consumed to maintain, repair, restore, refurbish or replace materials, components or systems during the life of the building. As buildings become more energy-efficient the ratio of embodied energy to lifetime operating energy consumption becomes more significant. Embodied energy of a building may constitute 15% of its lifetime energy consumption (Haris, 1999)
- In Germany, for example, new buildings already contain 30% of their lifetime energy consumption in the building materials, and this could rise to 50% with the next generation of low-energy houses (WEC, 2001).
- (5) http://www.obitet.gazi.edu.tr/makale/Makaleler/T33\_Tahmin.htm
- (6) Turkey's information needs on social, economic, and cultural subjects. The main function of SIS is to comprehensively determine information needs, collect and compile data, and finally, to present information to its users according to the highest international standards. http://www.tuik.gov.tr
- (7) Hacettepe University, the Institute of Demographic Studies: http://www.hips.hacettepe.edu.tr/
- (8) NEAP: National Environmental Action Plan for Turkey http://www.unescap.org/stat/envstat/stwesmo5.1pdf
- (9) UNDP (United Nations Development Programme) is the Umited Nations' global development network, an organization advocating for change and connecting countries to knowledge, experience and resources to help people build a better life. http://undp.org

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# ISPARTA CARSAMBA BAZAAR URBAN DESİGN PROJECT IN THE CONTEXT OF THE EFFECTS OF CHANGES IN LOCAL ADMINISTRATIONS TO THE PROJECT PROCESS

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### **ABSTRACT**

Local administrations take role actively in producing and practicing the project. But this process can sometimes be interrupted in the periods of changes in local administrations in some situations the project can never be completed. It can be observed the pause during the project process in the cities nearly in every kind of scales in Turkiye. This pause can be realized much more clearly in the middle-scaled cities like Isparta. As an example to this situation, Isparta Carsamba Bazaar Urban Design Project can be given. Carsamba Bazaar area was the biggest weekly bazaar area of Isparta which had fruit-vegetables market place and rural bus station in it ten years ago. Isparta government regulated a competition including urban design and architectural projects that affects immediate area and town positively and creates focused point. The Project selected as the first in the end of the competition has been made as application Project. But after the local elections held in 1999, the local government has been changed and the Project has been cancelled. The new government has been a new Project done and this new Project has been started to be utilized to real life. But this government has also not completed the construction. By the change of local administration again with 2003 elections has caused bigger problems for the construction. The new government has not only made modifications in the Project, but also demolished the constructions which have been made until that time and has added new functions to the site. Finally, although ten years has passed and millions YTL have been spent today the construction is as if it has never been started.

In conclusion, in this paper it is tried to explain the negativenesses on cities and architecture in the context of local administrations by giving a concrete example.

**Keywords:** Local administrations, Competition projects, Isparta Çarşamba Bazaar Area, Urban design

## INTRODUCTION

Local administrations can be defined as the organizations which are founded in order to serve to local folk in the topics which make them interest mostly, which are in duty by being selected by local folk, which have responsibilities and rights which are specified by laws, which have special incomes, budgets and personals, which can set its own organizational structure for its responsibilities and which benefits from its administrial autonomy in the relations with central administration.

Regarding to this definition, what is expected from local administrations is to lead the service to the local folk as fast and high in quality by using its administrial autonomy. By this purpose, local administrations take role actively in producing and practicing the project.

## LOCAL ADMINISTRATIONS AND PROJECT PROCESSES

In Turkiye local administrations have active role on the projects which orient the future of the cities. In many projects the local administrations are not only in the position of inspectors, but also they are producers. But this process can sometimes be interrupted in the periods of changes in local administrations in some situations the project can never be completed. The decisions about the projects which are supposed to be started are given by "town councils" which are selected in the local elections. In this councils the members are often belong to the political parties which win the elections so it is probable to be the decisions of these councils regarding to the requests of local administrators. Specially, after the local elections in the conditions not only when any change has become in Mayor but also in political party which win the elections, it is not taken care to the projects which the previous government has started to do, the Project is usually cancelled or there becomes modifications on the Project.

This situation affects the Project process negatively. Specially, if the subcontractor of the Project which has done by the previous government is private firms, not the municipality the modifications which are done on the projects by the new local administration cause big law problems between the new government and the private firms. As a result of being supported these problems by the political parties whose members are new and old local administrators this process are usually prolonged. Instead of discussing the benefits and correctness of the Project for the city, the topic is usually interrupted because of the difference in the political aspects of local administrators.

## SAMPLE OF ISPARTA CARSAMBA BAZAAR

It can be observed the pause during the project process in the cities nearly in every kind of scales in Turkiye. But this pause can be realized much more clearly in the cities which are not located on main transportation axis, which are out of metropolises and also can be called as 'Arada Kentler', like Isparta.

Carsamba Bazaar Urban Design Project can be given as an example to this situation. Carsamba Bazaar Area which is located on 55.000 m2 in the city centre is the biggest weekly bazaar of Isparta. In this bazaar there are nearly about one hundred small or big shops which are built in different times from each others by local administrations. The possession of big part of the bazaar which is consist of butcher's shop, fish shops, fruit and vegetable marketplace, restaurants and semi-open marketplace belongs to Municipality. (Fig.1)

On the other side, there is rural bus station on the north side of the area. Commercial transaction with town and rural residential area focused around the bus station increases the importance of the area. Being in the center of town, people living in rural regions can transport produced goods to the bazaar easily and leave the town with goods they had bought for their needs. Therefore, a structure which is majored on commercial traffic can be seen around the area. Food wholesalers, agricultural implements, medical and feed salers, slopsellers, restaurants and cafes are mostly existent establishments on the area.



Figure 1. Isparta Carsamba Bazaar, 1997 [1]

Both being in town center and comprising rural bus station, bring on fully commercial activity around. Last years, deficiency of correct planning has caused complicated area, which is consist of close, half-open and open locations, with fragmentary projects. And also, traffic, which is occurred by rural bus station and fruit-vegetables market place, stirs the area up disorder. Thus Isparta government regulated a competition including urban design and architectural projects for develop a complex that takes an important place in urban life, affects immediate area and town positively, creates focused point with support of Chamber of Architects.

Goal in this project is not only rehabilitation of this area and preventing visual pollution, but also supporting the acceleration of increased youth population which has involved by Suleyman Demirel University with approximately 35.000 students since 1992. It is expected that the new locations service to the youth population and ease the urban life. Nonetheless in the project, saving the role of rural bus station is demanded for the students and workers coming from rural to town and the commercial activity. Removing fruit-vegetables market place and reconstructing the bazaar area are thought fit.

The competition was finalized with selection of Selim Velioglu's project first in May 1997 (Fig. 2).

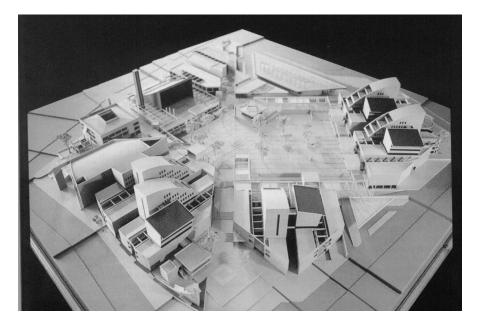


Figure 2. Selim Velioglu's Project, [2]

The Project selected is comprised from functional external location organizations like open-close bazaar area, market places, bureaus, residences for rent, community center, cultural center, cinemas, library, rural bus station, restaurant and cafes, close car park, square etc (Fig. 3).



Figure 3. General Ground Floor Plan, [2]

Application projects of the selected project was prepared by local government and started to dig in building land. Local government also began construction quickly and laid the foundation of building because of the political concern of oncoming government election. Yet the project paused a while with the last government's voting down on election.

In election process, the project used for political propagand broadcasts and it was adduced that the project isn't adequate to Isparta and it has contain some mistakes. Therefore new local government stopped the applications completely and created a new project with fundamental reforms at first project (Fig. 4).

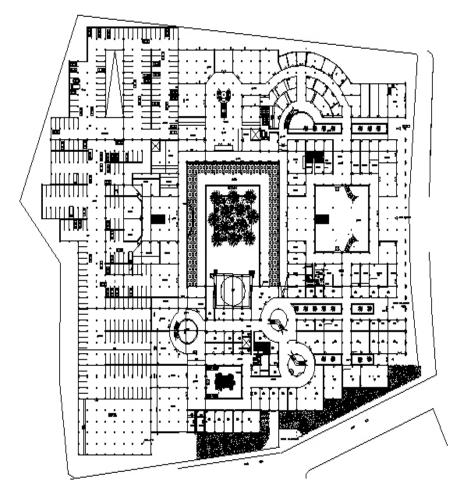


Figure 4. The Ground Floor Plan of Project Prepared by Isparta Government, [2]

After this process, a forensic conflict begun with project owner and new local government. On the other hand, construction of new building gained speed. Like 1999 elections, projects and project area were continued using for political propagands at 2004 local elections.

Likewise, local government changed at 2004 elections again and the second project canceled completely too. Project and building applications are contracted award to a new firm together. Bidding was made open session to the public but people weren't made known about project. Bidding was finalized with only representing the percentages of areas which will be given to the government by contract obtainers. Government has constructed a new building for fruit-vegetable market place and moved outer town yet. It has constructed new rural bus station and bazaar to the

Davraz quarter placed outer town despite great reactions from artisans and citizens. After that moving, contract obtainer firm began construction at project area quickly without representing any commentaries. All buildings belonging old projects were blasted (Fig. 5).



Figure 5.Blusted Buildings in Area in Consideration of 2007 (Private Shot)

But changing of projects, blasting old project's buildings and existent work places has caused civil commotion with all free hold owners and forensic processes has begun again.

Consequently, third project has formed irrespective of the provisions of the first and second projects. Although three years passed after the government election, the project area is composed of wreckage of old buildings now (Fig. 6). Taking in the account of all forensic processes, what the new project's future will be is unknown.



Figure 6.Area in Consideration of 2007 (Private Shot)

## CONCLUSION

Although ten years has passed from the first stage of the project, building has not even reached to the application stages. The project which can supplement town's identification hasn't got a project underway, so this situation affects negative social-cultural life on the other hand damages the economic structure in town center.

These negative conclusions can be arranged like this;

Designed projects and applications completely abolished with spending millions YTL,

Forensic processes continuing now, causes both physical and psychological damages,

A lot of renter artisans in these areas are aggrieved in ten years processes,

Work places around these areas are lasted job losses,

Not constructing new buildings instead of the blasted ones causes renting speculation in town center,

Building area which has been waiting desolate for ten years causes visual pollution,

Moving the bazaar area to the outer town without required arrangements causes traffic density in this quarter on bazaar days,

Moving the rural bus station to the outer town causes extra traffic density with new station and town centre.

In conclusion, supplements of new building to the town delay and also existent negative terms damage economic, social and cultural town life.

## **ENDNOTES**

- (1) Isparta Belediyesi Basın Bülteni (Isparta Government Press Bulletin), Volume 2, p.21, 1997, Isparta.
- (2) Velioğlu, S., "Isparta Çarşamba Pazarı Kentsel Tasarım Projesi" Yapı Dergisi (Journal of Yapı), Volume 214, p. 91-99, 1999, Istanbul.
- (3) Isparta Belediyesi İmar Müdürlüğü Arşivi (Isparta Government, Directorate of Public Improvements Archive).

# AN INTERPRETATION OF TRANSFORMATION IN THE PRODUCTION AND CONSUMPTION CULTURE: THE CASE OF BURSA

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#### **ABSTRACT**

In the context of globalization, appearances of cities are reshaped in accordance with the traces of changes in social structure, production types, consumption habits and spaces. City identity is an important dimension of the individual's activity of understanding of and commenting on his own existence. However, fictional lifestyle of consuming culture that global city offers is observed in every time and in every space again and again and this abstraction transforms the perception of time and space and the praxis of living. Beginning from the 13<sup>th</sup> century, Bursa has been the first capital city of the Ottoman Empire and a center which experienced a transformation with the reflections of Turk's philosophical, cultural, commercial and political lives. Bursa's importance in international commerce especially in 14<sup>th</sup> and 15<sup>th</sup> centuries became the basis of the city's architectural structure and the city became famous with its caravanserais and bazaars. In this sense, Bursa witnessed the transformation in production and consumption culture and it is an appropriate model for discussions on meaning and identity.

The aim of this study is to question the place and meaning of shopping centers, which reflect consumption values of the capitalist world are disconnected to their reference and take place in the metropolitan area, in our lives with their fictional and void indicators. While doing this, calling attention to the logic of formation of Bursa's caravanserais and bazaars, the relationship between origin and root and the connection between the Reality it offers and the way in which the individual exists is to make this comparison critical.

Keywords: Globalization, Consuming culture, Identity, Meaning, Reality

## SHOPPING CENTERS OF THE GLOBAL CULTURE

In a limited sense, globalization is the spread of capital movements all over the world and transforming the world into a finance market especially in parallel with technological advancements. There are countless arguments on the fundamental elements of globalization such as openness to international trade, capital mobility, labor mobility, multinational companies, changing structure of production, transformation in production and usage of technology and industrial relationships and new types of employment. However, as Giddens states, globalization is a political, technological and cultural concept, as well as economical. (Giddens, 2000, p. 23)".

Globalization leads to significant cultural transformations. Especially with the usage of new technologies, new cultural codes spread easily all over the world and local formations are shaped by social relationships which intensify globally. A structure of this type has its own peculiar order. "Global cultural transformation, which can be described as emphasizing new cultural production and reproduction techniques which transform daily experiences and practices (Feathersone, 1996, p: 94), is a significant point in understanding dimensions of globalization. Authentic local cultures dissolve in the global culture, cities transform into "world cities" with the effect of global economic processes. Cities transformed into "non-place" whose history, time and location is not clear, local unity is divided and which lost its meaning with respect to time and space.

In connection with this globalization process which is directed by capitalism, "consumption culture", which imposes a consumption oriented lifestyle instead of production and creates a transformation in consumption habits and consumption spaces, led to identity, communication and existence problems in societies.

Shopping spaces which transformed into an indicator of consuming culture, injures Heidegger's understanding of existence based on authentic life, time and space. The individual who lost his connection with time and space defines himself as a part of materialized values, relationships and environments in order to give meaning to his existence.

The situation which is described by Harvey (2003) as time and space compression is helpful in explaining phantasmagoric structure of shopping spaces. This compression involves the accelerating turnover time in production, the increased pace of change and ephemerality of fashion, the greater availability of products almost everywhere, the increased temporariness of products, relationships and contracts, the heightened significance offshort-termism and the decline of a waiting culture, the greater importance of advertising and rapidly changing media images to social life, the so-called "promotional culture", the increased availability of techniques of simulation, including buildings and physical landscapes, and the extraordinary proliferation of information and communication which tarnscend space instantaneously, at the speed of nanoseconds. (Urry ,1995: 23)

In cities where authentic data of time and space are deleted and transformed into a spectacle in the middle of the web of images and symbols, shopping centers, as well as fairs, entertainment centers, play areas, luxurious hotels and chain restaurants are simulated worlds which are designed to get people into the consumption ritual. Spaces of consumption which is a part of a broad set of concepts such as production, distribution, advertisement, marketing, sales, taste, style, fashion, are constructed in order to make people acquire goods and services and control them as consumers. These spatial formations, primarily shopping centers and megastores, have some common features independent from their functions (Yirtici, 2005).

-Highway communication has a vital importance. Homogenous diffusion and physical accessibility through highways and automobiles is one of the main criterions.

- -Spatial relationships: All spaces have minimum relationship with each other; each space is meaningful only with its own existence. And this minimizes the relationship between space and place.
- -Introversion: Not taking place in a context, development of spatial relationships requires introversion. And this facilitates both spatial and temporal control.
- -Quantification: Products which are sold do not include the products of that region anymore, which is different from traditional markets; they are products which are produced, packed and presented for use in accordance with certain standards everywhere. Similarly, events in shopping centers and shopping norms are also standardized.

Shopping centers which are the leading spaces organized by modern capitalism are environments where geographical borders disappear; thus they are environments which create a feeling of belonging to nowhere or everywhere instead of belonging to a certain place, disconnected from its context, construct its own space, in short, they are global environments. The traces of where on the world and at what time you live are abolished, they are constructed in a way that the distinction between day and night or seasonal distinctions cannot be perceived; the relationships between seller and buyer are minimized within shopping norms with displays, labels, vault cashes and credit cards and formation of standard patterns in consumption habits leads to spatial similarities.

In this sense, consumption environments are organizations which are rationalized in a way that drives people to consume more. These environments get people into an enchanting mechanism with various stimuli. Feeling of reality leaves its place to the artifice of indicators, temporary delights and search for momentary pleasure. Ritzer (2000), who suggests that the delight created by consumption in these spaces has a holy and religious character, names these spaces as consumption cathedrals. He argues that, beyond their commercial aspect, shopping centers meet people's need to contact with each other and in this sense they have a centrality similar to the one provided by religious sanctuaries. People also experience the feeling of belonging to a society in shopping centers. In shopping centers which provide such an environment for socialization, consumption itself transformed into an entertainment which is used by people to spend their leisure time. Not only goods and services are consumed in huge shopping centers; these centers also include a series of entertainment opportunities such as cinema, foods and games. They are transformed into social life areas with elements such as pools, plants and benches.

This consuming culture, in which people make reference to the commodities they have and spending and entertainment activities they engage in while redefining themselves, statutes and social relationships, is established in almost all fields of city life. As stated also by Foster (2004), historical city centers, suburbs, streets, train stations, museums, hospitals, schools and the internet are shaped with shopping mechanisms. In the context of massiveness, consuming culture in which goods and images are sold, which shape, change and is packed and presented in accordance with the changes in and needs of international market also removed the distinctions among image, simulation and reality. It does not have an origin. It is produced artificially in the logic of capital. As an abstraction, it is produced again and again

infinitely, everywhere and all the time. As Baudrillard (1997) emphasized, such a hyper-real space-time perception imposed by capitalism, affected deeply the ways in which we define the society we live in and position ourselves in the society. Cities, which are disconnected from their context socially, culturally and geographically, lose their identity and transform into non-place, are moved to the global scale; are far from being a "experienced" "place" in order to establish a connection between beings and past and future and find out possibilities of existence of being.

Bursa, which is famous for its historical identity and architectural constructs which are shaped by its commercial life, also loses its time and space codes in the mechanism of consumption based on spectacles. This transformation in Bursa due to production and consumption culture can be seen clearly especially in the comparison between caravanserais, "bedestens" and shopping centers which are different spaces where commerce takes place.

## **BURSA IN TRANSFORMATION**

Bursa is an Anatolian city which was one of the liveliest centers of transit commerce especially in the 14<sup>th</sup> and 15<sup>th</sup> centuries and takes place at the end of the Silk Road. Bursa was captured by Orhan Bey in 1326 and served as the capital of the Ottoman Empire for 42 years. Before the conquest of Istanbul, Bursa developed rapidly as the political center of enlarging Ottoman State and, at the same time, it was not only the center of commerce between Anatolia and Rumelia but also became one of the most important warehouses the international commerce between west and east. Population of Bursa, which was both rival and complementary of Istanbul at that time, exceeded Istanbul's population in the middle of 15<sup>th</sup> century (İnalcık,1993, p:203)

Moreover, Bursa was a modern for Ottoman urbanization. Until the middle of 16<sup>th</sup> century, Bursa outstands as a city where an intermediate stage of formation of Ottoman civilization focused on. Even in the 16<sup>th</sup> century it was the unique big city in its region. There were a few cities which had more than 400 tax-paying population in the region and with the criterions of the time, Bursa was the unique city among those cities which can be considered as a metropolis ( Tanyeli,1999:12).

In this sense, guild system has an important contribution in Bursa's fame as a transit production and commerce center. All activities of producer-seller artisan groups engaged in the same production in the context of providing raw materials, production, quality control, marketing and relationships with the central administration were conducted through this highly coordinate organizational structure (Oğuzoğlu, 1999: 13). The basis of guilds, which were merchant, artisan or craftsman unions which aimed at protecting religious and occupational interests besides mutual help and protection, dates back to the institution of Akhism. The institution of Akhism played an important role in regulating the social life in Anatolia in middle ages. (the institution of Akhism that is both related to the regulation of sociocultural life as well as to the operation of business life within the framework of certain principles and rules). The institution of Akhism which has multiple functions established the master-apprentice relationship, provided a strong, moral and professional basis for crafts. Until the 18<sup>th</sup> century, the Ottoman order lived its golden age because of craftsmen and artisans. Their Akhism tradition and guild organization which was established later improved

this class both in quality and quantity. Guilds became leaders in providing stability in the market, finding broad markets for products and supporting crafts and small industries with the way in which they organized economic activities.

Many factors which were effective in making Bursa, which was a small town when it was captured, the biggest cultural and commercial center of the Ottomans in less than a hundred years can be listed besides the religious, social, cultural and economic institutions which were supported by several foundations: its fertile lands on which various and high quality agricultural crops can be cultivated, its commercial potential based on velvet and silk textile products and its position on the east-west commerce roads which is easy to access made Bursa a city of commerce. When we examine Bursa in this sense, its process of joining into the world capitalism also reflected to the spatial construct of the city. Bursa, which is on the Silk and Spice roads, appears to be a lively shopping space where there are intensive commerce activities with its caravanerais and bazaars.

The most evident architectural constructs of this era are caravanserais (Han) and covered bazaars (bedesten). As a rule, a city with a bedesten is an international commercial center because, depending on the existence of traveler merchants and development of long-distance commerce, it includes functions such as warehouse, bank, accommodation and sales and it is shaped under the inspection of a foundation in the form of an "imaret" or "külliye" as a whole and central complex.

Bedesten, which has three main functions which are sales and protection of valuable goods, and filing documents, is an inner-castle with the central and strong architecture of Turkish-Ottoman bazaar. Bedestens which were full of valuable goods were highly strong buildings made of stone. Valuable goods such as jewelries could be kept in these buildings, which also served as banks, in return for an amount of hire. Besides valuable goods of merchants, cases, documents and books of artisans and merchants and documents of artisan and craftsman guilds, which were important institutions until near past, were kept in bedestens. Then, we can say that bedestens were the core of bazaar and industry regions. Bazaars were shaped around bedestens, merchant khans were built nearby or the previously built ones were included in the spanning borders, streets which had shops on two sides were formed. In the bedestens which are strong and built of stone, there are sales tables called 'cabinet'. There are shops next to the outer walls of bedestens. They have strong gates on four sides covered with iron and high and few windows. It is clear that there are not many windows for security purposes and it is known that these few windows are protected with shutters when necessary (Kunt. 1979:20)

The existence of an open horse bazaar on the area selected for commercial complex construction activities beginning in the Orhan Bey era and then by following administrators indicates that there was a leading commercial movement in the said area. Weightily industrial-commercial institutional structures built on this area consecutively made it possible for Bursa to be an international market. These complexes which had important functions for the Ottoman economy in almost all eras with these characteristics were first seen in 1339 with the külliye which consisted of a mosque, khan, bath, imaret and madrasah built in the name of Orhan Gazi. As Arslanoğlu (2000) emphasized, this was , at the same time, a reflection of a policy

aiming to make an East-West trade route, until then of only secondary importance, into a primary one.

The Emir Han which takes place in the külliye complex and which is the first caravanserai which was gifted to Bursa by the Ottoman Empire is the real core of the city and the oldest city shopping hall in our history. Caravanserais which were important commercial centers of the Ottoman Empire mostly gathered around Ulucami, in order to have operations in various branches and they had a central, compact structure. The activities for building commercial buildings which began in the 14<sup>th</sup> century continued until the 16<sup>th</sup> century. The Kapan Han was built in the era of Murat I., The Koza (Cocoon) Han and the covered bazaar (bedesten) was built in the era of Yıldırım Beyazıt and The İpek (Silk) Han was built in the era of Mehmet Celebi. Then, the number of caravanserais became 28.

As it can be seen in the broad researches by Ayverdi( 1966) on the first ages of the Ottoman Architecture, in terms of their general architectural characteristics, caravanserais generally had a plan schema which square or close to square; it consists of an at least two storey porch which surrounds a court and rooms behind the porch. In some of the caravanserais which were built for commercial purposes, lower floors were used as storages and there were shops on their higher floors; and in the caravanserais which were built for accommodation purposes, lower floors were used for sales and higher floors were used for accommodation of merchants. In some, there were service rooms such as stables and small mosques. Moreover, these caravanserais were constructed introvert for security purposes. Goods which are sold by weight were inspected here and they could not be sold anywhere outside these buildings. Moreover, the taxes collected were incomes for big külliyes.

After the construction of caravanserais, small shops next to their walls on the right and left sides were built and shopping streets were formed by combination of these small shops. These streets were the entrance points of caravanserais and bedestens and they joined in the circulation network. In time, these streets from the western wall of The Emir Han to the eastern wall of The Koza Han were covered and covered "Kapalıçarşı" was formed. In this era, the city was an important commerce center with its fountains, pools and planes which lived in rich, pedestrian dominated spaces where water and green were nested.

As one of the most important centers of transit commerce, Bursa is a city which gained its identity with its caravanserais, bazaars and also urban formulation. Later, it was left destitute of the Empire's investments; the recession era when social order and security weakened and economic difficulties were experienced affected the order among artisans, production quality and trade negatively. Introduction of new harbors, development of new branches of textile industry besides the silk industry with the beginning of industrialization, development of new factories using steam power and dominated by foreign capital began changing the appearance of the city.

After the declaration of republic, the city industrialized rapidly and the population increased and this led to an unpreventable blow up and unplanned development; new highways, stems, construction activities and unplanned structuring were observed. Several functions accumulated in the city center and the prices of land increased. With the transformation in the forms of production, distribution and

consumption, a new process started with shopping centers built in the suburbs as a reflection of postmodern cities; shopping centers, which tended to go towards suburbs gradually due to parking, service, storage facilities and low land prices, became effective as spaces which ignore people's knowledge of city, culture and history and construct new lifestyles and values.

Supermarkets, hypermarkets and mega shopping centers which aim at storing more products in bigger sizes and selling them more cheaply form new centre and fields of attraction in the metropolitan area which are enlarging as new consumption spaces of capitalist societies. When they are compared with the central bazaar and caravanserais region which displays an authentic existence in time and space, they present simulated environments which do not have a memory, time, identity and aura. These formations are carriers of new world values which are consumption oriented which became important with globalization as environments without depth and substance, without identity and patched to our culture. The transformation in this direction indicates that the city which provides a strong feeling of space and collective identity transformed into a consumption center.

## CONCLUSION

With the globalization concept, while the world is getting smaller with the fluidity of capital and rapid increase in communication and travel technologies, people are also affected by the materialism culture which is dominant in the world; in this context, consumerism gained an important acceleration. With this social-cultural transformation in the direction of consumption, structural differences came in the forefront especially in the context of urbanization and urban identity. At this juncture, the transformation in Bursa is an important example: it is an Anatolian city which became the capital of central administration historically, is famous for its intense international commerce, its religious, social, cultural and economic institutions supported by foundations and its caravanserais and bazaars which were vital points of commercial life. Bursa is the first model of Ottoman cities with its central structure constructed by its religious and commercial buildings. Buildings such as bazaars. caravanserais and bedestens which form the urban identity of Bursa were basically shaped in order to meet the needs of a traditional commerce and production model. Bursa's appearance today is a divided centrality in the context of post-fordism, postmodernism, changing roles of cities and culture patterns; it transformed into the carrier of consuming culture's web of indicators, symbols and images. Especially the changes in main preferences in the economy after 1980 and the efforts of harmonization with the changes in the world introduced different dynamics in the space. Urban rents in metropolitan centers increased, investments of capital groups in business centers, luxurious housing complexes, mass housing fields and shopping centers picked up, a fast flow of migration was observed to the metropolitan centers in addition to scattering and growth. Acceleration in the time and space compression creates a perception of temporality and ambiguity at several points such as goods, products, ideologies, values, lifestyles. In this environment, advertisements, brand names, media images play a connective role in cultural practices and this means that "commercial culture" which became a statute gains reputation.

Shopping centers provide the ideal environments in order to catch this metropolitan atmosphere: they are most striking examples of materialized spaces where the

boundaries of time and space, real and virtual disappear, hedonist lifestyle provided by consuming culture is motivated with spectacles.

Bursa is one of the cities which are suitable for commenting on relationships in the context of history-memory-experience and constructed environment and can nestle discussions on space and identity in its transforming structure most. Bursa's aura which it has with its production and commerce adventure from the past, caravanserais and bedestens is being injured and it witnesses the depressions of city-dwellers who have difficulties in defining their existence and identity in the transforming environment and surrounded by the indicators of consuming culture. City-dwellers have to be alert against traps to overcome these depressions with their experiences in their journey from tradition to future and have to protect their field of existence.

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## **ENVIRONMENT& BEHAVIOR**

Moderator: Şengül Öymen Gür

Searching for New Research Design Patterns for Environment-Behavior Field:
A Shift from "The Purely Scientific" to "The Architectural", Thus the
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Pınar Dinç

The Performative Edge: Place Exploration

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Defining an Urban Public Space for Children: The Child Attraction Center Sibel Ertez Ural, Sezin Tanriöver, Serpil Özaloğlu, Nerkis Kural, Deniz Hasırcı

## SEARCHING FOR NEW RESEARCH DESIGN PATTERNS FOR ENVIRONMENT-BEHAVIOR FIELD: A SHIFT FROM "THE PURELY SCIENTIFIC" TO "THE ARCHITECTURAL", THUS THE "CONTEXTUAL"

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#### **ABSTRACT**

Being a section of behavioral sciences, Environment and Behavior (E-B) research can be considered as a positivist approach that has been developed for the purpose of examining manenvironment relations. Verification, methodology, measurement, theory, hypothesis and assumption are the basic elements that characterize such research. Through a skillful management of these concepts, an accurate answer to a distinct research question can be developed. This is an activity that requires creativity. Obviously, such an activity has close relationship with "architectural design". As known, designers image, externalize their imaginings and test them. Designs and actual buildings are their proposals. For a realistic proposal, what an architect needs is a reliable knowledge base that can go beyond his / her intuitive / subjective comprehension of matters. Thus, E-B has the responsibility of supporting the designer in this sense. Keeping all these in mind, the present paper introduces a section of a "quasi-empirical" research and questions its methodology. The research looked for an answer to a specific question of the field of Architecture, which was "do Architectural environments convey the original design intentions of their designers? Apart from what is (not) conveyed, how do / we assess the issue of conveyance itself?". This research question was related with the Environmental Aesthetics section of the E-B field. The paper exemplifies the issue of forming a scientific / positivist research structure accompanied by normative approach. Thus, the methodology introduced in this study is "idiosyncratic" in character. It combines the normative stance of a chosen architect & the two buildings of him with participant judgments so that a general question can be answered in contextual level. The paper reviews one section of the completed project and improvises on methodological implications in order to clarify the features of an altered E-B that facilitate "context" issue instead of concentrating on correlations and causalities.

**Keywords:** Environment & Behavior research, Scientific research, Research design, Office research, Architectural education

## INTRODUCTION

Considering the current practice in the field of E-B, it is possible to claim that E-B research is mainly a "positivist" *science* approach that follows the "empiricism" of behavioral science. (Groat & Wang, 2002, p.25) It is based on facts and figures. The variables that test human behavior in relation to physical issues of settings vary, such as the human characteristics -e.g. gender, age and status, the physical features of the focused settings -e.g. color, size and location, the psychological effects of physical environments on human -e.g. pleasantness, friendliness, feeling of security. In E-B field, these variables are considered in relation to each other, i.e. how color affects different age groups? Or, what psychological effects does the size of settlements have on people? Through illuminating "impacts", the research gains a context-free status, which is, in fact, based on a very definite context defined by the assumptions, behavioral settings and the participants of the research. In the end, positivist research approaches to the level named "scientific".

The present paper proposes a way of stepping further than such a pure scientific concern. In other words, it aims to make an inquiry about whether a methodology can be developed that could help the field of Architecture more accurately and directly. In order to discuss the issue, the present paper introduces a completed research project first and then it develops further discussion on the applied methodology and the possible methodological alternatives.

## **THE THEME** – a short story of a completed research project

In this section of the paper, the first part of a completed research project will be presented. The research will not be given in full content in order to avoid a possible overload and repetition of information. Only the first and the most characteristic part will be reviewed and improvised. For the remaining part and further discussions, the responsible author can be contacted.

The research was conducted in two retail centers (Erdem and Andaş retail centers) that were situated in Batıkent, which is a satellite city of Ankara, Turkey. 3<sup>rd</sup> year students of Department of Architecture, Gazi University were the participants of the research (n=40) as it was conducted by a group of graduate student researchers (n=10) who were doing their master degrees at the same department.

The buildings under scrutiny (see Figure 1) were designed by the prolific Turkish architect, Merih Karaarslan (1949-2002). The architect had used identical design principles for both of his buildings. Nevertheless, the actual buildings look different. Although both has semi-enclosed courtyards, the building masses that surround the courtyards are different in character. As one (Andaş) is more "figurative", the other can be called "abstract" (Erdem). Independent masses and passages between them border the courtyard of figurative composition whereas a continuous and concave two-storey building mass surrounds a same scale courtyard of the abstract composition. The briefs, capacities and also scales are identical in both buildings.

The questions which driven the researchers to conduct an empirical research were a kind that taking part at the hearth of profession. Architects image, share their

imagination via their drawings and models, they test their ideas by asking people or taking part in competitions and finally they build (Zeisel, 1981). But what about the built work? What happens after buildings are built? What happens in occupation? Post-occupancy evaluation approach, by Preiser and his friends, assesses buildings systematically in order to check their efficiency and suitability for human activities and satisfaction (Preiser, et.al., 1988). But what about the aesthetic concerns? What about the messages that an architect wants to give through an actual building? No research or assessment approach includes this very specific subject which, in fact, takes place in the core of the discipline of Architecture. Briefly, the questions in mind were as follows:

- (i) Buildings convey messages. People / observers receive some messages from the buildings. Are the messages, which are conveyed and which are received, identical?
- (ii) The architect designs with certain design goals and principles in his mind. These goals and principles shape the messages. Do buildings convey these principles, or they fail? Which goals or principles are more prone to failure?
- (iii) Can we assess the subject whether the architect has approached his design goals and principles or not? What sort of methodology would help it?

Environmental aesthetics, which is a section of E-B research, was the only field that could help the research team answering the questions mentioned above. A review of related literature of E-B illuminated researcher's way. It put the theories that were related with their curiosity and the possible methodologies that could guide the group in forming a new one that should have been specific to the interest. Because the literature is very wide and elaborate, it will not be presented here.

A team of 10 graduate degree students, leaded by a master who was the conductor of this research, designed an empirical study. The preliminary part of the study was for the team itself. The team reviewed all the written materials about / of / on the architect, collected all his projects and put his design discourse into proper sentences so that the re-written material could guide an empirical research. "What did he intend to do? Did he achieve it?"



Figure 1. Erdem and Andas Retail Centers, plans and views

Although the architect had already given explanations for certain designs of him, validity of these statements was considered questionable due to their normative nature: (a) Statements are mostly ambiguous in character, (b) The original ideas and declarations, in fact, do not correspond to the related proposal or the actual building precisely and (c) Presence of other factors and actors that might affect the end-product has likely a shadowing effect on the original ideas. In all cases, it becomes difficult for the observer to identify the original design goals of the architect. Looking at the actual building and speculating about what the architect could have been

intended to do become acts which may not give true results. Too many things interfere and cause illusion and misjudgment. Thus, a specific methodology was required, which would also cover the ambiguities of the subject matter.

The sentences, which were re-written by the research team, had critical importance in research. They had the duty of mediating between the discourse of an architect, which had subjective character, and the theories of environmental aesthetics, which have relatively more objective nature. Related theories had leaded the team to base their language on the two main issues of environmental aesthetics which were affective appraisals and building cues. An affective appraisal was defined as a judgment that an individual feels and expresses about an aesthetic stimulus, such as a building. And a building cue meant an observable physical component of an architectural environment that arouses certain feelings and judgments of individuals. Therefore, affective appraisals and building cues were considered as if they were the two sides of one coin.

After clarifying these definitions, the team collected the typical sentences of the architect and the statements that were made about the architect, re-wrote them so that each re-written statement would correspond either to an affective appraisal or to a building cue. In fact, setting up such correspondences was a big burden. The architect had very particular statements that could not come together with any issue of the environmental aesthetics field. They were either subjective or contextual. The team decided to keep these sentences as they were, without trying to connect them with any of the issues of affective appraisals or building cues. The issues regarding the "crowding & enrichment effects of masses, elements and roofs", for instance, are the examples that stem from the "context" of facilities whereas the impression issue "looking alive / not alive" can be considered as a subjective proposal of the architect. These issues do not correspond to previous research studies very much whereas "complexity" is present in almost every research in the field of Environmental Aesthetics.

In the end, the list of sentences that the team proposed for the empirical study was consisting of two types of issues; (i) issues of environmental aesthetics, i.e. form and impression variables and (ii) issues of context, i.e. the configuration variable. Thus, the complete list of the proposed issues was neither in line with the environmental aesthetics field nor was contextual thoroughly. It had a mixed composition and an inbetween nature. Considering this fact, it was difficult to entitle the following empirical research as a pure E-B study in spite of the presence of strong associations with the field

The variables of this specific study were defined according to normative expressions of the architect and the ones who talked about the architect. Thus, the research did not use pre-determined list of issues that was supposed to fit / explain a number of buildings that belong to different architects or styles. Instead, the variables are specific to the chosen of architect and the two chosen buildings of him. In this sense, the completed research was in line with the "qualitative research" approach which views the researchers as "...interactive with the subject of inquiry" (Groat & Wang, 2002, p.26). Thus, viewing the subject matter from a distance and outside was eliminated from the preliminary part of the research. Instead, researchers took active part in it, they interpreted the data and they used their experiential background in

understanding and re-writing the sentences. These are the fundamentals of interpretive / qualitative research (Kümbetoğlu, 2005; Punch, 2005).

The list, established by the research team, was used in the questionnaires. They formed the 13 issues each focusing on one of the variables of form, configuration and impression of the settings. Each issue was presented to participants through a bipolar question of 5 point scale, which is a popular measurement tool of E-B research.

Literature review showed that, most E-B studies related with our field were conducted by means of visual materials such as colorful slides or black & white drawings of specific settings. In each research, usually more than 20 images were presented to participants. Thus, the quantity had important role in these researches due to verification matter. The variables of these researches were also formed according to the framework of existing environmental aesthetics field. For the number of variables again, quantity was an important issue. As explained above, the list that the present research uses is a mixture of the Environmental Aesthetics field and the specific context. Thus, representative pictures were not considered as appropriate tools due to the facts that the research had only two settings as stimuli and the variables were not only formal aspects of the buildings but were also related with the actual impressions. "Being there" was considered crucial. So, instead of using representative pictures, participants were taken to settings. Actual buildings were taken as stimuli. Present research differs from the conventional nature of E-B studies in this context.

The research team also decided on the participant group. Architectural students (the pre-architects) were the most suitable group since understanding a designer and his works is a fundamental issue in design education. The methodology of this present research was considered as useful and practical for education field.

Findings of the research (see Table 1) revealed the miscommunication between the architect and pre-architects. For the participants, it was not possible to identify the design intentions of the architect. Although participants were taken to the actual buildings, they were not successful in making true / expected judgments thoroughly.

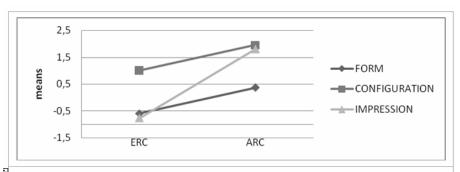
As noted before, the two settings were obviously different in configuration. The research team had hypothesized that this difference would be noticed by the prestudent participants. Nonetheless, participants failed in identifying this difference. The only configuration issue that the participants could identify correctly was the *crowding effect of masses*. The figurative composition (Andaş) had created such an effect.

The results for the form variable were not different from the configuration issue indeed. According to the research team, monochrome colors of the abstract composition would cause differences of judgments. But it did not happen so. The continuous building mass of the abstract composition was expected to cause assessment differences due to borders. But it did not happen so either. Participants did not think that continuity added much to the issue of having ambiguous / well-defined borders. Although the two compositions had similar sizes, the two-storey building mass of the abstract composition was expected to cause it to be assessed over human scale thus different than the figurative one. Surprisingly, pre-architects

judged the issue correctly. Similarly, figurative composition was expected to be found more complex than the other. Pre-architects judged the issue correctly too.

The other variable that the participants could not read and judge truly was the impression. The architect had the intention of giving same / similar impressions via his design approach despite he used different configuration and forms. Participants of the research could not identify the sameness. What they saw was the figurative composition (Andaş) being more inviting, cheering-up and looking alive compared to the abstract one (Erdem). Surprisingly, both compositions were assessed as being encouraging people's involvement. The research team and the participants were in agreement on this issue.

Table 1. Mean scores and standard deviation values for Erdem and Andaş Relatil Centers in terms of form, configuration and impression variables of the research, and paired samples t-test analyses results indicating significant differences between the assessments of pre-architects for the two facilities



囙					
		ERC		ARC	
	Research variables	mean	SD	mean	SD
	FORM	59	2.04	.37	2.07
	Complexity	37	1.20	.83	1.00
	Well-defined/ambiguous borders	.56	1.23	.15	1.20
	Nice / dull colors	-1.20	.93	98	1.37
	Human / over human scale	.41	1.09	.37	.97
	CONFIGURATION	1.00	2.50	1.95	2.80
	Integration with nature	17	1.00	22	1.01
	Integration with surroundings	.37	.89	.27	1.12
	Crowding / not crowding effect of masses	02	1.06	1.07	.91
	Enriching / not enriching effect of elements	.56	1.21	.90	1.09
	Enriching / not enriching effect of roof structure	.22	1.31	07	1.40
	IMPRESSION	76	2.61	1.80	2.53
	Inviting / excluding	46	1.03	.22	.99
	Cheering-up / relaxing		.77	.10	1.02
	Alive / not alive	24	1.16	.76	.94
	Encouraging / discouraging involvement	.34	1.15	.73	1.10

These findings revealed failures. The architect seemed to be failed in carrying out his intentions into real buildings. The buildings seemed to be failed in conveying their original design principles to observers. And, finally, the participants seemed to be failed in identifying the proposed differences and similarities of two actual settings. Thus, the architect had said something but it was not understood by the young observers. Likely that he used a very specific vocabulary. Or, the young observers, just like laypeople, did not have an appropriate vocabulary for understanding such designs. Considering the fact that the participants were 3<sup>rd</sup> year students, it was difficult to support such an incapability of observers.

Anyhow, words were not identified thus the original design intentions were not conveyed. This does not designate a failure stemming specifically from the architect but rather support a failure in the communication system of architecture. Even though the original design intentions were clear and were received approval of a more experienced team of researchers, an empirical test with pre-architects revealed failures. In other words, normative statements of the architect and the empirical test results did not say the same things. This point of departure made us reconsider the present status of E-B research.

Considering the results and the methodology of the completed research, the research team improvised on methodological issues of E-B research. The aim was achieving a better understanding of Architectural environments. How could E-B help the subject matter? Could it help by staying as it is? Or, rather, was an improvement in the conventional positivist research patterns necessary?

## **AND THE IMPROVISATIONS** – speculations on the short story

One part of Architecture is normative. This is natural, obvious and inevitable. One word or term may have several meanings depending on the context in which it is spelled. On the other hand, positive (contrast to normative) knowledge is encouraged through the approaches like E-B field. The main problem seems to be stemming from the lack of integration of these two sides. In order to facilitate comprehensive research methodologies that fit the specific field of Architecture, these two sides should come together in such a way that both do not lose their statuses. In other words, methodologies that cover normative and positive sides together are needed if we want "the scientific method" to look for solutions to the specific problems of Architecture.

In previous part of this paper, we reviewed a research that was based on a very specific question. In fact, it was a very basic question "is Architecture understood?" It was a question that would not be preferred to be asked in the field of E-B studies due to the methodological difficulty of focusing on normative statements and buildings of individual architects. Approaching to theoretical conclusions by inquiring individual cases is not practical in this sense. Obviously, what can unite such a research with the E-B field is its methodology.

The statistical analysis, which was the paired samples t-test in the reviewed study, helps researchers diagnosing the variables that cause significant difference between the judgments regarding the two facilities. Mean and standard deviation values

describe contextual results whereas t-test findings has potential to lead the findings towards theory such as, "the impression value of figurative compositions is significantly higher than of abstract ones", or, "two-storey building mass, which is also concave and continuous, cause the building complex to be assessed as over-human scale compared to fragmented compositions". In fact, these theoretical findings are valid only for one architect, the two buildings of him and the student participants. Obviously, what unites such an individual research to the rest of E-B field is the "methodology" that can be repeated and generalized.

The role of research team was a novelty of this research. The team studied normative statements and re-organized them in such a way that they could well fit in empirical part. Such a translation process evokes speculative thinking regarding the matter.

- How can we deal with the normative statements of Architecture? They are subjective and highly contextual by their nature. For sure, conventional E-B research patterns neglect them. In case they are given place in empirical studies, certainly they cause ambiguity and confusion; they alter the status quo of the positivist approach. So, a methodology that can transform normative knowledge into a special kind that supports empirical study seems essential.
- In order work with normative statements, what the researchers need is the help of qualitative research methodologies which are better specialized on such statements by their nature. Methodologies such as phenomenology, grounded theory or content analysis can be associated with empirical studies. Thus, researches can be designed as two-step activities which start with qualitative research. The research introduced briefly above stemmed from such an attempt although it did not name its qualitative methodology openly.
- Qualitative research can be at the core of main research activity. In other words, buildings or proposals can be judged qualitatively rather than being assessed via quantitave methods. Thus, assessment and measurement of positivist approach can be replaced with the inquiry of post-positivist methods. For example, in case of our completed research, we would have asked each participant to talk about each building or write an essay about his / her experience in the buildings. A content analysis of these verbal expressions might have given different results from the empirical study we conducted. The variables that the research team defined would be tested in another way. The conducted empirical study only illuminated the presence of misunderstandings. On the other hand, such a context analysis would reveal the concepts in participants' minds too.
- Buildings or design proposals are not simply stimuli. Human judgments regarding these are complex in nature, thus any purpose of simplification endangers the quality of findings in terms of being realistic. Simplification is unavoidable in empirical studies due to the fact that one term means one certain thing. In fact, what the researcher means with one specific term does not necessarily mean the same thing for the participants. Thus, such simplification should be handled with special care. What we simplify? How we simplify? In order to avoid over-simplification these questions should be answered in each stage of simplification.
- Empirical study uses concepts as well. In environmental aesthetics field, for instance, the term "complexity" is referred frequently. The complexity in designer's mind and the complexity in observers' appraisal are certainly different.

What is important, and thus the real concern regarding the field of Architecture, is not whether a building is perceived as complex by lay people or not but it is whether the complexity concept in the architect's mind is being understood "as it is" by the receivers or not. Defining what complexity means for laypeople does not add much to the field of Architecture in fact. Actually, Architecture is a field of art. No architect designs exactly according to what receivers think or feel. The architect has the duty of introducing new experiences to the society. Thus, he / she take risks. Any design proposal is a risk itself. Therefore, "the complexity", for example, of a new building cannot be explained with the general knowledge about the complexity theories of E-B research thoroughly due to originality of each Architectural proposal.

Any research is shaped according to a specific guestion. (Leedy & Ormrod, 2001) Empirical studies, including E-B research, limit the character of questions and the way they are asked. Methodologies and research tools of E-B research condition researchers about the possible research proposals. As a result, basic and fundamental questions concerning Architecture are left unasked, and of course, unanswered. A question such as "does this semi-enclosed courtyard encourage involvement of people?" for example, cannot be answered free from its context. Here, context is an issue that covers the space itself, its nearby environment, the architect who organized the space and the users who live and perceive this specific environment. It is a phenomenon. It is a unique entity. It may have common features that correspond and serve to present theories as it may have nothing in common with them due to the architect's imaging / intuitive mind which is completely different from the scientific consideration of matters. Therefore, the present patterns of E-B research seem that they do not cover specific issues that stem from a context. Rather, they are more concerned with over-context or beyond-context issues from which theories can be produced. In other words, E-B research focuses on the question i.e. "do semi-enclosed courtyards encourage people's involvement?" In reality, one semi-enclosed courtyard may encourage people within its original context whereas another may fail due to its extraordinary context.

The briefly discussed matters above point one important problem of E-B research field causing an alteration in the assessment of Architecture; the architect and his / her design goals are excluded from the system. As a result, buildings are treated as if they are anonymous works. In fact, buildings have creators, imaginers. Besides, buildings are given the responsibility of conveying the messages that their creators want to make public. It is these messages that consist the original part of the design proposals. Thus, without knowing and considering architect's original intentions, it is not realistic to judge a design's power / success in any field.

Certain building cues, for instance metal cladding, may not be appreciated by receivers. E-B research may be informing us about such an empirical-research-based conclusion. But, it is always possible for an architect to turn this dissatisfaction into a pleasure through a better and original consideration of the context. Thus, "context" is the generator of design. Each attempt of design should be considered as a unique case. Likewise, E-B researches should include this uniqueness in their design so that each work of Architecture can be considered together with the original thought that generated it. Otherwise, unique works of Architecture are let for simplified considerations like of the other settings that do not have designers. If a

more realistic support of E-B is needed in the field of Architecture, the architect and his / her original design intentions should then not be excluded from the research design.

The original design intentions of the architect define the significant part of the "context" of the design, so should also be searched explicitly in E-B field. Otherwise, researches misjudge buildings by giving them the responsibility of embodying certain features despite the fact that such responsibilities are not given to them by their architects.

Briefly, buildings are not simple Gestalt objects, but they are works of design. Their design determines their context, as it should also draw a framework for "context-based" research design patterns in the field of E-B.

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## THE PERFORMATIVE EDGE: PLACE EXPLORATION \*

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#### **ABSTRACT**

A performative approach to place is proposed, and implications for architecture and urban design explored. Illustrative examples are discussed, focusing on the knowledge work place. It is argued that examination of the performativity of the knowledge work place enables a critical engagement with the questions of work practices, technologies and the urban, under the conditions of an emerging, globalizing knowledge-based economy. The processes whereby an improvised, but legitimised, knowledge work place emerges on the periphery of the King's Library Tower in the British Library are discussed. This unintended, emergent work place is contrasted with a work place designed to house creative business units, located within Central Saint Martins College of Art and Design. Both use similar objects and forms as context markers, but crucially the contextual hierarchy and topographic markers within each differ. A performative approach to work place encourages design to consider how spaces are used and re-formed to generate places of work that suit organisational and personal styles. As an approach, it builds on what architects and urban designers already do and serves as a knowledge-sharing language enabling the use of ideas from across a broad spectrum of social scientific and design practices. The implications for architecture and urban design of a performative approach include generation of a more informed understanding of the anthropology of place; its better integration with the engineering of place; and the need to create transdisciplinary teams who consider the integrated performance of the social reality into which the design is to intervene.

**Keywords:** Performativity, Place, Contextual design, User-driven, Appropriation

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## INTRODUCTION

In November 2004, the United Kingdom's Department of Trade and Industry, through its Technology Programme, issued a call for research projects to develop applications that enhance productivity. As part of a project responding to this call, we interpreted it as expressing a need for the design of interactives that enhance performativity, [1] on the basis that productivity is a practical accomplishment, achieved through material-social performance, and work-place applications are moving toward a more sophisticated type of human-technology interaction, given the parallel emergence of such developments as tangible computing, ubiquitous computing and social technologies using Web 2.0 principles.

Further exploration of these ideas, through adoption of a more systemic approach, led us to redefine the brief as a call for the design of interactives, including interactive environments, that enhance performativity, i.e. <u>embodied and embedded places</u>, as systemic wholes or 'minds', whose performativity may be enhanced, part of which may be measured in terms of productivity improvement, using conventional accounting metrics related to time, output, competitiveness and profitability.

In short, our research into applications and productivity led us toward an investigation of the performativity-place relationship. This journey is mapped in Figure 1 below. In what follows, we will develop the ideas introduced above through the discussion of two examples of knowledge work places, one set within the public, institutional environment of the British Library, which we used during our collaboration, the other set within an institution of higher education, Central Saint Martins College of Art and Design, which had served as a case study in our research project.

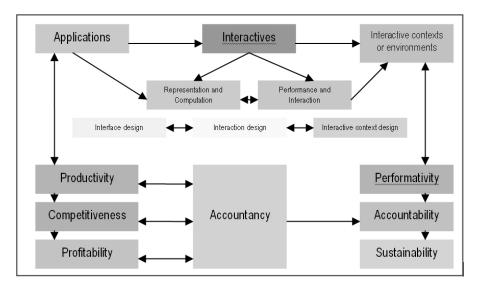


Figure 1. From applications and productivity to interactive

## **PLACE**

For us, place is important because, as John Wood et al. (Wood, 2005: 5) argue, people are place makers and the act of making place is inherently moral. [2] Place enables us to explore the choices we make and how our actions and interactions, our "doing" or our performativity, affect our relationships to ourselves, to each other, and to the designed, built and natural worlds.

We understand place as a systemic whole, an information, communication, exchange and control system, an example of an ecosystemic unit of 'mind' (Wilden, 1980: 258), in the sense elaborated by Gregory Bateson, for whom the mental properties of the system are immanent within the system as a whole, not any one part. Within such systems, causality is non-linear and circulatory.

In such cybernetic systems, as Bale (Bale, 1998) explains, there is a hierarchy of contexts. A mind-system is Janus-faced. As a whole, the system faces inward. It is concerned with maintaining its internal steady state through its dialogue with itself. As a sub-whole, a differential part of a larger whole, the system faces outward, responding to perceived differences in its environment, a meta-system, and differences communicated to it through pathways or networks of recursive circuitry within the larger mind system, in a potentially infinite regression of relevant contexts. [3] Places are sets of interlocking processes and relationships, held in an ecological balance, which may be far from equilibrium, and which may be very precarious. (Levin, 1997)

## THE URBAN

As place is important, so is the urban, because the urban environment is, for us, as for most people, where life is either enhanced or diminished. Cities facilitate or hinder development of a sense of place, a kind of human experience that impacts strongly on how we situate ourselves in the world. (Sheldrake, 2007: 50)

Furthermore, as Mike Davis argues forcefully, the urban is important because the world is entering an "urban climacteric" (Davis, 2006: 1-19). During the 2000s, for the first time in human history, the urban population of the planet will outnumber the rural. Cities will account for virtually all future world population growth, almost entirely (95%) in the urban areas of developing countries.

The price of the new urban order, according to Davis, is increasing inequality within and between cities of different sizes and economic specializations. At one extreme are the cities of the developing world, characterized by a form of growth that does not necessarily imply a coeval process of industrialization, or even of development. At the other extreme are the deindustrialised cities of the developed world, such as London, where our attention is focused.

Both extremes pose challenges for the urban form: the former, through its lack of design and planning, approaches anarchic conditions which undermine sustainable human life; the other, by being hyper-designed and over-rationalised, stagnates human and social invention through its restrictive forms of individualized contractual

engagement, as described by Marc Auge (Auge, 1995) [4]. For London, the challenge is to put substance to its claim to be a specialist centre or attractor in the creative industries. [5]

## WORK

Under conditions of flexible accumulation and urban specialization in the technology-intensive, globalizing, knowledge-based economy, work practices [6] are no longer, if ever they were, reducible to what is done within the job description. Indeed, as the literature on the futures of work suggests, it is not work which is disappearing but the job, as full-time, permanent, lifetime employment, with serious implications for careers, and what continues to change in work is the balance between human and technological forms of performativity. [7]

Much of the work available in the knowledge economy is not entrepreneurial self-employment, although often labeled as such, but simply labour for someone else's profit. [8] Emerging patterns of work, featuring de-layering of management, downsizing, temporary contracts, subcontracting, individual wage bargaining, virtualisation of organization, technologisation of work and business processes and off-shoring, challenge work as place, as stable site for production; the human body as place, as identity through repeated work and behaviour patterns; and the urban as place, as centre of and for employment. Workers' skill-bases, i.e. in our terms their performative ranges, are being displaced by contractual, geographical and technological change. Workers continually have to alter their 'act' and adjust their actions to performative repertoires of different durations and uncertain spatialisation.

For us, then, the question of work practices, and of social practices more generally, the question of technologies, or of the objectification, architecturalisation and technologisation, i.e. the design, of social practices more generally, and the question of the urban, or urbanization and globalization more generally, come together and can be explored through the performativity of work place.

## **EMERGENT NOMADIC WORK PLACE**

While we conceive place as an integral whole, there are potential disjunctions [9] between the levels of the system or between the different forms and scales of place or mind. These potential disjunctions expose the performativity of bodies of different kinds in holding together the place as system, aligning its parts, and inter-relating it to other places, at the same time and at other times and at the same scale and other scales.

Thus, a person or persons can be relatively disjoined from the immediate place, spatio-temporal set of events or situation, and joined to other places, but such persons cannot be disjoined from place altogether. This can be seen in Illustrations 1 and 2.



Illustration 1

In Illustrations 1 and 2, we can see two disjunctions emerging. The first is between the public place of the British Library corridor, as a place for resting, perambulating, eating or drinking, and the persons enacting a distinct place of work along the edge of the corridor. The second disjunction emerges between and the persons in their marked-out work place and the British Library as institutional cultural resource, as manifested by the structure of the King's Library Tower [10] behind them, shown more clearly in Illustration 2, and the surveillance of the British Library attendant on the balcony above, in the left hand corner of Illustration 1.



Illustration 2

This emergent work place is related to the other places denoted by 'The British Library' but disjoined from them by the performativity of place-making. The work of alignment/disjunction is performed, as can be seen clearly in Illustration 3, by the knowledge workers using the available resources, which themselves become performative: they create the boundary or edge that they mark. Sofas, chairs, stools, power sockets, laptop computers, paper notepads, body posture, spatial distance, structural building features, and so on, are marshaled towards place-marking and place making.

#### **TOPOGRAPHIC BODIES**

However, this is not a place which has emerged spontaneously, independently of the British Library as built-institutional place. It has emerged in collusion with the British Library's management, which has provided the sofas, chairs, stools, table lamps and power sockets. As a place, then, it is contained within a hierarchy of contexts-places, part of an extended social order, in which London's economic specialization and the British Library's role in it are integral parts. The British Library is a topographical place within London as urban economic landscape.

We also see the emergence of a topography within the confines of the British Library itself [11], with the emergent work place having a front, or prospect, the boundary between public place and work place, and a back, or retrospect, the boundary between institutional place and work place. Through this topography, the place is established as a retrospective-prospective presentment, indicating the performativity of the built environmental forms, their embodied process in enacting the attention system of the place, its sense of presence.

#### TOPOGRAPHIC, NARRATIVE AND THEATRICAL BODIES

The King's Library Tower, the bronze and glass-encased book stack visible in Illustration 2, can be understood as a body-marker of the topographical order of places-contexts within the Library setting. The King's Library Tower orients placemaking performatively towards the reading rooms, a place of access to knowledge, a place where the British Library maintains ordered access to the ordered world of knowledge, as structured by the Library's classification and storage systems.

The King's Library Tower is an unambiguous symbolisation of knowledge as cultural resource, on the one hand, but also of knowledge as property, as possession, on the other. The library belonged to George III, King of Great Britain and Ireland in 1760-1820, the sovereign individual of that period, before passing into public, in this case national, ownership. It is a performative symbol of what is being made available to library members, the promise being that, as library members, they too can become sovereign individuals through possession of knowledge, gleaned from access to the books and journals in the nation's possession, and through that knowledge-possession become empowered, because free from tradition (religious and feudal social order) and prejudice (superstition, myth and magic). Thus, the topographic place opens out into narrative sequences, for example, a historiography of the nation

as a collective body, a narrative of progress, or a biographical narrative of individual knowledge acquisition, a narrative of quest.

The King's Library Tower is not a passive or static symbol; it is impassively performative in the Austinian sense, it enacts what it represents: Enlightenment rationalism as cultural memory and cultural resource. It can be seen in its outward order: a body of texts within an architectural body, by means of which the reality of Enlightenment rationalism can be entered, recalled, re-enacted, re-experienced and renovated.

The King's Library Tower is visible as backdrop in Illustrations 1 to 5. In a literal sense, it sets the scene, but also metaphorically, it is the backdrop to the knowledge work place as theatrical scene which can be witnessed from the balconies visible on the right in Illustration 1. In this scene, the drama of national territory (the British Library), of Enlightenment (the books as carriers of knowledge-content that enlightens-informs in the process of modernisation, emancipation from tradition through knowledge), of modernity (with its Georgian challenges of empire, extraparliamentary radicalism, egalitarianism and cultural progress) and of modernism (the architectural form of the tower, its technology-dependent height, and its materials, rendered concrete, glass and bronze) are re-staged and re-produced on a daily basis.



Illustration 3

In all of these senses, the emergent knowledge work place around the King's Library Tower is a performative edge, marking and re-marking topographically, dramatically and narratively a passage towards the post-modern (plurality of places and contexts), post-modernism (emergence of relative dis-order, or re-ordering, through practice, performativity and digital technologies), post-enlightenment (knowledge as process, as negotiation, as interpretation), in a post-humanist ecology, i.e. the human is no longer the measure of all things.

In this way, we can recognize a moment in the concrete reality of today's world through its performativity, which intertwines places, non-places, spaces and times in a complex articulation, that is to say, the abstract (time, space, abstract logic) and the concrete (temporalisation of practice, spatialisation of practice and practical or situated reason) are intertwined to form an "order on the edge of chaos". [12]



Illustration 4, 5

The modern-post-modern world aligns the order realized through the embodied enactment of places with the enactment of the abstract logics of spaces and times, defined by the abstract or formal logics of contracts, for example, business contracts, investment contracts, employment contracts and sub-contracts. Thus, the emergent work place in the British Library corridor is only realizable at those times during which the British Library staff are employed to monitor the places enacted within their territory. The contract time of employment shapes the emergent place of knowledge work, although less so than the opening times of the reading rooms. Access to these disjoined worlds, and alignment of these disjoined worlds, is performed by context-and place-markers in the forms of objects, persons, technologies and environments, which mark the paths and circuits among levels and the boundaries between levels and contexts, using topographical, dramaturgical, narrative, logical, instrumental and other forms of ordering and direction, through which performativity as work is achieved.

# **COLLECTIVE BODIES**

The emergent corridor work place, while forming a collective body, does not form a self-consciously communal body, or a political body in any coherent sense. The people working there are not consciously united. Nevertheless, they do form a collective body of some sort, a population perhaps, and in that sense could be said to constitute an ecological collectivity. Furthermore, in working as a disparate population of knowledge workers, they could be said to form an abstract economic collectivity, a work force of some kind, but again not an organized one. Within that collective body, some choose to perform individually, while others form small groups or teams, mostly of two to three people. In sum, while they constitute a collectivity, they do not constitute a purposive organization, with goals and common interests.

#### **EMERGENT OFFICES**

The collective body of knowledge workers creates the emergent work place. However, at a smaller scale, within the emerging work place around the King's Library Tower, emerging offices as places can be recognized. The boundaries of these office places are created performatively using the flexible architectures of human bodies, objects, clothing, and technologies, and whatever architectural features lend themselves to the performance. In Illustration 3, we can see a sofabased office space for two persons, defined along its corridor boundary by stools and objects places on the stools forming an effective barrier. To the right of the sofa, the man uses the lid of his laptop computer as an effective boundary marker. To both left and right of the sofa, the men use a head-down, bent-over posture to close off their individualised place from others, a similar gesture for writing using paper technology and computer technology.

In Illustrations 4 and 5, we see a table-based office place emerging. This is much more of a re-purposing of place, the restaurant tables being pressed into service as offices desks, with less collusion from the British Library, for example, no sockets for computers. Looking at Illustration 5, the lamp-shade sketches an office ceiling; the far wall is formed by the restaurant balcony; the wooden benches and stone dividers forms the side walls, while the fourth wall is provided by a person's body, which could also serve as a door, should someone wish to address the group and enter its place by, for example, placing a hand upon the man's shoulder by way of knocking.

Body language reiterates the formation of place. In the sofa-based office, the bodies are aligned towards one another, hand gestures intensifying the connection, objects (water bottles, papers, plates, coffee cups, plastic cups and bags) arrayed around the edges, forming a loosely defined boundary. In the desk-based office, the bodies lean in towards one another. There is no need to reinforce the architecturally-formed boundaries on three sides, although clothing and bags could be used to personalize the occupation. A human body and a coat placed over a chair complete the enclosure on the fourth side.

# **NOMADIC OR HOMELESS?**

In one sense, the emergence of these performative edges, i.e. the work places on the edge of the King's Library Tower and the edge of the British Library restaurant, could be read as a performative feature in a narrative or a drama of overcrowding, which goes as follows: "The reading rooms are full to capacity. The Library's readermembers are spilling out into its corridors. What happens when they become so numerous that they begin to sit on the floors, filling the corridors so that they are no longer passable, making the corridor space uncontrollable, forming a knowledgeworker favela? These people are not so much nomadic knowledge workers as itinerant or homeless knowledge workers. This is a national economic problem: the infrastructure to support a knowledge-based economy is inadequate. Knowledge workers are pouring into the few existing adequate places."

However, the emergence of these performative edges may be interpreted more positively, as a performative feature in a narrative of progress, which goes as follows: "Knowledge workers, even those most intensely interested in scholarship, are moving towards collaborative styles of working. Using emerging social technologies, they are moving away from individualised, archival, textual scholarship, towards a more interdisciplinary and transdisciplinary collective mode of working, improvising as they go, even as far as the places in which they work. It is a thoroughly dialectical, creative world, far removed from the kind of instrumental performativity described by Lyotard." [13]

Depending on which narrative or dramatic frame is selected, the issue to be addressed may be one of demographics and ecology, of population and territorial size or resource base size, with insufficient investment in spatial resources, causing overcrowding; or one of space utilization, in response to which more conventional spatial resources should be turned over to emergent place-forms, for learning, working, collaborating, etc.; or, indeed, one which mutually contextualizes these two different kinds of problem.

#### **CREATIVE WORK PLACE**

The British Library emergent knowledge work place, with the emphasis on scholarship and physical and digital collections, and hence the creation of new knowledge from existing knowledge, is an example of an unintended place, brought about by a combination of institutional and personal action and interaction over time. Central Saint Martins Innovation is a deliberate attempt to create a knowledge work place, focused on creativity and innovation through design. It serves as a unit housing design, research and consultancy practices.

Interestingly, many of the contextual markers used in both places are the same. Particularly noticeable is the use of a sofa and a table to create collaborative spaces. However, since this is a business incubator for the creative industries, the overall topography is ordered through a more conventional business-body architecture, with the head-brain, the business manager's office, at one end of a corridor-spine-nervous system that connects to the limbs, the dedicated office spaces, workshops and studios, where activity takes place. The potential collaborative places are situated in

the corridor, as part of a re-purposing, taking advantage of the corridor's communication potential. [14]

Dedicated office space enables the creation of a degree of communal place or organic society to emerge within each office. The existence of a number of discrete offices, and a competitive environment encouraged by the combination of entrepreneurship, innovation and business principles, engages a certain political society also, with potential inter-office rivalry and worker/management tensions, both at the level of the office and of the unit as a whole.

The performative challenge here is to hone those energies, rivalries and management tensions into a creative whole, from a design and research perspective, and a productive whole, from a business perspective, and to render those two different accounts compatible in design practice. The performative edge of the emerging collaborative places in the corridor can serve a function here in aligning the competitive world of business practice with the more collaborative world of design practice, by creating negotiation places where people can tackle the paradoxical injunction in their work environment to "act competitively while acting cooperatively". This is a more complex performative challenge than providing potential places for nomadic workers, who, together, share no organizational goals. Similarly, the combination of dedicated office space and collaborative corridor space enables the establishment of stable identities, not easy within the nomadic work place, as a basis for individual creativity while allowing for a degree of interdependence in the more free-flowing corridor spaces.

#### IMPLICATIONS FOR DESIGN

For architects and urban designers the paradox is to design an emergent order which is not wholly preconceived, an order which is in some way designed, as an unfolding of events, but whose unfolding is not wholly pre-determined, an order whose events, which are potentially catastrophic or chaotic, always resolve as happy accidents, whose interactions change the prevailing situational and organizational order in such a way that the outcomes are acceptable and indeed desirable, but in some way unexpected.

The emerging nomadic work place in the British Library is one such happy accident, partly a product of the scale of the vision of the architect, Colin St John Wilson, who by design yet without intention created a potential nomadic knowledge work place which exploits technologies, such as wireless laptop computers, that were not part of the planning or design process when it began in the 1970s.

From a performative perspective, architecture and urban design become part of the design of institutional forms, which frame events, situations and sequences of situations topographically, taking collectivities and forming them into places and organizations. One of the performative goals of architecture and urban design, then, is to create environmental features that aid negotiation of these complex social worlds, for example, places which facilitate co-existence of individual and collective identities and switches among them.

To adopt a performative stance is to recognize and to build on what architects and urban designers already do: integrate the civil engineering of place, which is precise and predictable, with the anthropology of place, which is imprecise and unpredictable. [15] A performative vocabulary is a knowledge-sharing language, enabling use of ideas drawn from practices across the arts, design, humanities, social sciences and science, computing and engineering, in order to develop a more informed understanding of the anthropology of place and its better integration with the engineering of place.

Taking a performative view of place enable us to consider how people, objects, technologies and environments come together to achieve organizational and institutional goals performatively. This performance is both rehearsed, in terms of the rituals of social practice, and improvised, in terms of adaptation, emergence and innovation. It is also many-layered: it has a topographic layer (the force of sense of place); a dramatic layer (the emotional force of situations); a narrative layer (the persuasive force of rhetoric and story); a logical layer (the rational force of argumentation); an instrumental layer (kinetic force); and an organizational layer (collective force). Furthermore, all these modes and layers of performativity are integrated in institutionalized social practices, into which new persons, objects, technologies, architectures and urban forms intervene. If that intervention is clumsy or insensitive, they may be met by the full force of the above-mentioned performativities, and rejected forcefully.

The practical implication of adopting a performative approach is that design requires the formation interdisciplinary or, more properly, transdisciplinary teams, which include non-experts and non-professionals whose knowledge of the integrated performance of social reality is equally valid as the more refined, but very fragmented knowledge of experts. Together, such teams can pay attention to the broad field of existing performativity into which the design intervenes, while also focusing on the relevant scales and contextual hierarchies through which the pragmatic fields of practice, with their commonsense processes and goals, are enacted. They can also pay attention to the distribution or weighting of existing performativities among:

- people (as individuals and collectivities of different sizes);
- technologies (i.e. technical devices plus people, their technological skills and the abstract intellectual systems being utilized);
- objects (or technologies in object-form);
- interior architectures; and
- exterior or urban architectures and environments.

As a group, they can decide the scope of the initial intervention they mean to make, the design intention, while leaving broad margins for potential unintended usages and adaptations, and the scale of the initial intervention.

Above all else, the implication of a performative approach for design is learn from your own and others' existing, realized designs, your own and others' plans, particularly where they seem to go astray in practice, to become messy formally, such as the corridor and restaurant spaces in the British Library, where they might be said to be reaching toward the performative edge, performatively holding off the chaos of social anomie and the stagnation of excessive social regulation.

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#### **ENDNOTES**

- (1) Performativity, broadly conceived, is a material, practical and an ecological concept. It covers human performance and non-human performance, which are intertwined, as discussed by Pickering (1995). The concept of performativity first emerges in Austin (1975) and Austin (1970). Three aspects of performativity are important to highlight: the Austinian sense of an act that brings into being that which it purports to describe; how and whether that which is brought into being can be sustained in being; and the contestation among performative acts in establishing what exists, what is real, and what is appropriate. This last is the moment of performativity as knowledge-power.
- (2) The starting point for our understanding of place as a moral issue is ethnomethodological. Following Garfinkel. we understand that. "the possibility of understanding...consists...in the enforceable character of actions in compliance with the expectancies of everyday life as a morality. Common sense knowledge of the facts of social life for members of the society is institutionalized knowledge of the real world. Not only does common sense knowledge portray a real society for members, but in the manner of a self-fulfilling prophecy the features of the real society are produced by persons' motivated compliance with these background expectancies." (Garfinkel, 1984: 53-54) What we would add is that much of the stability in creating this common ground is achieved through the place as environment, i.e. not simply through human behavioural or intersubjective interaction.
- (3) In Bale's (1998) terms, a context is a non-substantial phenomenon, functioning like a map or a model. It is a recognition of the differences that make a difference within a set of relationships.
- In a similar vein, Dourish (2004) argues that context is actively produced, maintained and enacted in the course of activity at hand. Context is a process of contextualization which established and maintains relations among objects, activities and objects and activities.
- (4) For Auge, much of the urban landscape is marked by what he calls non-places, such as airport waiting lounges, hotel lobbies, the supermarket and the non-place we inhabit while driving on a motorway. Upon entering non-places, a person is relieved of their usual responsibilities and becomes no more than what she or he does or experiences in the role of passenger, customer or user. Thus, "Alone, but one of many, the user of a non-place is in contractual relations with it (or with the powers that govern it). He is reminded, when necessary, that the contract exists...The contract always relates to the individual identity of the contracting party. (Auge, 1995: 101)
- (5) The theme of London's specialization is taken up by the Greater London Authority in such publications as: GLA (2002), Creativity: London's Core Business, London, Greater London Authority, available online at
  - http://www.london.gov.uk/mayor/economic unit/docs/create inds rep02.pdf, accessed 11 April 2007; and GLA (2004) London's Creative Sector: 2004 Update, London, Greater London Authority, available online at
  - http://www.london.gov.uk/mayor/economic\_unit/docs/creative\_sector2004.pdf, accessed 2 April 2007.
- (6) Following Reckwitz (2002), a practice is defined as a routinised form of behaviour. It has several elements which are interconnected, and which can be understood as forms of

- performativity. They include: forms of bodily activities; forms of mental activities; objects (artefacts, machines, tools, etc.) and their use; background knowledges in the forms of understanding (i.e. recognition of context, context markers and context hierarchisation); know-how; states of emotion; and motivational knowledge. See Reckwitz 2002 and Kelly and Jones 2006.
- (7) See, for example, Leicht, K. T. 1998 Work (if you can get it) and occupations (if there are any)?, Work and Occupations, 25 (1), 36-48.
- (8) It is this disjunction which opens up the tortuous discussion of the relationship between work as production, with its correlated productivity measures, and work as performativity, where (a) one acts as if self-employed while fulfilling work that would have been done at one time by an employee, but which has been made into a flexible form of employment, and (b) one brings skills into play that may be well outside the contract terms.
- (9) In the context of architecture, the theme of disjunction is pursued by Bernard Tschumi who recognizes the importance of the displacement of architectural and urban spaces and human, social behaviours in those spaces. See Tschumi 1994 and Polsani 2003
- (10) Information about the King's Library Tower can be found at http://www.bl.uk/collections/early/georgeiii.html To quote the British Library website, the King's Library collection, "is considered one of the most significant collections of the Enlightenment, containing books printed mainly in Britain, Europe and North America from the mid-15th to the early-19th centuries." http://www.bl.uk/collections/early/georgeiii.html
- (11) Leatherbarrow (2005) points to the importance of a topographic model for understanding the performativity of built environments. He argues that, in any given site, at any given moment, a building's topographical structure requires that some places be recalled, others anticipated. Like events, topographic landscapes contain unforeseen potentials, and show these potentials in the various ways they offer themselves to perception.
- (12) Day and Letts (1997) contend that, "...complexity is characteristically found in systems that are able to exist at the boundary between order and chaos and strike a balance between these two regimes that is never quite stable and yet never quite turbulent...As Waldrop described it, "the edge of chaos is the constantly shifting battle zone between stagnation and anarchy, the one place where complex systems can be spontaneous, adaptive, and alive.""
- (13) The reference here is to Lyotard, J.-F. 1984 *The postmodern condition: a report on knowledge*, Manchester: Manchester University Press.
- (14) For a sense of how the occupants of the Innovation have adapted and personalized the space to make it habitable and workable, see the background shots on the Bop! project website. <a href="http://www.makingsenseofspace.com">http://www.makingsenseofspace.com</a>
- (15) For example, see the work of Jack Tanis and Francis Duffy in this regard, who move a long way towards the concept of performativity while still maintaining the vocabulary of producitivity in discussing different kinds of work styles, new kinds of organizations and new patterns of space use. Duffy, F. and Tanis, J. 1993 A vision of the new workplace, Industrial Development, 162 (2).
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# DEFINING AN URBAN PUBLIC SPACE FOR CHILDREN: THE CHILD ATTRACTION CENTER

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#### **ABSTRACT**

Urban culture proliferates in urban public spaces and this is no different for children. Appropriation of space by children is not possible when the city is regulated based on a city plan that leaves no choice for informal spaces that they can shape for their needs. As part of social development, children become agents of change, interaction, innovation, and democracy; and have a catalytic role in their community. This involves bringing together the community, reaching out to other parts of the city, have their voices heard, and enrich their lives with visions from all over the city. This study therefore aims to design a CHILD ATTRACTION CENTER \*(CAC) as an urban space that children can adopt. Thus CAC will be in-between urban place which will help children identify themselves with urban culture as part of their everyday life.

The project has been conducted on three complementary axes. As part of the (1) participatory process, several workshops were organized with the children and the activities to take place, materials to be used, and the design of the site were decided by them. A (2) Recommendations Guide was prepared as a collection of design principles particularly for CACs. (3) Use of recycled material aims to motivate the children to be creative in terms of attributing new meanings to it and use it in another context. Aiming at creating an interdisciplinary medium for the stakeholders, the project is on its way to be actualized.

\*The CAC project is one of the winners of Development Innovations Market Place Competition 2005, organized by World Bank Turkey, and implementation of the project is going on.

**Keywords:** Space as a social product, Representation of child, Participatory design, Recycled material, Children environments, Squatter settlements, Urban spaces

#### INTRODUCTION

As part of social development, it has been expected that children become the agents of change, interaction, innovation and democracy; and have a catalytic role in their community; bringing together members of their community (parents, neighbours, civic groups) as well as reaching out to other parts of the city; and have their voices heard; and enrich their lives with colors and visions from all over their city.

In today's urban environments, whether in developing or developed countries, children are eliminated from urban life and urban spaces; especially evident in changes taking place in the spatial and formal characteristics of their play and recreation activities. It must be noted that social scientists tend to look at the issue of urban space and children from a very narrow perspective involving only a "play" concept. Social scientists proclaim that changes in urban environments have led to less use of streets, parks and playgrounds by children; children spending free time in private and closed spaces which are increasingly commercialized and commodified, even leading to a commodification of the child (Wridt, 2003: 597-608).

Today, social inequality in the city produces two different environments for children, leaving the low income groups on the street, while the other have special facilities and centers for play and recreation. While the traditional street was able to stimulate the child as a learning environment, supporting his/her experiential and cognitive development, today's street is no more a public space for human interaction and production; it does not even exist in many areas due to housing arrangements where the only spatiality is in the form of the housing block and parking area with sporadic parks or playgrounds.

In this research, the position of children in urban spaces has been evaluated as a reflection of social injustice. Observing the city in terms of different social groups, it is to be seen that in squatter areas, in relation to children's positive and negative experiences, children are not getting their share of urban culture, that their mobility in the city is very limited, that their voices are not heard so as to show their resistance or creativity, that chances for interaction and communication with the rest of the city is scarce. However, in the face of these negativities, it was also observed that the squatter areas which contained traditional forms of neighbourhood life spaces were arranged horizontally, rather than vertically and afforded social interactions that were direct, frequent, and easy; that communication and solidarity among children were high.

#### THE PROPOSAL: CHILDREN ATTRACTION CENTER

Urban culture is the product of social classes and stakeholders in public spaces in everyday life. The Child Attraction Center (CAC) is a proposal for dissolving the isolation from urban life and culture that children face and integrate them to an active everyday life as members of the society. CAC as a socio-spatial project proposed by a team of architects, interior architects, urban designers as a step forward in providing an example to architects losing foothold and responsibility in the making of everyday places. For the proposal, Bademlidere district in Ankara has been chosen.

Bademlidere is one of the squatter districts at the threshold of an urban transformation which is currently on the agenda of the municipality. However "transformation" according to the municipality is to develop the area according to the system of lots and blocks, give legal permission to the construction of apartment buildings for increasing the residential building stock in the city. Public spaces such as parks are left over spaces in the urban plan. Places for recreational and cultural activities either for adults or children are usually not considered at local scale. The demographic structure of the district starts to change when apartment block type of residential buildings replace one- story squatter housing.

The subject of CAC is designing an urban space for children in their neighbourhood with a participatory process of children, their families, neighbours and friends. Since in squatter areas, inhabitants usually have a general knowledge of construction because they build their own houses, without receiving technical aid from architects or civil engineers, their participation may also be expected in the implementation phase of CAC.

The participatory process started with an interdisciplinary research in collaboration with sociologists and social workers. A questionnaire was applied to a random sample of children in Bademlidere Primary School and their families. The survey results helped the architects to better understand the inhabitants' life style(s), wishes, their reservations and tolerances in general (Atauz, 2006).

The proposal of CAC is structured as a trilogy of professionals, inhabitants, and public institutions (NGO's and local governments). Architects and designers are expected to supervise development and implementation of the proposal instead of imposing a stereotyped project upon a "standardized" user group, with the inclusion of other needed disciplines. As the smallest unit in the organization of local governments, the neighbourhood chief is important in the organization of CAC as the mediating figure between the inhabitants and other stakeholders.

# Aims of CAC

CAC aims to provide children – particularly those at a disadvantage – access points to the urban life and culture in their own everyday environment. In this sense, the innovative characteristics of CAC proposal can be summarized as follows:

- \* The function of CAC is not limited to a "playground". CAC is a place where children participate in various activities, cooperate with their peers and adults, discover their fields of interest, and represent themselves.
- \* The active involvement of the children will continue to be provided during programming, implementation and daily use.
- \* It is possible to implement CAC's in different regions, cities and countries, as a possible network of CAC's in hierarchical order. Design decisions are developed as patterns (Alexander, 1977: i-xv) compiled as a "Recommendations Guide". As the

patterns are adaptable for different conditions and changing needs, flexibility and variation is possible when and where necessary (Kural et.al., 2006).

- \* The use of recycled material in the construction of CAC aims to motivate creativity in children in terms of attributing new meanings to materials, increasing their self-esteem.
- \* CAC promises to be a space of interaction-memory-territory-creativity-resistance.

# **Complementary Axes Of CAC Project**

The project has three complementary axes which are considered as innovative integral parts of CAC proposal. (1) Children are the subjects of the project, nevertheless CAC is planned to be shaped and designed with the active involvement of all inhabitants, who will take initiative to do so. Thus, participation is essential for the project and enlarge with collaboration with local government, NGOs and other public utilities of civil society in a broader sense. (2) This study aims to fulfil several needs, and become a model for upcoming projects of similar nature, so that preparing a guide of recommendations is required. (3) Use of recycled materials is proposed for both minimizing cost of construction and stimulating children's creativity.

# Phases Of Participation

Today, it is common knowledge that environments created by people have a large influence in terms of health, mood, academic achievement, productivity, and the like, on "other" people (Fraser and Wubbels, 1995: 117-144; Hawkins, 1997: 10-12; Hebert, 1998: 69-71; Moore and Lackney, 1994; Taylor, 1993: 36-42). The few number of persons like governors, architects, landscape designers who are actually "allowed" to have their say in the shaping of environments, are seldom the persons who actually use them.

This issue reaches a climax in environments designed for children, as they are almost never permitted to have an impact on the surroundings in which they quite often spend a great deal of time. However, when children are given this chance, often they can state issues that may not have even occurred to the adults who are designing for them. The aim of the workshops integrated into the project is to see what the children can teach us about their needs and participate in the design of their own settings.

The idea behind participatory design is to systematically combine interdisciplinary theory and application, and involve the people in the planning and design phases of their surroundings. In addition to the benefits of people having the chance to actively take part instead of passively accept what they are given, this process plays the important role of giving people that feeling of having been listened to. Thus, the planning activity itself becomes a learning process for both the designers and the inhabitants (Sanoff, 1990).

# Phase 1: Participation In Planning Children's Environments:

Environments for children are usually designed according to previous models and rely heavily on the adult perception of what a child may need and want in his or her surrounding. It is very seldom that any research is done regarding the composition of spaces, use of colors, textures, and materials. In Turkey, there is a lack of participatory design projects for children. This project aims to fulfill a need and provide insight into upcoming projects of similar nature.

In workshop planning, the main issue to be considered is how to work with children. It is one thing to get children excited to work on a project as such, one thing to derive the necessary information to be used as building blocks of the design from them, and a whole other important step to check if the derived information is interpreted correctly. Only if all three of these steps are completely fulfilled can a workshop be recognized as an efficient one. Five workshops took place with the Bademlidere Preliminary School. The students of this school were familiar with this area, and could identify their wishes and needs more specifically. With the help of the teachers, a random sample of 4 students from grades 1 to 8 were selected and asked to participate. The number of students who continued from beginning to end was 30. Food and drinks were provided for a more comfortable and enjoyable atmosphere.

# Workshop 1: Questionnaires and Drawings

The addresses of the students were marked on a map of the settlement with the students and hung to the wall of the classroom in which the initial workshop took place. The workshop consisted of 3 questionnaires, and a drawing that were finished in 3 hours. The "importance list" was not only filled out by students, but also the teachers. The teachers were also asked to fill out an "activity matrix" regarding how they could use an attraction center for children.

#### Workshop 2: A Day on the Field of CAC

The day spent on the site was very useful in terms of getting the students used to create the sense of belonging in the children and to begin utilizing the area. A pinwheel theme was chosen for the day and several small and large pinwheels were prepared beforehand to hand out to the students as well as to be used as markers on the site.

### Workshop 3: Field Trip to the Junkyard

The research group explained to the children and teachers how they would altogether assign new meanings to the found material. This workshop was helpful to identify and begin to categorize the materials that could be used in the center.

# Workshop 4: Children's Design Proposals on the Site Model

A cork model and several large maps of the site were prepared before the workshop day. The final model turned out to be a very colorful, enjoyable area that was creative and intelligent.

# Workshop 5: Competition for CAC Logo Design

After being explained by their teachers what a logo was, the children were asked to design one that would identify the site that had already become theirs

These workshops enabled the surfacing of the students' wishes and needs in a creative and participatory way. The students felt part of the decision-making process, which was quite a new experience for them. One of the most important issues to be pointed out is that the workshops were enjoyable yet educational experiences for both the students and the research team. Significant information was obtained from the students and teachers regarding several aspects of the life in the neighbourhood.

# Phase 2: Implementation As A Participatory Process:

Planning the phases of an interdisciplinary research was efficiently handled despite the inherent complications in terms of organization and communication among the groups. However, planning the implementation phase (2) seems to oblige the project group to solve other unanticipated problems on site. Problems can be categorized under four subtitles: participatory process with adults of the neighbourhood; construction process of CAC; financial problems; management, maintenance, sustainability issues.

The participatory process at Bademlidere has two groups of participants. The first group is the children, the second one is the adult inhabitants. The former has already been actualized. The adults, on the other hand will be involved by means of workshops at school, site and junkyard. The aim and meaning of CAC, from the point of view of everyday use, became clear to the children. The adults' expectation, on the other hand from CAC is still a playground, municipality Park, or a volleyball field. For women, CAC will be a playground for their children, while they will also have the opportunity to sit and chat in one corner.

The participatory process may consist of two considerations: 1. Skilled or unskilled labour recruitment from the neighbourhood for the construction process. 2. Workshops with adults to ingrain a positive attitude towards CAC's activities, to increase the solidarity between the inhabitants for the security, ownership, continuity, maintenance of CAC. The land of CAC is a donation of the county (Çankaya) municipality and it is classified as green area where building construction is not allowed. CAC will mainly be a place of semi- open and open spaces constructed out of recycled material.

While the first phase of participatory design and research process was supported financially by the World Bank, the second phase of implementation needs to be sponsored by other stakeholders. Infrastructure works (electricity, water, landscaping) and site preparation has already been undertaken by the municipality. Consultations with various technical experts are required for the implementation of the project, voluntary or paid work will be negotiated.

Interaction with Çankaya municipality and the neighbourhood chief restarted in 2006 fall. It is less problematic to make the implementation by the interdisciplinary

academic and the professional (project) group. However this is not what is being aimed at. The problems start with the personnel of the municipality who do not have enough motivation to make the operations faster. The coordination of four or five different fields (academic group, professional group, the inhabitants, the neighbourhood chief, the municipality) takes time. The most difficult part is to explain the aim of the project to the adult inhabitants. The habit of getting help as charity from the municipality makes them participate in the activities more difficult.

Conflict of interest between the stakeholders will continue all through the implementation and thereafter. The participatory process inherently reveals the problems. Finding the appropriate methodology to solve the problems or continue to work by being aware of the situation is in the nature of this study.

# Phase 3: A Participatory Process For Everyday Use:

Implementation of programs and management of the center will again require interaction between various stakeholders. Management should include volunteer work from all parts of the city. Senior citizens, professionals (artists, poets, musicians, etc.) housewives, mothers, etc. can contribute to CAC as part of their everyday life. For maintenance, the protection of CAC against vandalism, theft or misuse can be facilitated by solidarity among inhabitants. Financial support for implementation of programs and maintenance can be obtained through donations.

#### Recommendations Guide

CAC has not been developed as a singular example but a prototype for other districts to be implemented with the guidance of professionals adopting a participatory process involving the community. Such guidance has the potential of giving architects an active role in the making of places for social life. Thus a "Recommendations Guide" has been prepared as a collection of principles which are put forward for defining CAC at various context and scale. During preparation of the guide, consultancy needed by a psychologist was provided.

Root of the methodology is "The Pattern Language Approach" developed by C. Alexander (Alexander, 1977: i-xv), and the format is derived from a recommendatory document prepared for "Children Environments Project" (Cohen et.al., 1979: 4-8).

Each design principle tried to be generated in a format that follows the natural process of thinking and problem solving. Accordingly, first the PROBLEM is stated and followed by PROBLEM INVESTIGATION, where the evidence of its validity, literature, observations and experiences are examined. Then the PRINCIPLE comes as a solution for the problem and supported by RECOMMENDATIONS; -concrete steps and/or approaches proposed to be followed during application/implementation. Finally RELATED ITEMS are mentioned, in order to emphasize that all the principles are interrelated and coexist within a whole.

Principles are grouped under 3 headings:

PRINCIPLES RELATED WITH GENERAL CHARACTERISTICS specify CAC's profile by its function, user group, location, financing and introduce a net of CACs in a hierarchical order.

PRINCIPLES RELATED WITH DESIGN APPROACH emphasize the importance of partnership and participation mentioning the probable partners and participants. Use of recycled materials is also being proposed under this heading and a methodology for material selection and classification is offered.

Under the heading PRINCIPLES RELATED WITH DESIGN PROCESS, decisions for activity programs, site planning, spatial organization, spatial design, landscaping, utilities, infrastructure and detailing are presented.

At present, Recommendations Guide consists of 60 items under above headings. It is obvious that, during different stages of implementation, new experiences and new situations will require to go over existing items and/or to generate new ones. Elaboration and refinement of the guide will need an interdisciplinary consultancy, as well.

# Use Of Recycled Material

The project CAC, which offers children in the low-income neighborhoods, an urban space that they can territorialize, aims to support the process of social development and proposes the usage of recycled material in the construction of the center. Major principles were to make good use of the resources and encourage creativity and social cooperation.

Major sources for recycled materials were MKE Junkyard in Kırıkkale, Ankara City junkyard and Ankara Municipality Junkyard. Ankara City Junkyard was found to be appropriate because of its closer location to CAC site and the variety and richness of recycled material.

A list of materials was prepared in the first two trips to the Ankara city junkyard which categorized recycled materials in three groups as structural elements, volumetric elements and objects. In the following trips, materials listed were analyzed in detail and were grouped according to the design parameters and to their types and dimensions. Then, an inventory table was produced where all materials were defined by the name, photo, category, dimensions and the probable usage (inventory table of recycled material). In addition to the professionals, children as well were taken to the junkyard for a discovery trip. Lastly, recycled materials were designed and modeled as CAC units by using a computer program.

The criteria for choosing and using recycled material were closely related to the design idea. The design idea/language was set by referring to the combination of linear and planar elements that can provide repetition and the volumetric elements such as containers and train carriages. The combination of these two groups and the hierarchy of open, semi-open and closed spaces were experienced by the sketches

(image 1, 2, 3, and 4). Planar elements were used to create/define surfaces and when used as a group, to define volumes; while linear elements were used both for definition of overhead planes of semi-open spaces and for load bearing purposes. The materials classified as objects, were used as interior partitions and furniture by referring to the function and dimensions.

While choosing and using recycled material in CAC projects, certain issues must be considered for its sustainability.

- \* The durability of the recycled material, especially the load bearing components, should be tested.
- \* The recycled materials, especially the load bearing components, must be fire proof,
- \* The recycled material chosen must be vandal proof,
- \* The recycled material chosen must be safe.
- \* Containers and the metal linear elements should not be cut or drilled in a way that their stability and safety is destroyed, to be combined.

#### CONCLUSION AND DISCUSSIONS

In conclusion, the quality of CAC as urban space in children's everyday life is expected to facilitate confrontation with urban life. Bademlidere CAC as a pilot project is a seed in the soil and it can be effective if number of CAC's increase in urban areas which need cultural resources to aid the development of children into adult urbanities, and mature individuals.

The workshops with children proved that they are skilful in expressing their feelings, wishes, and criticisms by drawing, writing compositions, making models or in other means if an opportunity is provided. The construction of CAC has just passed the land levelling phase, the boundary of the site was fixed and trees were planted along with the boundary. The children of the neighbourhood used the site all through summer. The recycled items which will be used in the site were selected from the matrix and details related to their combination and construction were developed referring to Recommendations Guide. Recently, the project group established contact with firms, companies and organizations for the donation of materials. The project group is hopeful that The Child Attraction Center will be brought to use in near future as a prototype.



Image 1. sketches of CAC units with recycled materials



Image 2. sketches of CAC units with recycled materials



Image 3. sketches of CAC units with recycled materials



Image 4. sketches of CAC units with recycled materials

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# **CITY**

Moderator: Süha Özkan

A Context-Sensitive Model to Redistribute the Property Rights in an Urban Transformation Project

Levent Ünverdi, K. Mert Cubukçu

A Method in the Context of Urban Planning and Urban Design Yelda Aydın Türk

Architecture and Urban Planning in Nature/ Zoning Law Interaction
Fikret Okutucu, Sibel Ecemiş Kılıç

# A CONTEXT-SENSITIVE MODEL TO REDISTRIBUTE THE PROPERTY RIGHTS IN AN URBAN TRANSFORMATION PROJECT

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#### **ABSTRACT**

In August 2006, Gaziemir Municipality of Izmir and the City and Regional Planning Department of Dokuz Eylul University initiated an urban transformation project in Aktepe and Emrez neighborhoods of Izmir. Aktepe and Emrez neighborhoods are pseudo-urban residential areas characterized with high accessibility, poor construction quality, and extremely low livability standards. This paper covers the pre-land-development phase of the project focusing on the method of redistributing the post-development property rights of the current property owners. As an alternative to the much-implemented and less-debated "one-size-fits-all" model approach based on land size, we develop a context-based model to redistribute the post-project property rights. The context-based model developed here considers the social, economic, demographic and physical structure of the site. The four alternative mathematical models are reviewed following a detailed analysis of the site.

**Keywords:** Context, Urban transformation project, Context-sensitive model, Aktepe, Emrez, Izmir

#### INTRODUCTION

Turkey has experienced a significantly high rate of migration-based urban population increase starting from the early 1950's. According to the United Nation's sources, the annual number of housing units produced has stayed over 100,000 units since the 1960's. This number has reached 800.000 units by the year 1980. However, this impressive performance in housing production and rapid urbanization are characterized by low building quality, insufficient level of social, cultural and recreational facilities. This rapid but uncontrolled and unauthorized way of housing production has resulted in a great risk of destruction in case of a natural disaster such as an earthquakes or a flood. Thus, Turkish cities need physical urban transformation at almost every scale (Balamir, 2005).

Over the 10-15 years, there has been a growing interest in transforming these highrisk pseudo-urban areas into livable places in Turkey (Turker-Devecigil, 2005). This interest in urban transformation is supported legislatively and financially by the central government especially in the two most populated cities in Turkey, Istanbul and Ankara.

Turker-Devecigil (2005) defines three types of transformation models applied in reshaping the slum (so-called *gecekondu* meaning built-over-night) areas in Turkey. The first model is the resettlement model based on relocation of property owners (or invaders) settled in flood zones, land slide areas and environmentally sensitive areas. The second type is the improvement plan. This model aims to redevelop the area physically making use of the market conditions. The key incentive in this model is the additional development rights given to the property owners with a revised plan to rebuild the existing low quality housing units. The additional development right is shared by the property owner and the contractor. Thus, a build-and-sell mechanism is embedded in this model. The third type is the urban transformation project model, which is an intermediate solution between the first two types of models. In this model public and private sources are employed to create additional urban rants. This additional urban rant is used to realize the urban transformation project to reshape the existing physical environment and to redistribute the existing property rights. This model type is also called the Dikmen Valley Model, named after the first successful implementation of the model in Dikmen, Ankara.

The main drawback of the resettlement model is the economic and social costs of relocating the existing property owners and/or invaders. The success of the improvement plan model, on the other hand, is highly dependent on the location of the gecekondu areas. Obviously, some gecekondu areas have location advantages and others do not. The advantageous ones transform with the help of market forces, but the disadvantageous areas never transform (Turker-Devecigil, 2005). In a comprehensive urban transformation project model, the advantageous and disadvantageous areas are equaled out through a comprehensive project. Thus, the success rate is relatively higher.

However, almost all implementations of the urban transformation project model have been based on a single parameter, the size of the land owned by the property owner (or invaded by the invader). This "one-size-fits-all" approach often results in implementation problems, share holders' lessening support for the project followed by an unexpectedly disappointing final. A context-based model in urban transformation projects might be the solution. Unquestionably, understanding the context is the key to develop a context-base transformation model.

In August 2006, Gaziemir Municipality of Izmir and the City and Regional Planning Department of Dokuz Eylul University initiated an urban transformation project in Aktepe and Emrez neighborhoods of Izmir. Aktepe and Emrez neighborhoods are pseudo-urban residential areas characterized with high accessibility, poor construction quality, and extremely low livability standards. This paper covers the pre-land-development phase of the project focusing on the method of redistributing the post-development property rights of the current property owners.

#### THE CONTEXT

# **Location and Accessibility**

The project site is over 140 hectares in size with over 14,000 inhabitants. It is located 13 kilometers south from the city center within the Gaziemir Minucipality of Izmir. The site is unique in terms of location and accessibility; surrounded by (1) Izmir Beltway, (2) Akcay Avenue and (3) Uzundere Creek.

Recently approved Izmir 1/25000 scale Master Plan defines 6 transportation nodes as a tool to realize the proposed macroform (Figure 1):

- Uckuyular node (Izmır Beltway Uckuyular Ferry Port Underground -Mithatpasa Avenue – Inonu Avene intersection),
- 2. Gaziemir node (Izmır Beltway Akcay Avenue intersection),
- Oglananasi Yenimahalle node (Izmır Beltway Izmir-Aydin Highway intersection),
- 4. Buca Kaynaklar node (Izmir Beltway South Development Axis intersection),
- 5. Ege University node (Izmır Beltway Izmir-Ankara Road intersection),
- 6. Cigli Mavisehir node (Çevre Yolu Dudayev Boulevard intersection).

Nodes 1 and 5 are already developed residential zones. Nodes 3 and 4 are in the non-residential zones with non-developmental planning decisions such as agriculture and forest. The remaining two nodes, nodes 2 and 6, have particular importance. These two nodes have residential zone decisions on, suggested by the plan, and they are yet to be developed. Node 6, Cigli - Mavisehir node, is currently the most attractive residential site for Izmir with more than 20,000 already built high-quality high-income housing units, and with over 10 large-scale housing development projects being built simultaneously. Node 2, Gaziemir node, can be well-perceived as the southern counterpart of node 6. These two nodes, node 6 and Node 2 have particular importance in structuring the ever-desired north-south urban development axis of the Izmir macroform.

The project site is situated on the northeast quartile of node 2, adjacent to Izmir Beltway Gaziemir Exit. It is 9.5 kilometers to the city center, 7.7 kilometers to the international airport, and 2 kilometers to the Izmir Free Trade Zone. The site is also very close to a number of public projects proposed by the 1/25,000 scale Izmir Master Plan. It 1.2 is kilometers to the proposed international fair site and adjacent to the Uzundere Recreation Area. The site is on the Aliaga-Menderes underground route, scheduled to open in 2008, with a station situated on its eastern boundary.

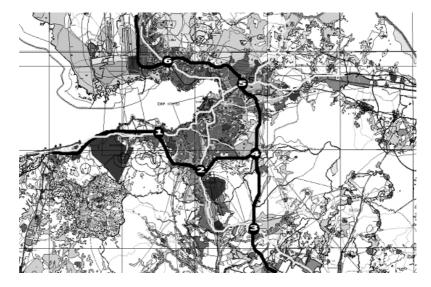


Figure 1. The transportation nodes of Izmir defined by the 1/25000 scale master plan.

# **Physical Structure**

There are 2366 parcels and 1837 buildings (including 48 buildings owned by the police department and used for housing) on the site based on the field surveys conducted by the project team in August 2006. 77% of the buildings are residences, 7% of the buildings hold commercial activity and 3% manufactural activity. The average parcel size is 432.2 sq. meter and the median is 137.1. %94 of the parcels are under 500 sq. meter in size and occupies 35% of the site. On the other hand, the

parcels 5000-10,000 sq. meter in size, consists of %3 of the parcels, but %21 of the land. A greater portion of the parcels, 71.9, are owned by single shareholder, followed by 15% by two shareholders and 4.9% by 3 shareholders. This fact is a true advantage in application phase of the project. Another advantage of the site is the amount of publicly owned land. 115 parcels are fully or partially owned by public institutions (average public share is 90%). The total size of the publicly owned parcels is 19.6 hectares.



Figure 2. The Project Site.

There are 3930 housing units (excluding police housing) and 450 non-residential units including shops and manufactories. 40% of the buildings are 3-storey or higher, although the current master plan dictates 2-storey maximum (Figure 2). Moreover, only 19% of the buildings applied for the construction permit, and just 14% have occupation permits. Over 80% of the buildings have no permits at all. On the contrary, almost all buildings are built on personal property by the property owners.

Thus there is no invasion of property rights.

# **Demographic, Social and Economic Structure**

Information on the social and demographic structure of the project site is based on two data sets. The first one is the 1990 census data obtained from the Turkish Statistical Institute for a sample of 6060 people living in Aktepe and Emrez neighborhoods. The second data set is the survey developed by the project team and conducted to randomly selected 131 families residing in the site. Thus, we were able to observe the change in the demographic and social structure in these two neighborhoods.

The results from the social and demographic structure analysis reveal that 48.6% of the current population is females. 71% is between the ages 14 and 64, up from 62% by 1990. %39.3 of the current residents were born in Izmir, and 8.0% in other settlements in Aegean Region. Central Anatolia and Eastern Anatolia Regions follow Aegean Region with 12.8% and 13.62% by 2007. The corresponding percentages for these 3 regions for 1990 were 47.3%, 13.6% and 13.8%, consecutively.

One can then say that, these two neighborhoods have not undergone a major demographic change in the last two decades. Moreover, these percentages for gender and age groups are not significantly different from the ones for Izmir. However, the percentage of people born outside of Izmir is slightly higher for these two neighborhoods, indicating mild level migration to the area. The survey results indicate that 73% of the families were already living in Izmir, before they moved to their current house in Aktepe and Emrez neighborhoods.

A good measure of social and demographic structure is the household size. The number of dwelling units increased from 1294 to 4395 between 1990 and 2007. The household size, on the other hand, shrank from 4.54 to 3.20. A plausible explanation to this change is as follows: The children of 1990's has grown up, got married and stayed in the same neighborhood. A significant percentage of these people are living in the unauthorized upper floors of the same building that they were living in their childhood. This explanation is supported by the information gathered during the field surveys. The number of families sharing a single dwelling unit is low. %95 of the families do not share their unit with a second family. %60 of the housing units are occupied by home owners, 19% by renters, 11% by police officers (police housing). 5% of the housing units are vacant, and 6% are still under construction.

The illiteracy rate for the site is down to 6.6% from 7.4% between 1990 and 2007. This rate is around 12% for Turkey. 65% of the illiterates are females and 50% were

born in Eastern Turkey. 67% of the residents are primary school graduates with minimum 5 years of education. Only 1% are university graduates.

Almost half of the households (48.8%) in the site report that their monthly income is between 400-700 YTL, which is slightly over the minimum wage per person (585 YTL) set by the government. 21% of the households' reported income is between 700-1000 YTL. It is less than 400 YTL for 14% of the households, which is certainly below the poverty level. 28% of the families have a car.

#### TOWARDS A CONTEXT-BASED URBAN TRANSFORMATION MODEL

#### The Need For Transformation

The need for transformation is no surprise result of lack of recreational, cultural and social facilities in the area, together with poor construction quality susceptible to catastrophic outbreaks such as earthquakes and floods. There are 4 reasons for initiating a comprehensive urban transformation project. (1) There is an urgent need for social, cultural and recreational facilities on the site, and these facilities can be built on the site through a comprehensive revised plan. (2) The dwellers of the site will have the opportunity to have these facilities in a livable environment without leaving their very own neighborhoods. (3) The project will replace unauthorized and uncontrolled housing stock with unacceptably low building quality with authorized and high building quality housing units. (4) The current commercial activity on the site is extremely limited. The transformation project aims to enrich the commercial activity on the site and create jobs for the Aktepe and Emrez dwellers.

# The Model

The context of the problem and the indubitable need for transformation urge the project team to find innovative and context-sensitive ways of redistributing the postproject ownership rights in a livable environment. The model should undoubtedly base on the facts derived from the long and detailed multi-perspective survey of the existing site. First of all, the model and the outcomes suggested by the model should be agreeable by the actors in the project; the plan makers (the university), the plan applicators and approvers (the municipality), the property owners (land owners) and the builder (the contractor). The model should be simple and perceivable by all. Considering the low and middle income property owners on the site, the model should bring an additional value to the owners in the form of assets and/or direct income. The model should also wipe out all the unauthorized and poor quality hosing stock on the site and provide adequate amount of social, cultural, and recreational facilities on the site. Considering the birth places and location of previous houses of the property owners, it is not hard to understand that most property owners do not want to leave their neighborhood. Thus, the model should include no relocation of the dwellers.

Based on the context, the university and the municipality agreed on the idea that the site is to be completely torn down and reconstructed entirely with a complete set of social, educational, commercial, cultural and recreational facilities. The idea here is to

build enough housing units before any housing unit is torn down. Guided by a comprehensive urban design project, the site will be redeveloped consistent with the city master plan decisions and within the density limits defined by upper-scale plan decisions. The property rights for the resulting built-up environment will then be shared between the developer(s) and the property owners. The crucial question is then how to come up with a number for the housing units to be built. The context-based approach developed to come up with a number is based on two simple assumptions: (1) there are homogenous groups of landowners on the site, and these groups should be treated differently. (2) A common ground between the actors is required to realize the project. Before starting the search for the common ground, the homogenous groups property owners had to be defined. There are six groups defined. Table 1 shows the attributes for each parcel type, and Figure 3 shows their spatial distribution.

Table 1. Attributes of Parcel Types.

Parcel Type	Plan (Zoning) Decision	Planning Application	Improvement Plan	Building	Assigned to a Public Institution
T1	Yes	No	No	All	No
T2	Yes	Yes	No	All	No
T3	No	No	No	All	No
T4	Yes	Yes	Yes	No	No
T5	Yes	Yes	Yes	Yes	No
T6	All	All	All	All	Yes

<sup>\*:</sup> A portion of the parcel (up to 40%) is already given to public facilities (roads, parks, etc.)

Four different mathematical models are developed: (1) The first model is purely based on the land areas. Simply, each property owner gets built-up area as a ratio of his land area. Whether he has a building on his land is completely ignored. (2) The second model is based on the area of land and also the size of the building on it. A higher yielding coefficient is assigned for the portion of the building with construction permit and a lower yielding one for the illegal portion. (3) The third model is modified second model which considers both construction permits and occupancy permits. (4) The final model is based on the current development rights of each parcel with respect to the pre-project plan.



Figure 3. The Spatial Distribution of Parcel Types.

Each of the four models is run under two scenarios: the base scenario and the maximum scenario. For the base scenario, an initial value is assigned to ea parameter in each model. These initial values are usually derived from the context.

For the maximum scenario runs, each parameter is assigned the maximum values possible constrained by the upper scale plan decisions. To keep it simple, it is assumed that 3 types of housing units are to be built with varying sizes: 75 m $^2$ , 100 m $^2$  and 120 m $^2$ . It is also assumed that the contractor builds 2 m $^2$  of housing for himself for every 1 m $^2$  of housing unit built for the property owner. All the non-residential facilities including social, cultural and recreational ones, are assumed to

be built by the contractors as well. The household size is assumed to be 3.2. Remark that all these assumptions can be relaxed.

The results for the maximum models are particularly important as the project aims to provide maximum number housing units for the property owners. The numbers of housing units yielded by the maximum runs for each of the 4 models are similar. The reason is simple, the constraints are the same. Thus, based on the discussions between the project team and the municipality, Model 3 is selected as the most appropriate model ethically and operationally.

Model 3 suggests that 13,004 housing units will be built on the site with a total on 1,207,779 m² of building area. 4,952 of these units are for the property owners and 8,052 for the contractor. The suggested population of the site is 45,513, which is 3 times the current population. Under this model, Type T1 gets 0.2250 m² of built housing unit for every 1 m² of land. This number is 0.3375 for T2, 0.2250 for T3, 0.3375 for T4. For T5, it is a little complicated. T5 owners get 0.900 m² of built housing unit for every 1 m² of building with occupation permit, 0.600 m² for every 1 m² of building with construction permit (but no occupation permit) and 0.375 m² for every 1 m² of building with no permit at all.

# FINAL NOTE

Urban transformation models based on a single parameter, the land size, often results in unexpected and undesired physical and social outcomes. As well understood, there is no global approach to urban problems, and urban transformation projects are no exception. As an alternative to this "one-size-fits-all" approach, we developed a context-based model to redistribute the post-project property rights in an urban transformation project. The model developed here is based on the local social, economic, demographic and physical structure, as it should be. The success of the model is closely related to the degree that it represents the people currently living in the site and the degree that it unifies the different actors of the project.

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# A METHOD IN THE CONTEXT OF URBAN PLANNING AND URBAN DESIGN

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#### **ABSTRACT**

Creating livable urban environments with an identity becomes possible as long as the combination of urban planning and urban design are provided. For this reason it is important that planning from high level planning to design to be applied should overlap with urban design. However, this fact has not been able to be realized in such countries as Turkey. In the west, on the other hand, the role of design and planning system in the planning process is well described and they are both taken as a whole mechanism, and successful examples are given. Within this mechanism, design is a part of the planning on every scale, and is accepted as an inseparable part of the planning. It is seen that in Turkey, urban planning and urban design was not combined, nor was effective regulations to do this established. For this reason, in the planning process, how urban design as an effective mechanism should be places must be questioned.

In this context, there is a need for a complete planning-design guide to be prepared through detailed studies in our country. In this study, a method that will foster the preparation of the above-mentioned guide by means of a research model, and its operation, evaluation and the results. Through the method introduced it is aimed to;

bring urban design dimension into the planning in macro level, and in the light of the principles and policies to prepare "a control list"/checlist that will act as a guide for the designer,

To prepare a method for the compilation of the design data, effective evaluation and the transfer of this method into the plan,

To develop a strategic evaluation approach that considers different dimensions and properties of the city ( such as strengths, weaknesses, opportunities, threats ).

**Keywords:** Urban planning, Urban design, Urban design frameworks, Control list, SWOT Analysis

### INTRODUCTION

City is the main component of the societal life and is the most visible one. An analysis of industrialization age shows that cities have been developing faster than ever before, which, initially, led to serious concerns. This is because people did not know how to cope with the rapid change. In time, various approaches, ideas and attitudes have been put forward in order to shape the cities. (URL1)

Parallel to the changes in the internal dynamics of the society, built environment also underwent certain changes. Particularly with the process of rapid urbanization the perception of cities changed and quality urban environments began to disappear and livable environments have not been created. Today's cities and environments that are in the process of continuous change and development pointed that nature-human and society were unable to establish a healthy spatial structure. As a result of such developments as globalization, information society, sustainability, it is seen that urban environments are undergoing important changes. In this context, it is inevitable that design is very important and inevitable in providing unity, harmony and a certain scale in the urban organization in order to shape the constantly changing characters of the cities.

Urban design is, in fact, a process that prepares a ground for putting planning decisions into life in the third dimension. For this reason, creating successful and sustainable cities can be realized as long as the unity of city planning and urban design is provided. For this reason it is important that planning from high level planning to design to be applied should overlap with urban design in order to create livable cities with an identity. Thus, in every step of planning process there is a need for emphasizing the importance of urban design and urban design should be given a primary basis and continue effectively until they are put into practice. But this has not been successful in such developing countries as Turkey.

In the West the role of design and planning system in the planning process is well identified and planning and design is seen as a complete mechanism and good examples are given. Within this mechanism design is involved in planning on every scale and it as accepted as an inevitable part of the planning. In Turkey, however, in the urban and legal documents that determine urban planning and fill the legal framework, there is no such a thing as "urban design". Urban planning and urban design are not treated together and there are no effective regulations regarding this. So, the question of how urban design can be placed effectively in the planning process must be asked. This must be emphasized and there is also a need for dealing with these regulations through constructive attitudes. Regulations that will enforce urban design processes must be made and sanctions must be considered regarding these regulations to be put into practice.

In this context, there is a need for a complete planning-design index in our country.

The aim of this study is; to find a method that will help prepare a common ground for an index that contains research model and its application, the evaluation and its results. By means of the method to be described here;

To bring design dimension to the macro level planning, and to prepare a "control list" that acts a s a guide to the planner in the light of the principles and policies,

To define a method in order to compile the design data and to use them effectively,

To bring a strategically evaluation approach that considers different dimensions and elements related to the city such as strengths, weaknesses, opportunity, threats

## **UNITED PLAN-DESIGN PROCESS**

Urban design is defined as a period which includes successive stages such as analysis synthesis, evaluation, and decision. In the analytical stage purposes and targets are gathered and classified. Synthesis is the stage in which the ideas are brought up. It is followed by a critical evaluation of alternative solutions which are against the targets, costs and other limitations. The decisions are related to the results of evaluation and they are handled fort he detailed level in the design process again. However; design period can not be defined as a simple stage: approaching design period from this perspective may continue from a single construction to urban design, city or region planning. The returns among the stage in the process is important (Moughtin,1999) (Figure 1)

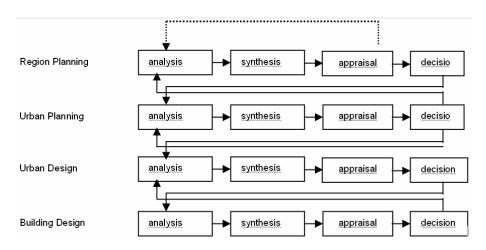


Figure 1. Integrated design process for planning (Moughtin, 1999, pp. 6)

Here ,the higher level decisions should inform the lower level design process which direct the process for that each item which form the environment is in a harmony with the higher plans or general state plan is the most important. For example; a single building design is determined by urban structural plan which depends on region plan proposals. In addition; it should be parallel to the urban design Project. However; it is not a one way single process that ranks from a large measure to small measure. Each single building has some effects on larger urban groups and the triangle design

of larger urban places enables the whole plan of the city. Therefore; there are some returns ,as seen in the figure 1,among the different steps of the development process of urban design.(Moughtin,1999)

Overall, it can be claimed that design and plan process are the ones which complete each other and support themselves. As shown in the figure 2, there is successive outline which supports each other all the time and continues as this unity in the process that begins with targets defined at the beginning of the plan and design stage continues according to them. The alternative plan options which are put forward to as a result of the analysis process which supports the unity between plan and design is also evaluated considering the design criteria(planning design unity )and brought to the application process with the projects which have been put forward for a certain design area. The information how continue among the processes at this level.

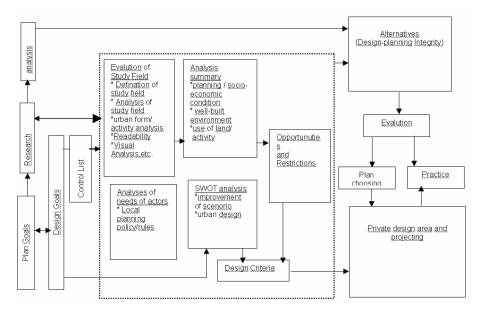


Figure 2. Urban design process and the place of it in urban planning (this figure was drawn with reference to Greed)

# **ANALYSIS TECHNIQUES RELATED TO METHOD**

An urban is a complex structure formed by the actors having different and complicated actions in a long term. Determining environmental needs of various groups of users in one way, urban design evaluates "how environment can be improved and developed for users" and aims to affect our life quality in a positive way searching for an answer such questions: "what are the high qualities and features in urban environment, what is the inharmoniousness between the form of a place and

its users?" A successful urban analysis answers such questions and directs the project, the formation of principle, Standard and policy (TPR, 1989) Defining social and physical qualities special to study field is a crucial starting point for the process of urban design (Jones, 2001)

Urban design calls for a number of researches into different subjects especially in macro scale in this aspect of it. Therefore, methods and analyses related to method used in the study are handled in different ways and scales. In addition to traditional planning subjects such as land use and transportation, analyses that will form a basis for further studies about environment quality and character with a large scale have been carried out. In the study, SWOT technique of strategic analysis and evolution has been used.

SWOT consisting of the capitals of the words, strengths, weakness, opportunity and threat is a useful technique for the collection and establishment of data. Actually, an administration technique and used in many areas today, SWOT analysis's strengths and weakness are connected with internal study of the area while its opportunities and threats are related with external factors (Figure 3) (URL 2, 1999).

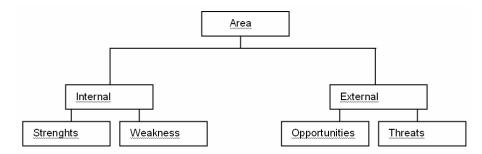


Figure 3. The frame of SWOT analysis

As the Figure 3 indicates, in accordance with SWOT analysis and objectives oriented towards workspace, strong and weak points, opportunities and threats which can improve design and planning process are categorized under four main topics. In this way, SWOT matrix paves the way in the identification of outcomes of design and exploration of the solutions (Moughtin, 1999). In other words, SWOT analysis can be considered as a guide in defining planning and design strategies in urban areas.

SWOT was used as a model, and also; a series of different techniques such as Historical Analysis, Townscape Analysis, Perceptual Structure Analysis and Visual Analysis were applied to investigate different aspects of the city. In conjunction with urban design principles, all the outcomes from macro scale to mezzo scale was tried to be demonstrated.

# **DEFINING MANAGEMENT**

Before all else, a checklist as a guide for planners and questions about the content of the list was prepared (Table 1). Questions and necessary information related to four

major categories (strengths, weaknesses, opportunities and threats) was stated in accordance with design principles. These inputs and their usage are explained in Table 2. Also, questions generated within the scope of SWOT analysis were analyzed together with the techniques mentioned above (Table 3).

Generated questions in relation to urban design principles, as it is presented in Table 3, are studied together with techniques of macro (all urban area) and mezzo (districts of the city) by evaluating findings.

Table 1. Control List/ Checklist

- · Physical characteristics of environment
  - Topographic characteristics and structure of area.
  - Vegetation
  - ✓ Valleys, hills, etc.
- Characteristics of Landscape
- Land Usage
  - ✓ Functional divisions
  - ✓ Density of development
  - ✓ Characteristics of contemporary urban environments
  - → Harmony of scale, structure and mass in established environment.
- Silhouette of the city
  - ✓ Townscape/characteristics of townscape
  - ✓ Significant skyline silhouette
- Elements and structure groups forming city and creating urban image
  - Urban form
    - ✓ Vision and perception of the city.
    - ✓ Developments influencing urban form
  - Vision and perception of the urban/districts/city entrance design
    - ✓ Special land usage increasing the perception.
    - ✓ Perception and vision elements, important areas, joint point, landmarks,
  - · Open-space area, public spaces
    - Division of the open spaces
    - ✓ Network of open space
    - ✓ Accessibility of open spaces
    - ✓ Usage of open space.
    - ✓ Security of the open spaces
    - ✓ Continuity and transition between public spaces
    - ✓ Perception of public spaces
  - Transportation
    - Pedestrian and vehicle transportation between urban spaces
    - ✓ Hierarchy in transition
    - ✓ Vehicle ownership.
    - ✓ Obedience to the rules at pedestrian and vehicle ways.
    - ✓ Security and convenience of pedestrian lane.
    - ✓ Permeability
    - ✓ Continuity and obliqueness of streets

Table 2. Questions to be formed related to SWOT [(X: direct: (1.degree) related 0: indirect (2.degree) related]

indirect (2.degree) related]	_								_				_				_	n en fr'	74-	
	CI	hara	acter		Le	gibi	lity		Ease of movement			of t	Quality of public realm				ontir	uity sure		
Questions	strength	weakness	opportunities	threats	strength	weakness	opportunities	threats	strength	weakness	opportunities	threats	strength	weakness	opportunities	threats	strength	weakness	opportunities	threats
Does the topography have a positive character?	Х						0							_						$\Box$
What are the certain topographic problems?  What are the particularly important landscape elements? Where?	X	X					0							0				H	Н	$\exists$
Are the natural landscape characters damaged? Where?		Х																		=
What is the distribution of the present open spaces? Is there open space network in the whole or part of the city?	Х		10	$\vdash$	-	Н		$\vdash$		-	_		×		0	_	-	Н	$\vdash$	Н
Is the availability to open spaces is strong?													Х							
Are there opportunities to widen the network? What are they? Where?  Are public places available for 24 hours?			0										X		Х			$\vdash$	$\vdash$	H
What are the identifiable townscape characters? Where?	Х						0													$\equiv$
Can the present view of the city increased? Where?  Do the disorganized developments affect the townscape character?	⊢		X	×	-		0	-	_	-	_	_		_	-		-	$\vdash$	$\vdash$	$\dashv$
Are there important sky borders? Where?	X																			
Are important sky borders under threat? Where?  Are there appropriaties to create sky borders in the present structure and		H	-	Х	-			$\vdash$		Н					-		-	$\vdash$	$\vdash$	Н
Are there opportunities to create sky borders in the present structure and developmental areas? Where?	Х						0												Ш	Ш
Is the historical texture protected?  Have the present characteristics of historical places been protected	Х				0													Н	Н	Н
and perpetuated?	×		ļ.,		L	Ш	0	Ш		Ш							Ш	Ш	Ш	Ш
Is there any protection policy? Is it appropriate? What are the areas that need to be stronger protection?	$\vdash$	X	Х	$\vdash$	$\vdash$		00	Н	$\vdash$	Н	_		Н	$\vdash$	-		Н	$\vdash$	Н	$\dashv$
is the present environment in harmony in the context of the scale, texture, mass?	Х						Ĭ													╛
Does the coefficient of land use cause an unbalanced increase for building volume in relation to environment? Where?				×																
Are there areas with the high density? Where? Is the building density of the city	Г		T	×	Т			П		П					$\exists$		П	П	П	
increasing? And is it a problem? Where?  Are there opportunities for high-buildings? Where?	$\vdash$		X	-	-	Н									-			Н	Н	$\dashv$
Is the irregular development of a town a problem?				Х		0		0												
Is the effectiveness of local pictures disappearing day by day? Where?  Do the monotonous, standardized and anonymous designs constitute a problem		L		Х				0		Н							-	H	$\vdash$	
and if so, in what areas should they be blocked?		Х		X			0													
Is it possible to improve the deficiencies of existing space forms? Where?			×				0													
Is it possible to minimize the poor appearance of structuring? Where?			×																	
Do the existing urban spaces include some of the urban districts that have the potential to improve their specific qualities? Where are they? Does the town have a describable form?			×		X		0													
Do the developments damage the urban form?  What are the opportunities that will strengthen legibility in the present and newly development areas? Where?							×	×												
Are there residential areas which have specific characteristics? Where?	Х		0																	
Are there legible areas in the city that were separated in exact borders? Where?  Are there places and buildings that are not suitable for the silhouette of town? Is it		×			X					Н										
possible to rearrange them?  Are there potential entrances that will make the town gain a new identity? What are		_^																		
they? Where are they?  Are there city sections that have no property, whose boundaries can not be drawn.		0				X	Х													
nor be perceived? Where Which morphologic elements support legibility-street texture/blocks/ borders/ node		L			X															
points / ballaing lines / where /																				L
Is there special use of land (green, park, alleys) which improves legibility? Where?  Which areas give the sense of a characteristic place and an exact image? Are the	H	H	H	$\vdash$	X	Н	Н	Н		Н		$\vdash$	$\vdash$		Н		$\vdash$	┢		Н
opportunities that will strengthen the sense of place? Where?			0				14			Ш										
Are there possible opportunities to form new landmarks and focal points?  Does the topography of the city bring some limitations to the pedestrian and vehicle		H	-	H	H	H	Х	$\vdash$	Н	Н		H	H	Н	$\vdash$		Н	H	Н	H
transportation?												Х		0						
Is the road hierarchy separating or uniting?										Χ	Х							<u> </u>		
Does the road network give way to alternative traffic management?  Are there tree-lined streets and alleys? Where?	Х												0						П	
Do the main transportation arteries feed the city centers adequately?																				
Do the continuous increases in the car ownership affect the vehicle and pedestrian traffic? Where? In the short, middle <a href="mailto:angle.org">angle.org</a> terms.  Are pedestrian roads safe and convenient?			0						X			Х		0	0					
Are the streets satisfactory and convenient? for pedestrians and vehicles			0						Х						0					
Are there required physical characteristics for designing of roads?			0					4	Χ	4					0			F	П	Ē
Are there problems in terms of technical norms in the many transportation arteries? Where do the standards lower? Can they be overcome?										Χ				0						
Are there urban areas where public transportation are inadequate?									16	Χ										
Are the pedestrian connections among the urban areas strong?  Can the permeability be supported?			H				$\vdash$	-	Х	-	Х			$\vdash$		_	Н		Н	
Are there reliable, easy and continuous passages among the public spaces?													Х	Х	0		Х			
Are there opportunities among the public spaces that will strenghten legibility? Where?								Х												
Are the negative natural and artificial environment effects a threat fort he open places? Where?													Х							
Is there active ground floor, utulization? Where													Χ							
Are there places that exceed the limit of enclosure? What places are not closure?			H		-												Н	X	Н	
Are there discontinuity at the street fronts? Where?						$\vdash$	$\vdash$						-	Н			Н	X	Н	
CAS A 15 TO A 15 SO A 15 TO A		_	_	_								_	_							_

Table 3. Analysis techniques and contents to be used within the framework of SWOT

		_
Land Analysis Of Use (Function, Density, Traffic)	<ul> <li>What is the distribution of the present open spaces?</li> <li>Are there areas with the high density? Where? Is the building density of the city increasing? And is it a problem? Where?</li> <li>Is the irregular development of a town a problem?</li> <li>Is there special use of land (green, park, alleys) which improves legibility? Where?</li> <li>What are the opportunities that will improve legibility by making urban form legible? Where are they?</li> <li>Are the pedestrian connections among the urban areas strong?</li> <li>Is the road hierarchy separating or uniting?</li> <li>Are there urban areas where public transportation are inadequate?</li> <li>Are there problems in terms of technical norms in the many transportation arteries? Where do the standards lower? Can they be overcome?</li> <li>Do the main transportation arteries feed the city centers adequately?</li> <li>Does the road network give way to alternative traffic management?</li> <li>Is the availability to open spaces is strong?</li> <li>Does the topography of the city bring some limitations to the pedestrian and vehicle transportation?</li> <li>Do the continuous increases in the car ownership affect the vehicle and pedestrian traffic? Where? In the short middle and long terms.</li> <li>What places are not enclosure?</li> <li>Are there places that exceed the limit of enclosure?</li> </ul>	MACRO
lmage	<ul> <li>What areas are lacking for a clear image?</li> <li>What urban districts have ineffective images? Is it related to design?</li> <li>Do the existing urban spaces include some of the urban districts that have the potential to improve their specific qualities? Where are they?</li> <li>Does the town have a describable form?</li> <li>Are there city sections that have no property, whose boundaries can not be drawn, nor be perceived? Where?</li> <li>What are the opportunities that will strengthen legibility in the present and newly development areas? Where?</li> <li>Are there possible opportunities to form new landmarks and focal points?</li> </ul>	
Historical Analysis	<ul> <li><u>Are_important</u> sky borders under threat? Where?</li> <li>Are there areas with the high density? Where? Is the building density of the city increasing? And is it a problem? Where?</li> </ul>	
Analysis Of Ground Figures	<ul> <li>Are there discontinuity at the street fronts? Where?</li> <li>Are there reliable, easy and continuous passages among the public spaces?</li> <li>Is there open space network in the whole or part of the city?</li> <li>Are there opportunities to widen the network? What are they? Where?</li> </ul>	

# The continuation of Table 3

Visual Analysis	Does the topography have a positive character? Where? Are there particularly important landscape characteristics? Where? What are the describable townscape characters? Where are they? Are there significant skylines? Where? Have the historic features been preserved? Where? Is the existing constructed environment in harmony in terms of scale, texture and block? Where? Where are the evident topographic problems? Are the natural characteristics of landscape getting worse? Where? What areas are lacking for a clear image? What urban districts have ineffective images? Is it related to design? Are there places and buildings that are not suitable for the silhouette of town? Is it possible to rearrange them? Is it possible to improve the existing view of town? In what areas? Do the existing urban spaces include some of the urban districts that have the potential to improve their specific qualities? Where are they? Is it possible to improve the discontinuity of existing space forms? Where? What are the opportunities to form a character? Are there opportunities for high-buildings? Where? Are there districts of great density? Where? Are there districts of great density? Where? Are there districts of great density? Where? Are there opportunities for high-buildings? Where? Is the irregular development of a town a problem? Uses the town have a describable form? Is there special use of land (green, park, alleys) which improves legibility? Where? Which morphologic elements support legibility (street texture/blocks/borders/node_points/building lines)? Where? Are there city, sections that have no property, whose boundaries can not be drawn, top the perceived? Where? Are there potential entrances that will make the town gain a new identity? What are they? Where are they? Are there possible opportunities to form new landmarks and focal points? What places are not enclosure?	MACRO
	Are there places that exceed the limit of enclosure?	
	Are there places that exceed the limit of enclosure:     Are there discontinuity, at the street fronts? Where?	
	- CONTROL AND ALTHOUGH AND A CONTROL OF THE CONTROL	

# The continuation of Table 3

Land Analysis Of Use (Function, Density, Traffic)	<ul> <li>Are there tree-lined streets and alleys? Where?</li> <li>Does the coefficient of land use cause an unbalanced increase for building volume in relation to environment? Where?</li> <li>Which morphologic elements support legibility-street texture/blocks/borders/ node points / building lines? Where?</li> <li>Does the development of town damage morphological form?</li> <li>Are there places that exceed the limit of enclosure?</li> <li>What places are not enclosure?</li> <li>Are pedestrian roads safe and convenient?</li> <li>Are the streets satisfactory and convenient? for pedestrians and vehicles</li> <li>Are the places for parking lots convenient?</li> <li>Are there required physical characteristics for designing of roads?</li> <li>Where do the standards lower?</li> <li>Can the permeability be supported?</li> <li>Are there reliable, easy and continuous passages among the public spaces?</li> <li>Is there active ground floor utulization? Where</li> <li>Are the open areas in service for 24 hours?</li> </ul>	MEZZO
Image	Are there possible opportunities to form new landmarks and focal points?     Which areas give the sense of a characteristic place and an exact image? Why     Which morphologic elements support legibility-street texture/blocks/borders/node points / building lines? Where?	
Historical Analysis	Are there facilities to create and support a sense of place? What are they? Where are they?     What areas present a clear image and characteristic sense of place?     Which morphologic elements support legibility-street texture/blocks/	
Analysis Of Ground Figures	borders/ node points / building lines? Where? • Are there discontinuity at the street fronts? Where?	
Visual Analysis	<ul> <li>Have the present characteristics of historical places been protected and perpetuated?</li> <li>Are there residential areas which have specific characteristics? Where?</li> <li>Are there tree-lined streets and alleys? Where?</li> <li>Do the monotonous, standardized and anonymous designs constitute a problem and if so, in what areas should they be blocked?</li> <li>What are the areas that need more protection?</li> <li>Is it possible to minimize the poor appearance of structuring? Where?</li> <li>Does the increasing building height constitute a problem?</li> <li>Does the coefficient of land use cause an unbalanced increase for building volume in relation to environment? Where?</li> <li>Is the effectiveness of local pictures disappearing day by day? Where?</li> <li>Are the characteristics of townscape threatened by irregular developments? Where?</li> <li>What areas are lacking for a clear image?</li> <li>Which morphologic elements support readability-street</li> <li>Texture / blocks/borders/hode points/building lines? Where?</li> <li>What areas present a clear image? Why?</li> <li>Does the development of town damage morphological form?</li> <li>What places are not closure?</li> <li>Are there places that exceed the limit of enclosure?</li> <li>Are there discontinuity at the street fronts? Where?</li> </ul>	

Under the light of the studies mentioned earlier, the relevant variables (Weaknesses, Strenghts, Opportunities and Threats)are described an the chart of SWOT Matrix (Table 4)

Table 4. The SWOT Matrix

Strengths	Weakness
•	•
•	•
Opportunities	Threats
•	•
•	•

A number of relevant strategies have been developed in accordance with these variables (The TOWS) (Table 5). SWOT matrix is important in terms of providing data for the strategy development matrix (TOWS Matrix)

Table 5. The TOWS Matrix

	Strength	Weakness
Opportunities	G-F Strategies	Z-F Strategies
Threats	G-T Strategies	Z-T Strategies

### On this chart:

- G-F strategies; refer to creating the opportunities compatible with the overall strengths of the field.
- Z-F strategies; refer to maintaining the opportunities that eliminate the shortcomings of the field.
- G-T strategies; refer to emphasizing the strong aspects of the field that lessen the vulnerability-fragility to external thrats.
- Z-T strategies; refer to generating protective methods that prevent the weaknesses vulnerable to external factors.

This clear distinction between internal and external condition is difficult to be revealed explicitly in an urban area, an inseparable part of the physical world. Many threats or opportunities related to the urban area are internalized, for they stem from the physical structure of the side observed. For instance, the constant decrease in a city center's population poses a menace to the revival of that area. In the meantime; it is internal since it is inevitable in the urban development process. So, it seems certain that these four analytical categories are interrelated. While, in some occasions the strengths in a strategy could be viewed as the source of weakness, this weakness could well turn out to be an opportunity with a positive perspective. But neither of these perspectives does hinder the feasibility SWOT in the fields of planning and design.

# CONCLUSION

Having a *check questions list* which leads the planner step by step so as to strengthen the dimension of the design will exhibit a requirement that the planner has to take into consideration during the planning. Because;

Collecting and evaluating al kinds of data about the city (or a part of the city) will be more systematic.

All characteristics of the city, potentials and weaknesses of it will be described locally. Thus the process of the planner and the designer's evaluating / examining the city (or the part of the city) during the planning will be clear.

The strategies will be put forward which turns the data found into a plan and makes it concrete.

While developing strategies in the process of planning and designing of the newly developing places except settled areas, in the attempt to renew/ enliven a problematic area in the city check questions will be beneficial. Taking local characteristics in the foreground, highlighting some historical elements as a reference may lead the design during problem definition and analyze. In addition, as the check list has the potential to serve for both the whole area and the part of it, it will control the planned/ designed area.

The checklist is thought to be a guide for the planner in the process of problem solving. During the planning, consulting different disciplines such as architecture, landscape architecture will be helpful. The list's benefits will be completely seen when directors and guiders (planners, designers, and local managers) start to use this means actively which has not been used in urban planning and design.

Such kind of a study, when evaluated from the perspective of legacy, serves as an input focused survey. The process put forward in the study can be defined as output focused. Since the findings/ evaluations have equivalent on the field, they will be reflected on the plan easily. Therefore there will be no need to make any reforms in the discussion of plan- design relationship or using designs in public improvement plans, the process that is put forward in the study can be applied to a city (or a part of the city). Execution tools of the reforms (18<sup>th</sup> subject application, nationalization, and taxation) should be applied actively. Different execution tools should be produced. Technical and administrative substructure should be constructed.

When it is evaluated from the perspective of the strategy, time, and the effort, the procedure of acquiring data, evaluation of the data and production take part in the current planning.

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# ARCHITECTURE AND URBAN PLANNING IN NATURE/ ZONING LAW INTERACTION

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### **ABSTRACT**

Today the most obvious criticism directed to living spaces would be their identical and monotypic characteristics. Whether we accept urbanization and rapid population growth as the reason for this fact or whether it is the outcome of planning and architecture shaped by modern scientific understanding. The harm done to nature and exhaustion of natural resources is another problematic.

Looking into the future from this perspective, we as architects and planners must ask ourselves one question: what must be done? We fail to imitate past settlements, while we are designing the future urban spaces which are different from the past with their technologies or consuming habits or their scale. Today our life style is different from the past and no doubt the future will be different. Our living spaces will change and reshape accordingly.

However, it is possible to learn from historical texture and use today technological potential to build more habitable surroundings in the future. The responsibility of architects and planners is to make flexible designs that use natural resources without exhausting them, that respect nature and have a relation with it, these should be places residents will have influence in their making or at least can transform and make more of their own.

In this proceeding our expression "sustainable architecture can be clarified and made more effective by turning nature/ zoning law interaction into a written fact" is clear. Our aim in this general context, is to develop ideas on what is done in a housing site in Malatya to make a liveable environment, what can be done additionally and how these sort of attempts can be improved in quality and extended to other regions and the kind of advantages this presents.

**Keywords:** Livability, Safer spaces, Harmonious with nature, Children

# INTRODUCTION: IDENTIFYING A UNIVERSALLY HABITABLE ENVIRONMENT

The biggest meetings under U.N. sponsorship in recent times has been the Rio conference (1992) and HABITAT-II Urban Summit (1996). They both adopt the principle of sustainability. Other themes discussed are, "providing sustainable human settlement in urbanized globe", "developing a liveable environment" and "providing adequate shelter for everyone".

Liveability is a concept which changes for everyone. Although it has an overall positive connotation, it is only natural that every individual in society would have a different perception of what consists of a liveable environment. Thus the concept of liveability would have a more broad but also a more obscure frame than the concept of "sustainable development" which attempts to establish a balance between economic development and maintaining the existence of natural order.

Despite its many positive meanings there is no conceptual framework which would give us an idea about the elements of a liveable environment and allow us to compare different urban forms. Despite this fact, there are many studies on the elements of a sustainable/liveable city; they all focus on a number of common points.

Compactness, sustainable transport, density, mixed land use, diversity, passive solar design, using wind with efficiency and greening are some of the more significant strategies. (Jaberann 2006). These propositions and suggestions have been addressed on different spatial levels from architectural design to metropolitan or regional scale. Accordingly, city or regional authorities, planners, architects and other specialists should act in concurrence towards a collective aims in order to get successful results.

Clarification of these proposals on universal level is certain to bring some legal, educational and practical changes in urban planning and design (architectural or urban wise). Nevertheless composing more liveable and sustainable urban areas that would have universal standards and applying them in all areas would mean the continuation of some problems we criticise in our present planning practices. Treating the matter on local level is as important as these proposals significant on universal level. In this content, besides the general principles to problems calling for solutions on universal level, concept of liveable environment should be treated in its own context.

Elements, which make developing generally accepted principles difficult, could be assessed in three main groups. First and foremost is natural physical structure of the city and its environs. This determines a city's form and inner order and differentiates one city from another. Developing similar liveability principles for cities developing in different areas does not seem very likely due to various causes such as topography, flora, sea level, climate etc.

Secondly, if we can say that city determines life styles then the opposite is also true. First element we encounter when the perception of liveability is considered is the social makeup. Attributes of the society as a whole and individuals living in the formed environment will at the same time define the expectations from a habitable

environment. Therefore we can assume that different liveable environments exist for different social structures.

Thirdly social structure and therefore expectations change with time. Therefore, even if generally accepted principles could be created, maintaining them will be a hard task. Constant change in living styles, state of natural resources, transformation in nature, technological progress would change and transform what people expect from a liveable environment.

In this analysis formed along these facts, the necessity of a more flexible structure rather than a general conceptual understanding of liveable environments is stressed. This structure should be open to participation, change/transformation in time and allow universally accepted principles with local solutions and therefore different alternatives.

### COMMON PROBLEMS OF PLANNING

Municipalities that responsible from urban plans have not been able to use this authority positively due to the lack or dissonance of a large scale plan and also underdeveloped control mechanisms. On the other hand legal arrangement (Building Code 3194 and related regulations) that focus on decisions regarding construction has guided Turkey towards a single structuring form and caused the characterless structures of which we frequently complain about.

"Our building code is concerned with a single section of a building lot, a single building, and individual buildings. When a second building is constructed besides another one, something more than two buildings is built, the space between the buildings is made. Therefore a city in this sense is more than the sum of individual buildings, individual sections. Take a look at building code. Beyond buildings is there any statements pertaining to public spaces, squares, parks, sidewalks, roads, infrastructures, addressing problems of city usage zones, city identity, beauty and safety? The only concerns seem to be about the building's distance from road, number of storeys, cellars, roof... We cannot easily say that these matters are directly about city, city spaces and urban environment quality." (Bademli, 2003).

In different periods planning has sometimes been seen as a limiting obstruction on economical development that must be overcome. Other times planning has been instrumentalized and limited to enterprises drawn on map sections belonging to different institutions foreseen with different savings and policies. Accordingly neither planning science nor the planners are directly responsible for today's cities whose liveability's is open to question.

On the other hand both scholars and planners should work towards improving planning methods and tools, bringing suggestions and taking an active role in shaping a perspective towards shaping the legal regulations. New planners and architects should perform the necessities of one indirectly responsible rather than be associates of politicians.

It is impossible to speak of one ideal form or a settlement layout having a universal applicability. Geographical attributes of the planned zone, economical elements and character of the social structure may allow for different ideal solutions for different areas.

Consequently if we accept planning as a political action, to make this action more democratic would be another point among the arguments. A more democratic and participant planning practice would be required in order to unite different expectations of each actor at a lowest common denominator and realize a particular liveable environment aim for the whole society.

# GENERAL PRINCIPLES FOR SUSTAINABLE/LIVEABLE SETTLEMENTS

Basically, these policies, which are related or even interspersed, shape towards such aims as the preservation of natural environment and resources, saving energy and increasing social interaction. In various studies, factors enabling sustainable urban form are handled on different levels and identified. The main points and the fundamental idea which this studies is based; factors such as nature/ zoning low interaction and factors making sustainable architecture written and understandable/applicable could be summed up as follows.

# **Reducing the Use of Motor Vehicles**

For meeting various traffic demands, forms/textures could be designed to accommodate pedestrians and bike users. Public transportation could support this design. And thus demand for motor vehicles and the use of motor vehicles would be reduced. This is one of the basic strategies in establishing sustainable urban structure.

# Mixed Land Use and Diversity:

It is assumed that the rigid zoning concept in planning separates different functional land uses thus increasing transportation demands and also decreasing social interaction. With this in mind, coherent land uses should be situated close. In this way travelling between these land uses as residential, commercial, industrial, intuitional would take less time, walking would be possible from one point to another while the streets are made safer and attractive social interaction between habitants would increase.

Diversity has a wider content. It signals to variety in physical space (building density, housing types and size, architectural styles) as well as variety in social, cultural and economic sense (household sizes, ages, cultures and incomes). Diversity in turn is deemed supportive in developing a common identity, increasing the attractiveness of the place, therefore encouraging walking and social interaction.

# Passive Solar Design

The basic aim is the reduction of conventional energy resources used for heating and cooling by using solar energy and microclimatic conditions to the full advantage. Correct orientation of buildings, utilising sun for heat and wind for cooling effect can be assessed in this content.

# **Increasing Green Areas**

Increasing green areas is an important design instrument in creating sustainable urban forms. In this way human-nature interaction is increased, ecologic diversity and balance is preserved in urban areas and city image, life quality is improved.

# **Communication Possibilities**

Street design to increase communication probability is very important developing liveable settlements. Although there are organized areas such as playgrounds or parks, streets are ultimately the realms of children. Child games can not be edited by grownups. Different spatial enrichments, cultural accumulation and the coexistence of children from the same neighbourhood offer infinite possibilities for social development, cooperation and doubtless creativity of children. Streets make communication easy for adults as well as children. Common areas of the neighbourhood, green areas, parts where commercial facilities and vendors coexist within walking distance would increase the possibility of interaction and communication.

# FOR A MORE LIVEABLE ENVIRONMENT AN EXPERIMENT URBAN DESIGN IN MALATYA: INTERSECTION OF ARCHITECTURE AND URBAN PLANNING

Designed area is 24 acres situated in Malatya, Yaka district and adjacent to the public housing area. The determining factor in the design is the traditional neighbourhood structure and the pedestrian could do their market-green area-primary school loop within this area without encountering any motor traffic.

For this end, a compact area having mixed usage is formed to increase social interaction. The primary school, public facilities addressing the needs of the region, a market area which would see to daily/weekly shopping needs and office area are planned within walking distance of each other.

A pedestrian focused arrangement that leaves no room for motor vehicles provides pedestrian safety and encourages pedestrian movement. This also enables forming a street texture similar to traditional texture.

With this purpose, pedestrian roads and the roads allowing entrance and exit of motor vehicles is separated. With buildings having double entrance/exit, accessing the housings is possible both from the motorway and pedestrian road. Thus a development plan is appropriate for the most fundamental and distinct of human

instincts, motherhood is formed. In this planning concept, primary and preschool children could access school, home and green areas without encountering any motor traffic. A mother's instinctive demand for her children would be thus fulfilled. A street which has the above opportunities would be an exercise model/place for the real/external life.

In house orientation and street organization consistence to topography is observed as to provide maximum solar benefit. As for architectural solution, another building appropriate for local climate is also designed to allow utilising sun for passive heating and cooling.

Obtaining successful results from this area designed for sustainable and liveable environment, is only possible with the correct application of the project and producing a model then following similar policies in city and country scale.

### CREATING MORE LIVEABLE SETTLEMENTS: PLANNING AND ARCHITECTURE

Recently the fundamental policies produced around the concept of sustainability have some significant similarities with traditional settlements. Traditional settlements are more compact, dense, pedestrian focused, have mixed usage, more compatible with nature, more sensitive to limitations and risks imposed by nature.

Today a whole generation of 30-40 year olds remembers safer, friendly neighbourhoods where children can play in streets wistfully. To recreate these urban spaces we can learn a lot from current studies and traditional settlement textures and reflect this knowledge in our current planning practices.

Why can't we reflect the qualities of the traditional spaces in modern plans? This question obviously has more than one answer. Unfortunately we have handed the advantages of living as a part of nature as well as disadvantages and risks of not following its rules from generation to generation. Planners and architects have become conspirators of politicians and contractors. Generally their plans have ceased being plans for people living in them.

So now what the architects and urban planners must do is to work towards a direct meeting their designs with groups which owe them.

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# **CITY**

Moderator: Orcan Gündüz

The Significance of Neighborhood in Istanbul E. Ümran Topcu, A. Nilay Evcil

Imaginary Remedies for Urban Diseases: Utopia Neighborhoods Akin Sevinc

A Research About the Evaluation of the Playgrounds in Istanbul from Sustainability Perspective Pınar Karakaş, Pınar Yavuz

# THE SIGNIFICANCE OF NEIGHBORHOOD IN ISTANBUL

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### **ABSTRACT**

The neighborhood is prominent in contemporary urban studies. One reason for choosing neighborhood as a unit of action is that the neighborhood provides an efficient scale within which to measure any change in target population's circumstances. Neighborhood here is defined as follows: Neighborhood is the bundle of spatially based attributes associated with clusters of residences. This bundle of attributes is multidimensional consisting of everything from topography and structures and demography to social interactions. For most people, residence and the context in which it exists, that is to say neighborhood, is the largest consumption item of a lifetime. How much an individual's needs and aspirations are met by his neighborhood is a concern for researchers and planners. This paper attempts to be a contribution to the conceptualization of neighborhood by specifying it as a spatial entity associated with 6 different locales, in different parts of Istanbul. The different locales are categorized as traditional and modern and a measurement of satisfaction is undertaken. Respondents from 6 locales are asked for their subjective assessments of a set of domains associated with neighborhood satisfaction. The results indicated significant differences among the residents of traditional and modern neighborhoods.

Keywords: Neighborhood satisfaction, Ccontext, Subjective assessment, Traditional, Modern

# THE SIGNIFICANCE OF NEIGHBORHOOD IN ISTANBUL

The neighborhood is prominent in contemporary urban studies and research. One reason for choosing neighborhood as the unit of action is that the neighborhood provides a manageable scale in which to work. It also provides an efficient scale within which to measure any change in target neighborhoods' circumstances. But the term is hard to define. A clear definition to "what the neighborhood is" is not yet achieved. All extant definitions suffer from common shortcomings (Galster, 2001). They pressume either a certain degree of spatial extent and/or social interrelations within that space and they underplay numerous other features of the local residential environment that clearly affect its quality from the perspective of residents. Neighborhood is here defined as follows: Neighborhood is the bundle of spatially based attributes associated with clusters of residences. This bundle of attributes is multidimensional consisting of everything from topography and structures and

demography to social interactions. For most people, residence and the context in which it exists, that is to say neighborhood, is the largest consumption item of a life time. How much an individual's needs and aspirations are met by his neighborhood is a concern for researchers and planners.

Another question raising from the issue is "does neighborhood still matter in the 21st. Century?". Forrest says that it does, but how much it matters depends on who you are and where you are. (Forrest, 2000). Despite the innovations in communications technology, the neighborhood continues to be a salient arena of everyday life for urban dwellers. Neighborhood change is proving unpredictable and resulting in everwider gaps in fortune and prosperity between places within a single city. As far as some neighborhoods of Istanbul are concerned, the change pattern represents a perfect example, which constitutes the content of this paper.

### LITERATURE REVIEW

Increasing concern for the future of cities and for the well-being of city dwellers has led in recent years the emphasis given to the study of the city in many respects. Central to this development has been the growth of research into the relationship between people and their everyday urban environments. Understanding the nature of person-environment relationship is the quint-essential planning problem. In the context of the built environment this can be interpreted as a concern with the degree of congruence or dissonance between city dwellers and their urban surroundings (Michaelson,1977; Rapaport,1985). This focus on environmental quality has emerged as a key area of research in urban planning and over recent decades considerable effort has been directed toward assessing the quality of different residential environments (Pacione,1990).

Sociologists who study urban neighborhoods have traditionally assigned a higher priority to the search of local sentiments, ties, solidarity and other manifestations of "community" (Hunter, 1979; Suttles, 1972). The reason for choosing the neighborhood as the unit of action is that the neighborhood provides a manageable scale in which to work. Working at a larger scale is often unwieldy. Concentrating on a single neighborhood may also provide an oppurtunity to focus on particular needs and particular outcomes. Neighborhood scale may allow to access to more perfect information and a better understanding of the target population. It may also provide a more manageable scale within which to measure any change in the target population's circumstances and evaluate the impact of an intervention (Chaskin, 1998).

Neighborhood satisfaction is a complex cognitive construct. Researchers from disciplines have approached the topic from their point of views but their theoretical underpinning have been rather similar. Galster (1987), says that satisfaction measures the differences between actual and desired neighborhood situations. Satisfaction is the absence of complaints and indicates a high congruence between actual and desired situations. On the other hand, incongruence leads to dissatisfaction.

Most of the studies have focused on different determinants of satisfaction, such as life cycle stage, tenure, income, length of stay and housing quality. Some of the results obtained by researchers were as follows: Having a high income, being at a later stage of life, having a smaller household membership were related to satisfaction with housing and neighborhood (Campbell et al., 1976; Galster and Hesser, 1981). Home owners are found to be more satisfied with their neighborhoods (Rohe and Basolo, 1997).

Neighborhood in this paper is considered for 6 different areas of Istanbul. The areas are considered as, locales that are within reach of 15-20 minutes of walk from the individual's residence. For most people residence and its immediate environment, that is to say neighborhood, is the largest consumption item of a life time, where they find refuge, rest and satisfaction.

### METHOD

A questionnaire containing 30 community satisfaction items was administered to a sample of Istanbul residents from 6 neighborhood districts. The items included a restricted version of the questionnaire (Table I) used by Topcu and Dökmeci (2003). Restricted because, 59 items were used in their study. This study included 30 items. All item responses were in the form of a traditional five-point Likert-type format ranging from "very true" to "definitely untrue" with a midpoint of "undecided". Systematic samples of residents (from random starts) were drawn from 6 neighborhoods (N:120) by urban planning course students at Beykent University of Istanbul. Items were scaled consistent with Topcu and Dökmeci's 0.40 correlation index. A 13 item scale resulted with the item correlations of at least 0.40. (Marked with asterix \* on Table I) They were subjected to descriptive analysis.

The sample areas were selected from modern and traditional sub-communities namely Ataköy, Ataşehir, Göksu and Ayaspaşa, Ortaköy, Sarıyer.

Ataköy is located on the western periphery of Istanbul near the International Airport. It is built on the general model of European new town. Most residents live in apartments located in multi-storey building blocks which are seperated from one another by public green spaces. Recreational facilities are located near the blocks of buildings and there are neighborhood centers providing basic services.

Ataşehir is located on the Asian side of Istanbul which is also built on a model of European new town and has a history of around 15 years. It has a reputation throughout the Anatolian side as a very desirable place to live. Because of the perceived desirability of Ataşehir, the price of apartements is relatively high. Most residents are higher middle class, working at professional jobs.

Göksu, the third sample area, is also located on the Anatolian side of İstanbul. In the 18th. and 19th. centuries Göksu was famous as a place for entertainment. After World War I. its reputation diminished. Waterfront houses on Göksu River were dilapidated and the wooden bridges spanning Göksu dissapeared. Actually, Today's Göksu is a typical example of natural and historical environment being devastated. The sea-view hills of Anadoluhisarı has been housing tens of compounds. Göksu is

one of these housing compounds with an active and desirable reputation due to its geological advantages. It is also defined as being "in the city, far from the city".

As for the traditional neighborhoods Ayaspaşa, is located on the steep hills and stepped narrow streets starting from Taksim Square to Dolmabahçe and Kabataş on the east and the south east. Full of old, stylish buildings most of which belonging to the first quadrant of the 20th. century, Ayaspaşa happens to be a distinct residential area for the Moslem Turkish population neighboring Pera. The first important building in the area is the German Embassy dating back to 1877. Since the 1930s Park Hotel has been the identifying characteristic of the district. Park Hotel not just being a building and a hotel, has been a focus on the 20th. century city profile of Ayaspaşa. It still keeps being a centre of interest with its present condition.

The second sample is drawn from a traditional European Side Bosphorus village Ortaköy. It was named Arkheion in the antiquities. It was one of the picturesque fisherman's villages in Byzantine era. Emperor VI.Leon used to meet his sweetheart Zoe in Damianu Palace, which happened to be in today's Ortaköy. Turkish population settled in Ortaköy in the middle of the 16th. Century during Sulaiman the Magnificient's reign. In the 17th. Century a muslim neighborhood existed on two sides of the river bed. Waterfront houses, non of which exist today, used to stand on the Bosphorus. Ortaköy, has a reputation of tolerance, by accomodating different cultures and religions in it, such as Turkish, Greek, Armenian and Jewish. These communities have been living there in peace untill today. Ortaköy Square, surrounded by significant examples of 19th. Century Ottoman civic architecture has gone through a gentrification process starting from 1989 untill 1982. The Square and environs is a major point of attraction both for Istanbul residents and the tourists.

The third neighborhood Sariyer's history goes back to the antiquity. There are a few stories about the name of the place, one of which sounds more believable. The yellowness of the earth, due to the copper mines in the area is where the name comes from. Untill 1960s, before the buildings proliferated in the area, empty hills overlooking the neighborhood, looked yellow. Sariyer has always been a place famous for its fresh air, green countryside and healing waters. Since the 18th. Century, Sariyer has been known as a defensive spot on the Black Sea end of the Bosphorus. Nowadays, new transpotation projects are being activated to entegrate this end of the city to the new CBD.

# RESULTS

More **people are satisfied with their neighborhood** in modern (Ataköy 60 %, Göksu 65 %, Ataşehir 83 %) than in traditional neighborhoods ( Ayaspaşa 26 %, Ortaköy 25 %, Sarıyer 40 %).

In modern neighborhoods more **people think that their house is good enough for their needs** (Ataköy 75 %, Göksu 60 %, Ataşehir 85 %) than in traditional neighborhoods (Ayaspaşa 32 %, Ortaköy 55 %, Sarıyer 70 %).

More people in the modern neighborhoods **accept their neighborhoods as a good place to live** (Ataköy 55 %, Göksu 50 %, Ataşehir 75 %) than in traditional neighborhoods (Ayaspaşa 16 %, Ortaköy 65 %, Sarıyer 45 %).

The ratio of **people who would rather like to live in another neighborhood** is quite the same in the modern and traditional neighborhoods. (Ataköy 10 %, Göksu 5 %, Atasehir 7 %)

(Ayaspaşa 16 %, Ortaköy 0 %, Sarıyer 25 %).

There are more people who feel they belong to the modern neighborhoods than traditional neighborhoods. (Ataköy 70 %, Göksu 65 %, Ataşehir 63 %)(Ayaspaşa 21 %, Ortaköy 55 %, Sarıyer 60 %).

There are more **people who think that people don't care for the environment** in the traditional neighborhoods than modern ones. (Ataköy 10 %, Göksu 20 %, Ataşehir 12 %) (Ayaspaşa 32 %, Ortaköy 0 %, Sarıyer 15 %)

More people in modern neighborhoods than in traditional claim that there are excellent shopping facilities in their neighborhood with respect to other districts of Istanbul.

(Ataköy 40 %, Göksu 5 %, Ataşehir 67 %) (Ayaspaşa 16 %, Ortaköy 5 %, Sarıyer 20 %).

More people in the modern neighborhoods believe that **public facilities are well kept by the municipality.** (Ataköy 10 %, Göksu 40 %, Ataşehir 35 %) (Ayaspaşa 10 %, Ortaköy 0 %, Sarıyer 25 %).

There are more **people who are satisfied with the medical facilities** in the modern neighborhoods than in traditional neighborhoods. (Ataköy 60 %, Göksu 30 %, Ataşehir 40 %) (Ayaspaşa 37 %, Ortaköy 0 %, Sarıyer 30 %).

More people in the traditional neighborhoods **think that life in their neighborhood is dull** than modern neighborhoods. (Ayaspaşa 42 %, Ortaköy 0 %, Sarıyer 25 %) (Ataköy 15 %, Göksu 5 %, Ataşehir 12 %).

Most of the people in traditional and modern neighborhoods believe that there are less crime comparing other districts of Istanbul. (Ayaspaşa 32 %, Ortaköy 65 %, Sarıyer 35 %) (Ataköy 50 %, Göksu 75 %, Ataşehir 46 %).

More people in the traditional neighborhoods like their neighborhood **due to the relatives in the neighborhood**, than in modern neighborhoods. (Ayaspaşa 10 %, Ortaköy 80 %, Sarıyer 45 %) (Ataköy 50 %, Göksu 10 %, Ataşehir 21 %).

The ratio of people who say that **people give you a bad name if you insist on being different** doesn't vary much in modern and traditional neighborhoods. (Ayaspaşa 42 %, Ortaköy 60 %, Sarıyer 30 %) (Ataköy 45 %, Göksu 60 %, Ataşehir 23 %).

# CONCLUSIONS

This study compares the satisfaction in modern and traditional neighborhoods in Istanbul. The results proved to be consistent with the previous work done by Topcu and Dökmeci (2003). The results from the series of analysis of 6 different neighborhoods provide a picture of the move towards modernization.

Although Ataköy is the oldest among chosen modern neighborhood samples. It provides 60 % satisfaction, which is still higher than the most satisfied traditional sample, which is by 40% Sariyer.

One item that proves to be significant is that people give you a bad name if you insist on being different. Proving indifferent both in modern and traditional neighborhoods, is not consistent with the move towards modernization. This may be explained by the values of conservativity, typical of eastern communities.

In closing, it must be emphasized that the conclusions are based on deductive logic, altough consistent with extant empirical evidence.

### TABLE I

Items of the Questionnaire

- 1. It is hard to find real friends in this neighborhood.
- 2. This neighborhood is peaceful and orderly.
- 3. This neighborhood lacks real friends
- 4. People give you a bad name if you insist on being different.\*
- 5. Few people here make enough money.
- 6. I feel that I belong to this neighborhood. \*
- 7. Nobody here seems to care about how the neighborhood looks. \*
- 8. Parents let the children do whatever they want, if they are out of their way.
- 9. Municipality serves this neighborhood poorly.
- 10. There is not enough going on here to keep me busy. \*
- 11. This house is good enough for my needs.
- 12. This house is better than the ones I've lived before.
- 13. Buildings in this neighborhood don't look as good as the ones where I lived before.
- 14. Job opportunities in this neighborhood is the same as elsewhere.
- 15. Life in this neighborhood is dull. \*
- 16. I would rather live in a different neighborhood. This one is not the place for me. \*
- 17. This is a good place to live. \*
- 18. The green areas make this neighborhood a nice place to live.
- 19. I would rather have more neighbors around. Neighbors are far away here.
- 20. Shopping facilities are perfect around here compared to other neighborhoods. \*
- 21. Medical facilities here provide all sorts of treatments. \*
- 22. Public facilities here are well maintained. \*
- 23. Less crime takes place here compared to other neighborhoods. \*
- 24. Everybody will have enough job opportunities.
- 25. Nobody cares about the neighborhoods' opinion.
- 26. Nobody here rents their houses to singles.
- 27. Elderly here are well looked after.
- 28. People in this neighborhood don't take care of their gardens
- 29. I like this neighborhood because it is close to relatives. \*
- 30. I am satisfied with my neighborhood. \*

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# IMAGINARY REMEDIES FOR URBAN DISEASES: UTOPIA NEIGHBORHOODS

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### **ABSTRACT**

Utopias, traditionally confined to endless open land or seas, found themselves two exciting new areas in the 20th century: space and cities. The massive growth of cities and the accompanying problems after World War II also played a significant role in the creation of utopias as a part of cities.

This study focuses on 23 imaginary projects (which may be referred to as "utopia sketches", if not as utopias) developed for existing cities in the 1960s. The two main aims of the study are:

- To examine major transformations in post-War cities and identify their key problems by studying imaginary projects created in the same era, and
- To examine the sources of inspiration for ideal model cities, their characteristics, similarities, differences, and the relationships between the suggested alternatives and cities.

These designs have the power to influence the flow of the utopia tradition: by placing cities within utopic projects. They also overthrew the old tradition of ignoring existing cities and designing them from scratch, and started a new approach that produces innovative ideas about cities. Approaching urban problems like a doctor diagnosing a disease, these imaginary projects also offer plausible remedies.

The agenda of the 1960s was filled with issues stemming from the assumption that the earth was invaded by buildings and that nature was dying. As a result, the utopists sought ways of establishing new nature-city relationships, avoiding potential urban transportation problems in the near future, alleviating psychological problems caused by city life, and creating suitable cities for the new communities to be formed by industrialization.

By examining the futuristic dreams of 50 years ago together with today's urban problems, this study aims to raise questions about life 50 years later by looking at today's urban transformation.

Keywords: Utopia, city, Urban transformation, Continuity, Sustainability

As recently as fifty years ago, the habitats of utopia – a threatened setting of our day were virgin stretches of land. Traditionally built on vast pieces of land or open seas. these ideal models called utopias were designed for centuries to exist anywhere on earth. Their evolution and survival always depended on chasing the different and the new. The off-shoots of these products of imagination, which feature in the climate and geography of architecture, found two new habitats in the mid-twentieth century: Space and cities. The excitement caused by the possibility of life in outer space, which started with the launch of Sputnik-1 in 1957 and peaked with the moon-landing of 1969, inspired many utopias in this era. The massive growth of cities and the accompanying problems after World War II also played a significant role in the creation of utopias as part of cities. When the space explorations of the era and the excitement they caused are considered, what is more surprising than utopias choosing the outer space as their setting is that they were still developing new designs in cities. Emerging for the first time in the 1950s, this approach can be perceived as a shift from ideal environments to daily life. Having fed for centuries on the problems of the existing but never attempting to develop solutions, the projects that belonged to "nowhere" were now finally starting to offer solutions for the "now here".

With the first fruits of this approach ripening in the 1960s, the problems of daily life in the cities of the time were transformed into design criteria for new projects. Yona Friedman totally rejects the "building from scratch" approach of the first half of the 20th century and argues: "A new town 'risen from the desert' is not generally viable. Big cities come into existence through the development of former small towns: the big city must be the intensification of existing towns." In "The Ten Principles of Space Town Planning" published in 1962, Friedman emphasizes the need for big cities to be formed through the expansion of existing cities, and contends that the real issue to be studied is the expansion process. He also adds that such processes hold important clues about the future needs of cities. (Friedman, 1971: 183)

Stating that the modern approach has taken to finding inspiration in the old environment and its values, Marshall Berman lists these values as: the freedom of the city, order coexisting with an ever-changing flux, the subtle but intense and complicated face-to-face communication opportunities the city creates. Believing that the need to keep the old city alive is becoming more real by the day, Berman sees the 1960s as a stage for various debates. At the very heart of these debates lies the effort to protect the old, resist the new, consider the old non-existent, and adopt the new. Berman argues that the dialectic that holds the old and the new together grants modernism with a new complicatedness and depth. (Berman, 1988: 322)

Referring to the rapid changes experienced by the cities of the era, Eckhard Schulze-Fielitz writes in his manifesto called "The Space City" that these changes prevent cities from extending in line with the needs of the public. The solution offered to this problem by Schulze-Fielitz involves developing new projects to be added to existing cities: "To renegade existing cities, structures will stretch above their degenerate sections and cause them to fall into disuse." (Schulze - Fielitz 1971: 175)

The utopist approach offering new imaginary projects as parts of cities coincides with an era of such ideas about cities. Utopias stop being a state or city in themselves and turn into neighborhoods of big cities. Meanwhile they experience a transformation

and go beyond the traditional boundaries of utopias. When utopias with their traits of communality, functionality, indoor features, orderliness, stubbornness and stagnation are considered, the projects developed in this era are better named "utopia sketches". These sketches try to understand the cities of one time and develop new ideas for making today's cities more livable places.

Before designing projects for future cities, utopist designers subject the existing ones to a health scan and diagnose diseases sometimes overtly and sometimes covertly. Therefore each imaginary project is in fact a prescription to help recover some urban disease. Of the projects aiming to restore urban health, few have been developed by considering the general problems that affect all cities like a plague. Of the twenty-four projects designed in this era, seven are comprehensive enough to offer solutions to any world city. The remaining seventeen were designed considering the unique problems of particular cities.

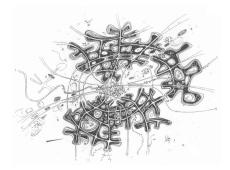
### "NOWHERE" NEIGHBORHOODS

Projects aiming to become a part of any existing city on earth and offer solutions to their problems may be gathered under the heading Nowhere Neighborhoods. The similarity between these projects is that they all start from general observations related to cities and offer very different treatment methods.



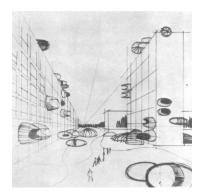
Intrapolis (Funnel Town) Walter Jonas / 1960

Believing that cities lose their health as they grow rapidly, Walter Jonas suggested the construction of new structures to restore their health and he designed an additive project for big cities. Known as "Intrapolis" or "Funnel Town", the project is envisioned to be built on the outskirts of the city and offer necessary functions. According to Jonas, a city can only have a balanced nature if it has "introverted" buildings, away from traffic, in touch with the sky and its neighbors. In this new design, transportation problems have been solved and public places are of paramount importance. (Jonas, 1972: 150)



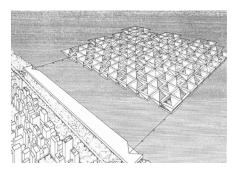
Crater City Chanéac / 1963-68

In an attempt to protect old city centers from the rapid changes caused by industrialization, Chanéac started the "Crater City" project in 1963 as a research study and finalized it in 1968. He put the old city center in the center of his project, envisioned new buildings to be erected around the city in the form of a dense "screen", accepted unconditional expansion of the city, and wished to protect it. Such protection meant that the city center would turn into an area for leisure activities. Another characteristic of the city are the units called "parasite cells". Various different units comprising the city may be added to the spaces when there is need and later can be moved to another place with ease. Considering the unpleasantness caused by noise pollution in existing cities, the roads outside the "screens" are surrounded by open areas on one side. This ensures that traffic is completely separated from the city. Transportation options include rail systems and the underground. Thinking that one day air travel will become the only transportation in cities, the roads in this project may be turned into workshops and depots in the future. (Chanéac, 1964: 42), (Chanéac, 1972: 152)



Cellules Polyvalentes Chanéac / 1960

The "Cellules Polyvalentes" project developed again by Chanéac also suggests incorporating units into existing cities. The project is based on inexpensive mass-produced cells integrated into cities sometimes through the "alligator cities" approach, sometimes through a skeletal system, and sometimes through "parasite cells". The idea of "parasite cells" is defined by Chanéac as "architectural rebellion". (Chanéac, 1972: 60)



Urban Matrix Stanley Tigerman / 1965

Another suggestion has been the off-shore "Urban Matrix", composed of 163 multifunctional pyramidal units added to one another, on a flexible floor plan. The aim of this project is to protect and at the same time expand the city center. With the awareness that cities by the sea attract a vast number of dwellers, the project suggests an off-shore addition to the city. This off-shore area is not accessible via any vehicle and therefore roads are non-existent. Vehicles are to be left in a parking lot on the shore. The additions are flexible enough to serve different functions when needed. (Tigerman, 1967: 76), (Tigerman, 1972: 132)



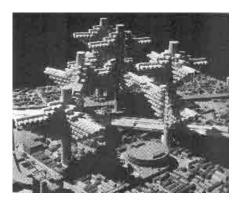
Instant City (Linear pyramid city) Stanley Tigerman / 1968

The most dispersed living areas around cities are those by the side of ring roads. The project known as "Instant City" or "Linear Pyramid City" assumes that ring roads will be placed under buildings. In other words, cities will be constructed above circular transport arteries. The project presupposes the building of a high density building made of two 200 meter long and 16.5 meter wide equilateral triangles whose one edge touches each other above the ring road. Homes are located in the three seven-storey sections located in the public area section of the building. Below the homes and above the ground floor, three high-ceiling storeys are reserved as education and study areas. (Fuller & Sadao, 1972: 158)



Walking Cities Archigram (Ron Herron) / 1964

The "Walking Cities" project which suggests mobile cities to be set up in or around existing cities belongs to the Archigram member Ron Herron. The project is made of mobile containers or urban units connected to one another by corridors and it is large enough to contain a city in itself. Resembling giant beetles, these containers are convertible so that they meet the need for fresh air and sunlight. (Herron, 1972: 114)



Space City Arata Isozaki / 1962

"Space City", designed by Arata Isozaki, has been one of the most controversial projects of the era. It presupposes a vertical service core built inside existing city centers with joists stuck into them and units attached to these joints. As a result of the tendency of this era for rapid growth and improvement, the basic design component of the project was "speed". Other major concepts of the project were flexibility, openness, transformation, and multiplication. Arata Isozaki named his units "purely imaginary units" and left them un-detailed and unresolved. His aim in doing this was to allow for various functions to meet possible future needs. (Isozaki, 1965: XXV), (Isozaki A., 1972: 72)

# "NOW HERE" NEIGHBORHOODS

Contrary to the projects entitled "Nowhere" Neighborhoods and concerned with the general problems of cities, a great deal of other imaginary projects have concerned themselves with the unique difficulties in particular cities and proposed solutions for these problems. Even though these projects have been designed with specific cities in mind, they may be adapted to other cities with minor modifications.



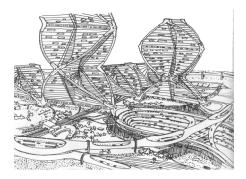
Ville Flottante Paul Maymont / 1959

In this era, Tokyo seems to be the most popular city for imaginary projects, prompted by the population boom after World War II, rapid industrialization and limited living areas. The "Ville Flottante" project designed by Paul Maymont in 1959 was a pioneer of these projects. Planned for the Tokyo Bay, the project has been designed in line with ferry routes, built with light steel construction elements, and envisioned to accommodate 10.000 people. The project includes almost all of the functions that a city normally offers and connects these functions to one another by perpendicular circulation. Depots, workshops, factories and other such functions are located in the lower parts and sometimes below sea level. Separate storeys and suspended gardens have been planned for leisure activities. (Jonas, 1972: 150)



Project for a town-planning of Tokyo Kenzo Tange, Arata Isozaki, Koji Kamiya, Heiki Koh, Noriaki Kurokawa ve Sadao Watanabe / 1960

One of the most important projects of the time, "Project for a Town-Planning of Tokyo", was designed in the aftermath of the war by a group including Kenzo Tange and Arata Isozaki. Designed as an addition to the city center, the project is an above-sea plan to accommodate five million people. Starting at the center of Tokyo and stretching towards the bay, the project is in contrast to the expansion approach of the city. The new stretch of city is planned as a linear development including administrative units, culture and art centers and hotels. A close connection between the city and its addition is envisioned in order to protect the vibrancy in both. In contrast to other metropolises which were fragmented to solve the problems, this project aimed to protect the unity of Tokyo. (Tange, 1962: 50), (Tange & Isozaki, 1972: 125)



Town plan for Tokyo Noriaki Kurokawa / 1961

Noriaki Kurokawa, who was a partner of Kenzo Tange, developed a different project called "Town plan for Tokyo" while Tange was working on "Project for a Town-Planning of Tokyo". Designed in 1961, the project offers three different units for a new infrastructure system in Tokyo and different living areas to be added to this infrastructure. The "bamboo type" buildings inspired by the shoots of the bamboo

plant have accommodation units attached to the outer surfaces of other buildings. The top unit is planned as an airport. The "tree type" buildings, on the other hand, have a mass in the middle serving as a service center. Hanging from the branches of this mass are circular platforms intended for accommodation and public use. Suggested specifically for the Ginza area in Tokyo and having a cyclical form, the "helicoidal towers" have a diagonal infrastructure offering different formal approaches. (Kurokawa, N., 1962: 84), (Kurokawa, 1972: 74)



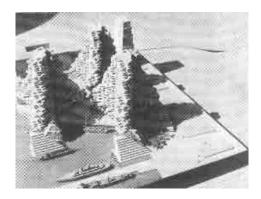
Geodesic Dome for Manhattan Richard Buckminster Fuller / 1962

New York is another metropolis which inspired many imaginary projects in this era. The most popular of these projects is the "Geodesic Dome for Manhattan" designed by Richard Buckminster Fuller. Based on the idea that a part of Manhattan Island be covered with a 3.5 km diameter dome, this project inspired many others succeeding it. The most important aim of the project is to control all climatic variables within the dome. Having been led by technical developments and causing much debate, Fuller's project is not considered at all far-fetched. (Fuller, 1962: 22), (Fuller, 1972: 120),



Slum-clearence scheme for Harlem / Richard Buckminster Fuller and Shoji Sadao / 1965

The "Slum-clearance Scheme for Harlem", a joint project by Richard Buckminster Fuller and Shoji Sadao, aimed to erect giant buildings instead of slums. In order to change the social and architectural identity of Harlem, the plan envisions a giant building in a pre-planned area and people living in this huge structure. Later when abandoned, this area will be transformed into parks or various public areas. The distinguishing feature of the project is bringing roads into the building and carrying them to the top with ramps. One lane is reserved for climbing, one for descending and one for parking. These giant buildings are connected by six-lane roadways. (Fuller & Sadao, 1972: 164)



New York Habitat Moshe Safdie / 1968

"New York Habitat", known also as "Octahedral Prisms Form Part of Lower Manhattan Development Plan", is Moshe Safdie's project adapting Le Corbusier's "plug-in" system to prefabricated building systems. The project based on octagonal prisms claimed to meet an important portion of New York's growing need for accommodation. The approach called "genetic code", originated through Moshe Safdie's architectural search to enable infinite combinations, is based on a growing and expanding system. The units are planned to grow perpendicularly, not just expand horizontally. The buildings can thus have as many as 45 storeys. (Safdie, 1968: 48)



Floating city for Monaco Paul Maymont / 1964

This era saw the development of three different projects for Monaco. The first one is the "Floating City for Monaco" project of 1964. Having a circular form and containing a lagoon, this multi-storey off-shore project is connected to the shore via a bridge. The seven-layered building features a terrace on top and a garden at its base at sea level. This "garden" offers different leisure time activities to inhabitants: game areas, culture centers, sports fields and beaches. (Maymont: 1972, 128)



Artificial Island in the Bay of Monaco Edouard Albert, Jacques Cousteau 1966

The second project for Monaco, "Artificial Island in the Bay of Monaco", aimed to increase the city's existing rest and recreation areas by building an artificial island in the sea. The natural form of crystal inspired this project. Planned three miles off the shores of Monaco, the island city is 220 meters wide, 50 meters high and houses units for rest and recreational purposes: Shops, restaurants, clubs, cinemas, swimming pools, sun-decks, sports halls and accommodation. (Albert: 1967, -), (Albert & Cousteau: 1972, 134)



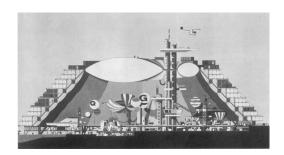
Overspill town for Monte Carlo / Manfredi Nicoletti / 1966

The third project for Monaco is the "Overspill town for Monte Carlo", which was a tourism-oriented imaginary project. It aims to meet the need for development in the small principality of Monaco. The units serve 20.000 regular inhabitants and a large number of tourists. With this peninsula to be built on the shore of Monte Carlo, the city will gain two new harbors, one facing Monaco and the other France. The main aim of the project is to solve the problem of congestion in the city. (Nicoletti: 1970, XVI), (Lubicz-Nicz & Pellicia: 1972, 142)



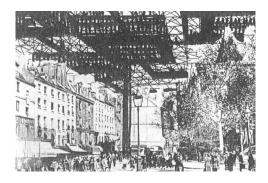
Project for Tel Aviv /
Ja Lubicz-Nicz ve Carlo Pellicia / 1963

Two other suggestions were developed for Tel Aviv in the 1960s. The joint project by Ja Lubicz-Nicz and Carlo Pellicia, "Project for Tel Aviv", was inspired by the city's new traffic arrangements. The project involves an extension and a man-made island. The island is connected to the land with a direct pedestrian road and a winding highway. The island houses 3.000 four and five-storey buildings and a parking lot for 1.500 vehicles. The center is traffic-free and conveyor belts help pedestrian traffic. The most memorable part of the project is its massive, saddle-shaped structures. The lower sections of these 20 to 25-storey buildings are reserved for trade; the terraces in the middle sections for accommodation and public use; and the higher sections for offices and administration. The center comprises low level buildings consisting of theaters, cinemas, museums, exhibition halls, libraries, synagogue, restaurants, bars and shops. (Lubicz-Nicz & Pellicia: 1964, 62), (Lubicz-Nicz & Pellicia: 1972, 142)



Leisure City, Kiryat Ono Justus Dahinden / 1969-1971

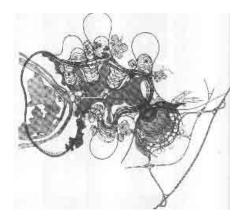
The other project for Tel Aviv, "Kiryat Ono" or "Leisure City", is a town for 3.000 people established in a densely populated part of Tel Aviv. This involves an indoor space designed mainly for the common activities of people and accommodation units surrounding this common area. The main unit is called "Green Hill" and can accommodate up to 3.000 people in meetings, exhibitions, theater plays, shows, concerts, religious and sports activities year round. There are two permanent units within the structure: an ice skating rink and a swimming pool. Designed to facilitate leisure time activities, the city is renowned for its rest and recreational aspects. (Dahinden: 1972, 170)



Paris Spatial Yona Friedman / 1959

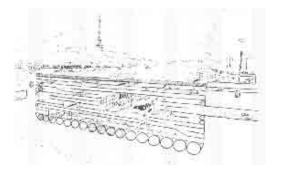
A well-known project of Yona Friedman, "Paris Spatial", can be summarized as a project which appends three additional layers to Paris city center. Aiming to multiply the housing density of the city by three-fold, the project aims to meet the emerging needs of the city while protecting the existing structure. Inclusive of services that will be needed in the future, the project aims to protect the attraction of the city center and increase its capacity. (Friedman: 1962, XXXVII), (Friedman: 1972, 197)

An off-shore project in Le Havre in France, "Hydrobiopolis", lies one km off the shore and includes all the functions required of urban life. It offers accommodation for 20.000 inhabitants, and employment for 6.000. The project entails a platform on the sea and units rising in the shape of steps. The driving concept of the project is density. It concerns itself with the future scarcity of land and high density accommodation as a solution. The liveliest parts of the structure are the axes at its center. A pedestrian zone and modeled after an out-of-doors lifestyle, the project offers public areas such as arcades for leisure time. (Hartsuyker-Cuerjel & Hartsuyker: 1969, 90)



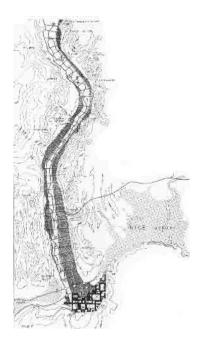
Manifestation Plastique (Sculptured urban landsape) / Equipe MIASTO: Michel Lefebvre, Jan Karczewski ve Witold Zandfos 1970

Another project from France is "Manifestation Plastique", which consists of a transportation ring around Vetheuil, a city aside one of the curves of the Seine River. The project envisions new accommodation units in the mountains surrounding the existing city. Leaving the old city center intact and even protecting it, the project offers a transportation system operated with air pressure. (Lefebvre, Karczewski & Zandfos: 1972, 170), (Valadares & Benoit: 1968, 3)



A town project at Seine Paul Maymont / 1964

"A town project at Seine" aims to go down 60 meters to the Seine's 220-hectare wide riverbed, build 12 layers and thus offer a spine for the city of Paris in a 2600 hectare area. Designed by Paul Maymont, the project mainly offers leisure time activities to Parisians, such as walking areas, cinemas and swimming pools. The spine also contains museums, a radio building, hospitals, libraries and court houses. It also aims to help the parking problem in Paris with a 500.000 vehicle parking lot, and connects to the city via the underground. (Gaillard: 1964, 30)



"Nice-Futur" Project Guy Rottier ve Yona Friedmann 1966

The "Nice-Futur" project developed by Guy Rottier and Yona Friedman for the Var River bed in Nice, France aims to meet the accommodation and office needs in the region. It lies like a 50 meter high, 3.5 km long, 20 to 30 meter wide snake. Separate storeys and passes have been designed exclusively for pedestrians in the 32 km long structure. (Rottier & Friedmann: -, 64)



Redevelopment of the city centre in Moscow V. Kalinine ile Y. Ivanov, P. Kovaliov, V. Maguidov ve V. Tarassévitch / 1966

"Redevelopment of the city centre in Moscow" was designed for a competition aiming at improving Moscow city center. The project leaves the city center intact, surrounds it with a double-storey service building called "A Ring", and protrudes beam-like structures from this circle for accommodation units in high-rises, thus relating work and accommodation areas to one another. From this perspective, it is very similar to Yona Friedman's "Paris Spatial". In order for the legs of the protruding accommodation units not to become too domineering, simple forms and clean materials have been preferred. The major concern of the project is the abundance of "third production" such as banks, insurance, transportation and trade companies in the city center and the resulting necessity for houses to move out into the suburbs. The project thus aims to re-connect the previously separated accommodation and work areas. (Kalinine & Ivanov: 1972, 82)

- - -

A distinct feature of utopias is their love for dark times. A close look at the world history shows that the most depressing times have bred new utopias. To illustrate a few, the very first utopias were fed by the most depressing days of the Middle Ages; the ideal life models in the 19th century emerged due to the social problems brought by industrialization; and the imaginary projects at the turn of the 20th century sought answers to the fuzziness of their times which later gave way to the birth of modernism. The Second World War and the problems and pessimism it created in urban centers also played a part in the emergence of new utopias. This era witnessed an unrivalled vibrancy in the area of utopias, which was also reflected in the daily life. The belief in a "Golden Age", a forgotten time of perfection, was influential to the birth of utopias. The 1960s were a living example of the "Golden Age" with respect to architectural utopias. Seen especially from today's utopiadeprived world, the 60s whets one's appetite.

The success of the imaginary solutions put forward in the 60s owes much to a close reading of the problems and negativities of the time. All of these projects identified and attracted our attention to the following problems:

- 1. The need for new living areas after the population boom of the post-war years and the damage given to existing cities by new overspill areas.
- 2. Separating cities from the nature.
- 3. Transportation problems and the resulting noise pollution.
- Rapid industrialization, fragmentation of cities for life, work and recreation purposes.
- 5. The decreasing opportunities for gathering of inhabitants in cities.

Although the treatment methods developed by imaginary projects for these urban diseases are rather distinct from each other, they can be grouped under two main headings: Short-term urgent treatments and long-term methods geared towards protecting the restored health of cities. Foremost of the urgent treatment options are leaving existing cities intact, stopping their growth or protecting them by surrounding them with "screens". This also means putting an end to the old habit of random urban development, and making proper plans. This was seen as crucial to protect the unity of cities which is fast disappearing. Another urgent treatment method is solving the transportation issue. Almost without exception, all these projects take a cautionary

look towards traffic and leave all but mass transportation vehicles outside the cities. Another urgent treatment is the building of new public places for cultural, artistic and sports activities, which are of paramount importance for the urban public's psychological and physical health. The long-term architectural suggestions focus mainly on the future problems of cities. Estimating future needs for living areas by looking at the growth rate of cities, long-term programs develop alternatives and plan infrastructures for the future. Another long-term prescription is to halt the irreversible damage that cities wreak on the natural environment by developing a "nature-friendly urban attitude".

Although not quite utopias but utopia sketches, these projects identify the diseases of their time and look for remedies. Each one concerns itself with a different city, marks problematic areas and tries to develop suggestions. Although these suggestions may not always have been realistic or successful, they have always caused serious discussions and impacted people's thinking thereafter. A majority of them have also become a source of inspiration for future overspill towns.

Today, the real life problems that these projects have so sincerely concerned themselves with are even greater and more diverse. Today's cities have much more serious diseases than the cities of 50 years ago. Perhaps what we need to do is to imitate these projects, identify the diseased parts of our cities and seek remedies. Sometimes it is best not to succumb to pessimism. It is obvious that new imaginary projects will guide us in establishing where we stand and where we want to go regarding our increasingly estranged and congested cities. Just as symbols on the street maps of foreign cities which appear as "nowhere" to travelers: "You are here now".

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## A RESEARCH ABOUT THE EVALUATION OF THE PLAYGROUNDS IN ISTANBUL FROM SUSTAINABILITY PERSPECTIVE

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#### ABSTRACT

Contemporary design activities are changing the traditional pattern of environment with the idea of building a livable environment but most of the time they accomplish just the opposite. Among them environmental design activities are the ones which effect the environment most.

Children's playgrounds have an important part in environmental design. This paper aims to deal with the design issues that arise in the consideration of sustainability in children's playground design process.

Sustainability principles are discussed within playground design and the design criterias that a playground should have, when sustainability concerned are put forward by the help of the previous studies about the subject. And according to the design criterias determined, observed playgrounds in public use are evaluated in Istanbul to see if the criterias are met or not. Finally from the data obtained, the proposals are given for the playgrounds from sustainability perspective.

Keywords: Sustainable environment, Playgrounds, Design, Landscape design

## INTRODUCTION

The attitude of perceiving the land as a commodity and using the natural and cultural resources carelessly has led to environmental problems. As a result of the realization of these problems globally, people forced to change their attitudes towards natural landscape. Consequently a demand occured to develope new plans and designs which are environmentally responsible. This demand caused a new dynamic approach which is a continuing process of developing sustainable plans and designs. Environmental design is a crucial part of this procedure. Among environmental design activities playground designs have an exceptional role in urban open space development because one third of the population living in urban areas are in the category of children. However the infrastructure and the services concerning the education, health services, recreation, use of spare time and cultural activities which

aims to reach this group are insufficient in great deal (Türkiye Ulusal Rapor ve Eylem Planı, 1996).

Children's playgrounds are chosen as the subject of this study for the reasons mentioned above. A brief introduction is given to ecodesign which was the first wave in the history of sustainability. Then the role of product design in sustainability and the way designers see sustainable design is examined. Lifecycle period and sustainability criterias of playgrounds are determined. Categories of play units are developed from the examples met frequently in İstanbul. Then a Sustainability Checklist is prepared for the playgrounds. The results are discussed after the evaluation of the Sustainability Checklist and proposals are given to maintain sustainability in children's playgrounds.

## **History of Sustainable Design**

Eco-design, which attempted to integrate environmental concerns into the design of artifacts and the build world did not emerge as a discrete discipline until the mid 1970's. Ecologists such as Leopord (1887-1948) and Naeness (1912) expressed earlier concerns; and socio-economic and political critiques and visions for a more sustainable worldview, offered by people such as Mumford (1895-1990); Bookchin (1921) Packard (1914-1996); Nader (1934) and Schumacher (1911-1977). Many cite the publication of Rachel Carson's Silent Spring in 1962 as a catalyst for environmental concern and Victor Papanek's Design for the Real World in 1971 as sparking the emergence of the eco-design movement.

The Brundtland Report (1987) prompted the second wave of environmental concern along with the green consumer revolution which regarded design as important in the development of more mainstream eco-products and in enhancing consumer acceptance of these. By the early 1990's designers beginning to take these messages on board stimulated by 'design for the environment' being placed on the corperate agenda (Mackenzie 1997; Burrall 1991).

Throughout the 1990's to the present day, a plethora of exciting new developments are pushing the boundaries of design. Ezio Manzini (2003) is part of a growing movement to broaden the remit of designers towards creating a vision for sustainable everyday life that re-defines the need for different types of goods and services. New approaches based on biological and ecological systems (inspired by the earlier work of D'Archy Thompson (1921) as well as natural patterns and morphological processes (such as Alexander's pattern Language1977) are shifting the agenda. At the same time, the work of Walter Stahel at The Product Life Institute and others are spear-heading the dematerialization trend via reconfiguring 'product service systems' (Sherwin, 2001).

## Tools and Methods of Sustainable Design in its History

There is a rich and diverse range of tools, methods and principles for Sustainable Product Design. For a comprehensive review see Sherwin (2001) and Charter and Tichner (2001). Most of those surveyed are concerned with improving resource and

energy efficiency of single products as well as reducing waste and toxicity impacts. They are product focused design methodologies. But more sophisticated models adopt a lifecycle approach, addressing all impacts along a product's lifecycle (material extraction, production, distribution, use and disposal) which in extended versions includes full triple bottom line impacts.

## Hierarchy of Waste Management

This is an early design model whose primary emphasis is on waste reduction and management. This model led to the earliest and perhaps most simple eco-design product focused strategies- reduce, reuse, recycle (Sherwin 2001).

## Factor X Eco Efficiency Concept

Eco- efficiency is a product based approach that focuses on increased resource and energy efficiency through technological innovation.

## Life Cycle Assessment (LCA)

Life cycle principle/assessment is a concept in which all the stages of a product 'life' are considered through design (material extraction, production, distribution, use and disposal). It is one of a range of tools that support life cycle management, minimizing environmental burdens throughout the product/service lifecycle. Life cycle approaches consider local as well as global impacts and attempt to incorporate environmental factors into early stages of design.

## Cradle to Cradle

This approach calls for more radical design solutions to bring our economic and social systems into harmony with the wider ecological systems on which they depend.

## Product Service Systems (PSS)

The key idea behind PSS is that consumers do not specifically demand products, but rather are seeking the utility these products and services provide. By using a service to meet some needs rather than a physical product, more needs can be met with lower material and energy requirements.

## Biothinking/Biomimicry

This is a growing field in which the design of products and services mimic nature by utilising biological and ecological principles and processes.

## Manzini's Principles

Manzini has developed some of the most advanced thinking in the practice and theory of ecodesign that starts from a systems wide perspective and questions the role that goods and services play in a sustainable future. He uses three principles (Manzini 1993):

From consumption to care: Developing products that require care and with which the use can establish an emotional relationship

From consumption of products to utilization of services: Looking at the concept of utilization, going beyond the notion of possession and personal consumption From consumption to non-consumption: In which the reduction of needs can experienced as an increase in social quality.

## The Role of Product Design

Much of the focus to date has been on the role of design in creating more sustainable products, but a potentially more powerful and transformational role for design is at the other end of the spectrum - in influencing consumption choices and lifestyle aspirations. Participatory design methods put the needs and aspirations of users at the centre of the design process to co-create demand for new types of products and services; while communication and branding design sends powerful messages that help shift social norms and aspirations to be more in line with sustainable lifestyles.

Design can contribute to the challenge of sustainable consumption not just by changing products but also by influencing social norms, consumption and lifestyle aspirations. User centered design as well as brand design, marketing and packaging design have an important role to play influencing the psychology of consumption. Exciting, innovative and meaningful messages can help create a new vision of how people live their lives. Designers are the part of the creation of new sustainable way of life is the challenge of those working at the cutting edge of sustainable design.

Focusing on breaking the link between more products = more consumption of natural resources will not be sufficient to move towards sustainability. We must now concentrate on the first correlation, more products = more well- being, and find a way to break it. The role of design then becomes not just about producing artifacts but also life scenarios and ideas of well-being (Manzini and Jegou 2003).

## How Designers See Sustainability?

Research from both the literature review and conversations with key individuals reveals that Mainstream Product Designers (MPDs) and Sustainable Product Designers (SPDs) have widely differing views and practices.

Designers were asked about their understanding of the terms 'ecological' and 'sustainable' design and what it meant for their practice. Sustainable Product Designers (SPDs) made a clear distinction between different terms and their

historical evolution in terms of what it meant for design practice (e.g. the move from incorporating single environmental issues to the wider considerations of full lifecycle triple bottom line impacts). Some SPDs were aware of a 'third wave' of sustainable design based on a fundamental shift in lifestyles. In contrast, MPDs were unable to distinguish between terms and found the incorporation of social issues into design particularly challenging.

Many mainstream designers see sustainability as one of many factors on a design berief and as a political/ethical issue, better left to the personal preference of the designer. In contrast, sustainability designers place sustainability at the heart of their practice often seeing it as an extension of their own lifestyle and values.

MPDs make little or no distinction between the two terms eco-design/ecological design and sustainable design. There is some awareness that sustainable design addressed social/cultural issues as well as environmental/economic concerns, but it is more challenging for them to draw connections between social issues and product design.

SPDs, on the other hand felt that there was a clear distinction between ecological and sustainable product design and saw the term eco-design as a somewhat historical term that represented early attempts to incorporate environmental concerns into product design (Sherwin, 2001).

#### **METHOD**

As assessments and rating systems use diverse indicators of performance there is a need to integrate a variety of elements at urban scale. This makes the design of sustainability evaluation very difficult. The means of valuing sustainable design should be developed into a more formalized evaluation procedure that can be objectively assessed.

The research method was adapted from "Sustainability Checklists for Developments" method which was developed from researches at the UK Building Research Establishment. It was designed to be used in relation to development at the scale of urban village or estate and in regeneration projects. The focus was on sustainability related to the site development, buildings and infrastructure.

In this study a checklist is prepared by the help of the previous studies about the subject and used to assess design criterias that a play unit should have when sustainability concerned.

#### Criterias for Evaluation

In order to make an evaluation of playgrounds from sustainability point of view, life cycle assessment should be done for them. Life cycle period of playgrounds and the criterias within this period are determined and prepared as a table.

Table 1. Life Cycle Period of Playgrounds

PLANNING PERIOD	DESIGN PERIOD	CONSTRUCTION PERIOD	OCCUPANCY PERIOD	RECYCLING PERIOD
Rational utilization of	Material Selection	Minimizing construction	Maintenance	Recycling
natural resources	<ul> <li>Resource Extraction</li> </ul>	removals (disposals)	<ul> <li>Easily maintained</li> </ul>	• Reuse
<ul> <li>Conservation of</li> </ul>	<ul> <li>Manufacturing</li> </ul>	<ul> <li>Excavating and</li> </ul>	hard and soft	<ul> <li>Disposal</li> </ul>
natural resources	<ul> <li>Saving energy in</li> </ul>	landfilling according to	landscape	
<ul> <li>Minimization of</li> </ul>	production and transport	topographic data	<ul> <li>Planting design that</li> </ul>	
use of resources		<ul> <li>Saving water and energy</li> </ul>	require less energy	
<ul> <li>Energy economy</li> </ul>	Longetivity	0		
<ul> <li>Use of local</li> </ul>	<ul> <li>Durability</li> </ul>		Health	
materials	<ul> <li>Adaptability</li> </ul>		<ul> <li>Hygiene</li> </ul>	
	<ul> <li>Serviceability</li> </ul>		<ul> <li>Safety</li> </ul>	
Selection of the location	<ul> <li>Maintainability</li> </ul>			
within the site			Comfort	
<ul> <li>Microclimatic</li> </ul>	Pollution			
considerations	<ul> <li>Using long life material</li> </ul>		Having more than one	
<ul> <li>Ecologic</li> </ul>	<ul> <li>Using biodegradable</li> </ul>		function	
considerations	material			
	<ul> <li>Using recycable materials</li> </ul>		Timeless designs	
	Disassembly			
	<ul> <li>Minimizing the material</li> </ul>			
	types (avoid secondary			
	finishes)			
	<ul> <li>Minimizing weight of</li> </ul>			
	materials and components			
	<ul> <li>Using modular design with</li> </ul>			
	minimum fasteners and			
	connectors (mechanical			
	rather than chemical)			
	Selection of Energy Use System			
	• Irrigation			
	Ligning			
	Selection of local plant material			

## **Sustainability Evaluation Checklist**

For this research evaluation criterias for sustainability are limited so as to achieve a more accurate result. Ten criterias are selected for the evaluation of playgrounds. According to the examples observed in public use in Istanbul six different categories are determined. During the selection of these categories play unit types are taken into consideration that are met in repetition. That was the common point for the playgrounds observed.

Sustainability Evaluation Checklist used consists of two parts; categories being evaluated and criterias considered for sustainability. Categories are rated in three different values. Plus sign (+) shows the category that meets the objectives well, check sign ( $\sqrt{}$ ) shows the category moderately meets the objectives and minus sign (-) shows the category that does not meet the objectives.

Table 2. Sustainability Evaluation Checklist

Sustainability Evaluation Criterias										
	Durability	Adaptability	Serviceability	Disassembly	Maintenability	Health	Comfort	Recycling	Reuse	Disposal
Category 1	+	+	+	+	+	<b>V</b>	+	√	-	-
Category 2	<b>V</b>	+	+	+	<b>V</b>	+	+	+	+	<b>V</b>
Category 3	<b>V</b>	+	+	<b>V</b>	+	<b>V</b>	+	√	<b>V</b>	<b>V</b>
Category 4	+	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>	-
Category 5	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>	√	+	<b>V</b>
Category 6	<b>V</b>	<b>V</b>	<b>V</b>	-	<b>V</b>	<b>V</b>	<b>V</b>	<b>√</b>	<b>V</b>	-

+ Category meets objectives well

√ Category moderately meets objectives

Category does not meet objectives

Category 1: Play units made of plastic\*

Category 2: Play units made of wood\*

Category 3: Play units made of plastic-wood

Category 4: Play units made of plastic-metal

Category 5: Play units made of metal-wood

Category 6: Play units made of metal-wood-plastic

\*Categories formed according to the materials mainly used.

The results of the checklist when the playing units are compared with each other shows us; the play units made of wood is the best choice according to the sustainability criterias determined. The advantages of these play units are their adaptability, serviceability, disassembly, health, comfort, recycling and reuse. The rest of the criterias are average advantages of these play units.

The play units made of plastic and plastic-wood are the second best choices. The units that are plastic have the disadvantages of reuse and disposal in great deal. Also their health and recycling properties have moderate values. And these units meet the rest of the objectives of the criterias well. The play units that are plastic-wood have the average advantages of durability, disassembly, health, recycling, reuse and disposal. The rest of the objectives take positive values.

Category four and five which are the playing units made of plastic-metal and metal-wood are the average choices for sustainable playgrounds. The only advantage of plastic-metal playing units is the durability of them. And their disadvantage is the disposal problem they bring. This category moderately meets the objectives of adaptability, serviceability, disassembly, maintenability, health, comfort, recycling, reuse and disposal. The advantage of the category five which are the metal-wood play units is their reuse opportunities. All of the other criterias meet the objectives moderately.

Category six, the units made of metal-wood-plastic are the worst choice among all the categories. It doesn't have any advantages at all. The criterias of disposal and disassembly doesn't meet the objectives and the rest is met moderately.

## CONCLUSIONS

The key to sustainable design is the systems approach-sometimes called a holistic view. Sustainable strategies and sustainable design use a holistic, synergistic and interactive approach. Most of us are aware that nothing exists in isolation and that everything is interconnected. Many of the skills of the design professions, however, are geared to solving arbitrarily defined problems and providing solutions that may appear reasonable from the point of view of a single professional discipline but can not resolve the multidimensional problems of the land (Thompson, G.F., Steiner, F.R., 1997)

Sustainability is a difficult goal to achieve. Many researches must be done and new methodologies should be developed to make assessments for sustainability. In this research, criterias are limited to evaluate the observed playgrounds because without a team work of disciplines, the evaluation of all the life cycle periods of playgrounds won't be reliable.

According to the results obtained from the Sustainability Evaluation Checklist, it can be said that the play units observed in Istanbul within playgrounds are insufficient from sustainability perspective. The standards of durability, adaptability, serviceability, disassembly, maintenability, health, comfort, recycling, reuse, disposal of the children's play units must be improved concerning sustainability. And also

design strategies can contribute to the challenge of sustainable consumption not just by changing these products but also by influencing consumption and lifestyle aspirations through user-centred design. Product-service design solutions should be created that meet children's needs. Playgrounds can be planned as services which give more response to the needs of children from every age so that there can be a decrease in the individual consumption of toys. And most of all, play units within playgrounds should be a part of natural cycles which would be a man-made cycle of a closed recycling loop.

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## **LANDSCAPE**

Moderator: Öner Demirel

Transformation of Landscapes Meltem Erdem, Ebru Erbaş Gürler

Transformation of Ankara's Urban Open Spaces: A Case Study of the Çankaya Botanıcal Garden Neslihan Kulözü

The Effects of Lighting on the Silhouette of a City: The City of Safranbolu

Nurhan Koçan, Koray Özdal Özkan, Selcen Özgül Özkan

## TRANSFORMATION OF LANDSCAPES

## Meltem ERDEM, Ebru ERBAŞ GÜRLER

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#### **ABSTRACT**

21st century is a turning point in terms of physical environments shaped by information technologies, movement, network systems and the global capital as an alerting force of these factors. As a result of these new tendecies, the nature of cities and daily livings has been changing rapidly. The new attitudes and contexts expose the fact that the elements that identify the landscape character is the most important components of the urban pattern. Here the term landscape doesn't only indicate the ecological and biological requirements for any urbanized area but also it expresses the recovering process for the spoiled urban charecter and creates new life styles, experiences and local identity.

Begining with the second period of the 20 th. century, growing effect of the globalization process has begun to transform all living environments to respond the new life style and new world system.

During this process, design professions started to explore new design language. Within this language, the issues that concern landscape, ecology and nature become most cricual because of the emergent concepts of environmental consciousness all over the world as a part of sustainable development. In this context, althought effects of globalization on environmental design provide a general recovery in terms of ecology, at the same time and oppositly feeds this new language move same lines, with the same solutions and the same elements. Therefore, this situation cause a uniform language and disrupt the unique character of landscape and urban that is site-specific and society-specific. As a final product, the living environment of 21st century occurs as a "flatten image" where all of the layers which enrich the local identity become the same and the one.

In this research, the transformations of landscapes and the forces that effect this transformation will be examined in the context of new expansions in environmental design and the effects on urban transformation will be explored.

Keywords: Landscape design, Urban transformation, Globalization

## TRANSFORMATION OF LANDSCAPE

21<sup>st</sup> century is a turning point in terms of physical environments shaped by information technologies, movement, network systems and the global capital as an alerting force of these factors. As a result of these new tendencies, the nature of cities and daily livings has been changing rapidly with respect to the concept of internationality (Erbaş Gürler, Erdem, 2006). It is obvious that one of the most important consequences of these changings can be seen in the transition from simplicity to multiplicity in every case of urban context (life, settings, social order, cultural revolutions etc.). The idea of multiplicity provides a new tool for reading urban structure from its different and overlapping layers. These layers are the abstract form of the networks system in the urban nature. Networks of transporation, electronic communication, production and consumption and networks of infrastructures have been creating new urban landscape which includes daily livings of contemporary man. Begining with the globalization process, urban systems are started to develop in a way in which all the local characteristics are minimized or as an public opinion maximized in to the universal values.

The scenarios which are developed for the 21<sup>st</sup> century city development are concentrated on the creation of better and healthier environment and also create a world of image that reflect the dynamic and shiny face of the new capital world system. The organization and the design of the urban spaces become a political and advertisement issue for the developed city center. As a result of the current trend of the city development, the metropolitan areas are transformed itself in to the one and the same vision (Figure 1, 2, 3).



Figure 1. Levent at night, Istanbul ( http://www.istanbulprincess.com)



Figure 2. Manhattan at night, New York (<a href="http://www.creative.gettyimages.com">http://www.creative.gettyimages.com</a>)



Figure 3. Tokyo at night, Japan ( <a href="http://www.creative.gettyimages.com">http://www.creative.gettyimages.com</a>)

Developments in the technology and construction industry make it possible to settled down every zone of the world, skyscrapers are everywhere in the city center, fashionable residential districts, parks, shopping centers are the new visions of the contemporary metropolis. Today cities are physically shaped by the solutions that

respond the same requirements, same enjoyment and same taste of the modern man. As a result of these new tendencies cities are faced with the identity crisis.

The local characteristics which are specific for every place or region are being ignored to correspond the new urban landscape. Maybe in the context of design field, the most important question can be occurred as what we understand from the term of landscape within highly complicated and interconnected urban system?

It is obvious that parallel to the new world system, the landscape idea in different scales are started to change with respect to new urban dynamics. This multiple character of the urban system required more complex interrelational solutions through land because of the dispersed charecter of the urban nature. In general, the term landscape is used to describe the human releation to the land. Land as a unifying base plane, people as an occupier of the nature, natural cycles as a physical data and the interreleations between those parameters create the landscapes identity (Figure 4,5).



Figure 4, 5. Cultivated Land (Taking Measures Across American Landscape)

On the other hand, the architecture of the landscape is basically concerned with the shaping material landscape to enhance human experience. The variety of the material landscape, include natural cycles, man made structures, synthetic process etc., can be assessed the reason for the pluralistic language of the landscape. On the other hand, the landscape idea is the reflection of human releation to land so it covers all the traces that are given by man from the beginning of the civilization period. Thus, it could be evaluated as a cultivated land created by man for his own desires and requirements. So the landscape of man is the reflection of his culture, his knowledge and his dominant power upon nature. That makes "landscapes" site-specific and society-specific. But today, there is a great shift toward the disciplines that is responsible for shaping the modern man's environment in terms of new concepts that includes environmental and sustainablity issues. Especially begining with the industrilization period, growing effect of environmental crises forced the design disciplines to produce new solutions for recovering the spoiled urban character. Since the date, landscape architecture and the issues that concern environmental design has become popular because of their attitude toward natural phenomenons. Nowadays landscape architecture has expanded its boundries and context.



Figure 6, 7. Barrel Warehouse Park, Canada,2001, Plaza del Desierto, Spain,2002 (Ultimate Landscape Design)

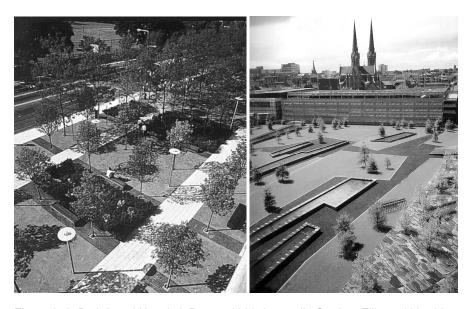


Figure 8, 9. Beth Israel Hospital, Boston 1996, Interpolis Garden, Tilburg, 1997-98 (Dictionary of Today's Landscape Designers)

Beyond the naturalistic approaches, it creates its own language which is more urbanistic and more stylized. In addition to the traditional notion of parks, gardens, squares etc., in 21<sup>st</sup> century landscape architecure occupies with the undefined micro-scaled points including problems which are unrecognised by the other disciplines, so this performance defines a new design- interface. This can be considered as a recovering process in the base of ecology, aesthetics, technology, sustainability and human sociology. Within this urban sense as a part of the global process of change, design professions started to explore a new design language, or

a new style can be called international style, that fit the complex structure of 21st. century urban characters.

To sum up, we can say that although effects of globalization on environmental design provide a general recovery in terms of ecology, at the same time and oppositely feeds this new language with same lines, same solutions and the same elements. Therefore, this situation causes a uniform language and disrupts the unique character of landscape and urban that is site-specific and society-specific. As a final product, the living environment of 21<sup>st</sup> century occurs as a "flatten image" where all of the layers which enrich the local identity become the same and the one.

If a landscape charecter of any given place is shaped by the characteristics that identify the locality of the places (topoghy, climate, native vegtation,culture,people...) does it make sense to create an international style that can be fit for any different condition?

Although landscape architecture has highly intellectual and sophisticated background, today there is an important misunderstanding towards the term landscape in the popular culture and it is minimized to only a beautification process of the outdoor environment. In every society all over the world we can see the same familiar landscape scenarios that can be reflected as a concentration of natural landscapes. All of these international and same characters of landscape designs lack of a relationship to the concepts. Everywhwere we can see the same details, exported plants, materials etc. The vision is the same capitalist environments. Solutions can hardly be gathered from limited traditional understanding of the field, borrowed from foreign examples.

## TRANSFORMATION: THE IMAGE

In Turkey, the landscape phenomenon is used as an image just as a reflection of welfare and prestige as an environmental beautification process. Especially it is clearly seen that those 'design models' in gated communities. This situation has a great impact on the quality of environment in Istanbul. In the recent development strategies, the city of Istanbul has expanded through the periphery by creation of gated communities. Those gated communities are the part of the trend of suburbanization that is based on the creation of self-contained, separate communities with carefully constructed identities. They are also a part of the typical patterns of the rapid spread of proprietary urban communities in 21<sup>st</sup>. century.

The recent examples of gated communities are shaped by global-economic changes, marketing strategies of developers and the spreading of architectural concepts and life-styles by international migration (Blakely and Snyder, 1997).

A general definition can be given as "physical privatized areas with restricted rules and entrance where outsiders and insiders exist". Gated communities are the fastest growing housing types of the 21<sup>st</sup> century. There are many gated communities with differing degrees of amenities, exclusivity and security (Gooblar, 2002). Gated communities radically transform not only physical but also social urban environment. These transformations lead to increasing segregation and on the other hand to

homogenous communities which act like clubs, affect the diversity and multiplicity in cities.

Gating a housing estate is a mechanism to protect property values from being affected by changes in the city. For residents gated communities are lifestyles choices. For many planners, they represent a physical withdrawal from civic and urban life (Gooblar, 2002). For developers, gating a housing estate is a way to market a property as a more exclusive. Developers build gated communities to meet niche markets; demand for security by designi for prestige living and for life-style of community living (Webster, 2002).

Turkey met with the phenomenon of gated communities in 1980's by socio-economic changes related to globalization and restructured laws. Gated communities first appeared in a coastal zone of Turkey by seasonal use of houses. But today gated communities spread mainly in big cities because of prestige. Istanbul, the most populated city of the country has the most of the housing demand and attracts most of the private investors, to meet the demand for housing (Gülümser,2005).

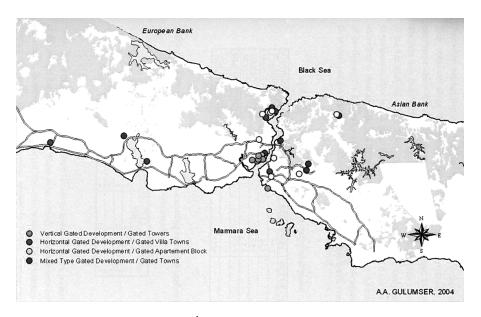


Figure 10. Gated Communities in Istanbul (Gülümser, 2004)

Parallel to this new demand for housing, the designs of these areas have become a crucial issue. Maybe the most important problem is the physical settings of these areas in urban pattern, because these areas are always create their own character, own community, own system and landscape which is unrelated to the urban system and local site characteristic. We can say that these settlements are the repetition of the same materials, buildings, services etc. in different combination. Also they have specific planners, architects and landscape architects who are responsible for the

creation of this environment. If these specific areas are owned by some groups and the high quality criteria's are come in to first stage then how the landscape character should support these total system?

In most of these communities the clients want to reach to have the opportunity for living in an environment that reflects the global outdoor image of the high quality standards. The high quality living standards are indicated the same tendency that does not fit the reality of the physical site characteristics. The climate (especially temperate), geography (seaside) and material (vegetation, such as tropic plants etc.) of the one unique place.

These exported landscapes are used generally as a marketing strategy of gated communities to attract clients and to increase the sale rates (Figure 11). Thus, these exported images started to transform landscapes in terms of physical and also contextual and so these transformed landscapes started to transform the urban character and city itself.

Thanks to the ornamented names of these communities (see the name list) that cover often a landscape term, the landscape design and context are used as a fake transforming material.

In fact, in this situation landscape doesn't a real recovering or giving higher environmental quality material. Even oppositely, local landscape character of places is spoiled and so an important urban component and local urban identity are loosing. The other important point is physical and contextual relation in urban patterns .In most cases, these complexes are situated in the urban pattern as a patches which are isolated with separator walls and the the functions and linkages within the urban pattern are ignored. Although these complexes have a specific user groups, it should be considered as a part of the urban landscape .

Today the concept of globalization and the reflective tool of the "internationality" have been transforming even the landscapes which are strongly rooted to the land, local characteristics and human culture. As a final product, the urban character is becoming more uniform with respect to the internationality of the landscape design issues. At that point, the most important task of the environmental design professions should be understanding of the local potentials of the sites and using this potential as a tool for recovering urban surfaces and collaborate the environmental character. Another important point that to gain the ability of integrating those international contemporary language with the locality. Therefore in 21st. century new landscape should be evaluated as a "unifying surface" that links all complex dynamics of urban system.

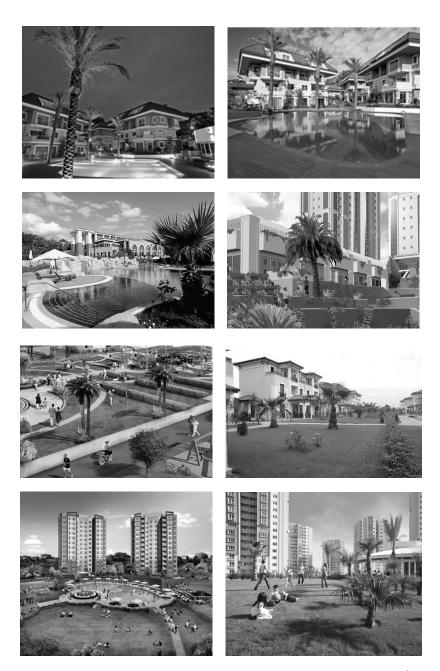


Figure 11. "The Image": Outdoor images of some gated communities in İstanbul (Sources: emlak.milliyet.com.tr, hurriyetemlak.com, agaoglu.com.tr, alkent2000.com.tr, soyak.com.tr, uphillcourt.com)

#### NAME LIST OF SOME GATED COMMUNITIES IN ISTANBUL

Yeşil Vadi Evleri – Green Valley Houses

Ardıçlı Evler – Houses with Juniper

Royal Park Residence

Yeşil Yamaç Sitesi – Green Hillside Complex

Palms Residence

Bavarian Gardens

Suadiye Sahil Park - Suadiye Coastal Park

Selale Evleri-Waterfall Houses

Palmiye Evleri- Palm Houses

Bambu Evleri – Bamboo Houses

Manolya Evleri - Magnolia Houses

Lalesehir- TulipCity

Flora Evleri – Flora Houses

Uskumru Köy Koru Villaları- Uskumru Village Grove Villas

Dokuz Palmiye Evleri- Nine Palms Houses

Durusu Park Evleri- Durusu Park Houses

Yonca Evleri - Clover Houses

Gizli Bahçe Konakları – Secret Garden Houses

Gümüş Vadi Villaları - Silver Valley Villas

Hasbahçe Evleri- Hasbahçe Houses

Sardunya Evleri – Geranium Houses

Kalamış Koru Sitesi – Kalamış Grove Complex

Park Mava

Ömerli Park Villaları - Ömerli Park Villas

Aquacity

Koru Konutları – Grove Houses

Göztepe Park Residence

Çam Konaklar - Pine Houses

Şelale Village – Waterfall Village

Yılmazlar Şelale Evleri – Yılmazlar Waterfall Houses

Bahçeşehir - Gardencity

GreenHill

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## TRANSFORMATION OF ANKARA'S URBAN OPEN SPACES: A CASE STUDY OF THE CANKAYA BOTANICAL GARDEN

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#### ABSTRACT

In Turkey, effects of urbanization on the planning approaches and the way these approaches were realized in life in the environment after the foundation of Republic and the process after that time has been divided into three planning periods as 1920-1950, 1950-1980, 1980-.... After the foundation of the Republic, rapid unplanned growth of Ankara necessitated development plan. Between 1920 and 1950, two development plans were prepared for Ankara. The former is the Lörcher Plan in 1924-1925 and the latter is the Jansen Plan in 1932. The next planning period, between 1950 and 1980, has been shaped as reflections of passing to multiparty system. In this period, Uybadin-Yücel Plan was planned in 1957 and the Ankara Metropolitan Area Development Plan Bureau (AMANPB) was founded in 1969 but the project was prepared in 1980. There is eleven years time interval between these two plans, in which the Çankaya Botanical Garden was planned and implemented. The Çankaya Botanical Garden is the first Botanical Garden of Turkey that was designed by Landscape Architect Yüksel Öztan and implemented between the years 1971-1972. The aim of the study is to discuss the effects of social and physical changing process on urban open spaces between the years 1950-1980 with reference to the Çankaya Botanical Garden in Ankara framework. Moreover, in the scope of this study, planning and implementing process of the Cankaya Botanical Garden will be discussed as the early reflection of changing approach of academics, architects, city planners and landscape architects in production of urban open spaces at that period.

**Keywords:** Urban open spaces, Transformation of urban open spaces, 1950-1980 period, Ankara's open spaces, Çankaya Botanical Garden

## INTRODUCTION

After the foundation of the Republic, Ankara was chosen as the capital city and its rapid unplanned growth necessitated planning of Ankara as a whole. Between the years 1920-1950, two development plans were prepared for Ankara. Firstly, Lörcher Plan was prepared in 1924-1925 and Atatürk Orman Çiftliği (AOÇ) is the one of important implementations of this period. The latter was the Jansen Plan in 1927-1932. The Jansen Plan suggested a structure that gave high priority to continuity of open urban space. With this approach, during the development of Ankara urban open spaces became an important part of urban design for the first time in Turkey. The

next planning period, between the years 1950-1980, was shaped by the reflections of passing to multi-party period. In this period, Uybadin-Yücel Plan was prepared in 1957 and the Ankara Metropolitan Area Development Plan Bureau (AMANPB) was founded in 1969. During this period, squatter development and the construction of illegal structures began. Green spaces were decreased; rivers were closed in order to construct roads and infrastructure systems. In 1969 when the Uybadin-Yücel plan was canceled, AMANPB was founded but the project was prepared in 1980. Throughout these three periods that will be investigated in this study, as well as urbanization, the formation of open urban spaces continued, however, in a different way.

# FORMATIONS AND TRANSFORMATION OF ANKARA'S URBAN OPEN SPACES: A HISTORICAL EVALUATION

In Turkey, effects of urbanization on the planning approach and the way these approaches are realized in the environment after the Republic is divided into three planning periods as 1920-1950, 1950-1980, 1980-.... In this part of the study, throughout periods before the establishment of Republic, 1920-1950 and 1950-1980 will be investigated. Since, during these three periods, urbanization as well as the formation of open urban spaces continued however, in different way.

## **Urban Open Spaces in the Period Before 1950**

Meaning of the recreation differs for different societies through time. Turkish society has been in a close and respectful relationship with nature throughout history. However, they did not have much need to establish recreation areas since the natural environment was close to the centers of small towns. After the Republic Ankara that was seen as a symbol of modern Turkey, began to develop because the population increased rapidly. It was a total transformation process for giving up the Ottoman life style and gaining a sense of national identity. Therefore, Ankara would symbolize the Turkish Republic and desired way of life. Parks in this period were designed for spreading the ideology of the republic and restructuring of the society to adopt the new way of life. That's why, it must be said that ideologies and conditions, underlying this process affected the form of urbanization and its reflections in life. In this part of the study urbanization and development of urban open spaces in Ankara until 1950 will be investigated under three parts according to development plans of the period.

*Urban Open Spaces Before the Establishment of Republic (.... -1923):* Western origin data were intensively imported to Ottoman culture during the Tulip Era (1718-1730). According to Tanyeli (1996), these imports can be seen as the first steps of Modernization, but real modernization began when western origin data were also adopted in addition to our ideological problems. Although transformations of big cities like İstanbul, Thessaloniki and İzmir started as early as the Ottoman times, Ankara started Modernization only after Republic. Therefore, Ottoman traces did not appeared in the urban open spaces of Ankara in the history.

Before 1924, when Ankara became the capital of Turkey, it was a village and open and green spaces consisted of empty lots, courtyards of houses, vineyards,

agricultural areas, graveyards and Millet Garden as the only park of this period. There were ten acacias that were planted by Agricultural School, a pool in the middle and a wooden theatre house in Millet Garden (Memlük, 1989). Although Millet Garden was the important area of this period, it lost its popularity with Republic and instead of its place first shops were built and the later 100.YII (centennial) building was constructed. Using this "demolished & constructed" method the only open space belonging to the period before Republic was erased from Ankara's urban open spaces. Furthermore, it is known that old Ankara citizens used edges of Hatip creek and Incesu river as picnic areas. However, these spaces could be used only by men and open to women only on Fridays and on festival days with their families.

**Urban Open Spaces in the Lörcher Plan Period (1925-1932):** After the foundation of the Republic, rapid unplanned growth of Ankara necessitated a development plan. Lörcher plan in 1925 became the first step in the planning of Ankara. The first steps of this planning activity were construction of buildings in small groups, construction of roads, and foundation of AOÇ one by one independently. AOÇ and Çubuk Dam were two implementations of this period. Therefore, AOÇ is the first recreation area of Ankara in the early years of the Republic.

Urban Open Spaces in the Jansen Plan Period (1932-1938): The administration of the Republic began the Modern urbanization as the continuation of the radical westernization movement. Therefore, many foreign architects and planners were invited to Turkey. In 1927, Prof. Herman Jansen won the development plan competition, which was announced by central management. The Jansen plan suggested a structure that gave high priority to continuity of open urban space rather than to numerical values and division of ownership. The Plan examined the resource potentials and natural data correctly and suggested a system for urban open spaces. This system consisted of rivers, creeks, valleys, hills and green strips surrounded of city. With this approach, during the development of Ankara urban open spaces became an important part of urban design for the first time in Turkey.

Big open spaces such as Gençlik Park, Güven Park, Hipodrom, 19 Mayıs Sport Site, Golf Area, Ankara Citadel Park, Çubuk I Recreation Area began to be used as complementary elements of urban open spaces. The approach of this plan period became characteristic of reevaluation of urban open spaces and integration of them into the plan.

Gençlik Park is a very successful implementation of this planning period in Ankara. It has become the first planned park of Ankara and its central situation was gave its citizens an opportunity to access form everywhere in the city. Gençlik Park and Lake Casino had been popular spaces and were used frequently by prominent people for a long time until the park became a fairground. After the Jansen plan period, green spaces was 15.5 m², park and child-park was 12.14 m² for each person that have been the peak values of the Republic period (Oğuz, 1998).

## Urban Open Spaces in the Years 1950-1980

With the emerging interior and exterior conditions caused by 1929 World Economic Depression and World War II (1939), there were sometimes ruptures of the urbanization structure and changes in planning goals. However, in spite of these negative effects, planning approach of this period continued to affect physical structure of urban area until 1950. In 1950s, the increase in the difference between urbanization and the speed of planning caused problems on urban space, which were tried to be solved by populist politics after passing to multi-party system. Therefore, the urbanization process was prone to unplanned development and during this period, squatter development and illegal structures construction began. Green spaces were decreased; rivers were closed in order to construct roads and infrastructure systems. These implementations were carried on without thinking about urban space as a whole. Moreover, open urban spaces that were planned and developed with the Jansen Plan were destroyed on a large scale. Besides, perpendicular and densely construction type was preferred for decreasing the costs of infrastructure. This caused the lack of open spaces that are necessary for modern urbanization. As a result of these implementations, today many city squares of Ankara are used as traffic islands. In this part of the study, urbanization and development of urban open spaces in Ankara between the years 1950-1980 will be investigated under two parts according to development plans of the period.

Urban Open Spaces in the Uybadin-Yücel Plan Period (1957-1969): In 1955, a new competition was started by Ankara Developing Director. The plan of Raşit Uybadin ve Nihat Yücel was selected among many others and it began to be implemented in 1957. It was thought that population would be 750 thousand in 2000 but, as a result of the rapid increase of population, while the final project was being prepared by Uybadin-Yücel, Ankara Developing Director made some changes on the project. For this reason, the city had to be planned for 1.500.000 people in the same boundaries by Uybadin-Yücel. This caused an increase in the number of the floors and illegal developments in public lands such as squatters (Oğuz, 1998). Moreover, urban technical and social infrastructure services became insufficient. Although the plan had some green area suggestions such as Incesu Dam and Animal Garden. Olimpic Area and Rider Sport Club which was planned to be constructed on AOC, and Hippodrome in Söğütözü these suggestions could not be realized. Finally, the plan could not provide the increase of green areas. Therefore, the user density on the existing green areas increased due to the increasing density of the city. Consequently, according to AMANPB research (1970), at the end of this planning period the amount of green area for each person had decreased to 0.5 m<sup>2</sup> from 15 m<sup>2</sup> (T.C. Imar Ve İskan Bakanlığı, 1977).

Unfortunately, development occurred in the Uybadin-Yücel Plan period and change in the ideological frame after the 1950s were reflected in the urban open spaces. As a result of the populist policy of this period, although the importance of valleys was emphasized and they were suggested as open areas by Jansen, illegal development rapidly increased. Therefore, valleys of İncesu River, Bent River, Çubuk River and Macun River have been filled with squatters.

Urban Open Spaces in the Ankara Metropolitan Area Development Plan Office Period (AMANPB) (1969-1984): After three plans experiences, which were selected with the help of competitions, in 1969 AMANPB was founded depended upon Ministry of Public Work (Bayındırlık Bakanlığı). The Office had worked to analyze the existing situation of Ankara until 1975 and then made basic decisions and produced a development plan with these decisions. The plan was a structural and directorial project more than a development plan (Keskinok, 2002). In this project, especially the bases of valleys were separated for functioning as green areas and green strips around the existing settlement areas were suggested. Consequently, this plan had been approved in 1982, yet the office was closed in 1984. Therefore, it could be implemented for only two years. Altınpark, Atatürk Cultural Center, Abdi İpekçi Park and Kızılay Pedestrian Zone have been the urban open spaces whose implementation attempts began in this plan period.

Besides, since there was not any developing plan for Ankara during between the years 1969-1982, municipality had some attempts to produce urban open spaces. These attempts did not depend on the developing plan since AMANPB' studies to prepare developing plan continued till 1980 after the cancellation of Uybadin-Yücel Plan. During this unplanned period some urban open spaces were produced with the support of the municipality and especially academicians. One of the examples of these attempts is the Çankaya Botanical Garden.

## THE CONCEPT OF BOTANICAL GARDEN IN THE WORLD

Botanical Gardens are defined as institutions, where natural and cultural plants from all around the world are grown in an order according to their usage aims. They are used for doing different scientific research on plant kinds and educating them in a constructed environment about nature. On the one hand, they meet the need for recreational needs, on the other hand they provide information about botanic even it is limited and they facilitate scientific and cultural development of humanity for centuries. The first botanical garden in history was designed to bring medicinal plants together in the same place. However, the first example of a modern Botanical Garden was designed at Italian Universities Gardens' in Padua, Florence and Bologna in 1545. It was founded as a research center and it is still continuing its function completely with its original structure. Although in 16<sup>th</sup> century Botanical Gardens could be seen only in some European countries such as Germany, Holland and Italy, today the number of Botanical Gardens has been increasing rapidly in developed and developing countries. All these Botanical Gardens' sizes differ from each other and range from five to five thousand acres (Perçin, 1997).

Despite the fact that, Botanical Gardens have been categorized into three groups according to their functions and sizes, City Botanical Gardens, Botanical Gardens within schools and Botanical Gardens within scientific organizations, when looking at examples of different groups, some common properties can be seen as follows (Öztan and Perçin, 1994):

- The entrances and exits of them are under control,
- Plants in botanical gardens are labeled systematically.
- All botanical gardens have a herbarium, laboratory and library,

- All botanical gardens have a greenhouse for plants that grow in different weather conditions.
- They have staff to carry out the work.

#### THE ÇANKAYA BOTANICAL GARDEN

The area of the Çankaya Botanical Garden is on 60-decare land of Çankaya valley, as the other valleys, and this area in Jansen plan was considered as a green area for preservation from the development. It has a small size and it presents very limited opportunities to land using, but the microclimatic condition, the situation and the connections were the positive characteristics of the area. The area of Botanical garden has a strict physical tie with the city center since it is at the end of the Atatürk Boulevard, the main axis of the city. There is only four kilometers between the valley and new city center, Kızılay, seven kilometers between the valley and old city center, Ulus. The situation of the area gives opportunities to the citizens, universities and other scientific organizations to make a close relation at any moment. Öztan (2006) explains the history of Çankaya Botanical Garden as following:

- "... In 1950s Cankaya was a district where building of Embassies were constructed and citizens of Ankara who had high level income settled. Therefore it was the upper class district of Ankara and developed rapidly according to the development plan. In this period the Cankaya valley was planned as a part of green areas system of Ankara. However, there were not any designs used for the valley and it became a gathering space for addicted and homeless people, as other empty valleys. Therefore, Municipality of Ankara wanted to develop a plan for this area in 1962. A competition was organized for Çankaya Valley under the title of Çankaya Touristic Facilities. However, the result of the competition was not implemented and the Municipality waited until 1970. In 1970 the new president of Municipality, Ekrem Barlas, thought that it was time to control the area, therefore he asked to the director of gardens to do some research. As a result of the research, the idea of Yüksel Öztan was found suitable for the area. He suggested to the first Botanical Garden of Turkey, therefore, the President wanted to have an interview with Yüksel Öztan. As a result of the interview, in 1970 Yüksel Öztan began to land studies..."
- "...The Botanical Garden Project was finished and implementation was begun in 1972 (figure1). Before the implementation, project and report hang and waited on the entrances of the area to give information about what would be done in this area. After two and a half months, the project was begun to be implemented. At the implementation process Agricultural Engineer, who was working at Gardens Directory, became responsible of implementation, since the designer for the project was in Adana as a founder president of Çukurova University Department of Landscape Architecture..."

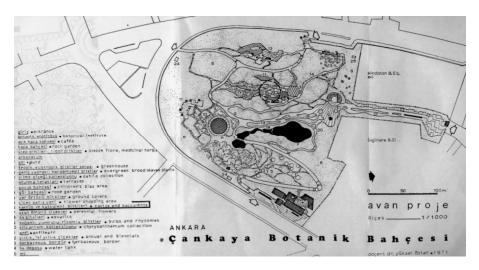


Figure 1. The Project of Cankaya Botanical Garden (Öztan, 1971)

According to Öztan the implementation process was carried out too fast. Therefore, some detail works were started before the detail projects were not completed. Moreover, the designer of the project could not come to the area frequently and it caused some uncontrolled development in this process. Some parts of the Botanical Garden were not applied in harmony with the project however some parts were not implemented, since the president wanted to finish this project until the election. As a result Botanical Garden was finished in line with his preferences but, the presidency could not be elected again. Ekrem Barlas could not be chosen again and new president neglected the Botanical Garden, because it was the the work of Ekrem Barlas, therefore, the project could never be completed. Öztan (2006) explained those days as follows (Öztan, 2006):

"...Today whatever you see in the Botanical Garden was implemented during the period of Ekrem Barlas' presidency, the next president did not want to continue the project, which had a great impact of Barlas and the Botanical Garden remained incompleted work. The area is uncompleted work for me that was done with compulsion. If the implementation of the project was completed successfully, the number of Botanical Gardens in Turkey would be increased..."





Figure 2, 3. The Çankaya Botanical Garden.

Although, in 1969 AMANPB was founded, there was any development plan between the years 1969-1982. Moreover, the Office was doing land research, when the Botanical Garden was being designed by Yüksel Öztan. Haluk Alatan the director of the Office, explains this period and implementation of the project by this way (Keskinok, 2002):

"...Ekrem Barlas the presidency at that time, asked me "What do you suggest?" at the first days of his presidency. I suggested that he should implement the Botanical Garden whose project was already finished up..."

#### THE PLANNING AIMS OF THE CANKAYA BOTANICAL GARDEN

With the foundation of the Republic, Ankara began to be seen as a symbol of modern Turkey and it began to develop according to development plans, which were designed respect to the western norms. Although Botanical Gardens were seen as important element of open spaces system in western cities, there was not any attempt to design the Botanical Garden in Ankara until 70s. Therefore, Çankaya Botanical Garden was an opportunity for attracting attention of planners, citizens and administrations by Yüksel Öztan. In spite of certain negative characteristics of the area, Öztan wanted to design a Botanical Garden anyway. Öztan (2006) explained the situation as follows:

"...The area of the Botanical Garden is small for a city Botanical Garden, but I wanted to design a Botanical Garden to attract people attention to this issue. Therefore, I thought that this project should be done as an opportunity in hand..."

As it mentioned by Öztan (1972), Çankaya Botanical Garden were not only design for really professional users, but also for citizens cultural and recreational needs. Considering the small size of the area and the green area needs of the city, Ankara Çankaya Botanical Garden was built to serve its visitors in a multi-sided way. Öztan

explained the multi-sided functions of Çankaya Botanical Garden as follows (Öztan, 1972):

- With regard to city planning,
- With regard to education,
- With regard to scientific research.
- With regard to introduction and distribution center,
- With regard to human-nature relations,
- With regard to gathering space for common people,
- With regard to green area system of Ankara,
- With regard to landscape architecture,

#### CONCLUSION

Urbanization in Turkey, especially in Ankara is to be the result of the modernization process. Therefore, it can be said that ideologies and conditions, underlying this process affected the form of urbanization and its reflections in life. In Turkey, the effects of urbanization on the planning approaches and the way these approaches realized in life after the Republic has been divided into three planning periods as 1920-1950, 1950-1980, 1980-.... Between the years 1950-1980 has been shaped as reflections of passing to multi-party period, local managements did not want to continue the work that was begun by the last management. As a result of the political rivalry, new managements neglected the work of the last management and the Çankaya Botanical Garden was one of the neglected, unfinished works in Ankara. Therefore, although it was planned to respond to one of the missing cultural activities of the city, it could not be more than a passive recreation area like the other recreation areas of Ankara. The reputation of the Çankaya Botanical Garden also affected from this situation that it has remained as the Botanical Park in memories of the citizens. Besides, even if it was uncompleted, it shared the usage density of the other green areas by attracting the large number of people.

Consequently, although the Çankaya Botanical Garden could not reached, it must be counted as the early reflection of the changing approach of academics, architects, city planners and landscape architects in production of urban open spaces at that period. Additionally, it can be considered to be a successful attempt of Landscape Architects in the modernization process of Turkey. Therefore, it could be said that as a result of this development happened between the years 1950-1980; urban open spaces were tried to be extensive with active recreation habits as well as to passive recreation habits of people in our country. Today, the necessities of giving the identity and character and creating meaningful urban open spaces are the most important issues. Hence, the Çankaya Botanical Garden must be counted an the early example of this approach since one of the designing aims was to make a remarkable area in the name of city identity thirty-five years ago.

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## THE EFFECTS OF LIGHTING ON THE SILHOUETTE OF A CITY: THE CITY OF SAFRANBOLU

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#### **ABSTRACT**

Lighting is one of the most essential needs for human being. A number of developments have occurred in the sector of lighting since the invention of the light bulb. The importance of lighting applications for perceiving the city silhouette and that for the aesthetic and functional necessities of natural and cultural landscape elements has increased.

Historical cities have carried the traces of different cultures and life's and the character of the cities with details and because of their rich formation including general silhouettes and different styles and forms, the historical cities have been the indicator of the creativity of the societies. The city of Safranbolu a historical Turkish city having an international importance, due to its social, cultural, scientific and economic aspects which has been designated by UNESCO as a city of world heritage for its historical, natural, architectural and urban characteristics.

In this study, that integration of natural areas with architectural elements composing the historical landscape of the city and that contribution to the silhouette of the historical city functionally by emphasizing the architectural individuality and esthetical value of it is intended by proposed lighting procedure with lighting devices. For that purpose, a lighting procedure is proposed for perceiving the city of Safranbolu which has a rich cultural heritage with natural and historical properties in the landscape context.

Keywords: Historical cities, World heritage, Safranbolu, Landscape, Lighting

#### INTRODUCTION

Light reflecting life and confidence provides continuation of social relation and provides orientation of eye by defining the border of the space. By this way, it provides to perception of details of the space. Lighting of the urban space and exterior parts of the architectural buildings increases visual comfort on the people during perception of the physical environment.

The perception of the space at night is possible by the way of perception of physical environment as a whole. Proper lighting of the historical urban pattern is essential in the context of history and culture and providing continuity. Has an importance of introduction and improvement of these values. Unfortunately, in most of historical cities perception of the silhouette of the physical environment at night is inadequate.

That the perception of unique architectural buildings and the city silhouette that represents the historical cities is very important in the sense of the maintenance of these values. For this reason, it reflects the image of historical cities which has cultural and environmental meaning with some kinds of light, scale, proportion, space movement, contrast, texture and aesthetic (Arredamento, 1999: 1).

All parts of the Anatolia are covered with rich, natural and cultural values. The physical view, rich formations and skillfully details contain aesthetic and also functional factors of historical cities. As well as its reflection of materialistic and moral historical values until these days, Safranbolu has the evidence of Anatolian civilizations is a good example for historical preservation.

Cultural heritage inherited from early generations can be protected and kept alive in the process of changing. Providing protection and development balance, emphasizing identity of historical city of Safranbolu had the view of Museum city and included in the world heritage list by UNESCO and contribution to city silhouette by suggestion for urban spaces and architectural buildings is aimed. For this purpose, the effects of the lighting being done and should be done in order to transfer the town center- çarşı, Safranbolu to new generation by protection and development on the silhouette and perception of the city are examined and some suggestions are improved.

#### **Urban Environment**

Man has been interacted with its environment for different purposes since its occurrence. The biggest physical indicator of this interaction exists in cities. Urban environment composes continuity with not only its material values but also its secret meanings and buildings being symbol.

Cities get value and meaning according to approaches, necessity of people and richness of their perception. For this reason, not only functional and aesthetic spaces effecting people in physical and psychological manner but also, sensible spaces for environment and nature are required. Environments having aesthetic quality are important in the aspect of physical and sensorial perception composed by it on the people, cultural contentedness and visual comfort (Keles, 2002: 2).

There is a strong relation between environment and perception. Urban environment and its components are perceived in their functional and visual quality according to people cultural values and their individual attitudes besides cultural factors, topography, climate, environmental values, etc. are effective in the perception. The visual value of the environment renders it livable (Susmus, 1999: 3).

Night lighting of the city and its silhouette is important for composing an environment suitable for social structure and identity with sensibility of aesthetic of nature in respect of balance improved by person and society in order to maintain their life in well conditions

#### **Importance of Historical Cities**

Historical cities providing to maintenance up to now and to transfer facts of early civilizations; such as, custom, life style, thought, art to next generations, transfer the architectural heritage, physical view, life value and aesthetic sensibility of civilization as a symbol.

Historical environment is a pattern sheltering various arrangements with its general fascinating view, various rich formations, narrow circuitous streets giving chance of fine surprises and attentive workmanships.

There is a balance between proportion and dimension in historical environment and architectural buildings. Instead of residential buildings common buildings having symbolic values were built bigger with more careful workmanship and high quality and sustained materials. City silhouette characteristic for the city is composed by togetherness of elements dominant to the general view of the city. This is the most significant properties of the city landscape (Keles, 2001: 4).

By restricted perception of the historical environment, i.e. considering the historical city without its surroundings, buildings constructed recently around the historical environment have negative effects on the perception of the historical city and the city silhouette

Contemporary culture is a value actuating sense and thought, admitting of a more creative medium with using whole potential of history. In order to emphasize existence of historical city, it should composes entirety with its buildings and environment in consider with continuity principle.

With respect to natural system and its process in the uniqueness of the city, it is obvious that functional, economic, aesthetic values and space quality in city get importance in relation with lighting design. Thus, this begins to be a connection for gaining of values; such as, identity, consciousness of being citizen, aesthetic evaluation to urban life (Korkut, 2000: 5).

## Lighting Practices Using in Historical Cities (The Quality and the Quantity of Lighting)

Lighting of historical spaces and buildings in a good and right way is very important for introduction of cities nowadays and increasing reusability of them. Suitability of lighting projects of historical buildings to originality of them, but at the same time using whole chances of technologies is one of the most important factor increasing functionality of historical buildings.

Lightings applications on historical buildings should be suitable for originality, function and quality of building. Night view of well lighted buildings has an attractive effect on people (Oguz, 2003: 6).

While the visualization of the objects is affected with the power, slope, and color of light, diffusion of light is affected by atmospheric conditions (Koc, 2004:7). There is a dazzling brightness in lighting area with powered light source. In result of this, realizing the area clear is prevented.

Whole outer lighting lamps whose power is more than 50 watt should be curtained i.e. being not spread light above the plane which is exist. Light diffuse from an armature without curtain illuminates wider area than desired area unnecessarily. Instead of this, it is possible to lighting with less powered lamps through above to below. And also by this way, heat sourced by lighting from above city is decreased (Bilim ve Teknik, 1999: 8).

Color of objects, light coming to eye by reflection is related with spectrum properties of light illuminated of the objects. For this reason, careful selection of spectral structure of light is important for the situation necessity realizing colors right and detailed (Oquz, 2003: 6).

There should be the lighting in quality of that whole details can be seen easily, surface and texture formation should be realized correctly, their color should be selected well and illuminated objects can be provided to look in a long time not disturbing the eyes

Required strength of illumination of the buildings or objects to be lighted should be identified in lighting quantity. In this situation, illumination quality and quantity reflecting originality of objects should be calculated well. In natural lightings because of people' tendency to warm and saturated colors, this is a very important character for lighting of historical buildings (Oquz, 2003: 6).

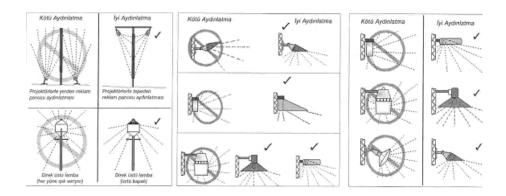


Figure 1. Wrong and Correct Lighting Techniques (Bilim ve Teknik, 1999: 8)

Contrast between luminous and obscure areas is used for making transition between different spaces clear and preventing monotonousness by creating surprising effects. Some pointer lightings play an emphasizing role in setting up a physical and visual connection of space.

Artificial lighting applications lately have improved greatly by using improved technological possibilities. In these applications, wholeness in the building has been tried to achieve by producing suitable lighting elements for building whatever quality of the building has been (Oguz, 2003: 6).

Urban formations which are not planed, not oriented and not inspected may cause chaos and deformation of the character of the historical structures. For this reason, lighting increases life and space value of environment and objects composing it by affecting their quality in physical and aesthetic aspect with formation of design.

In lighting study of historical environments, observation points and city silhouette should be considered. Lighting should be planed in order to let historical settlement be focus, effect of developing structure in environment on silhouette should be prevent, there should be provide a wholeness between natural areas and elements composing architectural pattern.

#### THE MATERIAL AND THE METHODOLOGY

The city of Safranbolu a town of Karabuk in the west of the Black Sea region is the material of this study. Carrying on the Turkish city culture due to its structural and environmental formation that has been constructed for hundreds of years, the city of Safranbolu was selected as a material of this study. Positive effects of the light on the perception and the silhouette of the city, in particular the old district, are the main concerns of this study.

The literature survey on the topics, especially, related to the importance of the perception of the historical cities and that of the cities themselves was performed within the study. The survey also included the lighting applications on the historical cities. Official documents, photographs and field studies performed and the results have been collected and used in the paper.

Existent usage and site areas of the city were examined with the help of 1/1000 scaled protection aimed development plan of Safranbolu supplied by Safranbolu Municipality.

Using the observations, suggestions will be proposed for preserving and increasing the importance and characteristic properties of the historical and cultural assets of the city with proper lighting procedure.

#### THE NATURAL AND CULTURAL CHARACTERISTICS OF THE CITY

Safranbolu is a sample city reflecting all the qualities of the traditional Turkish social life and preserving the cultural legacy created trough its long historical past, within its environmental texture.

Throughout the history, a number of civilizations lived in the region where the urbanization is estimated to begin at around 3000 B.C.



Figure 2, 3. General view of Safranbolu; A view from Safranbolu

There are hills and mountains where the district is located. The lowest point is 300 meters and the highest point is 1750 meters high. The lowest point in the district center is 400 meters and the highest point is 600 meters. The area of the district is 1013 km² and a big part is covered with forests. Also the canyon forming a natural beauty makes the region attractive.

Being a typical Ottoman city survived on East and West Caravan route after the construction of the railways in 17<sup>th</sup> century, Safranbolu was declared as an "urban site to be conserved" and was included in the "World Heritage List" by UNESCO in 1994 (UNESCO, 2007: 9). Safranbolu has 1200 historical traces of total 40000 historical traces under protection throughout Turkey.

The Safranbolu houses are detached houses each of which has a large garden separated from the street with stone walls. The curvy streets, the blind alleys, the town centre-çarşı, the shapes, sizes, designs and interactions of the houses/buildings form the character of the city.



Figure 4. A view from Safranbolu

The most important thing that brings Safranbolu to the forefront in Turkey and the world is the Safranbolu houses which are an example of Turkish architecture. These houses are important due to their place in urban life and their architecture. In other terms, the Safranbolu houses are important structures of the Turkish urban life culture of the 18<sup>th</sup> and 19<sup>th</sup> century which had been formed for centuries and continue to survive in our modern urban life.

The Safranbolu houses are designed and built by considering the "respect for the environment" principle. The houses were designed such that both of the official buildings, the mosques and the work of arts of the city are in the view of the houses.



Figure 5, 6. A view from the Safranbolu Gümüş District (day time); A view from the Safranbolu Gümüş District (day time)

It is possible to see the historical buildings in its original environment. Cinci Inn, Cinci Bath, Köprülü Mehmet Pasha Mosque, Kazdağlıoğlu Mosque, İzzet Mehmet Pasha Mosque, Dağdalen Mosque, Tokatlı Bridge, İncekaya Aquaduct (arch), Clock Tower, Historical Fountains, Hidayetullah Mosque, Bazaars, arches are examples of the historical buildings (Safranbolu, 2007:10).

Although there exists lighting plans for the museum houses and preserved government houses a specific lighting plan in the sense of landscape has been prepared neither for the whole city nor for the other architectural buildings. It is not possible to perceive the whole city and the silhouette of the city at night. The traditional houses of the urban life in between the streets cannot be perceived in the darkness of the night. The present lighting materials either have a planned order and a color harmony. Consequently, the lighting poles in the streets cause visual pollution also in the daytime. They are one of the major obstacles for the perception of the historical buildings and thus the city. This situation has a negative effect on the continuity and the presentation of the city a world heritage.





Figure 7, 8. One of the electric poles in the city; One of the preserved streets, Safranbolu Mescit Street

#### **RESULTS AND SUGGESTIONS**

Darkness seems to be a problem in the sense of perceiving the open lands and the architectural buildings and also that of living on the land. However, by using appropriate lighting techniques it is possible to emphasize the form, silhouette and the geological structures of the city in the darkness. Since lighting allows the designers to create different emphasizing points on the silhouette of the city, correct lighting provides correct perception of the city.

Besides the important lands and objects, we focus on the less important lands and objects in the daylight. This complexity avoids someone to focus on the actual objects or targets. The confusing effects of the modern day structures can be suppressed by focusing the light on the actual objects and keeping them off the background in the darkness.

Lighting applications applied on open lands and architectural structures in the historical cities increase the efficiency of the use of the building and that also effects the perception of the whole city. The correct selection of the quality and the quantity of the lighting in illumination of the historical buildings is very crucial for the functionality of the building. These two lighting criteria should be paid attention especially in the lighting applications of the historical buildings. Visual and physical adequation of the historical city includes esthetical and functional elements that specify the characteristics of the city. These elements correspond to the perception of the protection region, view points, altitude, silhouette of the city, street-house texture etc.

It is convenient to use hot colors in lighting the outer parts (such as stone walls) of the buildings. The purpose is not the homogeneous illumination of every part of the building instead, it is the creation of an adequate ambiance for the proper use of the building (Oguz, 2003: 6).

That changing the direction of the light from the sky to the land prevents a light dome formed over the city which causes an artificial increase in the temperature, and thus that prevents possible early aging of natural beauties.

The lighting plans applied on and around the town center-çarşı should be considered the architectural and historical characteristics of the city, i.e. it should have a balance between the elements of architectural structures and that of the place. Finally, this balance should also contain general characteristic of the city.

The lighting of the open lands around the buildings and the city allows the perception of the historical elements of the city and make them attractive. This emphasizes the character and the importance of the architectural buildings and open lands of the city.

By approving extra lighting schemes, characteristic and publicly used buildings can be highlighted among the others. The open lands, public buildings, museum houses and the registered streets of the city should be lightening with adequate strength of illumination.

A lighting line should be constructed on the peripheral roads of the city and especially the mother roads to the city should be lighting such that the visitors easily realize that the road take him or her to a world heritage. With the construction of the view points and terraces the historical city landscape and the beauty of the city may better be perceived. Besides increasing the attractiveness, a focusing point for the panorama of the city can also be created by lighting the Hidirlik hill.

Natural characteristics, flora, topographic and geologic structures and characteristics, angle and direction of the tilts of the city are important parameters of the quality and quantity of lighting and they should be concerned and optimized in lighting applications

The view points should be constructed so that they become the limit for the upper sides of the light spectrum of the lightened objects. The horizontal lines of the light adjusted to allow the perception of the whole region.

A light spectrum composed of the light of daylight-yellow color focusing, from the cliff, on the center of the city not only allows the complete view of the whole city but also makes the object less complicated but more attractive. With such lighting system providing shadowy illumination, it is possible to get out of the most of the lighting poles and the electric wires and thus the city will continue to keep on its own historical view.

With cliff hillside illumination, the urban site the nature of which has been formed due to its geological structure will be perceived clearly. Also the proposed lighting system, with the lines of the light beam radiated from upwards to downwards, prevents both the dispersion of the light through the sky and an artificial increase in the temperature.

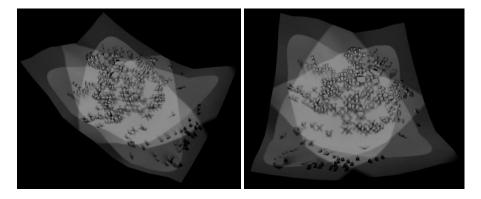


Figure 9, 10. The figures of proposal (Autodesk 3ds Max 8)

The use of the lands placed on the highest attitudes near the city centre-çarşı as a residential area damages the historical landscape of city. Images of the modern day houses badly affect the silhouette of city. The negative effects of the newest residential regions on the silhouette should be eliminated using the arrangement of illumination and if it is possible the contribution of these regions to the silhouette of the city should even be suppressed in darkness.

The lighting elements should be selected by considering their esthetical and functional properties. They must be arranged by both making the silhouette of the city, the historical buildings, and the characteristic beauties of the city explicit among the other structures and the design efficient. That using modern armatures within the city not only has an esthetically integration with the proposal of the lighting from the cliff, but also allows the historical structures to be more apparent.

Historical cities with their physical and visual perceptions have an importance in the sense that they make the people psychologically relaxed and culturally satisfied. Light has a contribution to form the esthetic designs throughout the physiologic and emotional needs of the people. The emphasis of the characteristic parts and the perception of the city should be made possible with proper lighting designs. That the

perception and the view of the city from all points is very crucial for saving and keeping alive the city.

Forming a continuing culture by using the tools of the modern life gives new solutions to the questions on the concept of lighting of the historical places. The city of Safranbolu reflecting its own qualities to the people by preserving the natural and cultural legacy throughout the history, will be more valuable and perceptible if the beauties of the city can be integrated with the silhouette of the city both in the darkness and in the daytime.

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### **LANDSCAPE**

Moderator: Saliha Aydemir

A Model for Using Perceptual Illusions in Environmental Design
Serap YILMAZ, Sema MUMCU

An Investigation of the Principles of Ecologically Based Recreation and Tourism Planning in Çalköy High Plateau Settlement (Düzköy-Trabzon/Turkey)

Zeynep Pirselimoğlu, Öner Demirel

Positive Effects of Native Flora on User's Environmental Preference:
A Sample of Trabzon City

Emrah Yalçınalp, Müberra Pulatkan, Mustafa Var, A. Gözde Ömeroğlu

#### A MODEL FOR USING PERCEPTUAL ILLUSIONS IN ENVIROMENTAL DESIGN

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#### **ABSTRACT**

One of the important problems in the process of urbanization is not having enough places for creating green areas as wide as in nature. The increase of population and the intense housing causes decrease in green areas in urban structure. As a solution for this problem with some design interventions small and fragmented green areas can be perceived as wider as and more natural than it is.

In this study a design model for solving the problems in urban green areas mentioned above was developed. Thus it was aimed to constitute green areas which have high visual qualities, high levels of preference and which are perceived as a part of nature. In order to achieve this, an analyzing method depending on perceptual illusions that can be used by design professions in landscape architecture was developed.

**Keywords:** Perceptual illusions, Urban green areas, Design interventions

#### INTRODUCTION

One of the most important problems in urbanization is insufficient green areas by reason of population growth and technological advances. Consequently life is less satisfying for many people who live in cities (R. Kaplan, 1988). Cause in many aspects nature plays a crucial role in everyday life of people. Natural environments fascinate human beings (R. Kaplan, 1983; S. Kaplan, 1977; Kaplan & Talbot, 1983). They like natural environments better than urban environments (Kaplan, Kaplan & Wendt; 1972). Contact with nature is a basic human need and a valuable visual environment plays an important role in this interaction (Kaplan & Kaplan, 1989; Hartig, 1993; Ulrich, 1986; Purcell, 1992). At the preliminary stage of this interaction, urban green areas (urban nature) that are near to the city-dwellers come on the scene. Urban green areas provide affordances for urban people to become closer to the nature and enable them to contact with nature, these areas supply the sense for exploring of human nature (Kaplan & Kaplan, 1978).

Influence of nature on preference is the most important indicator that shows nature has a vital role in urban context. Concept of preference was applied to determine

effects of green areas in urban context on humans. Researches, related to effects of green areas on preference and consequently how these green areas affect preferences related to the environment, are conducted and following are put forward;

- People tend to prefer natural over built environments (Ulrich, 1983; nopf, 1987; Kaplan & Kaplan, 1989; Hartig, 1993, S. Kaplan, R. Kaplan & Wendt; 1972).
- Levels of self-reported preference for natural scenes are so much higher than preference levels for urban scenes (S. Kaplan, R. Kaplan & Wendt; 1972, Ulrich, 1983).
- Kaplan & Kaplan (1989, 1998) point out the importance of experiencing everyday nature, termed also as a 'nearby nature'. Their investigation of people's perceptions and preferences for natural and naturalistic settings, gives particular attention to the issues of different independent spatial variables that influence landscape preference.
- Herzog, Kaplan & Kaplan (1982) have shown quite clearly that nature within an urban setting forms a distinct category in the minds of observers, a category rated higher in preference than all the other urban categories they investigated.
- A considerable amount of research has sought to operationalize human aesthetic values through systematic studies of preferences and other similar aspects of experience for different types of environments. One central issue in this research has been to find the physical attributes of scenes that result in the variations in preference. Four variables have been found to be important in preference; the degree to which a scene is natural or manmade, the extent of topographic variation, the presence or absence of water and the scale and openness of the scene with naturalness appearing to be the most significant (Kaplan, Kaplan, & Wendt, 1972; Kaplan & Kaplan, 1982, 1989; Purcell & Lamb, 1984; Herzog, 1985, 1987; Kaplan, 1987).

Thus it is known that nature in general is highly valued and that it can be used to improve urban environments. Not surprisingly, many attempts by planners to improve urban environments have involved introducing elements of the natural environment into the urban setting.

However green areas in urban environments exist in spaces out of built environments nowadays. Consequently these green areas turn into environments that are not perceived as deep and spacious unlike in nature, and environments which are not permanent in urban areas. But "depth and spaciousness" are one of the features which increase preference of green areas. Flaschbart & Peterson (1973), Gärling (1976), Hesselgren (1975), Horayangkura (1978) have determined that openness, depth and spaciousness are the most preferred features in landscape evaluation (Nasar, 1992). Craik (1970), Ulrich (1973, 1977) and Wohlwill (1973) have identified significant positive relationships between depth and aesthetic preference for natural scenes.

Depth/ spaciousness influence both the initial effective reaction to a scene and the ensuing process of cognitive appraisal. It is hypothesized that lack of depth (e.g., a visually impenetrable foreground immediately ahead of the observer) can be gross

ambiance that quickly elicits dislike and uncertainty with minimal cognition. These arguments are consonant with the finding that scenes having sharply restricted levels of depth are accorded low preference (Craik, 1970; Ulrich, 1973, 1977; Brush, 1978). Some researches related to the perception of urban green areas have researched effects of depth/ spaciousness on preference, but these researches do not suggest any solution about how areas which do not have depth/ spaciousness features shall be improved. Importance of designing a place which can be perceived as spacious by people is put forward by means of conducted researches. Therefore a method focused on perceptual illusion need to be evolved considering the fact that it can improve spaciousness feature of urban green areas and enable transferring the mystery of nature to urban environments. Aim of this method is:

- 1. To make people close to the nature by designating successful urban green areas because nowadays there is no integration with nature.
- 2. To designate an environment with high visual quality and appreciation level that is perceived as spacious and unrestricted by individuals.

In this context this model analyzes relationships between human and environment within the context of perceptual psychology and it emphasizes efficiency of senses and sensory illusions in the process of designing. A model, which is directed at evaluation of spatial effects of stimuli with perceptual illusions on users, is proposed. This model aims to solve the problems about urban green areas and to make the method that is evolved for solution, practicable for designers.

#### **EVOLVING THE DESIGN MODEL BASED ON PERCEPTUAL ILLUSIONS**

Illusion is a distortion of a sensory <u>perception</u>, revealing how the brain normally organizes and interprets sensory stimulation. Illusions can occur with each of the human <u>senses</u>, but visual illusions are the most well known and understood. Researchers have found also four basic causal classes of illusions: physical, physiological, knowledge, rules (Gregory, 1997). There are many types of illusions, some of which are of interest to the architect;

- 1. Objective illusions (geometric illusions)
- 2. Subjective illusions

Illusions of the first type are drawn figures in which the physical dimensions of size, shape, or direction are consistently misjudged (Fineman, 1981). Illusions of the second type arise from deficiencies in perception caused by such things as aftereffects of neural excitation and the internal excitation of the neural system (Gibson, 1966).

The art and science of design relies on illusions to attract the people's attention, instill a memorable impression, and promote an enjoyable experience. This perceptual experience is dependent on external forces (the physical features of the urban green area) and internal forces influenced by the people's past experiences, associations and demands. The designer, although not in control of the people's internal forces that form mental images of the green area, manipulates the external forces that include the green area forms, sizes, color and textures. The mind, which has the

capacity to organize these elements of design, requires the creative and cognitive participation of the people. The human being is impressed with things as they are perceived and not necessarily with things as they are. The designer offers perceptual clues that provide observer with the opportunity to create and complete mental images which are very often illusions (Polakowski, 1987).

Illusions can be catalysts for the creation of superb design. The designer should admit to the existence of illusions, use the visual puns that the mind and the eye create, understand their value, and consider their role and application in the design of an urban green area. Illusions can create a sense of depth/ spaciousness. Thus illusions related to length and area illusions of geometric illusions in literature and illusions used for designing space have been researched. It is supposed that some of them make a place perceived as more spacious than it really is. These are;

- 1. Lipps' principle of mechanical-esthetic unity states that we give to every space-form a living personality and consider the spatial forces created by the form's line, mass, and color to be real and dynamic. A circular space has a centripetal character; the spatial radial forces that are directed toward the center are perceptually dominant and overcome the tangential forces that have created the circumference or edge of the space. Consequently, attention is drawn to the center of the space and the apparent size is reduced.
- 2. Wundt states that the laws of retinal image and eye movement are responsible for illusions and not due to a deception or error of judgment. Vertical distance appears longer than the physically equivalent horizontal ones because the expenditure of energy is greater in raising the eye than in turning them through an equal angle in a horizontal plane.
- 3. **Illusions of interrupted extend**; Helmholtz square is an example of this sort of illusion. The interrupted direction appears longer than the uninterrupted direction (parallel with the lines). A square-shaped area with lines created by wall or plants that run parallel to the viewer appears smaller than lines running vertical to the viewer.
- 4. **Illusions of contour**; when certain figures which enclose identical areas are compared, and part of the boundary of one is missing, the dimension which is thereby undefined at one end is overestimated. Müller-Lyer considered that a square area with an open segment appear bigger than a square area of the same size that has the segment enclosed. Similarly, if the arc is straightened out to form half of a Müller-Lyer figure with outgoing fins, it looks more vaulted and therefore longer

Additionally subjective illusions can serve as design guidelines which create a sense of depth/ spaciousness. This group of illusions can be listed as;

1. **Illusions of texture**; Textures characterizing surfaces in the natural environment are very important in defining depth. Gibson's research has clearly shown that ground textural gradient can play a major role in depth perception and that the character of a textural surface affects he accuracy of depth estimates. Even textures preserve the sense of continuous sheet or surface between the observer and environmental elements that Gibson has shown is necessary if distance is to be

perceived accurately (Ulrich, 1983). Texture effect is obtained in green areas by means of two ways:

- Vegetation; Texture combination in vegetation makes place perceived as spacious. Transparency of light colored plants with fine texture make elements of background perceived fully, and thus it enable the distance between them to be seen consequently it causes the place be perceived as spacious and deep.
- Ground surface; Surfaces having many angles, a variety of forms and large contrasts between the size of its component parts present the observer with unordered high complexity that appears cluttered and small.
- 2. **Illusions of color**; Colors whose dominant hues are of shorter wave-lengths (blue, green) are retiring and those alive dominant hues of the longer wave-lengths (yellow, red) are advancing. The cool and light hues can help produce an effect of spaciousness while the warm color can produce a feeling of excitement and small.
- 3. **Illusions of plant** (Booth, Michelmore, 1990); Planting design is concerned with the creation of space. The structure or massing of plants influences the shape, form, size, and perception of space and thus the plants give character to the space. Therefore designers must take into consideration illusions that vegetation adds to a place. Depth and spaciousness can be achieved by considering the following features:
  - In order for a place to be clearly perceived as spacious, it must be divided into zones by means of different plant groups. When plant groups or a plant are in front of another and when plants blot out another plants, then the place will be perceived as spacious because blocking form, in front of the place, and blocked form, in back of the place, will add a sense of depth to the place.
  - In a place, color, texture and size of plants in a limited variety makes the area perceived as more natural and spacious.
  - Plants with dark green color and coarse texture constitute boundary effect and thus cause a place to be perceived as smaller than it really is, whereas transparency of plants with mild texture makes a place perceived as spacious.
- 4. **Illusions of topography** (Booth); topographic characteristics have the following effects on visual perception:
  - Concave areas; A place is perceived as more spacious, as the flat lands of these areas widen.
  - Convex areas; Downgrades on these areas create a barrier effect and this situation will make the place perceived as restricted and small.

Designers may create illusions by way of designing landscape elements according to the Gestalt Principles, and they can also use these perceptual illusion types directly. When designing urban green areas, plants will enable to shape out places, because they are three-dimensional, voluminous, intriguing, effective elements. Therefore plants can be embedded in green areas as an expression of shape. Consequently, to deal with combination of plants according to figure-ground relationship which was put forward by Gestalt psychologists, will strengthen effect of depth which is created by plants with their colors and textures. Depth by means of plants in an organization will be acquired with following features;

- 1. Covering
- 2. Transparency
- 3. Gradation of size
- 4. Gradation of value

Designs, which will be created by means of using all these illusions or utilizing their combination, may make urban green areas perceived as spacious and deep, and this model can serve as appropriate guide for the designer to use while considering the use of perceptual illusions and formulating an approach for urban green area design. Following criteria are produced in order to constitute a model which is based on this idea:

- 1. Criteria related to geometric illusions
- 2. Criteria related to subjective illusions
- 3. Criteria based on Gestalt Principles

Table 1. Criteria based on Objective Illusions (Geometric Illusions)

Geometric Illusions	Determined Diagram	Determined Criteria
Lipps illusion		Elements orienting towards to the centre of space
Illusions of horizontal- vertical distance		Vertical distances in space     Horizontal distances in space
Illusion of interrupted extent (Helmholtz square)		Horizontal platforms that divide space     Vertical platforms that divide space
Illusion of contour (Müller-Lyer)		Enclosureness     Viewing beyond boundaries
	$\cap \cap$	Space enclosing to inner side     Space opening to outside

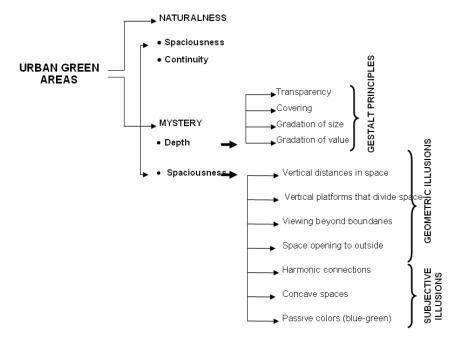
Table 2. Criteria based on Subjective Illusions

Subjective illusions	Determined criteria
Illusions of texture	Harmonic connections     Contrast connections
Illusions of color	<ul><li>Passive colors (blue-green)</li><li>Active colors (yellow-red)</li></ul>
Illusions of plant	<ul><li>Harmonic connections</li><li>Covering</li><li>Transparency</li></ul>
Illusions of topography	Concave spaces     Convex spaces

Table 3. Criteria related to urban green areas' being perceived as spacious and deep

Criteria acquired from geometric illusions	Criteria acquired from subjective illusions	Criteria acquired from Gestalt principles
Elements orienting towards to centre of space     Vertical distances in space     Horizontal distances in space     Horizontal platforms that divide space     Vertical platforms that divide space     Enclosureness of boundaries     Viewing beyond boundaries     Space enclosing to inner side     Space opening to outside	Covering Transparencies Harmonic connections Contrast connections Passive colors (blue-green) Active colors (yellow-red) Concave spaces Convex spaces	Covering Transparency Gradation of size Gradation of value  Transparency

Consequently a group of criteria have been defined in order to produce models for arranging green areas perceived as more spacious and deep and to constitute alternative scenarios determined by these models in this research. Connection diagram of this group is determined as the following:

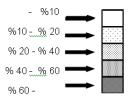


#### **APPLICATION OF THE MODEL**

A study is prepared in order to control applicability of the model which is intended for developing spaciousness and depth of urban green areas. A green area at Bursa City has been evaluated depended on the criteria of this model.

**Evaluation of the urban green area:** The survey included a series of questions that corresponded to criteria of perceptual illusions. Responses to these criteria all used a 5-point rating scale (1: Absolutely I agree, 2: I agree, 3: No idea, 4: I disagree, 5: Absolutely I disagree). The survey was evaluated by a group of 50 architects and landscape architect.

Answers to the Likert type scale given by experts inserted in a table. In the table (Figure 1), distribution values for each green area and frequency distribution values are given as follows:



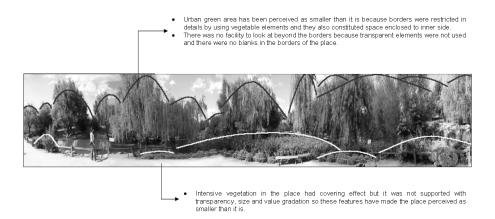
#### RESULTS

 According to the frequency distribution results of survey evaluation urban green area is described by %60 of the subjects as enclosed, enclosure with boundaries to inside, looking at the area beyond the borders and existence of horizontal distances. At the same time it has been determined that the area does not hold depth criteria like transparency and size dimensions.
 Values given to the criteria of spaciousness and depth perceptions by experts, are visualised as follows:

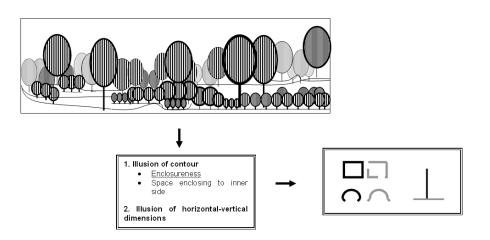
	1	2	3	4	5
Continuity					
Mystery					
Orienting towards to centre					
Enclosur en ess					
Elements in harmony					
Enclosing towards to inside					
Transparency					
Covering			L		
Gradation of value			::::::		
Gradation of size					
Opening towards to outside					
Defining space					
Vertical planes			L		
Horizontal planes					
Contrasting elements					
Concave space			:::::		
Convex space					
Vertical distance			L		
Horizontal distance					
Viewing the areas beyond the borders					

Figure 1. Frequency distribution values related to the urban green area

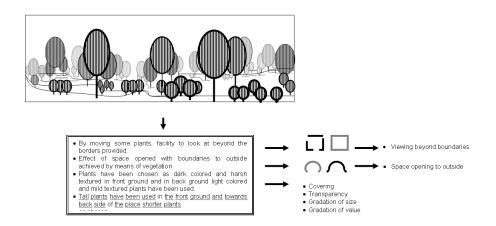
 Existent urban green area has been analyzed according to evaluation results of experts.



 Results of existent urban green area analysis have been displayed with perceptual illusions on the silhouette of the green area.



 After all the evaluations, it was tried to make the place more spacious and deep by making some changes in the silhouette of the green area. These changes are as the following;



#### CONCLUSION

Built environments without nature created by advancing technology in nowadays, is one of the most important problems of civilization. Green areas are not enough for city-dwellers and other living creatures, just the areas out of the buildings used as green areas. Built environments created by people for humanity's own end, estrange them from nature. However researches have shown that natural elements strongly influence perception and increase preference level of urban areas (Ulrich, 1983; Knopf, 1987; Kaplan & Kaplan, 1989; Hartig, 1993, S. Kaplan, R. Kaplan & Wendt; 1972). Urban green areas moderate sharp corner of buildings, contribute to visual continuity of large urban layouts and creates clear environments. In this context, importance of this model, which is based on increasing the perceived scale of these areas, is obvious for designers. Perceptual illusion diagrams of the model may contribute as follows:

- Urban green area models for designers may be created by means of "Perceptual illusion diagrams".
- Natural (spaciousness-depth) feature of existent urban green areas may be raised by means of script suggestions with some proportion and combinations of the criteria of "Perceptual illusion diagrams".
- Existent green areas may be analyzed basing on "Perceptual illusion diagrams".

Furthermore it is thought that suggested model will be beneficial for landscape architecture applications and it will be used. In the first stage of design process it will

be useful for fixing environment data and it will display input data which directs design decisions.

By means of usage of this model, city-dwellers will reach green areas with high visual quality and appreciation level. Nowadays isolation from nature increases, but green areas that are perceived as natural and limitless, will be widened in urban concept by means of this model.

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# AN INVESTIGATION OF THE PRINCIPLES OF ECOLOGICALLY BASED RECREATION AND TOURISM PLANNING IN ÇALKÖY HIGH PLATEAU SETTLEMENT (DÜZKÖY-TRABZON/TURKEY)

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#### ABSTRACT

With its untouched landscape values, Calköy High Plateau Settlement is one of the distinguished potential areas where recreation and nature tourism activities can be carried out.

In the scope of this study, the natural and cultural values of the area and their potential for recreation and tourism have been primarily investigated. In the region, together with the recreation and tourism areas, the behavior of local people in terms of recreation and that of visitors in terms of tourism activities were examined and the environmental deterioration and pollution caused by these activities were determined.

In the light of this preliminary research, interviews were conducted with five different social groups and the results obtained demonstrated the attitude of visitors (tourists), locals (males and females), public and local administration relating the characteristics of the natural and cultural values in and around the plateau area and what kind of environmental effects are caused by their activities.

By using this data, SWOT analysis method was used in order to determine the principles of ecologically based recreation and tourism planning. The method identifies strengths and weaknesses of the area along with opportunities and threats and lays out what needs to be done to strengthen by preventing the weaknesses and threats through TOWS matrix.

Keywords: Çal village, Plateau, Plateau tourism, Rural recreation

#### INTRODUCTION

High Plateau settlements which have a distinct place among the natural resources to be opened to tourism in order to benefit both the socio-economic development and accordingly the development of the region, have become increasingly important in the recent years as alternative tourism areas in Eastern Black Sea Region with their rich natural and cultural values.

Beginning from 1990, Department of Tourism, started to carry out various studies to embrace the principle of "Diversifying Tourism and Spreading it to Various Regions", one of these studies being "High plateau settlement tourism". For this reason, after the studies between the 1987-1991 and 1998, the Ministry announced 26 "High Plateau Settlement centers" in Black Sea Region and 6 in Trabzon as "Tourism Centers" (Canalioğlu, 2000). Department of Tourism, condenses its studies on the high plateau settlement centers in the East Black Sea Region but there is no "master plan" prepared in a way not to damage the socio-economic structure and to confirm natural and cultural values of the region.

Especially high plateau settlements which have been chosen as the new target for tourism are areas which are predominantly rural and are partially able to conserve their natural quality. In order not to experience and avoid uncontrolled practices, there is an obligation to follow and give priority to ecological principles. "Ecologically Based Recreation and Tourism Planning Approach" that has been proposed with this study, follows the principle that developing tourism activities without destroying the nature and culture values is only possible with the inclusion of these activities in careful planning compatible with the local conditions and their disciplined support.

#### SITE DESCRIPTION AND METHODS

Several steps was taken to prepare the "Ecologically Based Recreation and Tourism Plan" for Çal High Plateau Settlements. First, a through analysis of the internal characteristics of Çal Village was conducted. Along with a general description of the local community, the internal analysis aims to examine population and ethnicity, the local economy, and the current tourism economy that includes an analysis of the existing tourism product. The research evaluated community facilities in several categories: communication, education, medical, financial, transportation and physical attractiveness of the village.

The second step involved an analysis of factors from the external environment that would affect the village's tourism potential. Specifically, the analysis examined tourism trends, current customers and the economic impact of tourism. Based on the internal and external analysis, the strengths and weaknesses of the current situation were identified. After the components of the study were completed, recommendations for tourism development were made based on the findings of the qualitative and quantitative research.

#### **INTERNAL ANALYSIS**

The study which was carried out at Çalköy High Plateau Settlement of Düzköy village in the city of Trabzon (Figure 1) (Photo 1) consists of the determination of the demands and attitude of residents of the plateau settlements, local people and visitors in this regard through observation.



Figure 1. Geographical position of Çal High Plateau Photo 1. Çal High Plateau Settlements

#### **General Description**

Çalköy settlement, situated at an elevation of 900-1200m., has a sloped area in the South and southeast direction and is 45 km to Trabzon. The settlement is enclosed by Akçaabat in the North , Düzköy in the east and Çayırbağı in the South. Although not known certainly, Çalköy is believed to be founded in the Byzantine period. It is known that some of the tribes having settled here are Turani tribe originating from the Middle Asia. Ruled by Trabzon Greek Government until 1461, it has become a settlements connected to Akçaabat when Ottoman Empire Fatih Sultan Mehmet conquered Trabzon. Having been invaded by Russians during the first World War (WWI) in 1914, Çalköy village has been liberated in 1918.

#### **Population and Ethnicity**

Çalköy has become civil government (community) in 1979, It consists of 3 district (neighborhood), 3 fields, 3 high plateau settlements. According to the 2000 population census, Çalköy has a population of 4300. Population has a homogeneous structure. After 1461 conquest of Trabzon, Çalköy was affected by Turk-Islam culture and so Çalköy become a settlement which perpetuates the customs of East Black sea Culture.

#### **Economy and Economic Trends**

Eastern Black Sea Region is one of the underdeveloped regions in Turkey and a development plan has not been made for the area for a long time. However, after the cold-war period, free trade has revitalized, Black Sea Economic Cooperation has been established for the bordering countries at this area in order to increase border trading and economic cooperation thus leading to the development of the Eastern Black Sea Region and speeding its growth for Turkish Economy. In 1999, Turkish Government has prepared Eastern Black Sea Region Development Plan (DOKAP) in

technical cooperation with the Japanese government. The aim of this project is to create an integrated development plan which will provide Eastern Black Sea Region to develop in both short and long term. The percentage of working people to all population is %29.5. The basic economical activity is agriculture in the town. A substantial portion of working people is in the sectors of agriculture and cattle breeding. The other economic activities are commerce, small arts, public utilities, education, health and transportation.

#### **Community facilities**

Settlement has rural characteristics. Also social structure has affected economical structure. There is a traditional life style which shows a transition property, between socio-economical structure of coastal region and socio-economical structure of high plateau settlement. After the agriculture, commerce is a economical activity which has maximal workforce. There is no specialization in the commerce. Small arts evolve with commerce. With its special geography and climate, high plateau settlements has a special significance for the town within its rich life style and culture High plateau tourism and festivals have very important tourism value fort he town and watched with interest throughout Turkey.

#### **Tourism**

The report of Eastern Black Sea Region Development Plan (DOKAP) which was prepared in 1999 deals with the subject of "Tourism" from among the "Economic Development Strategies", is thought to play a supporting role for the regional development of tourism. Turkish Republic Ministry of Tourism has declared 26 high plateau areas as tourism centers in order to develop high plateau tourism at Eastern Black Sea Region between 1991-1998.

In the year 1999, according to the distribution of tourists who stayed at Tourism Management Certificate owning hotels to the seven geographical regions in Turkey, 62.9% of tourists stayed in Mediterranean region and 6% in Black Sea Region. The number of tourists who stayed in licensed hotels in Black Sea Region was 287 450 in 1994 and it dropped to 162 338 in 1997. The share of the area in Turkish tourism was 3.8% in 1997 with a number of 765 170 tourists. 41.7% travels to the region are directed to Trabzon (TTSO&MPM, 2007).

Black Sea Coastal Highway has been built in the 1960's on the coastline by filling up the sea thus destroying beaches and bays. The 345 km long highway between Samsun and Hopa has been started in 1997 following the same building method and has destroyed the coastline ever further. Eastern Black Sea coastline does not carry significant importance for tourism because of the destruction caused by the coastal highway building and pollution. For this reason, ecotourism and high plateau tourism are left as the only alternatives for the development of the tourism at this area.

#### **Current Tourism Strategies and Objectives**

In the DOKAP plan prepared with the cooperation of Turkish Government and Japanese Government for Eastern Black Sea Region suggestions were made to enhance and introduce resources of tourism in the region to create an image for Eastern Black Sea Tourism market this image with consideration of the resources of the neighboring nations (D.P.T., 2000).

Richness and diversity of natural and cultural values in rural areas of Eastern Black Sea Region has an important potential to enhance natural tourism activity and activities of rural recreation. Cultural, ethnographic and historical values of the area and cultural characteristics rich the locals have produced for centuries (language, folklore, clothing, hand-craft, songs, cuisine and authentic production systems) are important elements to be considered among the objectives of regional cultural tourism development.

#### **EXTERNAL ANALYSIS**

#### Trends

According to SWOT analysis of Trabzon Chamber of Commerce and Industry (2007), high plateau and mountain tourism has top priority to enhance tourism sector. Other planned tourism activities to enhance tourism which stick out are fairs, festivals, conference tourism, cruiser and yacht tourism.

#### Visitor Survey

Opinion of various groups of people were taken in regards to the economic, sociocultural and tourism dimensions of traditional plateau settlement activities and beekeeping which have been carried out in the region for years. The purpose here was to be informed about the opinion of people who are sides for the issue and authorities in terms of managerial, legal, and economic use.

#### Competition

Sometimes disagreements and conflicts may be experienced about the borders of socio-economic environment and the natural environment and their functions between government institutions, local people, tourists and nongovernmental institutions.

#### **METHODS**

SWOT analyses technique was used as a research method and for the examination various subject under the SWOT various techniques were used. . Observation, area research, information collection, interview method which is an inquiry system about understanding people's thinking, feelings, knowledge and expectation are some of

the techniques (Gür, 1996). By the way, SWOT methods were interpreted and using TOWS matrix the method has been revised.

The study aims at revealing how the permanent residents of Çal High Plateau Settlement which is a centre of attraction in respect of recreation and tourism activities, and those who go there only in certain periods use the environment for tourism and recreational purposes and determine their positive and negative impacts on environment through SWOT analysis. SWOT is very effective in determining the strong and weak aspects of the subject matter of the study and explaining the opportunities and threats it may face. When the analysis is completed, the basis for questioning the underlined purpose and goals of the study is also formed (Table 1 and 2). After determining the SWOT parameter related to the system, TOWS Matrix can be made up for doing current situation analyses. TOWS Matrix is a phase of strategic view resulting from internal and external factors analyses. As you can see in Table 2, the first column of the matrix consists of opportunities and threats related to the system as determined in first phase of SWOT analyses; first line consists of strengths and weaknesses which were obtained in the same phase. An analysis of the parameters in the first rows and columns in relation with each other makes it possible to make up the strategic view by studying the matrix.

A more detailed analysis of the G-O, Z-O, G-T, and Z-T strategies in terms of the mentioned relationships is shown on (Table 3).

S-O strategies suggest and evaluate opportunities to support the strengths of the system.

W-O strategies are strategies developed in order to overcome weaknesses.

G-T strategies, suggest strategies on how to use the strengths of the system to avoid external threats.

Z-T strategies prepare plans to avoid the weaknesses of the system from being effected by external threats easily (Uçar and Doğru, 2005).

W-T strategies, suggest strategies that minimize weaknesses and avoid threats

Table 1. SWOT Analysis Table

Strengths	Weaknesses	Opportunities	Threats
Climatic conditions which are conducive to human health The area's having extremely rich natural resources that may serve recreation and tourism Rich biological diversity Advantages of visual perception (Panoramic views) Traditional agricultural activities Traditional house architecture, Assets of folklore and ethnography Historical values The local people's earning income from recreation and tourism and having employment opportunities Its convenience to transportation The existence of a large variety of wild life and birds that may contribute to hunting tourism	A lack of ignorance on the part of the local administration regarding the conservation of environmental values Inappropriate use of natural resources Inefficiency of non-governmental organizations Rapidly increasing construction efforts Lack of rich recreation and tourism activities Inefficiency in garbage collection and disposal A lack of awareness in marketing the traditionally made artifacts as gifts and souvenirs A lack of promotional Activities The area's having experience in tourism The area's not being granted conservation area status Low educational profile of the local people Insufficiency of infrastructure services Insufficiency of Accommodation	The people's being open to new approaches Improving health tourism Improving mountaineering The favorable nature of the landscape to the organization of diverse tourism and recreation activities (camping and caravanning) Its proximity to large settlements Providing local people with employment opportunities The cultural contact between tourists who come for recreation or tourism purposes and the local people will raise local people will raise local people's awareness Planned construction of nature schools in the natural environment offered by nature and forests	Gradual decrease in biological diversity Illegal felling of trees in forests and shrinking of forests Gradual Increase in the number of visitors Increase in concrete buildings and hard grounds Local administrations' not having a budget for conserving of natural lands Local administrations' not having sound knowledge about natural values in the area Construction of various leisure and recreation facilities by public and private enterprises as consequence of political pressure on local governments Cultural degradation Erosion and flood cause by unnecessary road construction. Deterioration and littering of natural areas during highland plateau settlement.

Table 2. SWOT/TOWS Matrix

	Strengths	Weaknesses
Opportunities	S-O strategies	W-O strategies
Threats	S-T strategies	W-T strategies

Table 3. Çal Village High Plateau Settlement SWOT/TOWS Matrix

	Strengths	Weaknesses
Opportunities	<ul> <li>Preparing an inventory of natural and cultural riches, having the local people develop an awareness of conservation of the values and increasing this awareness</li> <li>The creation of a new centre of attraction through plateau (summer resort) tourism</li> <li>Turning traditional products made by local people (handicrafts etc.) and crops into sources of income through tourism and recreation</li> <li>Positive contribution that will be made by the development of tourism and recreation in the area in respect of job opportunities</li> <li>The necessity to take some precautions and do engineering work so that certain recreation and tourism activities that will be brought to the area, road network and various interventions on land will not create a hazard of any kind (flood, landslide, erosion)</li> <li>The fact that efforts have been spent to promote the area so that it will become a centre of attraction</li> </ul>	The damage caused by overuse of natural resources due to recreation and tourism activities concentrating especially in summer months A lack of proper disposal of garbage and other wastes Gradual degradation of natural vegetation due to excessive treading Forest thinning activities on the rugged plateau area and felling of trees as burning wood and the ensuing danger of landslides The necessity to take some precautions and do engineering work so that certain recreation and tourism activities that will be brought to the area, road network and various interventions on land will not create a hazard of any kind (flood, landslide, erosion)

- •The damage that might be caused by various uses and hard surfaces required by recreation and tourism facilities
- •Excavation and filling activities that will be performed on the area may create visual pollution and cause environmental disasters like landslides if measures are not taken
- •The possibility that plateau lands will lose their natural appearance if farming lands used for meadows and pastures used for animal husbandry are allocated to tourism
- •The villagers' gradually losing the consciousness of common conservation and sharing due to a desire to get their share from the tourism and recreation industry and earn short term profits
- •Agreement on the principle that public institutions private sector and universities cooperate with local people in all activities related to the area and as a result of this local people's recognizing and adopting local assets and participating in relevant activities •Developing an understanding of cooperation between the local administration and local people

- •Forest thinning activities on the rugged
- plateau area and felling of trees as burning wood and the ensuing danger of
- landslides
- The high likelihood of forest fires as a result of activities like picnicking that the local people and tourists engage within and around forests due to not taking measures
- •The local people's possible reaction against planning and any kind of regulations regarding the plateau area by
- local administrations and the state institutions aimed at conservation (ban
- on construction, illegal tree wood cutting, restriction of grazing, checks on
- road network, regular dumping of garbage, limitation on building stories etc.)
- •The gradual degeneration of local people's traditional culture and social values in parallel to the development of

tourism and recreation

### DISCUSSION

The suggested approach for ecologically based recreation and tourism planning consists of careful determination of the resource potential of the area and planning efforts towards preventing deterioration which may result from intense use of these natural resources. Integral to the plan is the natural characteristics of the environmental landscape of this area and whether it has the capacity to absorb the impact of people and vehicles using and are going to use the area.

During the planning process, protective studies have to be done in case erosion happens in the nature of the area and destruction of the scientific values. In addition, wishes of the local people have to be considered for the plans to be compatible with the local conditions and realistic. Unless, the local people would not accept a planning approach which would change the way they live.

When data belonging to the area are examined, the kinds of tourism that can be developed) are <u>health tourism</u> (climate therapy centers, physical therapy centersmountainous and forested areas' health-preserving and health-giving properties), <u>sports tourism</u> (long distance trekking, mountaineering, hunting, horse-riding, lawnsking, camping etc., topography, climate and elevation presenting interesting levels

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for sports, the existence of water sources and wild life etc.), <u>agricultural tourism</u> (traditional agricultural activities, local economic endeavors, offering of village boarding facilities in summer resort homes, potato planting and harvesting, fruit picking etc.), <u>youth tourism</u>, <u>nature schools</u> (summer camps for students, training, forest classes/green class, youth leisure facilities, nature sports clubs, bungalows, hostels, country accommodation facilities, scouting activities-in the natural climate provided by nature and forests they get to know nature and develop an awareness of nature, activities in which children and youths participate in a natural environment contribute positively to their psycho-pedagogic development, they discover natural, cultural and historical features/organization of working and leisure activities such as restoration, production and farming).

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## POSITIVE EFFECTS OF NATIVE FLORA ON USER'S ENVIRONMENTAL PREFERENCE: A SAMPLE OF TRABZON CITY

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### **ABSTRACT**

Having realized it is quite important to be able to live in healthy and well designed environments, humanity tried to solve many environmental problems, which had been created by itself for the last a few centuries. On the other hand, it did not take very long to recognize that these problems were not likely to have been solved that easily, which means those who had been living in big cities had to wait some more to experience a natural environment having less or no degradations. However, landscape architecture started getting attention between 1850 and 1900, especially owing to some great landscape architecture designs belonging to Frederic Law Olmsted, who is generally considered to have invented the profession, and other notable landscape designers all over the world.

Since people first understood that landscape architecture could hide negative effects of industrialization, even it was already a way to prevent these effects, the concept has been accepted as an important phenomenon especially for urban areas. Because it is possible to give an identity to urban areas by reflecting the nature on the cities using native plant species of the same region, landscape architecture is considered to have not only ecological but also social and cultural importance. Apart from this "identity" effect, the using of native plant species is very important also in economical way. Although Turkey is thought to have a rich flora comparing with many other countries all over the world, it is quite possible to see many "imported" exotic species belonging to other geographies and even other cultures across the country.

In this study, three public gardens and parks in Trabzon were chosen as the research areas. These areas were represented by taking photographs, which show current situations that have very limited or no native plant species in. In order to identify the effects of native plant species within landscape architecture on users, a questionnaire was used and the users were asked to evaluate comparing current situations and manipulated ones, which were designed by using computer programmes so that some native plant species could be demonstrated in different three seasons, spring, summer and autumn, on the areas. Afterwards, some important results regarding what people felt when they experienced manipulated photographs were obtained and some solution proposals were broken out.

**Keywords:** Landscape Architecture, Native Plant Species, Urban Area, Trabzon

### INTRODUCTION

Owing to many rapid changes we have faced in our life for a few decades, mainly depending on technology, the world has been considered to get smaller and all distances on it have become shorter. Because it has been quite easier to learn what has happened in any part of the earth recently when comparing with the past, the world has been defined as "global village" by many people. Nowadays it is possible to see what people are doing in the rural sides of Africa by clicking a web page and even to go there in a few hours by having a low-price airway ticket. Plus, nearly everybody knows well or at least has an idea about what rest of the world does when they experience something by watching television, seeing some movies and reading several newspapers belonging to other countries in their own language. Because of these recent phenomenon, it is not that hard to say that the world began to experience a global cultural structure regarding life styles, habits, behaviours and of course, architecture.

While many NGOs, governments, universities and other organizations strongly suggest local and indigenous values should be protected and the word *sustainability* is extremely important within these values all over the world, it has been quite hard to keep them stable, due to the recent interactions between the cultures. By and large, architecture, including landscape architecture, has naturally been affected by this globalization, which gave a rise to fuzziness of identity for many places. On the other hand, while this situation should be changed according to those who believe and support contextual architecture, it is also possible to see some others who define the condition as richness. This paper is to try to explain how the situation regarding landscape architecture is and should be.

## LANDSCAPE ARCHITECTURE and SOME DIFFERENT APPROACHES WITHINIT

Having realized importance of the concept, humanity tried to pay attention to landscape architecture so that people can live in healthy and well designed environments. The discipline started being popular between 1850 and 1900, especially owing to some great landscape designs belonging to Frederick Law Olmsted, who is generally considered to have invented the profession, and other notable landscape designers all over the world.

Since people first understood that landscape architecture could hide negative effects of industrialization, even it was already a way to prevent these effects, the concept has been accepted as an important phenomenon especially for urban areas. Because it is possible to give an identity to urban areas by reflecting the nature on the cities using native plant species of the same region, landscape architecture is considered to have not only ecological but also social and cultural importance.

When looking at the origin of the discipline, it can be assumed that the main –not only- purpose of the first landscape architects was to bring the nature to the urban areas though; definition of "nature" depends on the approaches of those who want to define the term. While the using of species and other materials is an important question to be asked in the landscape designers' eyes, what users would want to see around is also a hard issue to deal with.

At this point, different approaches can explain different suggestions within the architecture. In spite of the fact that it is possible to see some critics on it, contextual architecture vindicates indigenous values. As the notion can easily be understood through the analogy with the word "context" in the natural language, contextual architecture represents designing in a particular context, often historical or vernacular ones by being different in scope, objectives and approach from the appropriate technology based architecture. However, according to several studies, it is essential that the term contextual architecture not be considered as an obstacle to innovative and creative architecture.

In landscape architecture, the situation is quite sensitive because of not only cultural and vernacular values but also ecologic ones, especially owing to plant species to be used. The using of some plant species might give a rise to important problems such as genetic pollution. Plus, the species do not have to be exotic to cause this. Genetic diversity is the combination of different genes found within a population of a single species, and the pattern of variation found within different populations of the same species [1], which means two different populations of *Picea orientalis*, a native spruce tree of the Black Sea Coast in Turkey, might have different genetic adaptations because of the climate or aspect differences of their locations. Therefore, when trying to avoid causing genetic pollution, choosing the appropriate species is essential. However, it is not that hard to say that the using of exotic species has been quite common within the recent landscape designs, depending on preferences of landscape architects and users.

## IMPORTANCE OF NATURALNESS AND CONTEXTUALISM IN VISUAL PERCEPTION OF NATURALISTIC LANDSCAPES

Contact with nature is a basic human need and a valuable visual environment plays an important role in this interaction [2, 3, 4, 5]. At this point, visual quality of observed environment is very important. Production of a quality experiential landscape as a contemporary landscape design attitude may as well be a good design approach in the context of globalising world, in which processes of simplification of visual landscape patterns and diminishment of landscape diversity are rapid and likely irreversible [6]. Of course, the improving of visual quality is a comparative phenomenon and it might be changeable depending on those who perceive.

There is no doubt that nature has a great importance in daily life of people. Especially vegetation plays in many aspects a crucial role [6]. However, what the nature in people's mind is an important question to be asked, because people use their own values when perceiving environment. Definition of environment is already a fuzzy concept. In general, it is possible to talk about a few kinds of environment depending on different definitions. Many researches have made some interesting explanations of environment so that the term can easily and suitably be used for their purposes. In the same way, Kirk defines environment as an ecological system possessing three components:

- 1. Phenomenal environment
- 2. Personal environment
- 3. Contextual environment [7].

Phenomenal environment explains the "things" in the universe, while personal environment deals with the simulacrum that one gets from the universe and the values such as culture, belief etc. that one has. As for the contextual environment, it tries to deflect what one would feel or think owing to his past experiences, depending on his age, ethnic differences, classes and cultures. According to this definition, the second and the third are very important to identify up to what extend indigenous values are important in one's perception. Gür [7] also explains that culture is an important factor in all architectural designs by creating a few questions regarding it to be answered. Because culture can be defined as the full range of learned human behaviour patterns within the social sciences and, as mentioned before, contextual architecture vindicates indigenous values that are created by culture, contextualism, through which cultural values are considerable in leading the design principles, might be described as a major purview in visual perception.

Apart from this cultural phenomenon, because nature is probably among the first things coming into one's mind when hearing something about culture, it is also possible to say that nature might be effective in identifying people's perception. Naturalistic landscape designs are essential to provide naturalness especially for the users in urban areas that lack green fields. Hence, naturalistic landscapes reflecting nature to urban areas are extremely important for preferences of users. Naturalness is one of the seven reference visual qualities in researches determining visual quality of a place [8], and that is why it can be supposed to improve visual quality belonging to somewhere. Owing to the fact that naturalness is already main target of many landscape designs in urban areas, landscape architecture is doubtless a fundamental way so as to make a contribution to environmental quality. Thus, making a landscape design as natural as possible might be thought as a main advantage in order to get success in terms of visual quality. The main difference between landscape architecture and the other design fields, plants -living materials to be used, might therefore outweigh everything else in the discipline to create a high visual quality by having high values regarding naturalness.

In this study, positive effects of native flora on user's environmental preference are discussed while exotic species are quite commonly used in the sample city, Trabzon.

## **MATERIAL AND METHOD**

Because main purpose of this study is to determine effects of native flora on user's environmental preference, about ten public gardens in Trabzon were firstly examined to be able to find those whose flora is nearly native or nearly exotic. In this first step, not surprisely, it was recognized that there was neither public gardens nor parks having mostly native species in the city centre. Because of this situation, three public gardens and parks having exotic species mostly were chosen as the research areas.

Secondly, these areas were visited to be able to identify what plant species had been used within their landscape designs and what these species main phenologic characteristics were. Afterwards, these areas were represented by taking photographs, which show current situations that have very limited or no native plant species in. In order to identify the effects of native plant species within landscape architecture on users, a questionnaire was used and the users were asked to

evaluate comparing current situations and manipulated ones, which were created by using computer programmes so that some native plant species could be demonstrated in different three seasons, spring, summer and autumn, on the areas.

As with the manipulations which were made to demonstrate native species, no design principles were used through them so that only the perception differences regarding native and exotic species could be taken out. To be able to do this, current dominant species in the research areas were listed and native species having the same or at least similar phenologic characteristics with them were settled (Table 1).

Table 1. Common Exotic or Non-native Species in the Research Areas and Proposed Natives

Common Exotic or Non-native Species in the Area (Currently found in the research areas)	Main Phenologic Characteristics	Native Species in the Area (Proposed)	Main Phenologic Characteristics
Nerium oleander	Spring: - Summer: Purple blooming Fall: - Winter: Evergreen	Rhododendron ponticum	Spring: - Summer: Purple blooming Fall: - Winter: Evergreen
Kerria japonica	Spring: Yellow blooming Summer: Yellow blooming Fall: - Winter: -	Rhododendron luteum	Spring: - Summer: Yellow blooming Fall: Turning into reddish Winter: -
Forshtia x intermedia	Spring: Yellow blooming Summer: - Fall: Slightly turning into reddish Winter: -	Spartium junceum	Spring: Yellow blooming Summer: Yellow blooming Fall: Calligraphy Winter: Calligraphy
Pittosporum tobira	Spring: Cream blooming Summer: - Fall: - Winter: Evergreen	Arbutus unedo	Spring: - Summer: - Fall: Cream-Pink blooming Winter: Red fruit, Evergreen
Ligustrum japonica	Spring: - Summer: Cream blooming Fall: - Winter: Evergreen	Osmanthus decorus	Spring: Cream blooming Summer: - Fall: - Winter: Evergreen
Agave americana	Spring: Calligraphy Summer: Calligraphy Fall: Calligraphy Winter: Calligraphy	Iris sp.	Spring: Blooming Summer: Calligraphy Fall: Calligraphy Winter: Calligraphy

Table 1. Common Exotic or Non-native Species in the Research Areas and Proposed Natives

Prunus cerasifera 'Atropurpurea'	Spring: White-Pink Blooming Summer: Red fruit Fall: Turning into reddish Winter: -	Prunus avium	Spring: White Blooming Summer: Red fruit Fall: Slightly turning into yellowish-reddish Winter: -
Picea abies	Spring: - Summer: - Fall: - Winter: Evergreen	Picea orientalis	Spring: - Summer: - Fall: - Winter: Evergreen
Acer negundo	Spring: - Summer: - Fall: Turning into yellow Winter: -	Fraxinus excelsior	Spring: - Summer: - Fall: Turning into yellow and reddish Winter: -
Hebe veronica	Spring: Pink flower Summer: Pink flower Fall: - Winter: -	Daphne mezereum	Spring: Pink flower Summer: Red fruit Fall: - Winter: -
Deutzia scabra	Spring: White blooming Summer: White blooming Fall: - Winter: -	Sambucus nigra	Spring: - Summer: Cream blooming Fall: Dark purple flower Winter: -
Weigela coraensis	Spring: - Summer: Pink blooming Fall: - Winter: -	Cistus creticus	Spring: Pink blooming Summer: Pink blooming Fall: - Winter: -
Magnolia grandiflora	Spring: - Summer: White blooming Fall: Evergreen Winter: Evergreen	Laurocerasus officinalis	Spring: White blooming Summer: Dark purple fruit Fall: Evergreen Winter: Evergreen

Afterwards, characteristic display of proposed native species were created in digital platform and these images were put into the research areas as different three forms depending on how they were looking in different three seasons; Spring, Summer and Autumn. The displays in winter were ignored in this study owing to possible snow effect, which might create some difficulties for the users in perceiving the plants.

In the end, the users in the each research area were asked to evaluate manipulated three photographs in different three seasons belonging to where they were via the questionnaire. According to the answers, frequency tables were created and some important results regarding what people felt when they experienced manipulated photographs were obtained.

## CONCLUSION

 According to the users in three research areas, native plant species are not less valuable in terms of attractiveness and visual beauty comparing current ones.
 Moreover, the pictures, in which these native plants were used, are evaluated as "much better" by the users in general when they are asked to give a general comment to the current situations and manipulated ones belonging to same season (Table 2).

Table 2. General Evaluation of Manipulated Spring Pictures Comparing with Current Situations

Area 1 (32 People)		1	Area 2 (36 People)	Area 3 (31 People)
at	Much Better	9 People (~28 %)	17 People (~47 %)	14 People (~45 %)
	Better	13 People (~41 %)	14 People (~39 %)	13 People (~42 %)
2. g	No Difference	10 People (~31 %)	5 People (~14 %)	4 People (~13 %)
ш	Worse	0 People (0 %)	0 People (0 %)	0 People (0 %)

According to the users in the research areas, the using of native plants might
positively change their oftenness to visit the areas. When the users are asked to
explain the main reason of visiting or seeing the areas, it is recognized that flora
in the areas has nearly no effect (Table 3). However, when they are asked
whether flora in the areas would have been effective on their oftenness to visit, if
manipulated pictures had been true, most people confirms the assertion (Table
4).

Table 3. The Main Reasons for the Users to Come to the Areas

		Area 1 (32 People)	Area 2 (36 People)	Area 3 (31 People)	
Closeness 15 People (~47 %)		16 People (~47 %)	14 People (~45 %)		
Ę	No alternatives 7 People (~22 %)		4 People (~10 %)	8 People (~26 %)	
Evaluation	Garden 5 People (~16 %)		11 People (~30 %)	4 People (~14 %)	
%	Safety	1 People (~3 %)	3 People (~8 %)	1 People (~3 %)	
-	Plants	0 People (0 %)	2 People (~5 %)	2 People (~6 %)	
	Other	4 People (~12 %)	0 People (0 %)	2 People (~6 %)	

Table 4. How Native Species would Affect Oftenness to visit the areas

Area 1 (32 People)		Area 2 (36 People)	Area 3 (31 People)	
More Often 19 People (~60 %)		19 People (~53 %)	23 People (~74 %)	
More Seldom	0 People (0 %)	0 People (0 %)	0 People (0 %)	
No Difference	13 People (~40 %)	17 People (~47 %)	8 People (~26 %)	

• When the users in each area are asked to evaluate the pictures in different three seasons by comparing them, each season's value is quite close to each other. To get this, the users were asked to give each season a number between 1 (low) and 3 (high), depending on how much they would like to visit the areas. While many users find it exciting to visit the areas in summer most in current conditions (Table 5), intention of visiting the areas in spring and autumn is considerably high when evaluating manipulated pictures (Table 6). That means the using of native species might provide a sustainable use of open areas through the year.

Table 5. In Which Season the Users Mostly Want to Visit the Areas Currently

	Area 1 (Total po of 32 People)			Area 2 (Total points of 36 People)		oints )
Summer	24 people * 3 points 8 people * 2 points 0 people * 1 point	88	26 people * 3 points 6 people * 2 points 4 people * 1 point	94	23 people * 3 points 8 people * 2 points 0 people * 1 point	85
Spring	10 people * 3 points 15 people * 2 points 7 people * 1 point	67	12 people * 3 points 19 people * 2 points 5 people * 1 point	79	14 people * 3 points 6 people * 2 points 11 point * 1 point	65
Autumn	4 people * 3 points 5 people * 2 points 23 people * 1 point	55	6 people * 3 points 11 people * 2 points 19 people * 1 point	59	7 people * 3 points 4 people * 2 points 20 point * 1 point	49

Table 6. In Which Season the Users would Mostly Have Intention of visiting the Areas (Evaluating manipulated pictures)

	Area 1 (Total points of 32 People)		Area 2 (Total points of 36 People)		Area 3 (Total points of 31 People)	
Summer	21 people * 3 points 11 people * 2 points 0 people * 1 point	85	24 people * 3 points 12 people * 2 points 0 people * 1 point	96	26 people * 3 points 6 people * 2 points 0 people * 1 point	90
Spring	18 people * 3 points 12 people * 2 points 2 people * 1 point	80	19 people * 3 points 14 people * 2 points 3 people * 1 point	88	23 people * 3 points 6 people * 2 points 2 point * 1 point	83
Autumn	12 people * 3 points 14 people * 2 points 6 people * 1 point	70	16 people * 3 points 17 people * 2 points 3 people * 1 point	85	16 people * 3 points 11 people * 2 points 4 point * 1 point	74

## **SOME SOLUTION PROPOSALS**

Although Turkey is thought to have a rich flora comparing with many other countries all over the world, it is quite possible to see many non-native species belonging to other geographies and even other cultures across the country. However, native plant species have enough potential to be used within landscape architecture and their positive effects are quite clear on users' environmental preference. Although this study proves how native species could be effective for the users even if no specific design principles are implemented, this does not mean exotic species can never be used to create well designed environments. Moreover, this paper never claims exotic species cannot be used to get success within landscape architecture but strongly does they should not, while there are native species having the same phenologic characteristics. Consequently, a great attention should be paid to contextualism in landscape architecture.

Native species should mainly be used in landscape implementations. However, there are great difficulties in finding native species in greenhouses and nurseries so that they could be used. For instance, Turkey has been importing many *Rhododendron* species while the region has natives. Horticultural studies should be emphasized to solve this problem. In addition, the using of native species helps the urban areas have identification and special characteristics especially in visitors' eyes, which should be one of the main purposes of the discipline.

The using of non-native species in landscape architecture might mean not only economical expense but also genetic pollution. Many exotics are likely to cover larger areas than some native species do and this might be considered as a serious genetic pollution danger. To avoid this, invasive species should be identified and listed. Plus, they should not be used in huge areas.

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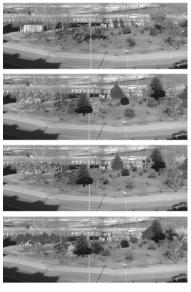
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## **APPENDIX**

The pictures having been used in this study

The Research Area 1 (The first is current situation. The followings are manipulated ones in spring, in summer and in autumn)



The Research Area 3 (The first is current situation. The followings are manipulated ones in spring, in summer and in autumn)



The Research Area 2 (The first is current situation. The followings are manipulated ones in spring, in summer and in autumn)

