

livable environments

&

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international congress
nature - cities - architecture
sustainable development
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LIVENARCH 2003

LIVABLE ENVIRONMENTS & A R C H I T E C T U R E SECOND INTERNATIONAL CONGRESS

nature-cities-architecture sustainable development

> July 1 – 4, 2003 Trabzon / TURKEY

Karadeniz Technical University Faculty of Engineering and Architecture Department of Architecture

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LIVENARCH

LIVABLE ENVIRONMENTS & ARCHITECTURE INTERNATIONAL CONGRESS

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PREFACE

KEYNOTE SPEECHES

(Urban) Space-Related Quality Management	Andreas VOIGT	3
Planning For Man And Woman Too	Clara GREED	9
The Relationship of Natural and Artificial Environment as One of the Important Problems of City Building Ecology	George SALUKVADZE	37
Treatment Of The Structures Dating From The Period Of XVIII Till XX Century In The Republic Of Macedonian	Lazar SUMANOV	44
Perspectives of Public Urban Space in European Cities	Helmut BOTT	60
Experiences of Sustainable Development in Contemporary Planning	Ruzica BOGDANOVIC	68
A Personal Account Of Design Methods İn Architectural Education İn The Last Three Decades	Şengül ÖYMEN GÜR	97
Role Of Culture And Tradition In The Development Of Housing Policy And Design: A Case Study In Anatolia	Zafer ERTÜRK	122

1st Session: PLANNING: Livable Settlement

A discussion on the easement in city plans for a more livable environment	Seniha Çelikhan, Darçın Akın, Esra Demircioğlu	140
Spatial and social dimensions of urban poverty: the case of Ankara	Hüseyin Gül and Songül Sallan Gül	147
The social environmental analysis of the qualitative values in suburbs	Filiz Meşhur (Alkan)	157
Nature effective architecture and settlements	Sonay Çevik, Zehra Kantar Eminağaoğlu, Fulya Erşen	168
2 nd Session : REVITALIZATION: Policies and tools		
Strategies, policies and tools in the urban design	Yelda Aydın	179
Revitalization of traditional neighborhoods according to the socio-cultural characteristics of inhabitants	N.Gül Asatekin	192

1

Revitalization of the historic urban neighborhood: case in Giresun	Arzu Aydın Aksoy, Hamiyet Özen, Süheyla Birlik	211
Renovation/Revitalization works in the city centers an example to pedestrian shoping areas: Trabzon kunduracılar street"	Sonay Çevik, Filiz Tavşan, Serbülent Vural, Özgür Aşık	222
3 rd Session: SUSTAINABILITY: Energy efficient buildi	ng	
Energy efficient housing design – in terms of heating and lighting-	Gül Koçlar Oral, Alpin K. Yener, Ş.Filiz Akşit	247
An investigation into ecological houses in the example of apartment blocks (mass housing) in terms of sustainable environments	Ayşe Sağsöz, Derya Elmalı, Reyhan Midilli	254
Building materials and technology in constructing of exterior skin of building by ecological approach	Figen Kars, Şafak Şahin	266
Control of the lost light energy at houses	Banu Manav	278
4 th Session: CONSERVATION: Policies and proposals		
Efficiency of institutions on conservation: A Case in historic districts of Eastern Black Sea Region	Nimet Candaş	288
Reusing of the early twentieth century architecture heritage: Case in Trabzon	Hamiyet Özen, Süheyla Birlik	299
A Callues diversion from a livable stage-set; the 75-year story of a "high-market" street	Gaye Birol, Murat Çetin	309
Lighting the building around the city	Ramiz Abdülrahimov, Mustafa Kavraz	317
5 th Session: RECREATION: Planning and design		
Effects of coastal filled areas on Istanbul	Fatma Ayçi m T ürer	328
The aesthetic and functional expectations of the community from a city park and its reflection to design: A study on Bursa Soğanlı city park	Bahar Başer	340
Research on the recreational use of Ankara Atatürk Orman Çiftliği	Dicle Oğuz	350
Definition of user satisfaction with the Kano Model	F. Hilal Halıcıoğlu	358

6th Session: MASS HOUSING:Culture and change

To examine harmony with cultural factors at the temporary houses which were built for 1999 earthquake wronged in Kocaeli	Sibel Demirarslan	366
Privacy symbols in transition	İlkay M. Özdemir, Nilgün Kuloğlu, Ali Asasoğlu	378
Effects of changes in life styles since the Tanzimat (the reforms) on house planning in the process of westernization Deniz Demirarslan, Kamuran Öztekin, Didem Erten Bilgiç,	Deniz Demirarslan, Kamuran Öztekin, Didem Erten Bilgiç, Tevfik İlter	389
Mass housing in Kocaeli-yesterday and today: first permanent houses for wrongeds of earthquake and others plan type	Sibel Demirarslan	397
7 th Session: EDUCATION: Design		
The changing position of the architect in the context of social sustainability	Deniz İncedayı	409
The journy of circle in the architecture in time	Emriye Muhçu	418
Accessible public use for people in special needs	Elçin Tezel	428
The transformation of present buildings stocks in historical texture	Ayça Ustaömeroğlu, Gürol Ustaömeroğlu	435

PREFACE

The first International Congress on Livable Environments and Architecture is organized between 4-7 July 2001 by the Department of Architecture at Karadeniz Technical University, Trabzon, Turkey.

Livenarch 2001 was a successful congress and reached the objectives in terms of its scientific context and social activities. Thus it was reasonable to organize the congress of Livenarch as a scientific activity in every 2 year period. A summer school has been planned following Livenarch 2003 congress. Livenarch will have two parts in the future organizations followed by a summer school.

The objectives of the "Livenarch International Congress 2003" are to provide an academic environment between international and national academicians and public and private practitioners to exchange knowledge and practical gains and experiences and to open discussions on "Livable Environment and Architecture."

The scientific content of Livenarch 2001-2003 congresses has 10 headings as follows: Multidisciplinary Approaches, Nature, Man, Cities, Waste Land, Flows, Shells/Housing, Shells/Contemporary Building Types and Policies, Laws and Regulations and Education.

The keynoters of Livenarch 2001 were Prof. Dr. Jon Lang Sidney University, Australia, Dr. Ali Madanipour University of Newcastle-England, Prof. Micheal Trieb, University of Stutgart -Germany and Prof. Dr. Necdet Teymur, Middle Eastern University-Turkey. 46 papers were accepted and all the papers were published in the "proceedings" of Livenarch 2001.

The Keynoters of Livenarch 2003 are Dr. Clara Greed, University of the West of England-England, Dr. Lazar Sumanov ICOMOS – Macedonia, Prof. Dr.Ruzica Bogdanovic, University of Belgrade – Yugoslavia, Prof. Dr. Zafer Ertürk, Eastern Mediterranean University-North Cyprus, Prof. Dr. Andreas Voigt, Vienna University of Technology-Austria, Prof. George Salukvadze, Georgian Technical University - Georgia, Prof. Dr. Helmut Bott, University of Stuttgart, Germany, Prof. Dr. Şengül Öymen Gür, Karadeniz Technical University –Türkiye. 28 papers were presented during the congress program.

I have special thanks to congress advisory committee, scientific committee, organization committee, congress secretary, department of English Language and Literature and all paper participants during the process of Livenarch 2003 congress.

With the hope of meeting at Livenarch 2005 congress and summer school.

Best regards,

Prof.Dr.Sonay ÇEVİK Congress Chair



(Urban) Space-Related Quality Management

VOIGT, Andreas

Vienna University of Technology, Institute of Local Planning, Austria

Abstract

"Space-related modeling and simulation" are to act as central working means for "(urban) space-related quality management", assisting planning and design processes with its possibilities and contributing to comprehensibility and awareness of planning measures for all those involved in the planning process. The main emphasis of this work is dedicated to the description of elements concerning planning methods grouped as "key activities" in line with a "space-related quality management" around the "conception of building-up and urban volume, resp.", as well as to the support the space-related production of models and simulation furnish.

(Urban) Space-Related Quality Management

Comprehensive quality management in connection with the quality securing conception has become the major auxiliary means in configuring production and service-trade processes. Examination of its applicability and the transformation of these conceptions with regard to planning and configuration processes suggests itself.

Considering urban and regional planning as "material and procedural task" "space-related quality management" would have to refer to the quality of "production processes" and the quality of the "product" (meaning design). The "production- and service-trade processes" and the "products" to result, however, will considerably differ from conventional production processes and products of industrial manufacture.

Despite all required differentiations a number of "links" encouraging a selective transformation of the concept of "quality management" in line with issues of area development planning result, e.g.:

- definition of terms
- clear determining of quality requirements
- shaping of awareness
- documentation of "process" and "product"
- increase of effectiveness and efficiency

- identification and analysis of key activities
- consistent consideration of client's requests
- rigorous application of quality
- critical examination and validation of activities, processes and findings
- methodical proceeding
- comprehensibility
- securing of quality achieved
- continuous quality improvement
- responsibility for the entire "product"
- confidence building

Three correlated topic complexes qualify as "action fields" in terms of quality management in space-related planning and configuration processes:

Frame conditions of planning processes

This complex refers to the definition of terms ("concepts"), system elements and their relations including the identification of those involved in space; the "configuration-determining physical" and "function-determining system structure" of space.

Space-related planning and configuration processes

"Completeness" of planning processes is to be sought, major elements thereof as the definition of the problem in question, the problem-related elaboration of space-related quality requirements and their validation.

Space-related model generation and simulation

Space-related model generation and simulation is closely connected to all elements and phases of planning and configuration processes.

"Key activities" for (urban) space-related quality management are enumerated below in line with the individual phases of space-related planning and configuration processes:

	Table 1
	"(Urban) space-related Quality Management" -
	Key Activities
ANALYSIS [Present]	
[A] Space-related	Continuous monitoring of space, space-analytical representation of
"monitoring",	present stock and changes throughout time; periodical elaboration
determination of	and verification of client's requests and other quality requirements.
specific quality	
requirements	Observatorization of space the "abarratoristics of space" esting as
[B] Definition of	the basis for desisions regarding specification of frame conditions
principles	of spatial development and the definition of "conservation and
specification of radius	alteration priorities".
of action	
[C] Space-related	Identification and development of "spatial models" as space-
conception aids,	related conception aids and approaches to solutions, development
spatial ideas	of spatial ideas.
SYNTHESIS	
[Required]	Increase of number of possible solutions by drawing up enotial
(spatial) conception	development scenarios and solution variants creativity simulation
and development of	early integration of "project development"
variants	earry megration of project development.
[E] Spatial impact	Screening of development potentials, sounding out and optimizing
analysis, checking of	of "tailor-made fit regarding stock and planning" ("fit" and "fitness
spatial compatibility	for use"); accompanying throughout spatial impact analysis and
	checks for spatial compatibility.
[F] Informing –	Developing of comprehensive information and communication
"mediation"	concepts; best-possible information <u>in</u> planning issues
[1] Moundation	(environmental mediation) and <u>on</u> planning contents.
[G] Normative	The adequate legal wording of the constructional-spatial consent
subjects of planning	transition from space-related "concent" to its constructional-spatial
subjects of plaining	realization.

The described "key activities" are to be regarded as elements of a correlated system of planning elements and not as a sequence of planning steps to be performed.

Model Generation and Simulation

(Urban) space-related quality management is directly connected with questions of space-related model generation and simulation. Space-related thought processes rely on space-related model generation and simulation. Planners always work with abstraction and anticipations (preview) of reality (circumstances, interactions, findings).

Model generation and simulation issue a contribution accompanying the planning process making for comprehension of space, for the conception of planning ideas, for the communication in the context of the specific planning and configuration process, i.e. for conveying messages ("mediation") regarding planning issues and for conveying planning ideas, assisting decision finding and public relations and thus for quality securing throughout the entire planning process.

Models and simulations are "auxiliary means in handling reality" (Bossel, 1994:11). They are elementary components of the human world of thoughts, permitting experimenting with variants and scenarios and thus source of new (space-related) knowledge. The simulation functions "knowledge", "decision" and "communication" (Markelin-Fahle, 1979:19f.) illustrate the background of the planning process.

Space-related model generation is to be interpreted as approach <u>based on</u> reality, space-related simulation as the approach <u>towards</u> reality. The approach based on reality leads via concept analysis and model concepts, the approach towards reality via concept synthesis and space-related concepts (configurative and function-related concepts). Space-related concepts amount to "turntables", model generation and simulation to the "driving belts" in the field of tension resulting from space-reality and space-related model (or language) making for configuration and structure development.

6



Remarks:

The "Semiotic Triangle" (cf. Schönwandt-Wasel, 1997) refers to the "correlation of language/signs and ideas/thoughts and objects", resp.. It is based on a clear differentiation of (material) "objects" and "human thoughts", of "signs" and the "denoted". Language (and words, resp) as well as signs thus first denote specific objects and events and secondly, also specify concepts, some words, signs and linguistic expressions only refer to concepts. They refer to "two kinds of "objects"", i.e. "concepts" (immaterial objects) and "material objects and events, resp.".

Urban Space, Building-up Volume

Settled space, urban space and its built-up volume (as major parameter) are those "concepts" to be secured and improved. Built reality stands for the spatial ideas of past and present generations: it is subject of knowledge and object of planning. The configuration of urban space and its partial spaces is mainly characterized by securing and creative advancement of the "building-up and urban volume". The "interaction between compound three-dimensional elements and free spaces" of the settled space determines the quality of public space. The architectonic object and its relation to public space is that delicate joint to be designed with special care. Building-up and its volume are of special importance within the framework of the components of space constituting "urban design", "urban space" and "public space". Public space predominantly acts as reference object for the perception of space, the space experience and the behavior of those involved in space. The public space, the village and urban space attract public interest due to their significance for the general public, arouse the public attention and are object of public appropriation due to space utilization. By determining the building-up and urban volume an essential principle for village and urban design is established.

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Planning For Man And Woman Too

Clara Greed School of Architecture and Planning. University of the West of England, Bristol, BS16 1QY, UK ClaraGreed@aol.com

Abstract

Town planning and urban policy making cannot be based upon the needs of 'the average man in the street'. Rather it is important to take into account the differences within the population in terms of 'planning for diversity'. This paper which is based upon recent Royal Town Planning Institute research, led by the author, looks at the ways in which equality issues can be mainstreamed and integrated into the planning process, in respect of gender, ethnicity, disability and cultural differences. Recent EU, European Union requirements are explained such as the effects of the Amsterdam Treaty 1997 that requires equality issues to be taken into account at all stages of the planning process, including allocation of resources, composition of planning professionals and policy making. Examples of locations where equality mainstreaming is taking place, particularly in relation to gender, are given in relation to UK (United Kingdom) and other Western European countries. Problems and barriers are highlighted, and recommendations and conclusions are made as to how to take the need to plan equally for all.

Introduction

Nowadays a commitment to Equal Opportunities is becoming widespread within local government and urban planning departments across Europe. But many are concerned that the ambitions and objectives of equality policies are set at too high a level, as 'spin', and as generalised, 'generic' standards which do not, for example, separate out the needs of women (as different from men), and do not identify the specific needs of different ethnic minority groups. In the UK (which does not just consist of England, but includes Wales, Scotland and Northern Ireland too all with their own planning systems) there is a range of generic standards requirements (LGA,2001), covering race, disability, gender and a range of other minority isues including religion and language, which are meant to be integrated into all aspects of policy making, including town planning. A specific focus on gender issues may get lost in the current emphasis upon taking on board 'all' the minority considerations at once in a generalised approach. In this paper the issue of planning for women (as well as men) is discussed. In spite of many years of 'women and planning' conmferences, books and organisations, still the gender implications of planning policy and practice

are not necessarily being taken on board. This is for a variety of reasons reasons including a lack of understanding and appreciation of the issues. Some planners seem to imagine that women's needs relate to just a few matters, such as childcare, and that they are to be seen as 'special' and separate from 'real urban planning'. There is a lack of awareness that many apparently 'neutral' policics have a negative impact upon women's lives. In fact, as will be explained in this paper, women's issues have implications for ALL aspects of policy making, including employment, housing and transport policy. Therefore gender needs to be mainstreamed (integrated) into all aspects of the design and planning of towns and cities.

Definitions

'The European Commission defines gender mainstreaming as the 'reorganisation of the improvement, development, and evaluation of policy processes, so that a gender equality perspective is incorporated in all policies at all levels and at all stages by actors normally involved in policy making' (Ref: Council of Europe, 1998).

Gender Mainstreaming goes beyond just 'equality' as defined as 'treating everyone the same', or traditional 'women and planning' initiatives, because it takes into account the different ways of life and daily travel patterns of women as against men - and the consequently different land use and development requirements that the planner must address. Gender mainstreaming has implications for men as well as women. But since women have a lot of catching up to do, and because heretofore strategic planning authorities have been empirically shown not to priorities women's issues (Reeves, 2000a: Higgins and Davies, 1996). It is likely that as a result of gender mainstreaming the needs of women will be more strongly embodied within town planning policy than previously. But in that 35% of men are now the primary carer of children under 12 because their wives are at work, it will affect men too, especially where the couple are on different shift-work patterns. Thus GM will not only make it better for women, it will benefit everyone, as it will lead to town planning policy being more reflective of modern family needs, demographic trends and post-industrial employment patterns (Reeves, 2000; Gilroy and Booth, 1999; Horelli, 2000; Darke et al 2000). Whilst stressing the importance of children's issues, most women out in the city are not in charge of children or babies. Many women want to be seen as citizens in their own right too with their own jobs, interests, and land-use transport needs of their own.

As has been found in previous research (Little,1994; Greed,1994,1999) although there is a plethora of 'women and planning' policies, there has been a very low level of actual implementation of policy. Gender

mainstreaming has been introduced as a means of increasing the chances of implementing planning policies that meet the needs of women, as well as men, being implemented more effectively, and being taken more seriously as a valid component of the mainstream planning system within each of the Member States. This paper is based upon research recently undertaken for the RTPI (Royal Town Planning Institute) (Greed (ed),2003,a,b,c), in which a survey was made of existing good practice, and a 'Toolkit' (= A set of Guidelines and Stages) was produced to enable local planning authorities to mainstream gender considerations into the planning process.

Why Mainstream Gender?

Taking gender into account results in better plans, and thus planning better for everyone, men, and women who comprise the majority of the 'planned' that is 52% of the population.

GM is now a requirement of policy making particularly in respect of the use of structural funds (EC.2000; Braithwaite, 1999). Since 1994 the allocation of structural funds for various projects and policies within the EU has been increasingly subject to funding conditionality in relation to EO considerations especially gender proofing in terms of tendering, procurement, recruitment, employment, and of course policy making (EC,1994). The concept of gender mainstreaming was first developed at the UN Third World Conference for Women in Nairobi in 1985, and was subsequently expanded as to application at the Beijing conference in 1995, which identified the following areas as subject of gender mainstreaming. poverty, education, training, health, violence, armed conflicts, economy, power and decision making, institutional mechanisms, human rights, the media, the environment, and the girl-child. Thus the European Union initiative recognises that there is a difference between the genders in terms of planning needs and issues.

Gender mainstreaming worked its way across into the EU influencing the Third and Fourth action programmes, and is now embodied in the 1997 **Treaty of Amsterdam**. This requires the equal treatment of women and men in all policy making, thus giving gender mainstreaming a high priority within the operation of the EC. Previously Article 119 of the Treaty of Rome 1957 guaranteed women the same rights in law, and the same opportunities in the public realm as men, but it took a long time for this to be instrumentalised. Article 2 and 3, section E, Clause 2, of the Amsterdam Treaty 1997 requires Europe-wide horizontal priority to integrate equality objectives throughout programming process. Although it is only since the ratification of the Amsterdam treay that the EU requires **all** public services to be implemented with full regard to equal opportunties.

Currently any EU structural funds allocated under Objective 1 and 2 funding, and arising policies in the regions concerned, must be the subject of gender mainstreaming. The means that funders and recipients must 'gender-proof' quite what policies are being funded by a Gender Audit (GA) and through a range of Toolkits usually based up GIA (Gender Impact Assessment) methods. Objective 1 funding is for 'cconomic adjustment of regions whose development is lagging behind' and Objective 2 funding is aimed at 'economic and social restructuring of regions suffering from structural problems' and encompass a range of fund sources including the ESF (European Social Fund) and the ERDF (European Regional Development Fund) (Williams, 1999:132-3). For example, in the UK parts of the English Midlands and North (around Birmingham and Sheffield) and parts of South Wales are currently the subject of Objective I funding, with a strong emphasis upon linking regional initiatives and funding with inner city urban regeneration programmes - thus encompassing all the levels of British planning and all sorts of areas.

New Spatial Planning Initiatives being required by the EU from UK local planning authorities require gender mainstreaming in all policy areas. The new General Regulations for Structural Funds for 2000-2006 require gender proofing of policy, it is an obligation to eliminate inequality in the distribution of resources and related policy making. The explanatory technical documents stress the importance of providing indicators that monitor sex and gender dimensions of policies (EC (European Commission),1996, 2000, Horelli et al, 1998; Horelli, 1997, 2000; Braithwaite, 1999; Fitzgerald, 1999, 2000.) So far, the EC has organised four mainstreaming conferences starting in Brussels in 1997, and including subsequent meetings in Sardinia, Finland and Portugal (Reeves, 2001,a and b). The conferences have put emphasis upon capacity building, awareness, policy implementation and evaluation. Meanwhile a series of ESRC (Economic and Social Research Council) funded conferences in Sheffield have sought to apply the principles to British town planning, urban regeneration and regional policy making (ESRC, 2000; Yeandle, 2000; Booth, 1999; Gilroy and Booth, 1999). In 1999 a national RTPI symposium on gender issues in planning included coverage of gender mainstreaming (RTPI,1999).

But What Is The Problem?

It has been demonstrated by research and human experience that women suffer disadvantage within a built environment that is developed by men, primarily for other men, as explained in published research (Stimpson et al 1981; Matrix.1984: Greed.1994; Little.1994; Booth et al. 1996; Darke et al. 2000). Women constitute 52% of the population (ONS,2001,Chart# 1.4). 68% of women and 78% of men of working age are in employment. 65% of women with children aged under 5 in employment work part-time. 60% of all potential voters are women. Thus women are a majority of the general public for whom planning 'is' and a substantion sector of the workforce. Yet they are often portrayed in planning literature as small minority of disadvantaged individuals, although women come in as diverse a range of social classes, ages, ethnicity, disabilities, and personal circumstances, as do men. Many women combine dual roles as workers and mothers. Many women combine roles as workers, mothers and carers. One of the main problems associated with town planning has been a tendency to see 'women' as mothers or housewives and as little else, thus underestimating and ignoring their specific needs as users of the built environment, as commuters, citizens and breadwinners too. Thus 'the average man in the street' is a middle aged, working woman! 80% of women live in urban areas (ONS,2001) whilst rural women experience an additional set of difficulties (Little,1999). Thus they require planning policies that enable them to combine all these roles more easily. What is good for men is not necessary ideal for women as their lives and needs are not the same as those of men.

Women are more likely to be the ones responsible for childcare, shopping, and a range of other caring roles, all of which generate different usage of urban space. Less women than men have access to the use of a car, and they comprise the majority of public transport users in many areas. Women's daily activities and travel patterns are likely to be different and more complex than men's, as many will be combining work with childcare, and other commitments. In order to explain the problem, the issues will be investigated at three levels the city wide 'macro' level of overall strategic policy; the district 'meso' level of local facilities and centres; and the local 'micro' level of daily practicalities - all of which have major planning implications. In the following section emphasis is put upon the strategic issues of land use transportation policy, to emphasise the fact that 'gender' does not just relate to 'creches and ramps' at the local level, as often appears to be imagined.

A historical emphasis upon land use zoning divided cities into home, work, and play areas (residential, employment and leisure areas) (Greed,1994) creates impractical divisions in the smooth running of women's lives. Not only do women work within the home but such home and care related activities also spill into the outside world too when travelling around the city accompanied by children for example on their way to childminders and work, or on essential shopping trips to the supermarket. Women cannot conveniently leave their children at home (it is illegal to leave children under 11 on their own at home). Yet 44% of mothers are in employment. Far from increasing efficency, convenience, and health, zoning has led to increased flows of commuter traffic. Picking up children from school, or doing shopping has become impossible without a car in many cities. But nowadays the pendulum has shifted towards car control and sustainability. If there really is a desire to create the sustainable city, and thus to move people out of their cars and on to public transport, then social infrastructural support facilities must be provided, such as public toilets (with baby and childcare facilities), safe waiting areas, and 'manned' stations: all issues which women frequently mention in public participation exercises.

Much transportation planning has been based upon the assumption that the 'journey to work' is an uninterrupted trip in the rush hour by car. Women workers often undertake intermittent, lateral journeys, rather than radial journeys straight to and from the city centre. Such journeys were often undertaken outside the rush hour if they work part-time, and are more likely to be by public transport or by foot. For example, a woman's daily journeys might be as follows: home -> school -> work -> shops -> school -> home, and may not necessarily be by car (Hamilton, 2000). In other words women trip-chain their multi-purpose journeys. Whilst 80% of households own at least one car, and 30% own two or more (ONS, 2001) it does not follow that women have equal access to the car in the daytime. 70% of car journeys are made by men and far more women travel by foot or public transport. An emphasis upon 'green' alternatives such as using bicycles does not address the realities that such transport is not suitable for women accompanied by small children and a week's shopping, and discriminates against elderly and disabled people, whilst the dangerous expectation that pedestrians and cyclists should share footpaths shows the low priority given to the needs of each group.

Criticising women for using cars to take their children to school (don't men have children too?) is seen as an example of non-joined-up-thinking, as it focuses on just one part of a complex linked set of activities. It ignores the

realities of women's lives in which many of their 'private car journeys' are in fact a form of 'public transport' for the benefit of everyone else in the household, as a series of vital journeys are trip-chained together. **Coleman argues that women's carefully planned multi-purpose journeys should valued as a way of reducing the total number of journeys that need to be made, rather than seen as a source of increased congestion.** Instead women are 'told' by planners to use public transport, where none is likely to be available, and where bus routes are unlikely to go anywhere near decentralised supermarkets and seldom echo modern women's complicated travel patterns and trip-chaining (Coleman,2001).

On average 60 per cent of workers in offices are women, as are 80 per cent of all workers in the central area, including shop workers, but little would one realise this from dominant images of the 'journey to work' by the male 'commuter' (Greed,1999). In spite of central area regeneration initiatives there is a trend for central area headquarters to decentralise to the green field out of town sites and 'business parks'. These locations are difficult to reach for those without transport and miles away from shops, schools and other facilities, but employ large numbers of female clerical and support staff. Some planners do not seem to be aware, even now of the implications for transport policy, land use and location decisions, and the poor level of accessibility to the built environment planned into new developments.

There is a vast female army working in other expanding sectors. The care industry has the highest rate of growth investment and employment of any sector, and most of its workers are female (Gilroy and Booth,1999; RTPI.1999). There are half a million care workers and 90% female. More people are involved in catering and hospitality industries than there are in heavy industry. Traditional working class male factory jobs are in the minority nowadays (ONS data##). Caring has become an paid form of employment, an industry, as a result of the pressures of caring for an ageing population, demands for increased childcare provision, and a reduction in state provision for the disabled. 'Cleaning' is the biggest industry in the country, with catering and 'hospitality' coming not far behind all areas where there are high levels of female employees. Many of the women who work in these industries rely on public transport, travel at non-peak times, and walk considerable distances to their work. There is a small growth in 'telecommuting' that is people working at home by computer but at present less than 5% of people work in this way, and many of them are selfemployed. Such home working massively reduces the overheads of employers particularly in terms of building provision and may generate new leisure demands to get away from the home working environment within the suburbs. But this also puts pressure on already overcrowded homes and affects the gender division of space within the home, often to the disadvantage of women.

The problem remains that much of women's work is still not seen as 'real work' that if taken seriously would have a serious impact upon the nature of land use planning, the investment of support infrastructure such as childcare facilities and the creation of more convenient cities in which home and work areas are more closely planned. To draw a parallel, Oxfam, the Third World relief agency, has been attempting to mainstream gender in many of its development programmes. But, for example, their attempts in Africa to develop initiatives that benefitted women's agricultural employment prospects as well as men have been met with considerable opposition. This is because men's agricultural work has been seen by Western development planners (and local elders) as 'farming' whereas women's has been seen as only being 'gardening' and therefore a sparetime activity of no economic importance (Smith,2000, March et al, 1999; Moser,1993). Likewise women's work in Britain has often been seen as a hobby done for pin money, and therefore it has not been recorded in national statistics or taken into account in land use planning policy.

If gender is mainstreamed into plan-making, statistics on women's work, travel patterns, and other land-use related activities need to be prioritised, as a matter of course, in all plan-making activities to reflect the true representation of women within the population. Women would be fully involved in the decision-making processes both as officers and as members of the public. Planning policy would seek to reduce zoning divisions, to integrate work and home areas. Decentralisation, dispersal to out of town sites, and low density developments would be discouraged. A fully integrated public transport system would be developed before introducing such crude (and income related) measures as road pricing, whilst in areas where no public transport was available car parking, traffic access and related user facilities would be provided in locations that were convenient to women's needs, travel patterns, and trip chains. Employment locations, and to public transport based accessibility.

But before policies can be different, it is important to change the composition of the policy makers, who are still predominantly, male, middle class, white, technically minded and lacking in awareness of the lives of ordinary people (Thomas, 1999). Professional decision-making is not

necessarily neutral and impartial as individuals inevitably bring their own personal life experiences and 'world view' of what is 'normal' and 'average' to the policy making process Susan Brownill (2001), working in urban regeneration in Sheffield explains how the very fact that the members of the decision-making committees and boards involved are predominantly male, being drawn from male-dominated property professions, marginalised women's viewpoint and 'other' solutions. As a result emphasis has been put upon economic development and employment rather than upon the social and cultural factors that really regenerate an area. Many women are disillusioned with the ways in which apparently gender-neutral topics such as social inclusion, sustainability, regeneration, and even joined-up-thinking have been interpreted effectively to exclude women's lives and realities. Brownill argues for urban regen(d)eration policy (sic) that is mainstreaming gender into all aspects of urban regeneration. If gender were included women would be more fully represented among the composition of both the planners and the planned in new build, brownfield site, and urban regeneration programmes. As a result there would likely to be greater emphasis on social infrastructure and amenities, personal and road safety, childcare and local facilities. These issues are also prioritised by WDS (2001b) recent report on women's perspectives on regeneration in ethnic minority areas.

Mainstreaming women's needs would also create a more environmentally sustainable city. As an alternative to spread out, zoned, low density cities, European women planners would like to see the 'city of everyday life' which they define as the city of short distances, mixed land uses and multiple centres as the ideal objective that would fully take into account gender considerations (Eurofem, 2000; Skjerven, 1993). This would reduce the need to travel, create more sustainable cities, that were also more accessible for all, whilst creating higher quality of urban environment for all. It would provide more jobs and facilities locally and help revitalise declining areas overall. It is a fallacy to imagine that out of town decentralisation 'solves' congestion and frees up the city, because it creates tremendous pressure for other supporting land uses to move to the out of town location too, such as retail uses and other services and amenities. Or it puts a much higher burden on everyone in terms of having to travel many times as far back and forth across the city to fulfill other duties. If the objective of the local authority is to contribute to the equality of all its citizens such policy clearly make women's lives mor difficult. Employment opportunities and transport are for women. Mainstreaming gender issues, alongside totally linked environmental, transport and economic considerations would tip the balance

towards convenient location policy, and would enable a gender lens to be cast over commercial and industrial development proposals in terms of the composition of the workforce, their travel needs, and back-up social infrastructure.

At the local level, especially at the detailed residential area level, most planners seem to be much more familiar with so-called women's issues revolving around pedestrian access, steps, lighting, surveillance, planting, and play areas. Women as the majority of pedestrians are critical of the 'little details', like the use of rugged paving stones which are meant to 'enliven the streetscape'. These can shake the wheels off a pushchair and twist people's ankles, whilst wrongly aligned drain covers can 'catch' bicycle and pushchair wheels. Narrow doors and footpaths make the built environment inaccessible for both pushchairs and wheelchairs (Goldsmith, 2001). A single buggy (pushchair) is at least 550mm wide, a wheelchair is 750 mm wide at least, and a double buggy is 900mm to 1100mm wide (Adler, 2000). Likewise 'little changes in colour and texture' which are meant to create an 'interesting' townscape and soften the division between vehicular and pedestrian zones on housing estates, 'mean' to many pedestrians that they have to watch more carefully for cars transgressing onto pedestrian areas, and that they have to keep an eye on small children running out into the traffic. Indeed 'exciting' elements which create 'suprise' and 'interest' in the urban environment, such as blind corners, meandering indirect paths, high walls alongside footpaths (intended to create a sense of 'urbanity' and to provide 'privacy' for adjacent gardens) have been much criticised from a gender perspective. The difference that gender mainstreaming would make would be that local area planning would be based, from the start, upon greater respect for pedestrian needs, upon walking distances. There would be a full range of back-up facilities to meet user needs, including public toilets, childcare provision, adequate seating, lighting, cycle parking, and storage areas. Such provision would be achieved as an integral part of the planning requirements and policies for the area in question, as a valid land use matter, and not as a conditional bargaining chip in planning gain negotiations.

Many of the amenities and policies that women want, such as childcare policies, public toilets, creches, covered parking spaces for pushchairs outside supermarkets, inter alia, have all, over the years, been labelled as too 'social' and taken out of development plans as 'inappropriate' or <u>ultra vires</u> that is outside the scope of physical land use planning law. Many women planners argue such so-called social issues are a land use matter, and that the consideration of gender itself is a land use matter too because women use

land differently from men. In the case of toilets both gender matters (cultural factors) and sex matters (biological differences) come into play and so this is surely an issue worthy of mainstreaming as a 'material consideration' in planning decisions affecting women's access to the built environment (Greed,2001). The inclusion of such 'social' issues in the planning process would be key indicators that gender mainstreaming is taking place and therefore such factors are included in the discussion of each level to illustrate the 'problem'.

Survey Of Existing Examples Of Gender Mainstreaming

The European Union

Within Continental Europe, gender mainstreaming is far more advanced and widespread than in the UK. The emphasis has been upon taking 'employment' and economic policy rather than 'planning' as the starting point in gender mainstreaming activities in relation to structural fund initiatives, which so far have been the main subjects of gender mainstreaming attempts. But 'planning' has been drawn into this along the way, albeit not as prime mover. Indeed 'planning' as exists in the UK is peculiar to our nation-state and takes different forms and manifestations in other EU nation states. For example in the Rhône-Alpes region in France. the Trans-Faire project has undertaken mainstreaming of gender into different levels of structural fund operation, involving a range of local and regional public authorities; and Nordrhein-Westfalen, Germany has put emphasis upon mainstreaming gender into regionalised structural planning, with strong emphasis upon the employment and training dimension. Likewise in the Provence-Alpes-Côte d'Azur area of Southern France under Objective 2 programmes emphasis was put upon collecting gender disaggregated data through liaison with the local women's rights group and regional census authorities. Similar work was undertaken in Haute-Normandie. Just collecting such data is a huge change in itself and currently new requirements are being fed into the next phase of structural fund criteria on standards for disaggregated gender collection. But those regions that have been proactive in data collection changes have also generally initiated training programmes for local authority officials and policy makers in order to ensure that the new approach and gender awareness is mainstreamed into the regional policy system.

Gender mainstreaming has already been incorporated into the planning systems of several European countries, with Scandinavia taking the lead (as discussed further in Section 4 and see Strauch and Wirthwein, 1989; Skjerven, 1993; Eurofem 1998, 2000; Verloo and Roggeband, 1996). In Continental European planning systems more 'social' factors can be incorporated into what, at first sight, seem to be more narrow planning systems. For example time planning has been introduced in many Italian cities (Belloni, 1996) an issue of great concern to women. Time planning has been established under Italian law, by Article 36, 142/1990, which has given elected city mayors the powers to formulate 'time plans' in association with business and school representatives, and to 'change times' that is to alter opening and closing hours of both public and private institutions, organisations and shops, and differential gender requirements have been strongly mainstreamed into this process. Also see examples in France, (ARU,1997 and 2000). In the RTPI study we were particularly interested in the methodology used in these examples to mainstream gender into the planning process. Key components and stages, identified from such European projects, that must be incorporated in the gender mainstreaming process (for every policy topic) include:

- 1. Programme preparation
- 2. Monitoring and evaluation
- 3. Institutional framework
- 4. Information and publicity (participation)

Alternatively key stages in the policy-making process are identified which correspond broadly to key stages in the British plan-making system, namely:

- 1. Defining issues, goals and objectives
- 2. Collecting data
- 3. Developing policy alternatives
- 4. Setting up public participation and feedback
- 5. Policy evaluation and policy determination
- 6. Ongoing monitoring, evaluation and policy review

Gender mainstreaming is also found increasingly within the funding regime of the EU, governing research, new investment and European Community priorities. Emphasis is put upon evaluating and selecting projects for EU funding (EC,2000) according to whether they are (paraphrased simply):

- 1. Equality Positive
- 2. Equality Orientated (has possibilities)
- 3. Equality Neutral

4. Equality Negative

5. Equality Ignorant (Missed Opportunity)

(Projects that are classifed as 1 or 2 are more likely to succeed with funding, CE,1998)

The know-how and methodologies of GA have been spreading into Britain through various European 'women and planning' networks such as Eurofem (Horelli et al,1998, Booth, 1999; Spitzner,1998). Conferences have been held for several years on strategies, policies and initiatives, especially the idea of developing Toolkits as a means of undertaking Gender Audits to achieve mainstreaming (Gilroy and Booth,1992).

In summary the chosen methodology must enable the planners to 'test' and then 'gender proof' the policies in questions. All this may boil down to asking only two questions, according to work in the Netherlands (the SMART system):

Is the policy proposal directed at one or more target groups?

Are there differences between women and men in the field of the policy proposal?

These questions are asked with reference to rights, resources, positions, representation, values and norms, and therefore can also be asked with reference to benefit from allocation of the resource of land use, accessibility and development within a town planning context. At its simplest sex differences in respect of the composition of target groups are generally a good indicator of gender relevance, for example if large numbers of men, but few women are likely to benefit from a particular resource or if 'women' are completely absent from the topic agenda then the chances are that the policy needs reconsidering. But the SMART system does not offer policy remedies to make the situation more equal but it does flag up warning signs for senior managers to investigate further. One could imagine such a system operating within a development control situation with 'dodgy' ((negatively gendered) proposals being referred to the line manager.

The United Kingdom

Although now part of the EU, nevertheless the UK has its own approach to urban planning and to equality issues. We were to find from our research that there was a limited amount of material or guidance on gender mainstreaming, rather the emphasis within the equality agenda was more upon disability and ethnicity (race) rather than gender. However, a range of women's organisations are pressing for change, such as the Women's Design Service, London Boroughs Women and Planning, and the London Regeneration Network, all of whom have produced guidance, workshops, conferences and initiatives on mainstreaming.

Very few central government policy guidance documents include gender matters thus there is a lack of national guidance. But we were to find that at the local planning authority level, a range of progressive EO policies on race, gender and disability are to be found, in particular, within local authorities within the London area. The new spatial strategy initiative of the GLA incorportes many of these dimensions and is being pioneered in the GLA (Greater London Authority) in the Mayor's Spatial Development Strategy (SDS) (WDS,2000a; LRN,2000; GLA,2001, see Challenge 6, Challenge for People, which includes a section on women). The 1999 GLA Act requires gender considerations to be taken into account, and according to Hannah Crook, GLA Strategic Spatial Policy Advisor, Previously the GLC had a strong record on gender issues (GLC.1995.1996) foreshadowing gender mainstreaming in its approach to planning policy making and some of this had spread to the different London boroughs such as Lewisham, Haringey, Tower Hamlets etc. We were also to find that gender mainstreaming was being 'started' in some of the larger provincial cities, where there was a more progressive local council, such as in Sheffield, Birmingham and Bristol. We were also to find that outside of England, with the new local assemblies in Scotland, Wales and North Ireland, and the Republic of Ireland there were an interesting range of attempts to mainstream gender into policy making at the highest level. The Republic of Ireland Document 'Mainstreaming equity between women and men in Ireland' is a particularly good example (Ireland, 2001).

Case Studies

We found it difficult to find a set of complete 'perfect' case studies of existing good practice but we were able to draw on examples where different aspects of mainstreaming were beginning to be undertaken. There were in particular several local planning departments where a generic, rather than gendered, approach to mainstreaming was being put in place, that is the emphasis was broader upon a range of minority issues, such as race, disability, cultural difference and gender. On the one hand putting gender (women's issues) in with everything else weakened the focus upon gender, but on the other hand such examples often provided good examples of practical methodology, although in some cases the programme was too ambitious 'to include everything and everyone all at once' and little was really achieved. In the end for Generic Mainstreaming we chose Bristol, Lewisham, Hackney (Southall), and Haringay. For Gender Mainstreaming where the emphasis was more focused upon gender in its own right we chose, West Midlands, Birmingham, Sandwell, Sheffield, Harlow, and Cambridge. We also looked at examples of national level mainstreaming

within other countries within the UK, for examples of <u>Strategic National</u> <u>Level Mainstreaming</u> chosing Northern Ireland, Wales, and Scotland.

Our investigation of <u>generic mainstreaming</u> authorities was very helpful in terms of methodology but found that in many cases 'mainstreaming' seemed to work better in relation to personnel and human resource management issues of staffing, and was much more difficult to integrate into actual policy making. This was particularly the case in respect of the more technical departments such as engineering, building control and highways, where the staff were mainly male, educated in a technical, rather than sociological culture, and generally unaware of women's issues. It was found that 'gender' had a better chance of being taken 'seriously' if there was strong higher level managerial support. In the case of generic mainstreaming, Lewisham's Best Value Equalities Guidance (2001) was most helpful. It starts with a simple SWAT analysis, which is applied to 'evaluating the current service'

Strengths

Weaknesses

Opportunities

Threats

This was developed into 'Equalities Swot Analysis Questions' as follows: Are there equalities targets and indicators?

Are they appropriate and met?

What is the current user profile?

How do you know this is representative of the community?

What do you do to ensure that all potential users have equal access to services?

Do you know of any gaps in provision?

How acceptable are services and information?

What are you doing to improve the situation?

In the case of specifically <u>gender mainstreaming</u> authorities, the main urban areas in England where gender mainstreaming policy making activity is already taking place were Plymouth, Birmingham and West Midlands, Sheffield and South Yorkshire, but implementation of recommendations is more limited. Plymouth had produced an excellent Gender Auditing Manual and Matrix. In summmary in Plymouth a gender profile was developed in relation to the 'gender gap' in respect of differences in family and caring responsibilities, leisure needs, housing needs, transport and accessibility, shopping, and individual and community safety. Emphasis was placed upon developing a Matrix, modelled on one previously developed for Environmental Impact Assessment in Plymouth. Likely indicators of change were identified in relation to each policy area, and likely requirements and changes for effective gender mainstreaming were provided for each policy category (Plymouth,). Further information on the work in Plymouth and other more recent EU examples is to be found in a survey undertaken for Vienna City Planning Department which is likewise trying to mainstream gender into its planning policies (Tilia,2003).

In the gender specific examples we were to find that a series of stages were generally undertakne as follows:

Collect gender disaggregated statistics and indicators

Rethink priorities and identify fundamental gaps

Develop equality 'know-how'

Develop appropriate tools supported by practical training

Develop new partnership structures

Monitor progress in achieving objectives

Engage people at all levels in the process allowing women and other disadvantage groups to take on the role of change agents

In the case of Sheffield (Booth,1999) the emphasis was upon evaluating policies in respect of:

Direct benefits to particular groups

Indirect benefits

Neutral impact

Groups at risk

Missed opportunities.

In respect of gender mainstreaming examples we found it was essential, for it to work, for that any attempt to gender mainstream must be fully owned and welcomed by the planning authority in question, by all its officers, not just the women, and not just those working in conjunction with higher level BV or Personnel programmes. It appears to be necessary to provide a period of teaching and familiarisation with the issues to enable senior planning officers to 'see' what the issues are and to breakdown stereotypes.

In the case of national level mainstreaming initiatives in Wales, Scotland and different parts of Ireland, newly devolved 'national assemblies' had put a strong emphasis on gender. For example The Government of Wales Act (2000) which established the Welsh Assembly, Clause 47, commits the Assembly to fostering EO, whilst Clause 113 requires that the Assembly ensures that those institutions which it funds incorporate EO strategy, which may be seen as a form of gender-related conditionality to receiving funding. Guidelines have been produced for the National Assembly of Wales (NAW,2001) on promoting equality of opportunity. Of particular interest is the National Assembly Equality Audit table which evaluates policies and stages relative to the following levels of gender awareness?

Innocence

Awareness

Understanding Competence Excellence

In Scotland, there is a heritage of 'women and planning' initiatives, a range of Objective 1 and 2 schemes in which gender conditionality applies, and various sustainability programmes, often linked to healthy cities, which all provided a good basis for gender mainstreaming, particularly within the two largest cities, Edinburgh and Glasgow, but much of Scotland is rural and remote and we found that in such areas there is a need to mainstream gender into economic initiatives, especially into employment policy, in order for them to have an effect on local planning policies.

Northern Ireland is an interesting example in that 'planning' policy functions are centralised to cover the whole region, whilst this is cascading down to district equivalents of lpas in the individual local municipal planning authorities which carry out planning. In the case of Northern Ireland gender was mainstreamed along with religion, race and disability, creating new juxtapositions. Emphasis is being put upon seeking out related likely influences and 'unexpected' linkages to other policy areas, thus seeking an integrated approach in the process of undertaking EIA (Equality Impact Assessment).

Pilot Studies

Having looked at the UK situation, we then undertook a series of 6 pilot studies in which we developed a 'Toolkit' and tested it with local planning authorities, 3 of which were also used for case studies, namely Edinburgh, Birmingham, and Harlow. In addition Kennet was chosen as a rural district planning authority. Crawley New Town, south of London, also asked to be included as it was already embarking on gender mainstreaming activities of its own in response to demands for greater participation in plan-making processes from enthusiastic Moslem women's groups in the New Town, so it drew together ethnicity, religion and gender together. Southwark was chosen as an example of a progresive London borough where a range of types of mainstreaming were already ongoing in respect of race, disability, inter alia as well as gender. Therefore it was of relevance in seeking to address the problem of 'gender being lost' by all the other minority issues that were being mainstreamed at the same time. We found that piloted planners were much more interested in PROCESS than in POLICIES. Respondents were not very interested in the section on the 'difference' before and after. They are not so keen on policy examples, which is interesting, as they all say each lpa is different. Indeed there seemed to be no big debates about policy issues but rather a concern with procedural

detail. Having looked across at the range of examples, possibilities and issues, it must be concluded tht it is impossible to give a prescriptive blue print on how to undertake gender mainstreaming, and what policies or approaches are 'best' as every situation is different. Therefore, in our Toolkit (Guidance Document) we put an emphasis upon providing key principles to raise awareness and to help local authorities undertake ender mainstreaming. We were also very aware that some local planning departments had already 'started' using genderic EO procedures and they wanted to use some bits of what we were offering but only those parts that fitted in with their existing programme.

There is considerable debate as to the merits of fully integrating gender in with race, age, disability etc etc, within diversity, as one of several attributes, or separating 'gender' out as a distinct factor affecting 52% of the population. The advantage of integration within diversity is that it can be latched on to existing programmes, and planners may be less alienated. The disadvantage is that 'gender' gets lost among everything else, and those authorities that imagine they can do 'everything', all the so-called 'minorities' at once but are not necessarily equipped to do so, in terms of training, awareness, and cultural perspective. Therefore the realities of applying a gender lens thoroughly to all aspects of policy making needs to be stressed, so that the toolkit does not end up as yet another 'tick box' exercise.

In the end, after much struggle we produced a toolkit and an accompanying research document and submitted them to the Steering Committee of the RTPI for their final editing and publication. Owing to contractual copyright reasons we are unable to include the Toolkit details in this paper, but they should be available on the web www.rtpi.org.uk, and below we have set out what we consider to be the essence of the methodology that will enable local planning authorities to mainstream gender into the planning process.

MINIMUM CHECKLIST FOR THE TOOLKIT

In the case of each policy area ask the following, and thus go through the following questions and stages.

Who is doing the planning? (male/female composition and senior management)

Who are perceived to be the planned? (just the average man? or women too?)

How are statistics gathered and who do they include? (are they separated into male/female?)

How is the policy team chosen and is it representative of men and women? What are the key values, priorities and objectives of the plan? Who is consulted and who is involved in participation?

How is it evaluated? Are focus groups used?

Does Gender auditing reinforce 'plait with' other key policies to create better planning?

How is the policy implemented, managed, monitored and managed?

The most telling indicator = "what are the best places, favourite places, nicest urban areas that women like and why?" Think on these things.

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The Relationship of Natural and Artificial Environment as One of the Important Problems of City Building Ecology

George Salukvadze

Georgian Technical University

The issue of interrelation of natural and artificial becomes more and more acute and acquires specific principal meaning in addition to philosophical aspects.

As it is well known, natural environment is subordinated to natural regularities; and it was always so. But since man started to interfere in it actively through his activities and the attitude of man towards nature became deeper and wider, the nature underwent changes and together with natural character it obtained some artificial ones and we have received a sphere of mutual interference of nature and society, transformed by the society and carries the social traces of man's life and activities.

While tackling the issues of relationship between natural and artificial the process of development of interrelation between society and nature, it was revealed that the society strongly influences natural environment as a result of which we receive more and more changed environment, more "adjusted" to biological and social requirements of a human being.

The attitude of modern man towards nature is not only as a "means of life"; it is also a "means of production" (1). Thus, as long as man masters new methods and means of usage of nature, the attitude towards nature itself requires new comprehension.

Bio-spherical influence of man increases exponentially and this revelation can rise and accumulate so as to finally cause negative influences on outer world.

What is the idea of artificial environment? Scientists clarify that this is expressed in its "double determination" (2) causing the creation of spheres of reality of natural-social, artificial-historical new objects; they are subordinated to natural and social regularities, namely, certain interrelations between natural and human factors, natural and social regularities represent quantitative characteristics of natural environment. This is the basis of dialectical impediments and similar to any artificial material creation, this determines the specifics of inner and artificial environment between natural and artificial (3). Artificial world is a materialized outcome of interrelation between society and nature.

As it was mentioned above, natural environment is subordinated to natural influences. One can carry out any manipulations with the latter, as with an object. Namely, one can preserve it maximally similar to initial form, assist its development, protect it etc. and vice versa, deteriorate its ecological condition through wrong aggressive and consumer attitude and thus achieve the creation of such artificial environment in the same natural environment which will cause negative changes and degradation of natural environment.

One of the main characteristics of artificiality is the fact that environment is subordinated to human goals. There are three subsystems in this subordination singled out on the basis of degree:

- 1. Artificial environment, which is entirely subordinated to human goals and is radically changed by humans (e.g. a wide-scale capital construction in the environment), that is, next to natural environment there is an artificial environment created, or we face the problem of interrelation of biosphere and techno-sphere;
- 2. Environment or subsystem, which is partially subordinated to human goals. Here the environment without techno-sphere is meant, that is, the subsystem of the artificial environment, certain elements and features of which are used by humans for achieving their goals. Unlike the first subsystem, this system remains in the structure of natural environment and as a result of human influence changes partially; e.g. square, small park etc.;
- 3. The third subsystem is the part of the natural environment, which is not included in the first two subsystems and despite this it carries the traces of human activities and actually it is the result of elemental, non-realized, unintended influence.

Thus, all three subsystems the degree of artificiality is determined on the basis of interrelation between natural and social and it varies. We believe that three categories can be singled out in artificial environment on the basis of the degree of relationship to natural:

Firstly, the objects, which represent no threat to natural environment and the inner features of their life – such as origin, inner activity – do not pose any problems of existence of natural environment, that is, the forms of human relations connected to these objects – influence as well as its termination – do not change nature essentially.

The second category of artificial objects is made by objects, in which equal relation has been established between artificial and natural, which are essential for the first as well as for the second side, directed to their further development. In this case, the human influence of nature stresses the essence of natural system, and the termination of the influence may cause negative results – significant changes, degradation of disturbance of the entire system.

The third category of objects is made of the ones in the origin and development of which the decisive role is performed by social and natural are subordinated to the latter. In such case, in compliance with its goals it chooses and to some extent "makes a combination" of natural serving its goals and neutralizing the outcomes of, which hinder its achievement. The examples of such objects are "anthroposcenoses" (urban territories).

Practical activities of humans directed to the transformation of nature increases its unity, caused by the increase of functional network with the latter. It gives a possibility of discussing man and natural environment as a unified system (4). The unity of outer functional connections achieved in the process of utilitarian-technical transformation of the universe is not only the true unity of humans and nature or genetic unity as an outcome of nature. Man is united to nature not only genetically (due to his origin) and functionally (transformed in the process of his activities), but essentially as well (due to his own potential) and the latter acquires the ability of separate existence in the process of activation; for this, the unity of nature and humans has the features of dialectical impediments.

Man cannot exist without nature not only physically, but inside and spiritually as well. In case of normal interrelation between man and nature, man should be united with nature not only physically but inside and spiritually as well. There is one more important point to note, namely the advantage of humans on nature is revealed during his relation with nature and in this case the type of attitude of man towards nature is essential, or, when there is a desire of its improvement, or vice versa, man actions damage it. That is, man's activity is the basis of relation with nature. The nature of changes of natural environment depends on it. Man has to use nature, utilize its possibilities, but it is important to know how and for what we are transforming it, what are the preconditions, means involved in the process etc.

Man is a part of biosphere. He is characterized by dualism – he is a biological entity and a social creature, and in this dualism, dialectical relationships the complexity of his relation to nature is revealed. The changes introduced by modern man as a result of his production activities are huge. In total, man deforms biosphere.

Human being's current "success" in the relationship with nature is, first of all, the result of the fact that up today science has failed to provide an absolute prognosis concerning the outcomes of man's influence on nature. And secondly, man lacks an absolute reliance in technical systems. Unfortunately, today technical means are used not for preserving and developing the existing wide variety of natural environment, but vice versa, for weakening its aesthetic and ecological side. Overcoming of these negative relations is one of the leading issues of modern architecture. That is, to make artificial environment a part of live nature maximally. The acuteness of this problem is proved by the fact that the International Conference of World Architects planned to be held in 2004 will be dedicated to this problem.

While studying the of interrelation between natural and artificial environment the main importance is born by the type of relation between these two environments, how does artificial environment support normal functioning of natural environment, preserving and developing biological processes undergoing in it or, vice versa, how does its very existence play a negative influence on natural environment; its ability to compensate decreases and finally we get a degradation of natural environment. Consequently, chemical compositions, physical condition of environment, existence of various necessary components being in contact with it are all equally important for a living organism. Organism receives necessary substances from the environment and returns the product of metabolism to it. And this process of receiving and giving energy away should be balanced, otherwise "the balance between organism and environment" is broken and its existence is in danger.

Thus, in the part of natural environment where artificial interferences are introduced, the latter should be based on the implementation of realized changes. In such terms, man possesses an ability to manage this evolution process by social as well as by biological implication. "Balance" should not been understood as an ideal system of relation between natural and artificial environment. It should be understood as unity of qualitative and quantitative changes subordinated to the objective of nature.

Man has realized that the strategy of urbanization demands new understanding and puts ecological and social sides of life in the conditions of management with the aim of interrelation. And the aim of management is mutual adjustment of city and environment.

Man cannot refuse interfering into natural environment and he should not do so first of all because this is an unavoidable process and secondly, man's influence on environment does not mean only negative outcome of his activities. Much depends on how reasonably the man uses hid possibilities, knowledge and ecological education for establishing these relations (between natural and artificial). Man's role in these relations should be discussed as on of the chains in ecological system, which helps various flows of substances on the earth, numerous transformations undergoing in nature, both dead in live and vice versa. Making the artificial eco-system perfect and adjusted to natural environment can be determined with the difference of how effectively does the trophy system work in artificial environment in comparison to natural environment; i.e. man's activity directed to implementing changes in natural environment and creating artificial environment in it should be based on exactly on biological and other relations as long as at any level, even for the whole earth, ecological balance is determined by the balance not only of plants, animals, and micro-organisms. Man's life and activities are connected to such balances, proportions and . The city building architecture plays and important role in developing and realizing these measures; its main aim should be to create ecological environment necessary for modern man, as long as the relation and outcomes of natural and artificial environment directly influence the perseverance, restoration, formation of nature, condition its co-evolution development both at local and regional level.

The links with nature should be restored not on the principle of "back to nature", but vice versa on the principle "ahead to nature".

We consider that it is possible to ecologies urban territories, to change existing ones with similar eco-systems, those nor rejected by nature, but organically inscribed in it; this will give then possibility to reach steadiness, restore damaged balance and help nature in avoiding negative influence. And the main role here belongs to city building, city building ecology.

Addressing such an important problem as ecology and the increasing interest of the world society towards it, I would like to introduce the attendants of this International Conference the text of the address delivered by us at the World Summit held recently in Johannesburg:

"The year since the Earth Summit in Rio de Janeiro which enunciated the interdependence and indivisibility of the world, the development and environmental conservation, regrettably could be called the time of missed opportunities.

In the report of XIX Special Session of the UNO in June 1997 it was forecasted that the next quarter of the century there would be characterized by "frequent ecological conflicts and intensification of ecological stress". In UN Account on Ecological Research 2002, carried out by more than five thousand scientists, was written: "The planet is tottering on the brink of disaster and the time to make economic or political election, which could prevent the catastrophe, flies away".

The life clearly showed insufficiency of financial investments and in institutionalization of the process, the absence of real stimuli to actively involve the countries in solving global problems, the roots of the ecological crisis lay in improper approaches and principles of nature use and nature conservation. As a powerful factor for stimulating the consolidation of international community can be only a new basis of values. We need a new "Ethical Ecological Concept".

Here it is meant that it is unallowable to treat Nature only as a source of welfare, preserving it for more intensive exploitation. The motivation for Nature conversation should be the acknowledgement of values for each Nature competent despite its usefulness for Man, with the method of minimization of interference in nature.

The main thing in this new "Ethical Ecological Concept" should be an assertion of moral principles in the attitude towards Nature as a counterbalance to utilitarian one, the change of ideological dogmas and anthropocentric objective into spiritual values, and ecocentric views at the world, to consider regional peculiarity, historical experience and conditions of each country.

The development and implementation of "ethical Ecological Concept" will give appropriate ground for harmonization of interrelationships between Man and Nature, for better mutual understanding between the nations. From the strategic point of view – formed to Concept for a Sustainable Development of Earth Ecosystem.

We, the ecologists of the South Caucasus, located at the junction of European and Asian, Northern and Southern cultures that has passed through the hardest historical path, but preserved the global perception of the problem, suggest:

- To examine this Declaration on the Global Forum of Civil Societies within the framework of the Summit and reflect the general position in the Political declaration of the Summit;
- To introduce a separate point in the second section of the Agenda for the 21st century or adopt a separate decision concerning the necessity of developing new concepts for the protection of the environment on the basis of ethical principles as well;
- ➢ To devote a special session to of the UN to the problems of ethical approach towards the environment and elaboration of the basics for the Concept for a Sustainable Development of Earth Ecosystem."

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Treatment Of The Structures Dating From The Period Of XVIII Till XX Century In The Republic Of Macedonian

Lazar SUMANOV¹

Introduction

According to the registered and filed cultural monuments in the Republic of Macedonia, most of those belong to the period between 18th and 20th century. The processes of inventorying, evaluating, maintaining, conserving, restoring, revitalizing and reconstructing have been going on since the time of establishment of the Institute for Protection of Cultural Monuments (1949).

Generally, they treatment can be divided into two phases, namely, the phase of registering, evaluation and designating the cultural monuments and the phase of elaboration of projects for direct treatment (physical) and their realization.

Within this phase, a large number of activities has been taken, but these were not always adequate and in accordance with international recommendations which were in force at the time of those activities. This shall be elaborated in more detail in this paper.

Inventoring and evaluation

The inventoring of immovable architectural heritage (a process that is still going on) started immediately after establishment of the Institute for protection of Cultural Monuments in 1949². Based on the initial results from

¹ Dr (Ph.D.); Advisor Conservator, Free Lance Architect; President ICOMOS Macedonian, P.O.Box 816; Razlovecko vostanie br. 24/6; 1000-Skopje, Macedonia; tel/fax ++ 389 2 362 024; mobile: ++ 389 70 781 671; e-mail: icomosmk@mt.net.mk

² According to latest data from the Republic Institute for the Protection of Cultural Monuments, there are in total number of 1,115 registered immovable cultural monuments in the country. Out of these: archaeological sites-100; churches and monasteries-169; vernacular -urban architecture-359; vernacular-rural architecture-71; monuments and commemorative structures from the renaissance and the National Liberation War (1941-45); profane architecture-186; fortresses-8; markets-4; historic construction buildings-9; mosques-29; place of worship-6; Ottoman bats-20; taverns-4; covered markets-3; towers-13; clock towers-10; bridges-13; inns-2;other 19.

According to knowledge that have been gained so far, there are existing in a total number (not all yet registered of 6,617 filed immovable cultural heritage. Out of these: rural

the inventoring, evaluation of the structures pertaining to this heritage was made as was their designation as a cultural monuments protected by law.

During the fifties, he sixties and particularly the seventies, the main attention was primarily focused on the individual cultural monuments (basic assumptions of the Venice Charter-1964). Parallel to the inventoring that went on and the solutions made as to putting structures under protection by Law, the also started activities for physical treatment of the structures dating back from the $18^{\text{th}}-20^{\text{th}}$ century.

Based on this general determination and constellation of staff within the protection institutes, all the activities and attention was focused on the individual sacral cultural monuments-the churches from the Byzantine and Post-Byzantine period as the most valuable cultural monuments. It was this determination that affected adversely the remaining but also valuable fund of immovable architectural heritage-the structures in the town and villages. Namely, although the structures were evaluated and registrated,³ there was no categorization or adopted List of priority task and our attitude toward this heritage was different. The primer importance was given it structures from the Byzantine (9th-14th century) and post-Byzantine (15th-18th century) period, which means structures of sacral orthodox character. With some exceptions, the remaining structures that existed within the towns tissues were rarely treated.

This situation was changed in a positive sense after 1975, i.e., after the Amsterdam Declaration that pays much more attention to the profanevernacular architecture, particularly that which represents a constituent part of the urban and rural units of particular characteristics.

Still decades had to be pass until this trend began to be more intensively regarded in the Institutional activities for so called "integrated protection" of the architectural heritage.

Treatment of Structures from this period on the Restoration and Reuse Aspects

As already said, a larger number of monuments from this period in the country represent samples of urban and rural vernacular architecture.

architecture-209; archaeological sites-4,114; churches and monasteries-907; inns-10; commemorative structures-886; Ottoman sacral architecture-60; mosques-10; profane architecture-33; cave churches-2;fortresses-1; chapels-2; granaries-1; fountains-1; graveyards-10.

³ It must be noted that it was in 1945 that the a Law on Protection of Cultural Monuments and natural Rarities was passed at the level of the federal state-The democratic Federal Yugoslavia. Article 1 of this Law provides definitions on the characteristics that the movable and immovable property must have in order to be put under protection of this Law.

Noteworthy is also is also the existence of valuable sacral architecture from the post-Byzantine period and samples of Ottoman sacral and profane architecture, which are in much less number.

The treatment is different from both aspects of principles and intensities. The treatment of the first group is done very carefully and by acceptable principles.

Very rarely, the original purpose and function of structures belonging to this group (sacral-churches, mosques) are changed. With some exceptions, the change of use takes place in Ottoman profane structures (old bats, covered markets, towers) i.e., they are re-used as exhibiting areas, concert halls, administrative working areas and alike. However, there is no change of original materials and technologies, structural elements and structural systems. The original residential structures-cultural monuments undergo functional changes and are turned into exhibiting areas, i.e., they have new function, without any significant disturbance of other authentic elements of the structure. Generally, the treatment of the structures pertaining to this group, with the above mentioned expectations, does satisfy the modern requirements for protection.

Unfortunately, this cannot be said for the other group encompassing a greater number of monuments that have undergone a different treatment with a negative connotation.

After the passing of the Amsterdam Declaration and the establishment of town institutes for protection of cultural monuments⁴ and equipping these institutes, there were created conditions for better and more extensive protection of our architectural heritage, particularly that part was "neglected" in the past. However, this seemed to have been done too late. Why?

Because after the ;liberation and establishment of the new state-Yugoslavia-federative union of six republics⁵ there was a fast development and industrialization of the country that contributed intensive migration of rural population to the urban areas (places of construction of large industrial plants) which negatively affected the rural areas (neglect-destruction-dying out).

⁴ Presently, there is one Republic Institute for the Protection of Cultural Monuments in Skopje,(responsible for the territory of the state were there are no Institute for protection) and six town Institutes in Skopje, Bitola, Ohrid, Prilep, Strumica and Stip. The difference between this six institutes is that only he one in Skopje represent an Institute for protection of the cultural monuments only, whereas the other five have also the function of a town museum in the same time.

⁵ The Federative State of Yugoslavia encompassed: The Republic of Slovenia, The Republic of Croatia, The Republic of Bosnia and Heregovina, The Republic of Serbia, The Republic of Montenegro and the Republic of Macedonia

It was exactly this element of migration that caused mechanical pressure upon the existing town tissue and agglomerations and "a hunger" for new areas. The unreadiness and insufficient alertness of the services for protection of cultural monuments and the society as a whole, contributed to the "sacrificing" of extraordinarily important structures and entities for sake of progress of the society.

To this adds the inadequate approach of the urban planners within the area of the state and the settlements. Namely, for the purpose of achieving some "higher goals', large number of extraordinary architectural structures dating from 19th-20th century were for ever buried in oblivion because of constructing of a new squares, streets, plants or residential blocks.

This process could be defined as "planned degradation of architectural heritage" which is sometimes worse than that caused by natural catastrophes as are the earthquakes, for example. Why? Because the planned "removal" of heritage for ever, while damage due to natural disasters are graded into categories that there remain structures that can still be repaired and restored and their authentic characteristics preserved.

The definition of "planned" destruction involves several levels of destruction.

The fist level or category, can be called "the most destructive one" and is characterized by physical removal of that which represents an evidence of tradition and architectural creation. The unjustified reasons are represented above.

The second level, or category, is characterized by planned tearing down of the existing structures or part of it and rebuild its/their replica. It is exactly this process of renovation that arouses many questions and dilemmas. It is a fact that the recommendations of the Venice Charter and Amsterdam Declaration said (maximum preservation of the original and authentic elements of the structure) are conscientiously not respected. It is very often that the purpose and function of the structures are changed into other than original ones. The economic factor is frequently pointed out. It is pleaded that the conservation of the structure is much more expensive than the new approach. But, what about the principles, the philosophy? Is the economic factor the only one that s crucial for making such inadequate and non acceptable solutions? Does this "replica" posses attributes of a cultural monuments? We could rise, the following question: Can we destroy Coliseum of Rome and construct and rebuild a new one that is replica of the original and consider it cultural monuments from the past? There is only one answer to Thais question - NO.

The third level, or category, is characterized by a modified, lesser intensity of destruction. Namely, the main outline characteristics, number of stories, structural elements and systems, purpose (which is sometimes changed) are preserved and very rarely are preserved also the authentic materials and technologies of their incorporation. This level can be considered of a lower intensity as to degradation of the originality and authenticity of the structures, with different, more or less destructive variants, depending on the level of modification of the authenticity of the elements, i.e., the structure as a whole.

Restoration and re-use. Case studies

In this part of the presentation, efforts shall be made to illustrate the above statements by presentation of activities taken in the past and those for the future. Particular attention shall be paid to profane structures which have undergone a wide range of activities that have proved to be more or less successful.

Tower in the Town of Kocani6, (Fig. 1.)

The author almost completely acted in accordance with a proper conservation approach (maximum preservation of the authenticity of the structure, particularly referring to the outlinc forms, materials and technology, with adoption of the area and its revitalization from the utilization aspect). He residential tower has been adapted to accommodate part of the Town's Library. This can be accepted as a successful realization of restoration and acceptable re-use activity.

Commemorative House of Vasil Glavinov, Veles⁷

The author of the project acted properly when preserved the authenticity of elements of the structure (outline, number of stories, materials). His thorough conservation approach to authenticity was proper. The only change was done as to the function – the purpose of the structure. Namely, from the residential structure it was transformed into a commemorative house of Vasil Glavinov – one of the most distinguished uprising and renaissance creator of Macedonian in the 19th century (it is his born house). The author stuck to proper conservation principles/and adoption and the works done are acceptable.

⁶ The author of this project and its realization is. Mrs. Mirjana Dimovska-Colovic, Advisor conservator, Grad.eng. architect

⁷ The author of this project and the conservation works are by Mr. Mitko Prendjov, Advisor Conservator, Grad. Eng. Architect

The Ins within Monastery Complex of St. Jovan Bigorski⁸, (Fig. 2-3)

The authors acted thoroughly in a compliance with the international recommendations. The activities proposed and taken can be considered works of the highest values and achievements due to the fact that the authenticity has been preserved to the maximum possible extent in all the domains involving also function of the structure. This is particularly important having in mind the decision that the structure s be given again n a possession of the Macedonian Orthodox Church.

The Inn within Monastery Complex of St. Jokaim Osogovski⁹ (Fig. 4-8)

The author of the project made efforts to respect, to the maximum possible extent, the authenticity in almost all domains (outline, number of stories, partially materials¹⁰)Because of improvement of the original function and re-use of certain premises, new contents incorporated into existing outline forms were proposed. Due to the fact that new functions increase public use and hence increase the risk (the territory of Kriva Palanka is prone to earthquake with intensity of VIII degrees MCS scale), a dynamic study that verified the assumptions in the project was elaborated.

Although the authenticity has been preserved to a great extent, the adding of new public functions, the change of materials (materials having the same characteristics as the original ones) and the incorporation of an infill (with characteristics different from those of the original one), although thoroughly in compliance with the safety requirements, are not very much in the spirit of the recommendations for an adequate treatment.

Robevi House in Ohrid¹¹

¹¹ Author of the project is Mr. Todor Paskali, Advisory Conservator, Grad. Eng. Architect from Ohrid.

⁸ Authors of projects are number of architects from the Republic Institute for the Protection of Cultural Monuments: Mrs. Marriage Hagi Jordanova; Mr. Mitko Prendjov, Mr. Gorgi Dapcev – all of them architects conservators, who participated in the realization of these projects.

⁹ The author of the project and revitalization of the structure and a part f its realization is the author of this paper. The author of the Dynamic Study of the Structure are: Pr. Dr. Jakim Petrovski and Prof. Dr. Trifun Paskalov.

¹⁰ In the programme proposal related to the restoration activities, the author originally proposed preservation of the original infil material of the timber frame work (timber frames with wattle and dub plastered with mud mortar with added cut straw on both sides of the walls-as well as preservation of maximum number of wooden column elements of the structure). The commission did not agree and recommended that these should be replaced by new material, which was done.

The author of this project has preserved the outline form with all original openings, number of stories and roof covering of the structure. Due to the change in function (residential structure is turned into a museum) and in accordance with the project, a completely new floor and steel ceiling structure were incorporated, without respect of the authenticity of the timber structure.

This means that, because of the new use of the structure (museum), a new structure is incorporated constructed by modern material – such as a still, which is not compatible at all with the remaining original building material on the facades, for which the authenticity of both materials and finishing should be respected. Here, there is an intermingling of approaches ranging from acceptable ones (outline, facades) to less acceptable involving application of new non-compatible materials (steel) to modify the original structure. Such an approach to restore and re-use can hardly be justified.

Karavan-Saray in the Town of Kratovo¹², (Fig. 9-10)

The author of the project anticipated tearing down (by previous separation and storing of original timber floors, doors, windows and architrave for reuse) and building a replica because of change of the original function (residential structure is adopted to serve as a museum). This replica structure has the same proportions, number of stories and distribution of rooms, while the basement part is adopted to new functions. It is constructed of a new reinforced-concrete structure composed of new materials (bricks, cement and cement-lime mortar).

This is the most striking example of not having respect for the authenticity in the sense of maximum preservation of the authenticity and preference given to conservation-restoration works instead of reconstruction (although according to complete documentation). It is a question whether the degree of damage to the original structure did not allow its conservation to the best possible extent, replacing the elements whose conservation was impossible. Or. Was the economic factor that was so crucial to make such a decision? Nevertheless, having in mind all the relevant factors, one could not have a positive opinion as to whether the main principles and philosophy of protection of cultural monuments have been applied.

Bidikova House in Kratovo¹³, (Fig. 11-13)

¹² Author of the project is Mr. Nikola Sentevski, Advisor Conservator, Grad. Eng. Architect

¹³ Author of the project is Ms. Marula Nikoloska, M.Phil. Senior Conservator, Grad. Eng. Architect

The author of this project, which is to be realised, acted properly paying complete respect to the authenticity of a structure as a whole and respecting the original structural system and elements. It is of a particular importance that although there is a change in the original function of the structure (a residential structure is turned into a museum), the project shows maximum respect for the original material and structure (timber mainly) and a proposal is given for its conservation despite the increase in cost of the realisation of the project for the benefit of maximum sticking to proper conservation principles. The project should certainly be accepted as an adequate and good attempt for proper application of conservation principles in conservation and restoration as well re-use of cultural monuments.

Conclusions

It may be concluded that, during this fifty years since establishments of the service for protection of monuments dating from the 18th-20th century in Republic of Macedonia, the activities that have been taken for their restoration and re-use have been more or less successful. Still, the main motto should be improvement of what s good and make it better and learn how to mitigate, i.e., eliminate errors made and never make them in the future.

However, we do hope that the conclusions drawn at this conference should enhance the efforts for maximum respect of authenticity of cultural monuments not only by professional services and experts but also those who support, i.e. finance this activities.



Fig. 1 Tower in the Town of Kocani South-West facade, after Conservation





Fig. 3 St. Jovan Monastery Main Konak - after Conservation



Fig. 4 St. Joakim Osogovski Monastry - Konak Second floor - project



Fig. 5 St. Joakim Osogovski Monastry - Konak Project: South-East View



Fig. 6 St. Joakim Osogovski Monastry - Konak South-Eastern View before Conversation



Fig. 7 St. Joakim Osogovski Monastry - Konak South-Eastern View after Conversation



Fig. 8 St. Joakim Osogovski Monastry - Konak South-Eastern View Bird perspective after Conservation



Fig. 9 Saraj in the Town of Kratovo Western Facade - before Reconstruction



Fig. 10 Saraj in the Town of Kratovo Western Facade - after Reconstruction



Fig. 11 Bidikova House in the Town of Kratovo Main street Facade



Fig. 12 Bidikova House in the Town of Kratovo Second Floor - Wooden Ceiling



Fig. 13 Bidikova House in the Town of Kratovo Second Floor - Timber frame and wattle and dub

Perspectives of Public Urban Space in European Cities

Helmut Bott

In Germany we were having a discussion, that using the Internet for all kind of services combined with the increase of shopping malls in the outskirts would make the public space empty and threaten urban life in the city cores.

After a renaissance of public space in the eighties now many of the traditional stores in the cities cores are replaced by international chain stores. Fast food restaurants threaten traditional restaurants.

On the other hand we are watching an increasing number of entrances in the public urban space. The polarity of private and public is dissolving. The new medias are featuring this process. Cell phones are revealing snatches of intimacy into public. In TV-shows the most intimate things are dragged into public, people are setting net cams showing her private live.

The interpenetration of public and private is increasing – not only concerning the relation of state and private corporations, but concerning family and individual live, too. Video - cameras are controlling the public space and pay - cards are setting an electronic track, which can be watched and controlled by public and private organisations. The rapid change of labour, technology, politics and social structures, accompanied by an acceleration of the individualisation makes people insecure. So having contacts in any way – spontaneous or organized – becomes very important. People working isolated with computers, if not yet sensual handicapped, will enhance their entrance on the public space. In Europe the conversion of the city core into a stage, theatrical behaviour and costuming is increasing.

At the beginning I want to set up four hypothesis:

1. The so - called post-industrial age of information claims much more flexibility. It dissolves long lasting perspectives, bonds and vice versa commitments. It is accelerating the process of individualizing and reducing the importance of locality ("dislocalizing").

2. The classical polarity of public and private, which became paradigm of bourgeois behaviour in central European societies, dissolves, partly.

3. The increasing complexity (and confusion) of economic and social structures evokes performances pretending to interpret the mysterious complexity. Performances like "on stage", "in a scene" started to get the paradigms of individual and group behaviour:

A theatrically entrance on stage.

4. The necessity of personal contacts drops down. Combined with the mentioned individualisation an increasing need of personal contacts emerges. This emphasizes the public sphere.

Public and Private

Daily thousands and hundred thousand of people in each city are using public space, public transportation systems, public facilities. In Europe these activities in high density function still fairly well without too much conflicts, aggressions and crime.

But these crowded gatherings require a high standard of civilized people, trained to control spontaneous aggressions and trained to sublimate natural drives.

Norbert Elias (1979) defined in his famous book "The process of civilization" the transition from the medieval, martial nobility to the courtly aristocracy as domestication: Aggressions had to be controlled and were brought into a formal ritual, the duel. The duel meant to postpone aggressions, meant sublimation and subjection to rules.

The necessity to control spontaneous feelings and urges grew further more in the bourgeois society. The increasing of the division of labour and functions during the second age of industrialization was creating even more interdependences and came to the top by launching the assembly line.

Living in an extreme high density of contacts in the everyday contacts in big cities, working in a time - controlled production is the top of domestication of human beings.

So Georg Simmel (1904 / 1984) the founder of German sociology of town in the early 20^{th} century defined the specific urban communication as anonymity. Everybody has to keep distance to everybody who does not belong to family or to the circle of friends. Otherwise one will have an emotional overkill, a blackout of feelings.

Urban communication has to be casual and nonverbal. Regarding people in the crowded public space means to look the other way. This behaviour was sentenced to guarantee surviving in the jungle of big cities – just the opposite of small towns and villages. And it should give everybody his chance in an open city without barriers and without closed communities.

Subsequent the polarity of public and private was told to be characteristic for urban live: Intimacy in the family, and anonymity in the public sphere, reduced anonymity in the neighbourhood and with friends. (Bahrdt 1969)

Interpenetration of Public and Private

New technologies, new medias are inducing a radical change in this behaviour formed in the age of the first and second industrialisation.

On one side the division of functions and the dependency of everybody on technologies and on a global market is growing even more. A successful attack destroying the international controlling electronic nets would be much more disastrous than the destroying of the World Trade Centre on 11th September.

On the other side working in the age of information tends to veil these dependencies. Working on a computer does not sensually show the person working before, beside and behind you like in the age of the first and second industrialisation, like working in the assembly line. Working with computers suggests independency.

In the high-developed centres of the global economy an increasing amount of people does not work under the restricted conditions of the traditional time controlled schedules of big industries and big management offices. And an increasing amount of so - called free lancers is not involved in the regular system of labour and social security. So much more people are working in a self-reliant rhythm and environment of working, breaks and leisure time – or we better should say they seem to work more self reliant.

The required flexibility and mobility in a rapidly changing economy with high rates of technological innovation accelerates the erosion of social integration.

Up to the age of industrialisation livelong connections to a firm and to a place have been the paradigm of live. So someone's live and identity was formed by these conditions. Richard Senett (1999) defined the flexible man of the post-fordism age of information as a drifting individual without strong connections, that has to make up its story of live, its identity. In simultaneity the same happens concerning personal partnerships, which don't last for lifetime, but only for a period. Mobility, transition and changing relations have become the paradigm of the new age.

In the metropolitan areas the nuclear family is shrinking to the so-called single and dinky households, which are the majority in the big city cores in European cities since one decade.

Traditional relationships in families, neighbourhoods, firms, clubs, churches and political organisations in Germany are detached by a relaxed membership in a so-called scene – many times commercially organized like clubs for surfing, fitness, diving or other leisure time activities.

Identity seems to be replaced by lifestyle, environment or social background by scene. You can train a lifestyle and buy the specific outfit to

have your entrance on the stage of the scene. And you can leave it without saying good-bye and mourning.

Independency at the working place and detached social connections on the other hand are dropping the functional caused personal contacts. So other opportunities have to emerge for the urge of human sensual contacts did not yet vanish.

A big market for the commercial run new medias was created.

In association to the term "just in time", used in the concept of "lean production" I would like to introduce the term "intimacy in time".

The loss of close intimate communication in the culture of singles and dinkies seems to force the extension of more and more talk shows where all details of personal life without any taboo are spread out to an audience of millions of people. Quit nothing is ridiculous or intimate enough **not** to be reported.

Even husbands in lawsuit of divorce are presented in their disputes.

In a lot of contact shows ladies and gentlemen were announced or have a blind date watched by millions of auditors.

The life soap "big brother" was the start and early top of "intimate in time" (in the German language this term is like a pun: "intim in time"). A group of young men and women lived for weeks in a container flat, watched by many cameras in each room. They should interact; present themselves and their contacts among themselves to millions of auditors. Each week the TV viewers could kick one of them out by phone polling. The Truman show became reality.

The mobile phone is another tool to bring intimate details into public. While the old phone boxes gave shelter to privacy, the cellular phone let us take part in private details of everybody's all day live. Every day we perceive fragments of privacy or even intimacy in public or semi-public spheres.

Web cams are showing rooms and scenes of private family live in the Internet.

Richard Senett (1999) used the term tyranny of intimacy.

The Californian firm Pyra com was elected to be the coolest technological enterprise by the commercial magazine "Fortune. Pyra com produces a web site called Blogger com, where users may write their diaries or their thoughts of anything for a kind of semi-public.(Knop, 2002)

In 2002 Blogger com has had more than 600 000 users.

My first resume at this point is that the polarity of public and private,

which was defined to constitute the specific urban culture in the developed industrialised countries, is partly dissolving.

Publicity, self – promotion and the entrance on the stage

These tendencies are corresponding with the increasing of theatrical behaviour. Jeremy Rifkin (2000) describes it as a general tendency caused by the growing importance of cultural products like Movie and TV-productions, soaps and commercials.

By the way: Movies and TV-productions are the most important exports of the USA.

Rifkin thinks material products partly got the role of requisites defining a scene that is created by the advertising publicity.

I want to show 2 examples of (expressed in a German term) "theatricalisation" in economy:

1. The so - called "lean production" extended the chains with subcontractors across the globe to the global economy what means, "dis – locating" of production and products.

Even traditional industrial sites like Stuttgart with the famous Mercedes and Porsche cars tend to dissolve themselves in an international chain of subcontractors.

In the European centres of industries production means more and more "finishing". And finishing is the last small part of the worldwide extended assembly line. But what does this tendency mean to the labels, which are creating the aura of the products?

German answers to these question are the "Autostadt Wolfsburg and the glass factory of Volkswagen at Dresden.

The finished product has to be charged up with the spirit of the firm like in a religious ceremony. The mounting of the luxury cars in the glassy factory at Dresden got the status of a cultural act. Yet cultural TV programs have been telecasted from the clinic- like halls.

2. The all day stock exchange reports in German TV shows a view into the stock exchange hall of Frankfurt with activities and big screens announcing rates, orders, puts and calls.

But the reality of stock exchange is up to more than 90% computer trade. While billons of Euros or Dollars are flowing in the Internet we get the presentation of a little old theatre.

This presentation of abstract proceedings as a performance is corresponding with the virtual reality of computers. The windows of computers got the status of a metaphor. They do not give view to the reality, which is surrounding everybody, but they open windows to virtual drams, games and fights, to a theatre wherein the user may participate. Especially many young people are fascinated by these "worlds" and drawn inside. (Rifkin 2000) The individual urge to act and to have the entrance on the stage belongs to the fundamental personal experiences of everybody. Learning and forming the personal identity entails imitation not only by learning the language but training mime, gestures and roles, too. To become a member of a specific culture needs any forms of spontaneous or organized public institutions. The reactions to someone's figure, beauty or ugly appearance, to his outfit belongs to the fundamental personal experiences of everybody expected with hopes, fear and shame.(Bott, 2000)

Training the specific patterns of behaviours and attitudes especially in the phase of growing up, in the puberty is connected to the public sphere wherein the public space is one of the most important parts. Developing personality is connected with Self-representation. And self-representation is connected with gestures, mime, moving, is connected with clothes and accessories (In the English language access and accessory are very cognate). All these external signs seem to give access to one's inward personality. To represent a specific life style or to demonstrate the membership of a specific group has become more important in the last decade. How should we otherwise interpret the increasing diversification of performances in the public space?

The declining of functional caused personal contacts in the urban culture seems to emphasize the need of personal contacts and of personal representation in the public space outside the virtual world of computers and Internet.

The Urban Planner Alex Krieger (2000) notices at Silicon Valley or Boston (MIT) a hunger for personal sensual contacts. Bars and clubs are the more crowded with people the more people are working in the digital nets.

The more all day perceptions and contacts are mediated by pixels on flat screens the more fascinating will be the real bodily presence, the real sensual contact.

We can watch a body-cult with fitness training, diversification of outfit with piercing and tattoos. This phenomenon is new in its intensity and at the same time very, very old.

In theory the new medias and information systems make personal contacts and moving in the public space obsolete and creates isolation.

But in the same degree as the functional need of using public space is running down its use in leisure time is charged up with importance and new meanings.

Especially the young free lancers and skilled engineers of informatics are working out of traditional time – controlled systems like it is in the big industry or in the big offices. Working on projects with an individual schedule generates a new way to use the facilities of a city. As a consequence the demands for having fun and entertainment are removing
traditional schedules of shops, public institutions and services. The 24 hours event city seems to have a good future.

The reconquest of public space

For 5 decades we have had the objective to optimise the city as a transportation system for cars. We used open space as lanes and parking. But parallel to the mainstream new users partially took the open public space.

During the so - called students revolution of 1968 streets and squares became the place of political demonstrations, meeting rallies and information desks – what Germany had no more seen since 1933. And connected with the rediscovering of public space it became quiet normal to stay in street restaurants or on benches and to watch people passing by. We could see more and more street musicians, clowns, street vendors and kids with specific modern toys like skateboards and special city bikes.

Since 2 decades the police tolerates the periodic usurpation even of main streets for example to give the very important information to the public that a football match is won.

These events are used to show one's identity and the affiliation with a nation, a town or a club. It is a new but a very archaic phenomenon. It is demonstrating fundamental urges of human beings which ever lived in groups and tribes and showed their descent by specific accessories. Produces globalisation the search for identity?

The more interesting now are the so-called raves and parades with thousands and thousands of young people. The most famous of them, called love parade, takes place since some years at Berlin.

These love parades are showing interesting constellations: Young people are dancing and moving very close together in masses. That is a typical urban situation, which should evoke anonymity. But they are dressed – or undressed – like in an intimate situation. The roaring techno music is joining them by its rhythm – but they are dancing very individual. For me this contradiction is like a paradigm of the change in urban behaviour. It is another facet of the changing polarity between public and private.

Town scenery

Digitising of pictures and the electronic medias facilitate the production, reproduction, manipulation and spreading of pictures.

You can see the results of this technology at Berlin, Milan and Venice or in most European towns.

More and more pictures are hung in front of the reality. The pictures may be connected with the function of the building behind or not. Sometimes they seem to give better information than the real building like at Venice, where scaffolds often hide the buildings. Façade descents from faccia what means face. So the big awnings with printed pictures are masks. The buildings are playing carnival.

• We are back at my theme: The buildings may become part of a scenery.

In a lot of projects the facades became huge screens with moveable pictures like the Nasdaq in New York, what Jean Nouvel proclaimed years ago and what Ridley Scott prophetically showed in the fantastic movie Blade Runner two decades ago.

Can we imagine a future wherein the buildings in the European cities are covered like a set, where the public open space is designed like scenery?

I don't hope. But I am convinced we should think about design for the urban space in another way with the background of the rapid change in the age of information.

Traditional functions of the city cores are in a heavy competition with the new medias and the shopping malls in the outskirts, at the edge of the town, in the nowhere land directly connected to the highways.

Semi-public and private commercial organized institutions and areas like malls and gated communities threaten the public open space. The way into the future is not the way back into the eighties, when the city cores have had their temporary last revival.

But we have to respect the change of behaviour and urges I talked above and to rethink the conceptions for use and design of the public urban space in our European cities.

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Experiences of Sustainable Development in Contemporary Planning

Ruzica Bogdanovic

Abstract

"Think globally - act locally" - this is the precondition for fulfillment of goals of the concept of "sustainable development". The core of understanding of the notion "sustainable development" is in the understanding of the effort of present generations of planners to fulfill the needs through the development and city reconstruction, not endangering possibilities for development of future generations. From the general concept of "sustainable development", the new approach to the socio-economical development, which, next to the economical goals, integrates the goals of environmental prevention, too, with the aim to preserve natural resources for future generations, the principles of "feasibility" in all significant areas of economy and society were derived(1). This concept has more and more important role in urban planning, urban reconstruction, as well as in the traffic planning.

In the course of the last decade the notion of "sustainable development" has been proclaimed and accepted on a number of important international conferences; its goals and its strategy were articulated in numerous documents and agendas. Since this goals are life giving, some of them even of crucial importance for the future of manhood, it is extremely important that the concept of "sustainable development" does not remain just an empty phrase.

This paper represents experiences from foreign praxis, which is reference to concept of sustainable housing zone, understand as micro- part of the town. Project defines and resolves objectives from social, economical, morphological and ecological aspects. Most important is aspect of Ecological Optimization, which consists of main components: energy use optimization, water concept, exemplary waste management concept and ecological soil management.

If we want to manage as a sustainable society it is important to develop new planning strategy for our cities, based on sustainable development principles, in that way we will provide retention of quality housing in our towns centers. Following examples are presented: Hanover Kronsberg Model for a Sustainable New Urban Community and Kronsberg Model for Ecological Farm, Stockholm Hammaraby Sjostad and Compact city structure - The Reconstruction in Central City Zone of Traditional Urban Heritage. The aim of this example is to present a (possible) method of application - implementation of a principle of "sustainable development" in the process of reconstruction of a typical urban area (Residential zone in the area of traditional urban heritage).

Furthermore the aim of this paper is to present experiences from Serbian praxis covered by following case study projects, in landscape scale, that are developing methodological approach for sustainable development.

Multidisciplinary approach - Technical innovations: The Case Study Of Tunel-Bridge Crossing In The Boka Kotorska Bay

A case study of the Verige Gorge crossing in Boka Kotorska is an example where the concept has been implemented and principles of sustainability developed for the very specific technical system of the underwater tunnel-bridge construction.

Waste Land & Properties: Case study of Artificial Lake with recreational center near Novi Becej - project of recycling of the surface clay mining pit depression

The project theme as underlined in the contents of arhitecutural-urbanistic proposal was "nature friendly, moderate and calm"

Greenways – ways of future – the potential of Danubian trail.

Functions of greenways where best defined by Phil Lewis, naming them E-ways: environment, ecology, education, and exercise. The Danubian area, by its natural characteristics, richness of culture and historical heritage and international significance offers ideal possibilities for location of a greenway trail. Therefore in this contribution, besides theoretical background, a review of advantages of the Danubian area for creation of one the main corridors of the future greenway are presented.

Case study

Type: Housing

Intervention: "Hanover Kronsberg Model for a Sustainable New Urban Community" and "Kronsberg Model for Ecological Farm"

Description

As a concept sustainable development has evolved over the past two decades from a concept closely associated with the biophysical environment to become much more complex, embracing social, cultural, economic political and esthetic phenomenon, which are invariably in mutual interaction, so they influence sustainability of natural environment. The very notion of "sustainable" we are meeting today in almost all significance areas of human activities. Contemporary planning, projecting and building techniques undoubtedly implied integration of goals of environmental prevention with goals of socio-economic development, all with respecting the esthetic standards.

This paper represents experience from foreign praxis: example of transformation of peripheral urban zone through integration of rural area with the city. There are "Hanover Kronsberg Model for a Sustainable New Urban Community" and "Kronsberg Model for Ecological Farm", both of them realized in praxis as one complete zone. From this example there is possible to examine all the aspects of sustainability problems during planning and projecting processes and which is most important - during realization. A need for wide participation of all the interested parties (politicians, city administrations, planners, architects, building contractors and citizens themselves) is emphasized. Project defines and resolves objectives from social, economical, morphological and ecological aspects. Most important is aspect of Ecological Optimization, water concept, exemplary waste management concept and ecological soil management.

Design objectives

Cooperative project development and integrated planning

Developed and implemented Model for a Sustainable New Urban Community

Presented new ecological concept

Established Kronsberg Environmental Liaison Agency to coordinate and support the process, implement qualification and skilling initiatives, and manage the new district's public relation strategy



Visual appraisal

The planning of the new district includes enhancement of the adjacent countryside; it is conceived as a green settlement. The district will be a mixed residential area of terraced houses and large and small apartments, financed on different models. Transportation concept is based around an environmentally responsible concept serving a compact community. All the streets are designed as avenues with a large proportion of greenery – across the district there will be trees on both sides of the road and in the front gardens. Following the moto" use without ownership" car use scheme is planned as an extension of the proven system already operating in Hanover. The energy concept pursues dual aims: energy use optimization based on low-energy housing, electricity saving and district heating, and use of renewable energy sources and innovative technology. The open space concept starts with the private and public spaces between the houses- they should become green oases, private gardens, meeting places for neighbors and play areas for children, while also serving to absorb rainwater - and extends into wide stretches of common land above the built-up areas for the use and enjoyment of all the residents. About 100 hectares of city land will be farmed as a registered project according to guidelines from the

Association for Ecological Agriculture, to counteract the high degree of specialization and spatial disruption caused by agribusiness and the increasing remoteness of the agriculture base from regional economic cycles.

Quality assessment

An energy policy Renewable energy Energy – efficient modernization of public buildings Energy saving by changing consumer behavior patterns Climate protection measures in kindergartens Lighting unit exchange programme Low energy houses Waste avoidance Waste avoidance Waste utilization Waste treatment A water policy for Hanover Rainwater absorption Natural rehabilitation of waterways

Key issues

Agenda 21

The project will be planned according to the postulates of Agenda 21: a new city district created for the future to make manifest the world exposition themes, "Humankind, Nature, Technology" in everyday community life (EXPO Hanover 2000).

International association

The overall ecological concept for the Kronsberg project was developed in the spirit of the Charter of Aalborg, ratified by more than 80 European cities, and harmony with International Council for Local Environmental Initiatives, recommendations on the establishment of a Local Agenda 21 Sustainable Community development

The planning new district includes "support for sustainable settlements" and "promotion of public awareness": the residential development should be designed to give overriding priority to sustainable land planning and economic use and to the promotion of ecologically – responsible energy provision and transport systems; equally important are ecologically responsible building methods to avoid environmental damage in the forms of excessive resource consumption, injury to sensitive ecosystems, chemical contamination and the use of building materials injurious to health.





Case study

Type Housing Intervention The Hammarby-Sjostad Stockholm

Description

Hammarby Sjostad is being developed as a natural extension of the city. The project involves the renewal of an old dockland and industrial area and will being transformed into a modern city area. The district will be a spearhead project for sustainable construction and living. The plans covered 8000 apartments, corresponding to 20,000 residents and 15,000 workplaces. The environmental goals for Hammarby Sjostad are very ambitious. Achieving them calls for creative solutions in a variety of fields. The Hammarby model will be a highly environmentally orientated system with important reference for developing technical solutions for large cities generally. A model have formulated a set of proposals for water and sewage management, solid waste management, and energy supply.

Design objectives

- A new part of inner Stockholm
- Renewal of a run-down port and industrial area
- Environmentally will be a well-planned area with its own recycling model
- Created a neighbourhood adapted to the environment and the ecocycle
- Intelligent house/home concepts are implemented

Visual appraisal

An environmentally friendly part of the city

The environment is at the heart of Hammarby Sjöstad. The negative effect on the environment can be halved, compared with that of other modern developments, with the help of new solutions and the commitment of the residents.

One of the objectives for the Hammarby Sjostad project is to create a neighbourhood adapted to the environment and the ecocycle. These ambitions find expression in the design of the buildings with regard to the choice of materials and new solutions in the area of environmental technology.

Intelligent house/home concepts are implemented in the whole area. New smart system solutions for building management are beeing implemented. One of the two awarded system providers is BBI (Birka-BPA Informationssystem AB). SenseAir cooperates with BBI on indoor air quality control for apartments in Hammarby Sjostad. In a first step



500 apartments are completed with the BBI F20 system.

Hammarby Sjöstad will have its own ecocycle model with its own sewage treatment plant, where waste water will be treated, the heat will be recovered and any nutrients will be recycled using new technology to enable them to be returned to agricultural land. Surface water will be cleaned locally and will not impose a load on the sewage treatment plant. Energy will be produced in the district heating plant in the area and will be based on renewable fuels. Combustible waste from the area will also be recycled in the form of heat.

The commitment of the residents is essential to this environmental work. Good practical arrangements for the sorting of waste products at source and recycling are necessary, as is the ability to monitor one's own energy and water consumption via the internal data network. Energy consumption is accurately adjusted. For example, lighting and ventilation are switched on only when someone enters the room.

Communications

Information technology is being applied to minimize the need for transport within Hammarby Sjöstad. Public transport will take priority with the new Tvärbanan tram service and a boat service into the city centre. A car pool is being established, and residents will be able to join this and request a car when they need one. The cars in the car pool will also be modified to run on biogas from the sewage treatment plant. An Environmental Information Centre will be opened to provide residents with help.

Public transport in Hammarby Sjöstad will include boats, buses and trams. There will also be a car pool for local residents. Parking for customers and employees will be provided by new garage and street parking. A system for the shared use of parking places between residents and workplaces will be organized.

Quality assessment

Five point architecture program: spatial hierarchy, focus on the environment and ecocycle, the water town, Stockholm's unique character, time and modernity

The model for energy, waste and water management is known as the Hammarby model. Birka Energi, Stockholm Vatten and Skafab developed it jointly. The model is already known internationally and is a source of inspiration for measures to minimize environmental impact in other countries, too.

The investment in IT in Hammarby Sjöstad will also create excellent opportunities. The whole of this part of the city will be linked to an Intranet. This will allow companies to make direct contact with local residents. IT companies and IT-dependent businesses will naturally also benefit from the extensive information technology infrastructure.

Key issues

A modern residential and work area is based on the Agenda 21 programmes. Architectural and aesthetically interpretive concept.

Achievement of the ecocycle-related goals set for Hammarby Sjostad counts on involvement from the residents. A dialogue with the residents through joint working groups is one solution. The residents will achieve insight and assistance via an Environmental Information Centre. Follow-up and evaluation can be done by measuring and recording of resource consumption for water, heat, and electricity.

The district will be equipped with a mobile vacuum system, which will handle combustible waste, newspapers, and organic waste.

The district will be heated mainly by heat pumps on treated wastewater, solid waste fired boilers and liquid-biofuel fired boilers. Electricity will be supplied in accordance to Good Environmental Choice.

Hammarby model will be a highly environmentally orientated system with important reference for developing technical solutions for large cities generally.





Case study

Type Housing

Intervention The Reconstruction in Central City Zone of Traditional Urban Heritage

Description

The aim of this paper is to present the (one of possible) method of application - implementation of a principle of "sustainable development" in

the process of reconstruction of a typical urban area (residential zone in the area of traditional urban heritage).

This method encompasses the comparative *problem analysis* - limitations that exist within the analyzing territory and which diminish the possibility of reaching the objective, and *space potentials* - possibilities of reaching the objective; all this, through interdisciplinary study of the problem. Method is based on qualitative analysis of present situation by evaluation of criteria through indicators for a "sustainable block" and "sustainable transport".

Design objectives

Method

For a start, conception is to define and recommend new "sustainable parameters" - standards for a typical urban area: to determine optimal "sustainable height" - number of stories and the parameters of "sustainable density". Then, through evaluation of possibilities of reaching the objectives (objectives are the principles of Sustainable Development from the Habitat Agenda), we can define concrete potentials for realization.

The methodology of evaluation of objectives through the criteria and indicators is adopted. (1/TEM study, 1987)

- Objectives are principles of "sustainable development" (from Habitat Agenda 21)
- Criteria are derived from the objectives; these are general factors and elements among which there is a solution for reaching the objective (e.g. "land-use", "morphology", "ecological conflicts", "access to services", " parking"...)

Indicators of particular criteria are given here descriptively - for the concrete location: as problems - space constraints, and as potentials - space potentials; for the level of qualitative analysis of urban plan, indicators are quantified through the influence degree of the consequences which they can cause during the reaching the objective (having in mind that we deal here with subjectively judged, hardly measurable Indicators), so the valuation scale is: -3 - very damaging consequence; -2 - significant damaging consequence; -1 - less damaging consequence; 0 - no consequences; +1 - small positive consequence; +2 - significant positive consequence; +3 - very positive consequence. (1/TEM study, 1987)



Evaluation of objectives

Summary table can give a plenty of information about researched area. For example, results of one of the research showed that in the area still exist potentials for reaching the objectives of "sustainable transport". Regulation requests for achieving better state in "sustainable transport" were possible to formulate in accordance with the potentials of the concrete space.

Visual appraisal

In accordance with presented methodology one practice example is worked out. It is "Regulation Plan for the Kralja Aleksandra Boulevard", in central Belgrade zone. We made a scenario for transformation of this zone according to the compact city principles and included comparative analyses of present and prospective urban parameters.

This zone is very interesting for research - it is a city boulevard stretching from the very center of the city to the periphery - namely, Boulevard Kralja Aleksandra. Mentioned zone was selected as a sample since it represents a cross-section of the Belgrade urban structure. It shows complexity of relations in all urban domains: social structure, traffic matrix and streams, morphology, contents distribution.

Specific indicators defined as per the designated criteria can assess the result of specific actions implementation. In this way, quality of specific actions – their applicability to specific goals, can be predetermined. The question is: "Will this action further the development towards the realization of a goal, or could it actually be counterproductive?"

Although general studies of the compact city can be useful, it is necessary to study the problem at the specific location. Recommended assessment methodology enables investigation of how much the actions towards making the "compact structure" in the center of the town is economically, socially, ecologically and morphologically sustainable and justified







Quality assessment

- The area is suitable for development of the specific urban- architectural forms inside the blocks
- Alteration of the intended use for existing buildings
- Implementation of new contents in the interior of the blocks
- Elimination of malfunctioning living area in the interior of the blocks
- Implementation of public and pedestrian areas
- Possibility of an attractive city area formation
- Buildings and areas of significant historical and artistic value
- Possibility to increase fees for use of building sites considering the advantageous location
- New investments can bring fast results, both direct and exterior
- Possibility of implementing cultural and entertainment contents with a significant sociological quality
- Reaffirmation of the area as the important central zone of Belgrade in the residents' consciousness
- Clearing out interior of the blocks for new pedestrian paths and passageways
- Conversion of the network-insignificant streets into the pedestrian and motorways
- Possibility to build underground garages inside the blocks
- Implementation of new commercial contents and alteration of intended use will increase changeability on parking space
- Implementation of bicycle routes through the interior of the blocks
- Enlargement of pedestrian area by clearing out the pavements and interiors of the blocks

Key issues

Study of the "compact structure" involves three main elements: 1 - *investigation of the need for the compact city;* 2 - *investigation of the feasibility of the compact city;* 3 - *generating tools for the compact city.* It is impossible to define what actions to take if no goals are identified. First consideration of this Case Study was a goal-defining methodology – beginning with the principal goal (well-balanced planned development of specific urban sites in conformity with the sustainable development principles), through the specific goals (in line with the principal approach, specific goals can be defined in consideration of the economic and social situation and within the restrictions imposed by the natural environment and

man-made surroundings), all the way to the sub-goals and specific actions that should be undertaken to this effect.



Case study

Type Urban management&Development

Intervention Sustainable Infrastructure Tehnical Systems; The Case Study Of Tunel-Bridge Crossing In The Boka Kotorska Bay

Description

The Projects of the Pan European networks of routes in Adriatic Area (defined by the Helsinki Conference) made connection between Trieste and Athena crossing Bokakotor bay. The space of Boka Kotor represents a unique physiognomic, historical and cultural unity at the Montenegrin coast.

A case study of the Verige Gorge crossing in Boka Kotorska is an example where the concept has been implemented and principles of sustainability developed for the very specific technical system of the underwater tunel-bridge construction. The project was developed and submitted as an entry for the international competition for the Boka Kotorska Bay crossing, which took place in 1999 under the auspices of the Government of the Republic of Montenegro. By the competition conditions the two locations were proposed: (1) Opatovo - Sv. Ne|elja cape, and (2) Gospa od An|ela cape - Turski cape (Verige). The comprehensive and thorough analysis and investigation of the relevant data and factors preceded developing several alternatives for each location site. They were tested and assessments for successful construction, management and future use of the crossing made. An optimal alternative was selected based on criteria of technical and economic effectivness, fullfillment of sustainable development principlies, preservation and protection of the natural, historical and national

heritage surroundings. The location of the Opatovo- Sv. Nedjelja crossing was proposed.

In this context principles for activities for this competition were established which determined the type of crossing choice, way of crossing placement, its tehnical, space and other solutions according to the Low of Space Planing and Arrangement of FR Montenegro, which regulates that the values of environment are under the special protection of the society and that all users are obligated to use space in such a way which insure preservation and promotion of the environment and prevention of adverse effects which could impair these values, as well as other national and international documents which take care of this problems.



Design objectives

During the outlining of the type of crossing and outlining of its working out, following principles and demands were respected:

• Principle of full consideration and affirmation of natural, ambient, architectural and cultural values and beauties of this region, with its minimal loading and disturbances, exceptionally in such parts where it is not possible to avoid them during the solving of primary problems of crossing;

• Principle of respect and preservation of landscape and aesthetic values of the gorge and bay. This is especially in regard to: (1) view towards Perast and from Perast, (2) towards depth of Tivat Bay, (3) along the Verige Gorge and perspective on Verige, as well as (4) special entities of the Gorge itself;

• Principle of selecting solution which will not produce direct or indirect short- or long-term effects upon the existing ambient, nature, architectural and monument values, or which will do it in the least possible way during interventions and building in this space;

• Principle that during interventions in this space maximal care is taken about the existing settlements, preservation of settlements human values, their economic value and their development potentials; • Principles that in all activities legal and other regulations, international documents pertinent to here discussed problems, existing planning and project documents are maximally respected.







Identified entities in the Boka Kotorska Bay

Three entities are recognized and they were dealt singularly and interlaced:

Area of Verige Gorge

Interior Boka: Risan - Kotor Bay

Outer part of Boka, which is the area outside Verige towards Tivat and Bijela, Tivat Bay

Entity of Verige is an area of special natural and ambient values.

In the Gorge a certain number of objects of interest and significance were identified.

For the decision concept following criteria were established:

Preservation and protection of the recognized monumental values and properties;

Preservation and protection of Sv. Nelelja Cape;

Affirmation of ambient, landscaping natural values and special quality of the Gorge and Vrmac especially;

Preservation of the appearance and visual qualities of the view from the Gorge towards Tivat Bay and in the direction of Perast;

Preservation of a balance between activities and environment and taking into account ambient and natural values;

Careful harmonization of the crossing with other purposes, activities and functions in the region.

Interior Boka: Risan - Kotor Bay is a cultural monument of the first category as a whole, an area that was declared as an endangered World Inheritance and comprehends the utmost caution in planning and building

Following criteria are recognized as most valuable:

Preservation of the site's spirit;

Respect and non disturbance of cultural, ambient, natural and landscape values as a whole;

Protection of form and visual qualities of the view from the Gorge towards Perast and towards Gorge from the direction of Perast (from the sea in the middle of the Bay);

Preservation of balance between different activities and environment having in mind ambient and natural values;

Careful harmonization of the crossing with other purposes, activities and functions in the region.

Outer Boka, which includes the area outside Verige towards Tivat and Bijela, Tivat bay is the third macroentity discussed in our contribution.

Concept decision of the crossing has been considered on the basis of following criteria:

Preservation and protection of the established values and properties;

Affirmation of ambient and natural values and quality;

Preservation of balance between different activities and environment, having in mind ambient and natural values;

Careful harmonization of the crossing with other purposes, activities and functions in the region.

In the domain of natural values, entity of *Vrmac* and the sea of the Bay as a special natural unity have been particularly prepared. Criteria derived in relation to the problem of natural ambience were:

Preservation and protection of the established values and landscape;

Preservation of biodiversity;

Preservation and protection of Vrmac;

Preservation of the sea, protection of water quality and sea life.



Visual appraisal

Proposed solution: Underwater tunnel-bridge Tehncal solution

The tunnel is essentially a singular, water impermeable, reinforced concrete construction whose whole length leans on supports in the sea or rocks mass, which by one part passes through the sea and by the other through the rock mass. A total length of the underwater tunnel is 1346.00 m with the total width of 24.40 m. Width of the tunnel traffic lines is 3.50 m; edge lines

width is 0.35 m and width of shoulders is 0.75 m. Free height of the tunnel is 5.30 m of which 4.50 m is provided for ventilation. The tunnel is planned with a two-side slope of 4 percent from the middle of sea towards the terrain surface of the exits.

The tunnel construction consists of three tunnel tubes. Sides one serve for traffic. The middle tube is a service one and it is used for accident situations and storing of installations (lightening cables, ventilation, tubes for wastewater, protection against fire). This part of the tunnel is 3.00 m wide and 6.20 m high.

Approximately 1/3 of the tunnel construction is accomplished by open excavation and around 2/3 by connection of prefabricated, water impermeable, reinforced concrete elements 120.00 m long. Connection of these elements is done in the sea, on previously done supports. Supports in the sea are constructed as wells; a pair of wells under each support. A joist leans on supports as a base on which ready-made prefabricated elements of the underwater tunnel are placed.

Wastewater drain from the tunnel is placed in the central part (the lowest point in the tunnel with a manhole) and with the introduction of a pipe which will leads wastewater to the surface. Ventilation system of the tunnel has twofold role: recording of harmful materials by *means* of sensors and ventilation by turbojet ventilators.

Quality assessment

• Relationship towards inheritance, natural and ambient values

The decision to propose the underwater crossing and not the surface one, speaks about the attitude and determination of authors who have a high estimation of inherited and existing values in this area and who consider them to be crucial for the crossing concept. All criteria for preservation and protection have been respected to the utmost possible measure. The only ambient entity that is exposed to direct effects is Sv. Ne|elja Cape, in the sense of disturbance of its appearance e.g. visual values, since the tunnel exit is planned in Cape foothill. This is related only to the point of observation from Bijela side e.g. Tivat Bay, while the observation from Verige Gorge and other directions is undisturbed. Evaluation and significance of these effects are particularly prepared in the proposal. By the method of comparative analyses of alternative solutions, one that insures the least possible and disturbance of the ambient entity was adopted.

• Relationship towards environment

For the evaluation of the impact analyses on environment methodology, that one which was proposed by the UN program for environmental protection to Governments of the countries which are members of TEM for evaluation of esthetic economic and ecological impacts for Transeuropian highway northsouth (AECOTEM) was used. Negative, positive and consequences of minor significance are identified:

Negative consequence:

consequences on indirect and direct surrounding in the phase of constructing of the route and tunnel and during the period of usage of the traffic artery;

Ecological consequences along traffic artery (waste disposal of material, changing of area purposes, air pollution, noise, vibrations and consequences of traffic separations;

Disturbance of cultural inheritance of Sv. Ne|elja Cape;

Consequences of minor significance:

Consequence related to the protection and aesthetic, cultural inheritance and embedding into surrounding;

Impact on production of the observed area - agriculture, forestry, watersupply;

Positive effects:

Economical rationality and justification of the solution, according to majority of estimation parameters;

Providing of settlement protection and protection of existing cultural inheritance in this area;

Protection of natural landscape quality and existing plant communities in the route and crossing;

Protecting and not impairing nature protected areas;

There will not be degradation of immediate coastal (eulittoral) zone as well as natural vegetation in shallow water (infralittoral) zone and in deep parts;

Protection of the biota in the seawater is provided. By the building of the construction, the barrier for the passage of deep and surface fish will not be formed, so that they can freely migrate;







Key issues

Advantages of crossing the of Boka Kotor Bay by underwater tunnel at the location "Opatovo" are:

Sea regime is not significantly disturbed

Sailing is not disturbed

The traffic is possible even under bad climatic and atmospheric conditions Natural surrounding ambient is disturbed to the smallest extent Monumental, cultural and ambient values are protected and kept

Risan - Kotor Bay is fully affirmed as a cultural monument of the first category

Concerning realization,

It is significant that proposed realization tehnology for the tunnel enables usage of domestic practice and equipment

Tunnel construction laying is performed on the site without traffic interuption

According to world experiences, underwater tunnels are cheaper, simpler, safer then bridges and they have the smallest effect on the environment.

Case study

Type Urban management&Development

Intervention Artificial Lake with recreational center near Novi Becej project of recycling of the surface clay mining pit depression

Description

Occasion

The investor "Polet" was obliged to bring back to a former use the exploited land.

Idea

The idea was to build the recreational center instead of former agricultural land and to improve urban structure of the city of Novi Becej. Nearby river canal Danube-Tisa-Danube and the river Tisa made special offer – sport fishing, but the water was not suitable for other water sports – swimming. *Condition*

There was no planning documentation for the area and the area is outside the borders of General urbanistic plan as the highest legal act of planning in Serbia and Montenegro.

There were no accurate geodetic plan for the area.

Therefore the realization of the project is a groundplan for future planning documentation.

Design objectives

Project realization

mapping As the first step mapping was made – orthophoto and digital mapping

geomorphologic project The following step was to made a project for closing the surface pit ant preparing it for the future artificial lake

hydrological project The hydrological researches of the level of the land absorption were made in order to avoid water swelling because of the nearby new exploitation surface pit. This research also elaborated the possibilities of water filling and supplying by underground canal and from river canal Danube-Tisa-Danube. The second option was taken into the consideration and the calculations for the maintaining constant water level were made. The constant water level was necessary because of the depending growth of the plantings - bamboo belt around the lake for the natural water cleaning.

The canal water cleaning and refilling was managed by Wetland system, applied in the domestic practice for the first time. At the same time it was an attractive detail in landscaping

hydrobiological project The canal water quality was researched to explore the fish and other water species to be set up growing in the lake.

urbanistic architectural project The future recreational area is well connected with surrounding as well as the city. Local highway passes right by the complex. Motor traffic is excluded from the area except for the access road for the parking lots.



Visual appraisal

Concept defines a more peaceful area at the north side of the lake for the recreational use of swimming, sunning and fishing, and the other, south side of the lake facing local highway for recreational use and sports.

Around the lake walking- and bicycle paths with random placed groups of rest points with a fireplace were designed.

Designs were made for wooden pontoons for sunning and fishing at the water surface. A complex for boats for recreational use was meant to start working with smaller number of boats and later to become a rowing and a sports boat club.

Development of the sports area was designed along the highway : playground complex, universal fields, tennis and football courts. All the way along the sports area extends a beach.

In immediate surrounding a fast-food restaurant was placed for the users of the sports area.

The existing complex of buildings is reconstructed as a restaurant only for the use of the owner, investor "Polet".

These two zones are connected across the Wetland and the park. Park was designed with a protective high plantings area facing the highway and ground floor arrangements around axial walking path connecting the two zones. The path is creating the dominant pedestrian flow, overlapping with the bicycle path.

Quality assessment

Materials used for objects are traditional and chosen from surrounding, as well as products from investors 'Polet" own production – wooden construction, roof tiles and pounded brick for walkways. Additional urban mobiliar elements are lamps, benches, bicycle racks also the ones meant for children playgrounds made of plastic and painted wood.

landscape project The concept includes the idea of keeping existing flora and fauna that have spontaneously developed after the exploitation of the clay pit was over. Project elements park, wetland, bamboo belt around the lake are designed with the motto of the entire project "friendly to nature ". The rest of the green plant compositions are fitted and adjusted to the particular use of the area.

Key issues

Goals

Surface clay pit revitalization and its fitting into the surrounding environment

Sorrowing environment quality development by defining new contents Making a groundplan for future planning documentation

Concept

Nature balanced, moderate, calm

Realization

The realization of the project was made by expert team of scientists of different background: geologist, hydrologist, hydrobiologist, urban planner, architect, landscape architect.

While the final project was bringing to end the investor "Polet" started and finished the works of the 1st phase, the preparation of the pit for filling in the water.



Case study

Type Urban management&Development

Intervention Greenways - Ways of Future The Potential of Danubian Trail

Description

The term greenway is originated from combination of two words, where the word "green" means green corridor with all its properties, and the word "way" points to the possibility of moving. It is important to emphasize that network of greenways are formed on local, regional, state and interstate level.

Functions of greenways were best defined by Phil Lewis naming them Eways (environment, ecology, education, exercise). The recreation function is in placement of different types of paths in natural corridors, as well along canals, abandoned railway roads, pipelines and others. Ecological function is achieved by connection of important natural corridors and area of natural protection, often along rivers and streams and by it is enabled animal migration, biodiversity protection etc. Cultural and historical greenways are places and paths of historical and cultural values and enables education, experience of a landscape, recreation and benefit.

Along green and blue corridors is laying out cycle routes, promoting the following: development of an alternative way of movement by cycle and afoot, promoting the idea of "sustainable" transportation – healthy movement which does not pollute the environment and spend resources; development of "green tourism" and benefit of it (in the Netherlands, for example, the network of long distance cycling routes generates at least euro 7 million per year); development of sport industry which also economical effect; activation of cultural potential by designing pathways in such a way that they include the visiting of cultural and traditional heritage.

European Green Ways Association (EGWA) works on the development of a network in corridors designed to different ways of movement. At European level, the European Cyclist Federation (ECF) is promoting, with the help of the European Union, a network of 12 trans-European cycle routes, called "Euro Velo. Cycle route 4 will be passing by the Danubian area, therefore located in natural green and blue corridor.



Design objectives

What is the benefit?

The list of presumed advantages has never been established exhaustively. They are various kinds, including:

- Ecological impacts with a distinction between local, short-therm effects –
- notion of the environment and non-localized long-term effects notion of ecological balance; such as a reduction in dependence of energy, saving non-renewable resources
- Economics benefit such as benefits from tourism, also as benefit for residents who use a recreation in open space
- Environmentally improvement such as esthetical value of ambient, also quality of environment

- Culture values promoting such as emphasis culture heritage
- Social advances such as the democratization of mobility, greater autonomy and accessibility of all facilities to both young and elderly people

Visual appraisal

Danubian area as greenways networks

The Danubian area, by its natural characteristics, richness of culture and historical heritage offered great potential for greenways networks. Those potentials are:

Natural potential – natural assets under the first level of protection

The combination of orography, microclimate, biotic factors and specific natural history in the area of Djerdap has created this exceptional natural phenomenon and unique refugium. Development of flora and vegetation, in this relatively small area, has been continual since the period of Pliocene, resulting in preservation of numerous relict species and associations and whole developmental series. The term natural asset here refers to those areas in which certain characteristics of flora and vegetation of relict species confirm the theory of vegetation development series in the natural history of this region.

In the area of the National Park Djerdap there are ten nature reserves, and proposals for establishment of another three reserves are under way.

Cultural- historical resources

The valley of Danube was the route used by numerous European and Asian peoples in their migrations and military campaigns over the centuries. Many different civilizations have been present in the area of Djerdap, leaving permanent imprints behind them. As early as early Neolithic, about 8.000 years ago: an impressive culture of prehistoric man which lasted for a couple of centuries - situated at the site of Lepenski Vir; From Roman time: the most prominent among these monuments are Tabula Traiana and the Roman road cut into the rocky cliffs of Kazan. Also remnants of the Roman palace Diana-Karatas. From Turkish time: the fortress of Fetislam near Kladovo are best presented and also toponymes of certain areas. Medieval fortress Golubacki grad is a monument to the power of Serbian principals and building skills.

The protection of the architectural, monumental, and archeological heritage and involved that heritage in greenways network made basic idea for protection culture heritage like non-renewable resources.



Recreational potential

Encouragining cycling as a hobby is therefore a good way to relaunch its more general use. When drawing up a network of cycle routes, this should always be conceived in part as a way of joining together tourist routes (including, typically, canal towpaths, paths trough woods, disused and refurbished railway lines). Such routes will any case attract. By linking together the daily route network and the cycling-for-leisure network, economic benefits can be accrued from tourism. . Cycle routes are being constructed with the aim of developing green tourism, which is less of a burden of the environment.

Euro velo routes in Serbian Danubian area

At European level, the European Cyclist Federation (ECF) is promoting, with the help of the European Union, a network of 12 trans-european cycle routes, called "Euro Velo. Several sectors have already shown great interest in euro Velo: 52 sponsors from 22 countries have provided financial support to get the project going. The majority of association cooperating in this project is active at national level and can assist in developing this network.

It is important for Serbia that two of those trans-european routes will be passing through country, crossing Belgrade. The route 11 from Tart to Athens (from North Sea to Aegean Sea) and route 4 from Nantes, (with connection to La manche) to Constance (from the Atlantic to the Black Sea). Itineraries of the route 11 will be passing by the Tisa area, crossing Belgrade with route 4 and continue on South by Velika and Juzna Morava area, over a distance 592km

Itineraries of the route 4 will be passing by the Danubian area, therefore located in natural green and blue area, over a distance 588 km.



Quality assessment

Protection of nature

In Danubian area the most important is the National park Djerdap. This park is divided into zones with three levels of protection. Type pf protective regime for each zone is determined on the basis of the purpose and function of that particular zone.

The first level of protection requires strict protection of exceptional natural and cultural values. All protective measures are carried out under special regime;

The second level of protection is protection of especially valuable natural systems (characteristic ecosystems, landscapes and other natural assets) and natural environment of immovable cultural monuments. In the zones activities such as research, education, presentation of the national park, sport and recreation, water supply development, traffic, forestry, agriculture and husbandry, are allowed under certain, pre-established conditions.

The third level of protection is applied in those areas. Activities pertaining to tourism, sport, recreation, forestry, water supply, exploitation of mineral raw materials, development and regulation of settlements, etc., are allowed. For planning of greenways significant are: national park, natural reservates (strict and special), areas of special natural characteristics, park-woods, natural monuments with geomorphologic and hydrologic characteristics, natural monuments with botanic characteristics, small river islands, protected spring areas, touristic and picnic areas, existing woods and the remains of riverside woods, embankments, deserted railroads etc.

Creating archeological parks

Including archeological sites, insufficiently explored and protected, in the "greenways" can be accomplished by creating archeological parks. In the archeological parks the structure of fortress or settlement is being marked by plantings (if possible the plants that were present in the period that is reconstructing), while the net of paths of the former settlement forms future net of the park paths. There are possibilities of conserving archeological sites in order to be exploited as turistic itinerary. The aim is to make archeological sites available to the public and to be preserved for future explorations. Creating archeological reservates also carries great significance for the future. The reservates are the zones with archeological sites left for the future generations in undamaged environment.

Connecting and recreation

The same paths that "involve" the nature into the cities along the trace of the Danubian "greenway" can lead the people from the city in the nature. The paths could start from park to recreational area, alongside paths by the water. The paths could unite transit traces or connect urban centers and regions.









Key issues

Planning potential

The realization of the project of greenways network imply few steps: mapping existing natural corridors; researching existing planning documentation; identifying possible connections; creating special plans as: nature protection, recreation, historical and cultural resources, the plan of various types of paths, and at the end, creating complex all-inclusive greenway.

Pilot project

The Danubian area, by its natural characteristics, richness of culture and historical heritage and international significance offers ideal possibilities for location of a greenway trail. Therefore in this contribution, besides theoretical background, a review of advantage of the Danubian area for creation of one of the main corridors of the future greenways is presented.

The authors of the paper are pleading for realization of the pilot project for the greenway corridor in the Danubian area. This is the way to intensify new approach in planning that is in accordance with the idea of sustainable development. This approach includes cultural and natural resources protection, healthy and stable (economically and socially balanced) environment affirmation. Researches made so far, presented as numerous studies, explorations and plans, provides quality material for creating necessary database, as one of the steps suggested in methodological approach for realization of greenways.



Note

Author of this paper took part in all case study examples from Serbian praxis, as a team leader or collaborator.

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A personal account of design methods in architectural education in the last three decades

Şengül Öymen GÜR Karadeniz Technical University, Architecture Department

Abstract

Some believe that "design methods" totally failed, and the first remarks made concerning their failure were by those who pioneered in developing them. In this paper I am arguing that this statement is very much based on how one perceives what design methods were, in the first place. Secondly, I am pointing down how they are still utilized in architectural studios and the improvements made by myself with respect to the phases and steps of the methodology, with special emphases on intelligence and design phases.

Was not the aim of design methodology to make the process of design more scientific? Was not the aim of design methods to make externalization of the design process possible so that the process could lend itself amenable to further developments? I use them, I incorporate changes in them, and I update them according to the major transformations the design thought is going through. So, the design methods in architecture are alive and well. Only, they are more humanized, domesticated and viable now.

Eventually the question implied in this article is that; 'could the major masterpieces of the last quarter of the 20th century be realized without the slightest notion of systems thinking and of design methodology developed so far?'

Did design methods in architecture actually fail?

If any one had a chance to observe the processes of architectural designing at major and minor firms and architectural design studios over the world, at the first sight he/she might have come up with the conclusion that design methods are totally forsaken as passed-out and outmoded interests, as some sort of whims of earlier generations.

One reason which leads us to believe what is seen as looked at on its own is that major pioneers in the field have almost readily admitted that their professed approach to design methodology did not work. Only after two years of having published his major work on the synthesis of form (1964) Alexander confessed that the city was not a tree (1966; 1971)¹⁴. Jones (1970) unwittingly demonstrated especially how design phase approaches

¹⁴ May be it should be treated as if it were a tree. For this allegoric approach see; Gür, Ş. Ö. "Pomegranate", 1st International Congress on Livable Environments and Architecture, LIVENARCH, 4-7 July 2001, KTU, Trabzon, 8-17.

were not operable. Broadbent described the progress in 1973 and retreated in 1979.

Like many practicing architects, several researchers-even those from design methodology field, such as Gedenryd-condescend design research and contend that methods do not work. But all he is rejecting is that design process seen as a problem solving activity is replete with defects: It is as biased as the problem solving activity in mathematics on which it is based. In order to substantiate his claim he goes on demonstrating that in mathematics as soon as one analyzes the givens one has already worked out the necessary calculations to arrive at solutions. In other words, solutions are imbedded in the givens. In geometry, for example, the proofs of theorems are the corollary of appropriate choice of axioms. Therefore, analysis and synthesis are two aspects of the same activity, not two different activities, stages and processes; they are one and the same.

Thus, Polya's problem solving methodology (1945), which is based on classic mathematicians and Pappus especially, is no good; it is dead-born since the structures of process and proof are conflated in Pappus's own approach. Therefore, he contends that "had the original model of mathematical problem solving been good, then it may quite possibly have been a good start for a theory of action and cognition in general" and implies that the design professions might have benefited from this. He concludes that failure is located in the model of rational action, on a cognitive level. He has a good point there. As I proceed with architectural design methodology I will come back to this. For the time being, I will simply be content by stating that architectural design is a rational (justified) action, on a cognitive level and what is defined as failure by Gedenryd is responsible for the success of most talented architects.

On the other hand, Darke (1982) some time ago declared that the sole method adopted by the practicing architects was Alexander's Checklist approach, among many others proposed by design methodology researchers. On the face of it, this might be a true assertion but does it fully explain what is really happening at the architectural offices, studios and more importantly, in the minds of the architect-designers? No.

That the architectural design methodology when propounded by design researchers was not fully attended to by intuition-oriented architects is quite true. I recall one by name, Louis I. Kahn of the University of Pennsylvania. But most architects of the last three decades are raised by some studiomasters that sometime in their professional life were grasped by interest and concern in design methodology. Notwithstanding the fact that design methods were criticized in general, many studio masters, such as myself, have developed their own methodologies by open-ended approaches and incremental repairs, which they experimented all their lives. The reason why such experiments do not show up in periodicals is that in such a hard science and technology-oriented world we shy away with our soft techniques, which I believe, are perceptive, reliable, affective and eliciting for architectural design teaching. Our graduates unconsciously and imperceptibly inherit these approaches. In this indirect way methodologies live on. The fact that architects do not consciously practice a formal methodology is very poor evidence that no such methodology exists. There is a distinctive methodology of architectural design, which architects practice unwittingly.

Architects differ in their stance to architectural theories and the beliefs and values they are imbued with. The main dissension erupts between those who stick with the fundamentalist theories of architecture and others who flirt with the non-fundamentalist ones. Architects differ in their affection, predilections and prejudices for and about history and traditions of architecture. Some prefer architectural conventions (see Ghirardo, 1991; i.e. Israel, 1991; Vattimo, 1991, 1996; Pinos, 1993), some are socially motivated (see Frampton, 1980, 1996; i.e. Dean, 1991); yet, some rely heavily upon analogies, myths and fiction, such as Charles Moore, Michael Graves and Robert Venturi; some prefer to play with geometry and "other geometries" such as Daniel Libeskind, Peter Eisenman, Eric Owen Moss, etc. (Moss, 1993; Rajchman, 1998); and yet, some pour their thoughts into shapes by and through three-dimensional hand-made models, such as Gehry (1994), Coop Himmelblau (1993) and very many others. They sometimes create and innovate concepts and lay special claims to adjudicate upon their usage. They display differing attitudes towards nature, culture and building context.

They have one thing in common though: if asked what is going on in their heads on the verge of design or what methodology they followed in putting out their first l'equisse, they fail to explicate it. Unfortunately an architect's account of his own intellectual procedures is often untrustworthy, seldom convincing and usually an afterward story. What Albert Einstein said once for scientists is equally valid for architects: "I advise you to stick closely to one principle: Don't listen to their words, fix your attention to their deeds" (Medawar, 1969: p.10). In other words, methodology when propounded by architects is a misinterpretation of what they do.

Therefore, in this article by which I aim to clarify the amendments I made to my almost thirty year old design thinking and methodology, I will first expound on designers' lineage and strand of thought during design process by emphaty and describe their differences from other professionals and artists, and their similarities to mathematicians. This clarification will

ctizey dosonce: su topeden gelir, yapimur y gear lateral dosonce: su nedm? nerden gelir?

help me to substantiate and support the revisions and developments I implemented in my design methodology (Fig. 1)¹⁵.

STEPS	1	2	3	4	5	6	Feedback
	Problem Recognitio n	Identifica tion of Human Behavior Sets	Identifica tion of Problem Situation	Goal Setting Predictio n	Design of Objectiv es	Program ming	
PHASES							
Intelligence							
111630			2				Requireme nts
2 Design	1. Decomposition and Composition Process						
Fildse		2. AIIIIII	IVC LIHHIKH	ig; creative	e Activity	-	
3 Choice &						4	Alternative s—♥
Phase							
/ Implementat							
ion							Field
Phase						1	
5 Evaluation							
1 11035							

Feedback to the Intelligence Phase

Figure 1. Architectural Design as a Process Matrix (Gür, 1978: p.121).

WHO ARE DESIGNERS?

Over the last 45 years or so, many researches-very few in architecture, though-have been conducted on creativity. These focused on personality variables together with the socio-cultural variables, which, to the researchers' belief, might be responsible for creativity. Studies almost univocally demonstrated that certain personality traits often characterize creative persons and some traits of personality co-vary with creative

¹⁵ Note that even then I was not convinced about the mechanical, one-way design process understanding and implanted my personal beliefs and experiences into the model. And just as Wittgenstein, although I worked it out at a time when science-oriented thinking was at its peak, I gave the design process a second thought (seeing as) and left a lee-way for insight. Design does involve some emotional thinking after all.

thinking. These studies made comparisons between artists, scientists, other professionals and designers. They made a rather convincing case that "creative personality" exists; and that some personality variables regularly and predictably relate to creative achievements in arts, sciences and design professions (Myers and Myers, 1980; Myers, 1993; Diehl, 1992; McCaulley, 1990; MacKinnon, 1962; Durling, 2003).

The common dispositions observed among these creative people are openness to new experiences, being less conventional, less conscientious, more self-confident, self-accepting, driven, ambitious, dominant, hostile and impulsive (Feist, 1999).

Furthermore, Durling (2003) contends that art students have a propensity toward questioning and rebelling against established norms; they have a disposition toward intense affective experience (a tendency, which I believe is somewhat constrained among their architect to-be peers). By relying on the cognitive characteristics measured by those researchers who work toward establishing personality inventories (Myers&Myers, 1980; Myers, 1993) he also demonstrated that interior design students are of extraversion orientation, which makes them comfortable in working with others; that they combine **intuition** with **thinking** rather than combining **sensing** with **feeling**; that they markedly prefer **perception** rather than **judgement**.

Intuitive thinking is concerned with future oriented ideas and possibilities. It is seeking and sorting of alternatives. It is a cognitive activity as opposed to sensing, which deals with directly observable facts and things. These are essential qualities for architects, too. MacKinnon (1962) had already demonstrated the significance of intuitive thinking in high ability architects. Although rapid judgment is also vital for architects than interior designers under the constraints of environmental specifications prior to final decisions, perceptiveness is also a quality more associated with architectural design activity, since it involves remaining flexible, open minded, with rich visions for the future, and adaptability to new experiences. So, what is true for interior designers is almost equally true for architects.

On another occasion Durling states that "...being different is a strong motivator-this is often difference for its own sake. Sometimes style will outweigh practicality, or there may be a drive for some particular aesthetic or tactile quality that must receive expression.... They are given to proposing unusual associations, and they sometimes deliberately break the rules set by the tutor, for example by pushing a brief to the limit. Occasionally, they may be rebellious and difficult...they seem happy to work with uncertain or incomplete knowledge"¹⁶

¹⁶ In his response to a question in PHD-Design Discussion group; feb.14.2003.
I personally do not disagree with any one of these observations, except for one thing. One should clearly distinguish between artistic creativity and problem solving creativity. A brief, if there exists one in the head of the painter or interior designer, may be pushed to limits. It won't hurt anybody. At the most you do not buy the painting. But, design in architecture is a realistic response to a real problem situation. Although intuition is an essential precept in architectural thinking, architectural thinking is at the same time a problem-solving oriented rational action that needs to be substantiated and corroborated by a solution, design. It is this reality that architectural design studio has got to mimic. How far can the limits of the reality be pushed in reality? How far can it be pushed in the simulacrum? In order to resolve the complications involved in the concept of creativity and to be able to distinguish among varying conceptions of and demands on creativity the term creativity requires further clarification.

What is creativity?

The demand for environmental quality and livable environments today aggravate the responsibilities of architects and render their task more challenging and tough than ever. Architecture is enrooted in place. It is a unique activity that is both geographical and cultural. Each problem situation demands a particular solution appropriate for the geography and for the culture proper. Therefore creativity in architecture is of prime importance at the level of the individual and at the level of the society.

Systematic inquiry into creativity occurred from 1950s onwards and aimed towards a more fundamental understanding of human creativity. These researches adopted psychometric, cognitive, psychodynamic and pragmatic approaches to define creativity (Durling 2003). Only the last one deals with design fields, to a certain extent. In fact, very few researchers from a design background have undertaken studies on creativity and have investigated the knowledge about the underlying intellectual and social drivers of creativity.

As for creativity, it is a broad and vague concept. Criterion of creativity varies from one discipline to another. In engineering, for example, it may be predicated on there being some functional improvement on the product: It may be made cheaper, safer, stronger, of better performance, multifunctioned, etc. Some creativity, for that matter, may be a systematic affair with serious implications for success and failure as opposed to creativity in artistic domains, which value and cause the different, the eccentric, and the frivolous to come into existence. The role of creativity in sciences, on the other hand, is best understood by quoting Henri Poincare;

"It is by logic that we prove, but by intuition that we discover."

In effect, creativity is the ability to produce work that is both novel and appropriate, although traditionally it used to be emphasized as an 'effective surprise' (Bruner, 1962); and even lately described as an act of creating 'the unexpected' and 'the original' by the Deconstructionist architects, i.e. 'shock' by Tschumi (1994). For Polanyi it is an illumination (1958; p.123), a kind of awareness. Nonetheless, as quoted by Durling (ibid.) an important and persistent feature of all creativity is the ability to set aside established conventions and procedures (Guilford 1950; 444-454).

As a human behavior, creativity is a rapid intuitive deduction that owes its power to the infirmity of our powers of reasoning. It is generally considered a generative act, a leap in architectural discovery, which obviates an image of a fragment of possible worlds. Since creativity is a dynamic thought process in action some prefer to use the idiom 'imaginative leap' instead of the passive concept of creativity, in design disciplines.

"That creativity is beyond analysis is a romantic illusion we must outgrow. It can not be learned perhaps, but it can certainly be encouraged and abetted."

Says, Medawar (1969; p.57). Therefore, I posit that any sound architectural education and design methodology should be predicated on fostering intuitive thinking, without neglecting however, the obtainment of sensitivity towards nature, humans, history, technological innovations and contextual essentials; on minding students of the poetics of existence; and on building up of a reliable perceptiveness for past and future, within them.

However, in order to teach creativity in architectural education and implement intuitive thinking in design methodology one should first understand and detect the critical moment and the nature of creativity in architectural design process. Only then can one accordingly implement changes in architectural education in general and in design studios in particular.

The critical moment(s) in architectural thinking

That architectural thinking is much different from other disciplines is not fully investigated but a number of significant differences have been postulated between designers, architects and engineers. One of these differences is that the cognitive style of *convergent thinking* is marked in engineers whereas designers appear to major on *divergent thinking* (McCaulley, 1990). Cognitive style of divergent thinking is elaborated on De Bono website, and the term 'lateral thinking' is introduced: "*Lateral thinking describes problem solving methods, that instead of meeting the problem directly (conjectured as vertical thinking) attempt to go around the problem (lateral thinking) to facilitate the exploration of new territory often* through unusual associations of ideas. This seems to describe what designers do naturally." (Durling, 2003; p.5).

This final statement is partially true if not totally incorrect, untrue and unrealistic both in engineering and architectural design. Lateral thinking is only a part of our job. Attempts to correlate *generative and exploratory thinking* styles to different phase of design as suggested by Finke (1992) can neither be authenticated. We do both at the same time lapse and before every decision level. If either one of the thinking processes outweighs the other this happens in congruence with the problem recognition.

Design is a reflective activity. The entire process of idea exploration, evaluation and implementation is reflective. No one mindset or attitude prevails. Instead it is the judgment of the designer, or team leaders to approach each kind of problem in the appropriate way. Some moments require an emphasis on the logical and rational. Others demand creative exploration and expression driven work. Often the entire project cycle is spent shifting between different modes of thought, exploring, evaluating and exploring again. There is no one mode of thinking explicative of design process in architecture, there is no one critical moment in architectural design thinking. There are many, contingent with the phases and steps of architectural design (see Fig. 1). The guiding design concept can be creative, the structural system can be creative, and a minor detailing can be very genius. And this is exactly why architectural design is always a creation, be it minor or major. Few things of importance arrive from either/or thinking. Architects unify and combine rather than separate and divide. They design on both sides of their brain, at the same moment.

However, as underlined above there are critical moments along this thinking process. Although the part played by tacit knowledge in intuitive leaps that precede the rigorous construction of knowledge in science or in architecture is not fully understood, most architects would agree that good designers, just like good scientists, arrive at brilliantly rewarding solutions by way of analysis through synthesis (Medawar, 1969; Gür, 1978). The nature of architectural thinking is holistic as opposed to atomistic (Sternberg, 1986). Creative designers somehow know when an idea is the right one (Davis&Talbot, 1987); elements of solutions emerge very early in the design process (Eastman, 1970; Agabani, 1980; Lawson, 1990).

Among these researchers I fully associate with a philosopher of science, Medawar and I think that 'analysis through synthesis' best reflects architectural thinking and the major critical moments along this thinking. I completely disagree with Rowe (1987) who says that 'their lines of reasoning are based on some synthetic and formative design idea rather than on the analysis of the problem. He contends that 'architects instead of slavishly following methods contemplate solutions as soon as they conceive of design problems'. He implies that it is all of a sudden: Ah-ha! As I stated above; the fact that architects do not visibly practice a formal methodology is very poor evidence that architects do not follow any methods and no such methodology exists.

In general what researchers are confused about is that, which parts are played by theory, experience, drive and imagination in the creation of this intriguing and fast (!) solution system. There is no definite answer to such a query as yet. The importance of disciplinary theoretical knowledge and of experience is not fully understood. Intuitive thinking-or imagination seems a gift, a godsend or the result of a beneficial hereditary; but is imagination not, in fact, the result of the maturation of knowledge gained during education and professional practice? Is it not born from facts apparently forgotten, stored in a distant part of the memory, and suddenly remembered when circumstances call them back? Is imagination not based partly on the ability to connect notions which, at first sight, look quite unrelated? Is it not the ability to catch barely seen analogies? Shall we ever learn how to develop it?

I personally believe that tacit knowledge is not that tacit after all; and if there is any ability involved in developing the right approach to a design problem in architecture, it is the ability to connect design ideas, notions, which at first sight look quite unrelated, and to catch barely seen analogies; and I strongly believe that this ability can be improved in architectural education (Gür 2003). As usual, rules of thumb are more efficient than scholarly developed recommendations in this realm. Nevertheless, views of researchers on the nature of the generating idea in architecture vary a great deal too and are worth discussing at this point.

The generating idea and the nature of the tacit knowledge

Early in 1973 Broadbent used the term "preconceptions" to stand for the guiding principles preferred by architects in contemplating solutions, but it connotation: Preconception conditioned derogatory implies has а consistency, whereas most creative designers are very much inconsistent in their choice of guiding principles. On the other hand, Darke (1978) contended that a simple idea is used by designers to narrow down the range of possible solutions to a design problem and termed this idea as "primary generator". Recently Lawson claims that primary generators do not merely get the design process started but they have an influence throughout the whole design process; in many cases they are even detectable in the solutions (1997: pp.45-46).

As for me, architects may have ideologies that may lead them to think in a certain way, architects may have, and do have their own values that guide their overall design activities, but their ideas and principles are in the form of vague concepts, in the beginning. Nothing like scientific principles. Schön comes a little bit closer and uses the term "generative metaphor" with reference to Wittgenstein's "seeing-as" principle, implying that architect is framing the problem situation and reflecting his dreams upon it. He is more right because he mentions a 'problem situation', meaning that designers do not throw out concepts from the top of their heads. But the term metaphor is still very much restrictive: In spoken languages a metaphor is so well defined that the entire society is able to decipher it. This is not always the case in architecture. Architectural design is an individualistic and personal activity afterall, and the metaphors can be very idiosyncratic and esoteric thereof.

What architects actually work with are visio-spatial concepts with depth of coverage and explanatory power. This is called right brain thinking characterized by a distinct, holistic, visio-spatial approach (Bogen, 1969). If we try to analyze the design process pseudo-stepwise, the generative act is triggered by the observation of a problem situation where critical physical matters and human participants are perceived. Perceptive designers tend to be able to diagnose the real problem behind the purported one. They do not merely respond to some filtered needs statements. They often explore unarticulated or latent needs of the society, which brings us back to the complexity and tacitness that some methodologists have already suggested (i.e. Polya, 1945; Polanyi, 1958). In evaluating the problem and responding to it they make use of hypothetico-deductive logic: they interpret and validate the problem situation by passing individualized judgements, seeking little approval from recognized rules or precedence. The intuitive hypotheses they form and test one after the other are visions for solution. The choice seems fast to 'others'. But it is not. It varies from one architect to the other, though. The sieving of alternatives is done again through visiospatial concepts. They apply the scientific premise of reducibility, clandestinely: an ill-defined complex socio-physical problem is reduced to a visio-spatial solution-a cloud-like concept, a vague image, yet.

Knowledge and the power of imagination play an important role in creating cognitive alternatives, but an inductive logic runs throughout the sorting process (this is reminiscent of Baconian experimentation: "Let's say if..."). Naturally, causality plays the major role in the choice and refinement of one of the vague and barely articulate visions of future. However in this very complex act of perceiving, imagining, thinking, feeling and judging five factors are involved:

- 1. Foreknowledge gained from theoretical/historical knowledge of architecture.
- 2. Foreknowledge gained from the canons of masters of architecture then and now.
- 3. Foreknowledge gained from studio education and practice of architectural design- skill of transforming and representing concepts.
- 4. An incentive, which may be a restrictive clause-ranging from a scientific/technological rationale to a personal fancy.
- 5. Perceptiveness-a feeling for alternative socio-physical futures gained from the knowledge of other disciplines such as philosophy, sciences, literature, sociology, economy, etc., from arts, from extra-curricular activities, life experiences, etc. Perceptiveness may owe to some inborn insight for sensory clues, though.

Consequently, an internal censorship restricts available concepts to those that are not absurd, and an instant apprehension of analogy between the problem and solution is achieved, a convincing illumination. 'The rite of discovery instantly coincides with a ritual of proof' as they say in mathematics. Although this internal circuitry is unknown to others, it is well known to the individual designer herself.

To put it differently, the success of architectural design co-varies with the digestion of the factors cited above. Therefore, these should be the focus of architectural education, and they are. Also, the observation that design is at the same time an analytic and synthetic intriguing activity would not mean the renunciation and the abandonment of design methods. On the contrary. We educators are pro-methods anyway! and apply them in our own way, which we seldom explicate. In this article I definitely will. But before I do this, a few words must be said about the implications of this argument on the learning theories in architectural education in general and design studio approaches in particular.

Implications of this argument on learning theories in architecture

Any argument on creativity teaching should concern itself with learning theories. The learning theories proposed so far falls into three categories (Mayer, 1983; Broadbent, Martinez, Cardaci and Zoilo, 1998): 1. Conditioned learning, 2. Problem solving, 3. Cognitive learning. I prefer to examine those under five concepts, the last of which I had proposed in an earlier study (Gür, 2000), inspired by *Einstein's heuristic inquiries* (1963, 1993, and 1998) and Wittgenstein's Philosophical Investigations (1953):

- 1. Conditioned Learning
- 2. Problem Solving
- 3. Observational Learning

4. Reflective Learning

5. Conceptual Learning

Conditioned Learning involves stimulus/response strategy, which is based on minimal memory reserve and the automatic retrieval of the response, upon perception of the stimulus. It is imputed to Pavlov (1927). It is the oldest method of learning and the most classical, indeed. The second one is a decomposition and re-composition process, based on the analysis of problem situation and a re-structuring of the issues from down up, following a Cartesian methodology. The third theory of learning is learning from pure observations of both nature and society. Types, modes and styles of interactions and behavior are learned from such observations. It is first demonstrated by Aristotle and advocated by Rousseau (Lecercle, 1995), valued by Freud (1998) and followed by American sociologists such as Bandura and Walters. The fourth derives from the work of Piaget (1955). It employs the reflection of learned theories and hypotheses onto the object of investigation. In other words, it is an at hand trial of cognitive knowledge over practical problems. Trial and error involved in this type of learning may also lead to new discoveries.

All theories of learning briefly described above are necessary and valid in architectural education, but they are not sufficient. Architecture differs from many disciplines, such as social sciences, law and medicine where the knowledge is transmitted to the recipient and demanded back as it is rendered. Therefore, conditioned learning, observation, analysis and speculation based learning and the corresponding teaching methods are sufficient to deliver successful education in these fields.

Architectural education consists of two main bodies of knowledge. First body of knowledge can be taught as it is done in most other disciplines. In the design studios, however, the student is not expected to recite back the theories of architecture or the strength of materials, etc.; he is expected to understand a problem fully and to device a solution, shouting out "eureka!" Therefore, architectural education must furnish the students with something else in order to guide them in discoveries. As a remedy to this situation, bearing in mind the gravity of problems to face architects in future, I propose 'conceptual learning' as the fifth theory of learning.

Conceptual learning, although first proposed by myself (2000) without the slightest notion of Mezirow's (1978, 1991, 1997) 'transformative learning' could be understood as a special case of his adult learning theory. Transformative learning offers a theory of learning grounded in the nature of human communication. In this theory; "learning is understood as the process of using a prior interpretation to construe a new or revised interpretation of meaning of one's experience in order to guide future action" (Mezirow, 1996; p. 162). It is both instrumental and communicative. "It is instrumental in that it focuses on learning through task-oriented problem solving. It is communicative in that it is learning involved in understanding the meaning what others communicate concerning values, ideals, feelings, moral decisions and such concepts as freedom, justice, love, labor, autonomy, commitment and democracy" (Mezirow 1991, p. 8).

Transformative learning attempts to explain how our expectations, framed within cultural assumptions and presuppositions, directly influence the meaning we derive from our experiences. 'Three common themes of Mezirow's theory are the centrality of experience, critical reflection, and rational discourse in the process of meaning structure transformation'. Instruments of Mezirow's theory and practice is spoken and written forms of language. In my conceptual learning theory these are percepts, affects and expression instruments of design (Fig. 2).



Figure 2. An Analogy between Spoken Languages and Architectural Composition.

Conceptual learning proposed by myself is predicated on a dccp understanding of the architectural design activity itself (Gür, 2000). Design in architecture is an act of transformation and in that sense it is the highest form of practical adaptation to our environment. We transform and adapt. Thus, designing itself is a perennial experimentation process from historical, societal and individualistic point of view. It is a double act of communication where existing constructs, concepts, mental pictures of reality in the mind of the designer are being transformed into visions of future realities at one level, and they are being represented in the form of affects of that vision through instruments of architectural representations and expressions at another level. Studio efforts in architectural education are still another level of communication where these mental transformations of students (and may be of masters) are communicated between the two parties through simulacrums of real life situations.

For this reason, I established a totally new approach to the first term project in architectural education where transformative learning was exercised through architectural and other concepts (Gür, 2000). At this instrumental level of learning the emphasis was laid on students' dealing with haphazard concepts some relevant and some seemingly irrelevant to possible future architectural problems. This endeavor can be likened to Mezirow's understanding of instrumental learning because these exercises were task-oriented, by definition. For example, an exercise would expect from students to choose one from the suggested concepts such as '*rain*, *deep*, and *other*' and explain it on two-dimensional surface by employing instruments of representation, such as lines, shapes and forms, etc. First hand experience and critical reflection were central to these exercises. After each exercise masters of the studio would criticize the student's drawing in terms of essence, correlation of tools and percepts/concepts, aesthetics of composition, etc. Especially the criticism, I believe, helped students to change their perspectives toward architecture, design, composition and future of the world, etc. Their mental formation got used to transformations; they gained skill in thinking abstractly and designing figuratively (Figures 3&4). Again, Mezirow's theme of rational discourse is met by my dialogue– based learning/teaching theory, which I call 'conceptual learning' due to its instruments. The course itself proved very successful in itself and for the following studios.



Figure 3. Family (by Muhammed Ekşioğlu)



Figure 4. Open air concert hall first term project as a visio-spatial image emerging yet

Grounded on and substantiated by the above discussions now I can safely proceed with the phases and steps of my design methodology.

Proposed methods and techniques in design methodology

My methodology consists of five phases and each phase of seven steps (see Fig.1).

Intelligence Phase. Although I term this phase intelligence phase I caution my students that information collection never ends in designing, it only becomes more and more scrutinized towards the end. Steps:

1. Problem Recognition; the chief purpose of this phase is to create consciousness. Depending on the experience level of the students I follow two alternative ways. Usually in the first five semesters of design studio I state a building purpose. In the higher levels of education I leave the choice to the students by pointing to a problem area and let them decide for the purpose of the development. At this step the most important issue to transmit to the students is the uncertainties and indeterminacies of our times. What inputs the defined lot or lots would need to deregulate in a globalizing world. We speak of major changes the world is going through, what kind of effects might have impact on this place and what kind of a place this place is, first of all. Observation and reflection, that is, understanding and feeling, are very important in cognizing possible mental transformations of a place.

To aid in this to happen I have already published one sensingfeeling oriented heuristic approach to internalize spaces, and emphasized the role of history of matters and spirits and how they make themselves known to us at a place (2002; 2003b). I call this act 'Deciphering the Palimpsest'. When this guide is followed students develop a deeper understanding of a place. When they are to propose functions they have some background knowledge, their first-hand experience of a place to justify their proposals now.

When the younger ones are given a building purpose and a possible lot, they are usually let to decide whether this building purpose is the right choice there. Eventually, they have to go through the same experiences, anyway.

Deciphering the palimpsest involves three 'T's: a study of topography, topology and typology. Determination of topography and climate indicators is the easiest. Topology involves relation and interrelations; main and minor traffic routes, pedestrian traffics and the rationale behind these. Before any change is to be implemented into the area the existing relations must be understood very well. Typology may take some time depending on the situation but it is worth it. Traditional buildings and the other existing ones are studied in detail, typology-a strong indication of character-is searched, in order to guide the students in her decisions of 'continuity or change' and what kind of change.

2. Identification of Human Behavior Sets; what the place was like and what it looks like at the present is partly due to the impact of people using it now. Therefore, I ask my students two things: First, what is the human traffic like in the problem area and what the human qualities are. Statistics do not tell us this. Second, who will use the building-to-be? Classify and render scenarios applicable to each set.

- 3. Identification of Problem Situation; define contradictions and conflicts. Pinpoint where the critical decisions lie. Develop intellectual ways to overcome and/or to compromise and upgrade them so as to settle the issues in the future.
- Goal Setting and Prediction: obviously in architecture learning 4. consists in technical learning and in developing an attitude towards designing. "By far the most important thing for architectural students today is forming a reasoned, coherent opinion on architecture as a whole" says Grassi (1992), when referring to architectural education in general. In this article he reinstates the importance of history. first hand experience of buildings as technicians and as judges, especially the historical ones. My thoughts are very much in line with him and I emphasize this way of looking at things even in the studios. As a rule I discuss with my students alternative design thoughts and canons imbedded in our past. In certain cases I include regional and vernacular design thoughts as well, because I consider them important. However, instead of directing them to a certain design thought I prefer to speak on pros and cons, I invite them to speak too. I am famous for organizing 'intellectual days' on such issues where students collaborate and present certain epochs of thought and this is usually open to other students. They come and go on a voluntary basis. Although basic emphasis lies on my transmitting my own doubts and uncertainties as to the present and future of architecture, which I believe is realized by my own critique of competing approaches to design, in connection with the pressing issues for the project I let the group to come up with user, customer, business oriented goals. Setting goals is a significant tool for further analysis, without them individual research of students run very disorganized. I never let students to design objectives without setting the goals because definition of goals makes the huge research converge.
- 5. Design of Objectives; habitually I post the goals, and let students decide for the alluding objectives of design for and by themselves. We argue over them. We compare the design thought of past and present and the contradictory ways architects approached to solutions. For example, what transparency was for Raphael, Le Corbusier and Norman Foster, and the like. At this point I give out assignments in order to further develop an understanding of the ways past and present generation of architects solved similar building tasks. My favorite method is the one explored by Clark and Pause

(1996) long after me. I have developed this to a large extent with major canons of major architects to conform to the building task. I have built in syntactic analysis steps which distinguish the in-users and out-users of a building, day uses/night uses of a building, major vistas of the interiors, geometry of the distribution of vertical and horizontal circulation nodes, etc. I give assignments to my students to make syntactic and semantic analysis of existing buildings, either in architectural literature or in the environment, thus they develop a talent to investigate similar functions deeply and to compare the success of architects prior to them. They learn to discuss and criticize. This is one key element in the education of an architect. If you develop viewpoints to criticize others, your ability to criticize yourself increases.

6. Programming; While this process runs, students and me gradually formulate what can be done in the problem area to upgrade life in general and what the extent of the proposal could be. As the last step we determine the basic functions of the building, we double-check it with the competition programs in order not to omit some vital helping functions and we determine the size and scale of our mutual endeavor.

Design Phase. Design is a personal activity, however, I always ask my students to create fundamentally opposing alternatives stemming from the essential contradictions and conflicts which we defined but did not compromise throughout the process. Although some are very determined about their cognitive solutions almost none resists to this offer because it is also challenging (and students in my studio already have had heard about my approach and me-the irresistible). Here the play is soft science. Berkun (2003) corroborates me: "The ultra-compressed scientific version of science has two parts. Part one: when you have an idea, you must expend time and energy to prove that it works. Part two: you must also expend energy to prove that it does not work" (p.1). Designing two opposing alternatives may show that one should not strongly defend his formulation to all extents, there may be other solutions. Or may be the opposing one better meets the objectives and passes more tests.

Nevertheless it is always better to have more than one alternative because it is only when comparing the two ideas that the best idea-a hybrid of the two-is discovered. Cars are designed to switch gears easily, why not architects. I design them like cars! This attitude of mine takes Wittgenstein as its point of departure (1935): 'seeing' and 'seeing as'; and in that sense it is corroborated by Sless (1986; 2002) who introduces the notion of 'letness' into design field, which reminds me of the Baconian play with heuristic questions: "Let's say ...". Actually next step is our Baconian play. **Choice and Development Phase.** In face of contradictory and not so contradictory alternatives we take our testament of goals and objectives in our hands and discuss over the alternatives about their pros and cons. That which gets the best grade is chosen for further development. Naturally, causality plays the major role in the choice and refinement of one of the vague and barely articulate visions of future. Development is both functional and technical and involves scrutinized and precise knowledge about structural systems, materials, lighting, colours, textures, availability and maintenance of materials, etc, an endless query.

Presentation Phase. Although presentation phase is deemed to be solely in the responsibility of students, in order to broaden their view of presentation techniques in architecture I present new and attractive material to them and discuss about the relative value of one technique of presentation over the other. While doing this I discuss the general value and devaluation of simulacrums so that they gain consciousness also in looking into the media and the present goals of media. Again another hint of transformative learning.

Implementation and evaluation phases are beyond our responsibility but I value the feedback from the field and among the projects which we criticize during the sessions I always prefer to choose at least some of the buildings in the immediate environment. We discuss how well it functions, responses of the user to the building how the passers-by cognize the building, etc. At this point my intention is to breach the gap between environment and behaviour studies and design studios. I actually do the same kind of critique during the analysis of the human sets.

As one can see design methods are alive and well, only they are more humanized, domesticated and viable now.

A proposed approach to design studios

Grassi says that in face of such indeterminacy and uncertainty no body should call herself a master. But I believe I have developed myself to accommodate all sort of changes, therefore I call myself a master and still wish to add some soft advices to those who run and will run design studios. A design critique is a hairy issue because of the complex interactions of masters and students, aggravated with the complexity of inter-phases of contemporary design issues. Therefore as a studio master;

1. *Be a reliable person* so that your students will feel secure with you, confide in you, entrust themselves, their ideas, dreams and their work to you. If you are not one, disguise yourself as if you are one. Even a simulacrum will do.

- 2. Be open; let good ideas to surface throughout the entire process.
- 3. Feel free to speak in context of your point of view, but listen before speaking. *Facilitate the critique, do not dictate it. They are not your puppets.*
- 4. *Take down notes* or make her feel that you remember the previous critique very well. This will make her feel safe and cared for. Every one needs some encouragement now and then.
- 5. Be *extravagant in your praises* when there is something to do so, lower your tone otherwise. Design is one of the most difficult and challenging professions, after all.
- 6. *Change your aspect now and then*! This will help him to change his gears. This will lead him into exploration of alternatives.
- 7. Do not hesitate to *set out goals, objectives or some rules and guidelines.* They clarify your intentions and students' search. Modernist foundations and certainty is lost in architecture but without a clear set of intentions you become ambiguous (indeterminacy and unpredictability); all you have to be is non-determinant and non-predictable. This is open-endedness. Ambiguity is something else, open-endedness is something else. The latter encourages students to recognize their abilities, their freedom for research and choice and encourages them to imagine. The more they imagine the better it is.
- 8. Do not forget the tone, content and quality of critique shepherds creative process! Even when you are talking about uncertainties, use a sweet but an authoritative, non-surrendering *tone* with the implication that architect can vision better futures and that he must. If you yourself are lacking any ideology, even this much will do to induce courage and self-confidence in the students.
- 9. *Learn history and theories of architecture and design very well.* The more inclusive you are in your design thinking the more influence and authority you will have over them. This will higher the creative momentum of the team.
- 10. Try to follow methods. Without some knowledge in systems methodology I could not have developed my design methodology. Learn scientific methods and systems thinking well. "The surprising truth is that for designers everywhere, the scientific method can be an extremely powerful tool for finding and evangelizing their ideas." (Berkun, 2003; p.1). Let them be your main references. But apply them softly and poetically. This will highly improve your critiques, attendance and your reputation.
- 11. Reputation is half of the success of the studio work. When you build a good reputation as a studio master it will have a challenging

impact on your students. They will compete among themselves to receive praise from you for their work. The resulting learning and teaching will turn into memorable days of your life.

- 12. Avoid statements that refer to absolutes. Instead of saying; "this is bad"; or "How could anyone figure that out?" say; "Well, if the goal is to make this door look friendly, black and flaming red doesn't convey this to me!"
- 13. Although then practical certainties of our discipline are built by other professionals now, emphasize the point that they will still be built as the architect provisions them.
- 14. *Post some valuable references* onto the walls and panels of the studio and encourage the students to do so. They love to post and see their names posted on some sample assignments worth exhibiting. I have seen some taking shots.
- 15. Do your best to memorise names!

Conclusion: repercussions in design education

Naturally this argument has grave implications for architectural education. Continuous efforts to update and improve architectural education are undertaken by world's leading architectural education organizations. Prototype curriculum is designed and distributed to be adhered by accredited schools of architecture. At first sight everything seems fine and working. I am not against it. However, none of the organizations is dealing with the essence of architectural education and the quality of people who render it. Nonetheless the quality of people who render is what counts for the quality of architectural education. And this is where we should start. As Karl Marx once said; 'If you wish to implement a change in the society, start by changing yourself'. My goal has been constant improvement of self, and 'I' as a studio master. Hereby I admit what I have been doing; anyone can improve on it and initiate a change for the better, starting from the self.

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Role Of Culture And Tradition In The Development Of Housing Policy And Design: A Case Study In Anatolia

Zafer ERTÜRK

Eastern Mediterranean University

Abstract

With the rapid population growth, Turkiye confronted with a serious shortage of accommodation units. The realm of dwelling need has been increased by the urbanization rate. As a changed society another important fact is that the form of the house has been differentiated physically, in other words, in order to house the urban style of living the designing concept has been changed The majority of housing in Anatolia has traditionally been in the form of an independent family house with all its vernacular characteristics and identity. But with the increased growth of towns two or three stories-small houses have been decreased in number, and apartment houses or so called "units" have instead dominated production.

The context of the paper covers these subjects, which are discussed in detail as listed below:

- Cultural dimension of the vernacular housing,
- The need for housing caused by rapid growth in population and urbanization in Turkiye,
- The evaluation of design and the concept of the house in the process of urbanization,
- Legislation which is done on the housing problem and housing policies,
- Researches on the subject of design and construction of the housing done by the universities and/or the research establishments and evaluation of those studies.

As a developing country, the housing problem is still the major issue in Turkiye. Therefore an evaluation type of study is of great importance for the future.

This paper examines the recent housing situation by giving special emphasis both on the market, housing policies and also on the cultural dimension of the problem.

Keywords: Housing, urbanization, planning, policy and implementation, vernacular architecture.

Introduction

This paper attempts to introduce the existing housing situation in Turkiye as a developing country. It is very clear that although almost every effort has been given to overcome the housing shortage in Turkiye, still there are measures to be taken due to her unique conditions.

Turkiye is a country, which has some characteristics of its own from the point of view of its geographical location, socio-economic and cultural structure. One of the most interesting areas in the world to be analyzed as a housing environment is perhaps Turkiye, since it is the land of many civilizations and cultures. Anatolia is a cultural melting pot, and therefore its housing reflects its mixed cultural inheritance.

On the other hand, as in many other developing countries, the most serious problem in Turkiye is housing. Today the rapid change of the manmade environment is staggering. In most developing countries all over the world, rapid change in society, the rate of urbanization, the growth in population, growing mechanization, and industrialization have resulted in most people spending by far the greater part of their lives in a housing environment which is insufficient.

Although the Anatolian vernacular housing settlements appear haphazardly organized, on close examination, it is clear that they have been arranged for the best fulfillment of their function (Küçükerman, 1985). Although Anatolian vernacular architecture varies from region to region, the image is clear and shared, and the matching is relatively straightforward the orders and rules are strong and coherent. Small variations are noticed and become important.

The traditional housing environment is an interesting form of living environment, but a much more important feature of this is, obviously, the rooms, with their various units serving different activities in the house. The plan of the house is based on the number and the shapes of the rooms. The other common element in the organization plan is the so-called "sofa" which is an area providing a medium for social interaction, which could not be realized in other parts of the house. The different combinations and use of the rooms and "sofa" present a large number of plan types, which are used all over Anatolia (Ertürk, 1989).

Beyond the organization plan, there are other motifs such as "overhang" and "upper-lights" which both enrich the quality of the internal space and the aesthetic appearance of the house. These overhangs also give a visually rich contact between occupants and overhangs that give more external surface and enlarge the internal space provide the external environment. The contact by the outside view through the window is considered in a most skillful way. Windows, which are broken up, provide interesting vision rather than a large glass surface. Small and narrow windows give different views from different positions in the room, while the view is rather monotonous through large windows (Ertürk, 1989).

In the addition to the plan organization, overhangs, upper-lights and windows, there are other significant features, which occupy an important place in the Anatolian house, such as room entrances, doors stairs and fireplaces and the use of traditional materials and structure. It is obvious that detailed field studies on this account will certainly give several clues to be used for the improvement of housing quality in Turkiye.

This paper examines the recent housing situation by giving special emphasis both on the market, housing policies and also on housing research studies. It is unfortunate to see that there is a great gap between the problems as in the actual situation and the research findings. It is simply due to the tie, which does not exist between the two representatives of both sides.

In the paper; two major issues, namely the housing market and the housing policies, will be discussed in length. The housing policies, which were set up in order to solve the housing problem and housing studies during the period of the Turkish Republic will be evaluated and some estimations will be put forward for the future of the Turkish housing market. The paper also deals with: the cultural dimensions of the housing design that will be discussed with special emphasis on the vernacular housing environment.

Cultural Dimension: Vernacular Housing

The fundamental response among architects to vernacular shelter is primarily an aesthetic one, in which the beauty of buildings is inspirational. Their visual aspects impressed several architects such as Wright, Aalto and even Utzon. In his travels, Corbusier sketched the vernacular architecture of the wooden houses of the Bosphorus and was impressed by the natural orders, simple geometry, aesthetic framing and the way of using traditional materials, and reflected those in his work for the Villa-Fovre Jacot and Felix Klipstein (Graves, 1981).

Vernacular communities do not produce only buildings of aesthetic quality but they have also various other qualities such as environmental, structural, functional and organizational, which all together brandish an enormous source for architects. There are many principles applied to climate, technology, materials, life style, habits and activity systems, which are all the basic issues of architectural design (Rapoport, 1969).

Vernacular architecture is based, primarily on using pastoral materials, by trial-and error to establish the building form and is highly affected by social and economic order, and way of living. Once a style of construction had become established it was often used in substantially the same form for hundreds of years. The nameless building masters seem to have taken a highly practical way of using whatever materials they have, establishing by trial-and error what the material could do than seeking them for conscious putting to those use (Broadbent, 1970). Vernacular design method is carried exclusively in the human mind and maintained within its culture by tradition. It is distinguished from contemporary design processes because it is a non-literary method of design, which stores its complex tradition not on pipers, but in the mind of the builders (Tosun, 1983).

There is no reason why the studies on man-made environment should mainly restrict itself to the study of expert designed buildings, since in a world-wide perspective such buildings comprise only a small fraction of all man-made structures (Vestbro, 1975). Unfortunately, the common approach is that, architectural theory and history deals with the monuments and masterpieces of the well-known personalities. But it is clear that vernacular environment is the actual environment in which most people live in, and it has been ignored for long years. Vernacular architecture became popular field of interest when its potential for the future was realized in the last two decades.

With its varied geography, the natural wealth of its soil, and its favorable climatic conditions, Anatolia was a region marked by nature for the birth, growth and development of the earliest forms of human civilization.

Like so many cases of comprehensive studies where both collection and, more significantly, interpretation of data are not available, their rate of deterioration is very high, therefore it is impracticable to wait for applicable data in order to make any proper appraisals. Anatolia consequential study of vernacular housing demands on going insight of life style (Danel, 1990).

The vernacular parts of the Anatolian cities are in some ways the best examples of what is incoherently termed as culture, the manners and affectations, the way one decorates one's doorway, the peddlers in the narrow street, play areas, stone street covers, with nice texture, ground floor stone wall with flowers, and above all the physical character of the spices. It is not build-form alone, but also the outdoor and random spaces, the festivity and color of human activities, which provide specific characters to specific areas.

Although the Anatolian settlements appear haphazardly organized, on a close examination it is clear that they have been arranged for the best fulfillment of their function (Küçükerman, 1985). There are regional dissimilarities allover Anatolia on settlement level. The scattered settlements pattern, which is very different from the compact Anatolian village, is dominant and perhaps the most remarkable characteristic of the

Eastern Black Sea Area, which can be seen throughout the region, beginning from Samsun and continuing through Sarp towards Caucasia.

It is obvious that, this scattered housing brings a different order of living and working, and breaks the direct physical connection between residential area and the civic center. Because of this loose connection with the town center, the open market, the mosques and the traditional teahouses have acquired importance in the social life of the region. These are the places in which all kinds of social, economic and cultural activities take place. This argument probably is one of the critical issues, which would have been taken into consideration for the designing of the region.

Although Anatolian vernacular architecture varies from region, the images are clear and shared and the matching is relatively straight forward. The orders and rules are so strong and consistent but variations are noticed and have become important. The traditional Anatolian house is an interesting form of living environment developed by different cultures existing in Anatolia over the centuries.

Although all Anatolian house types are an interesting form of living environment but one of the much more important features of it, is obviously the rooms with their various units serving the different activities in the house. The organizational plan of the house is based on the number and the shapes of the rooms (Eldem, 1984).

The important common element in the plan organization is the so called "sofa" which is an area providing access between the various rooms and also provides a medium for social interactions which could not be realized in other parts of the house. The different combinations and use of the rooms and "sofa" present a large number of plan types, which are used all over Anatolia. Anatolian houses are classified according to the position of the "sofa" in the plan organization. This classification gives four basic types of houses. Those are, without a "sofa", with an outer "sofa", with an inner "sofa", with a central "sofa" (Eldem, 1984).

The first one is the primitive state of a house plan and consists merely of one or more room placed in a row. The second one is the first step in the development of the plan. This form of plan was used in the Hellenic houses in Anatolia. The type of plan with an inner "sofa" is the one, which is most common in Anatolia. This plan was developed by the addition of another row of rooms onto the outer side of the "sofa" .The last type present a central "sofa" surrounded on four sides by the rooms. The origin of this is Byzantine house with a central atrium.

As well as the plan organization there are other motifs such as "overhang (jetty)" and "upper-light" which both enrich the quality of the internal space and aesthetic appearance of the house. The overhangs also give visually rich perspective to the vernacular Anatolian streets. The close relationship and

visual contact between occupants and the external environment are provided by overhangs which gives more external surface for adding more windows and enlarging the internal space of upper floor. The contact by the outside view is considered in a most skillful way. Windows, which are portioned in small pieces, provide more interesting vision rather than a large, clear glass surface. Small and narrow windows give different positions in the room, since the view is rather monotonous through a large window.

"Upper lights" are placed on the level which is normally out of reach and above the ordinary windows as well as the line of functional use. The upper light is treated in many ways in Anatolian house. No matter what the building tradition is, it has always kept its existence. Obviously, regional and constructional conditions influence on the character of the upper lights. Each region has its special effects on the interpretation of the upper lights. Solutions are much more simplified on Black Sea Coast. Upper lights have both practical and semiological functions, simply they provide more lights to inside, and they have a symbolic character, which gives an identity because of its form and ornaments (Küçükerman, 1985).

In Anatolia natural conditions have direct and strong influence on the form of buildings, structure systems and constructions. Variety of climates are reflected in the physical structure and construction of all buildings throughout Anatolia, thus the natural conditions of Black Sea Region gave rise to wide use of timber in buildings, while other pastoral materials such as adobe and stone are common in other parts. There are distinctive regional styles as it is on Black Sea Coast.

The Ways of Using Vernacular Motiffs In Housing Design

There are several diverse ways and styles of utilizing vernacular heritage.

The first and simplest way is to modernize the vernacular heritage through a special application of the general concept of "Conservation". Modernization of the vernacular architecture we utilize from the past is a continual process. It is the responsibility of each generation to act as guardian for the next generation. Therefore, it is necessary for an awareness to be developed to recognize not only those features of obvious value but also those which may be ignored but which will be appreciated more highly in later years. Many of vernacular buildings are of great individual aesthetic value and give pleasure to the eye of the ordinary people as well as the architect.

Modernization is something different from stagnant protection, and means keeping purposefully: Not simply a continued existence but continuing a useful existence, which often implies retaining or restoring the traditional appearance of buildings, individually or in groups, but adapting the interior to actual uses.

Movement of a romantic interest in the vernacular has increased in recent years. This is not pseudo sentiment, but a genuinely increasing interest in the works and the ways of earlier generations. Buildings as a visual expression of the life of a community excite the imagination. It may be true that the more mature a civilization becomes the more it delves into its past, it is certainly true that old civilizations rich in substantial evidence of history are of ever-increasing interest to contemporary designers. The vital issue is that, how do we modernize and renovate an area or a building sufficiently without destroying the traditional character.

Old cities in Anatolia are frequently characterized by small deviant parcels, traffic blocking, structural and functional outmode, congestion of occupancy in all types of premises and ineffective services. But despite the insufficient resources the people living in these areas serve essential economic and social functions. Most of the places of historic interest are located in the old parts of the cities. They have a physical and social character that sets them aside from the rest of the city.

Most of the cities in Anatolia are in a continual and phenomenal change, reconstructing to the changing demands of economy and related activities. Changes in uses, rebuilding and renovation are taking place. The changes are often worse. The rebuilding or development taking place has no reference to any guide. These developments are changing the basic characters of vernacular housing environments.

There is a need for motivation and raising the public consciousness towards conserving historical building, and districts. The philosophy of conservation has to be politically and socially acceptable. Conservation is a process of development rather than a nostalgic step. Like land-use, conservation has political implications as it carries with it the improvement of the living conditions of ordinary people.

Planning and conservation of buildings and regions are difficult where the directions of development depend on decisions taken by individuals separately without any reference to a plan and guide. The urban form that evolves in the lack of regulation or controls does not respect culture or environment. Without adequate legislation, the deterioration of vernacular areas will continue. The existing elementary rules and regulations on conservation and land use controls have been misused by authorities. This is partly because of lack of trained people and partly because authorities are unorganized to enforce the rules (Enam and Rashid, 1991).

The second way is the referential interpretation. Referential interpretation covers a large number of diverse alternatives from basic imitations up to more complex interpretations including several visualization processes. The failure of modernism to cope with the "complexities and contradictions" of contemporary living and its lack of "meaning" were conducive to the spread of design criteria that gave priority to such dimension and to communicative value. The plurality of community life threatens to overthrow traditional spatial conceptions of the architecture.

Architecture went through a dynamic progression and development. Sometimes, it tried to eliminate the use of the past for its references and creates a new architecture of what they called Modern Architecture. Some believe that we should ignore the past if we want to create a new architecture. This is different from the Post-Modern architecture, which that needs to refer to history and the vernacular culture in order to create a new image.

The priority is given to a design that would become a cultural reference, which the users could read. In addition to this, it is also thought to interpret the historical and vernacular images to achieve more attractive environments. Therefore, the building itself can carry certain meanings. In any given environmental setting, the order of the forms exists as the components in a variety of interrelated sign systems. Each system addressed to partly unique and partly redundant functions (Preziosi, 1979). It is characteristically the case that some object formation will have variant meaning and behavioral associations in different contexts. And not everything in a built environment is meant in quite the same way. Different cultures will have different vernacular motifs to express their cultures. By applying the vernacular motifs such as orders, proportion and rhythm, they can design buildings that will express their particular cultures and environment. As for the people who will experience these environments they will have certain feelings towards the environment.

In creating new images there are several approaches of looking backward to historical environment. The first one is the "imitation" of the past. The second is the creating new feeling through making "referential interpretations". It is obvious this is the most important way.

Recently, in architectural creation, expression of a civilization, representation of cumulative memory and concentration on meaning, the process of intensifying correlation between design and space in time gains distinct significance. Time and space transcend the boundaries of the present and reach out to the complexity of history, culture and mythology. Thus, a cluster of composite and disorderly forms "images". It is obvious that, images generated from collective memories of society and languages formed from the images and their relations with the social realities are richer than the minimalist approaches of the "Modern Movements". Also, images based on the collective memories provide much more ability to cope with

the complexities and combinations of the language of generally meaningful forms (Lawrance, 1990).

The language of space, made up of the individual comprehensible forms, conveys a pattern meaningful in itself. Forms preserved in the memory of society constitute a design language. The dimension of meaning sought is intrinsic to it. Architecture, like all other arts, is poetical and it acquires historicity through, its poetic nature by mastering the cultural language of a certain people in a certain process of history, which is made possible by perceiving and making other perceive the solitude of imagery within a whole.

It is noteworthy that the following several diverse ways of interpretations of vernacular architecture were commonly used by architects.

- The formalist interpretations: It is used by the architects who are primarily concerned with the formal composition of building (Lawrance, 1990).
- The typological interpretations: It is used by the architects who focus on the geometrical and compositional orders of the plan organizations (Lawrance, 1990)
- Interpretations based on an analogy: Analogy is made with vernacular object or spatial concepts. There are several ways of making analogies such as direct, fantasy, physical, organic and cultural.
- Bricolage: It is recombining, reusing and reconstructing the several old parts that are laid at architecture's doorstep (Rowe, 1987).
- Mimesis: It is not the imitation of the form itself but it is imitation of something else such as a miniature, a concept or a figure from history or mythology. Ever since Plato, "mimesis" has been considered a dangerous conceptual domain. But it is possible to create imagery and to generate tension within the concept of mimesis as it diverges from imitation to its iconic aspect (Çavdar, 1990).

Housing Market Characteristics In Turkiye

The dynamics of population growth in developing countries poses a great challenge to human settlements. Eradication of squatter settlements and improvement of the rural habitat have to be tackled on a priority basis (Ertürk, 1989).

During the period of the new Turkish Republic, which has been for over seventy-five years, the most remarkable socio-economic changes are listed below:

- High rate of population growth,
- High rate of urbanization,

• Transition from the import substitution strategy to the Export leading growth strategy,

The period is evidence of the transition of Turkiye from an underdeveloped country to a developing country. Macro economic structural features of the Turkish economy are characterized by the relatively high development rate, the high rate of unemployment, the high rate of inflation, and being open to challenge from the outside world (Bocutoğlu and Ertürk, 1991).

The high rate of population growth and rapid urbanization are remarkable. In the economic and social structure together with the housing market, considerable developments have taken place.

The most important factor, which affects the accuracy of the analysis of the conditions of the demand and supply in the housing market, is the lack of the statistical data. First of all we should emphasize the fact that we do not have reliable statistical data on the existing housing stock in Turkiye.

Information of housing demand can be provided by rough estimations, which rely only on the basic factors such as population growth rate, and housing density, but we still do not have information relating to the new changes. Another important point is that we do have officially recorded statistical data; in which however, squatter houses are not officially recorded and are therefore, not taken into consideration. This is an important clue as to the reliability of the information. It is obvious that all estimations based on this unreliable data will be the subject of further criticism by the academicians and practitioners in the field of housing research (Bocutoğlu and Ertürk, 1991).

In the next part of the paper, those factors, which have effects on the housing demand, will be discussed. Although the total population in Turkiye decreased very much in the period between the First World War and the Turkish Independence War, the population has increased to 62 million from 13 million in the last seven decades.

In this period the population growth rate has been higher than the rest of the world and especially higher than that of the developed world. It is obvious that the population growth is the most important independent veritable, which has affected the housing demand in the last ten years. The total population increased by one million each year (DİE, 1990).

Rapid economic developments and industrialization have made urban centers and their immediate environments more attractive since 1950. This is the basic factor of the mass immigration of people from rural areas who want better standards of living, a better income and greater opportunity for jobs. In 1970 only 35% of the total population was living in the urban environment but this figure increased to 59.1% in early nineties. After the 1970s this immigration flowed to cities, which have the population of between 100.000 and one million. This made housing and infrastructure problems worse (DIE, 1990).

As a peculiar feature of Turkish culture, housing is considered as an investment and therefore housing is different from other properties. The inflation rate has been mostly over 50% since 1980 and even this rate made housing a very important investment. Since price increases in the housing market have been below the inflation rate for the last couple of years the demand for housing as an investment started to decrease.

Everybody knows the positive correlation between housing and income and obviously an increase in income also increases quantity and quality of housing. During the last ten years anti inflationary programs have been used by the government and these applications made income distribution peculiar in Turkiye. We have reached a point where increases in the incomes of middle and low-income group have been behind the increases in prices of housing. Obviously as a, result of urbanization and increases in the number of working household members, a nucleus family type has emerged. Changes of life style and the strong inclination towards living separate from other family members causes family size to decrease. Population growth and the decrease of family size increases housing demand The shortages of new housing for non-useable old houses also affects the balance of the housing market in a negative direction (Bocutoğlu and Ertürk, 1991).

Housing supply is a function of housing demand Even though other independent variables, which affect housing supply, are positive housing cannot be produced without enough of the demand for it. However, attention should be given to the difference between the demand for produced housing and the demand for shelters. The demand for built housing is low in middle and low-income groups who concentrate in the big cities in Turkiye (Bocutoğlu and Ertürk, 1991).

The main resources for the financing of housing are savings, housing credits, and equity resources of constructors; however, basically saving and housing credits are used. The private sectors of the housing market complete the selling process before they complete the construction of housing, so they do not need to use their own resources (Bocutoğlu and Ertürk, 1991).

There are two main types of construction technology, traditional and industrial, used in Turkiye. The main system of industrial technology is large panel systems, which have very limited use. Traditional technology requires more labor and time and this makes the system more expensive; however, it is the one commonly used. The construction-materials of the system are expensive, but produced sufficiently in Turkiye to meet the requirements. In big cities, the supply of lands has decreased and state agencies which are responsible for the supply of lands has not succeeded because of the high price of land and the shortages of funds. So the cost of land is sometimes more than half of the total cost of housing.

Small construction companies, which are not well organized, dominate the housing market, and so they are unable to construct mass housing to meet the needs of the country.

It is estimated that the total housing stock is 11.5 million units in Turkiye and the housing stock is 7 million units including squatters in urban areas. In rural areas, it is around 4.5 million units. If the average family size is taken into account, it seems there is no shortage of housing, but it is misleading. First, there is a difference between the number of household members living in rural and urban areas and this difference hides the real need of housing demand Secondly the difference between housing supply and demand is met by squatters who total about 1.5 million units. It can be claimed that squatter type of housing is not real housing, in fact, the number of squatters is the need of housing (Bocutoğlu and Ertürk, 1991).

Unfortunately the majority of the population of the capital city of Turkiye lives in squatter type of housing today. This rate is also over fifty percent in other metropolitan cities, such as Istanbul, lzmir and Adana.

Even though it is estimated that the need for housing in Turkiye is more than 300.000 units per year, production is just 75 percent of that. It will take a long time to meet the housing demand. Therefore, illegally built squatters will close the gap.

The Politics of Housing; Legislations in Turkiye

The constitution founded in 1961 with a five-year plan made the economic development for the state sector mandatory, since it has had guiding and encouraging effects on the private sector. The politics of housing can be discussed in two periods; the period before the planned economic development between the years 1923 and 1962 and the period during the planned economic development from 1963 to present.

During the years between 1923 and 1945, before the planned economic development, the Turkish economy was essentially based on agriculture, and immigration to the cities and urbanization was low, and there was no politics of housing. After 1945, industrialization started and this made urbanization start. So it created a demand for housing and it was the time of building squatters. In this period a ministry was set up to take care of the planning of housing, and city plans. There was no tax on housing and first time housing credits were made available. However, measures to increase production of housing were not taken then.

During the planned economic development, six "five-year" plans were established. They had different approaches to housing. The first "five-year" plan, which was between 1963 and 1967, did not take housing investment as a production investment and so housing investment fell from 30 percent to 20 percent. To increase the housing supply, the tax rate on housing decreased and housing credits supplied for houses with an area of less than 100 square meters. During the second "five-year" plan, which was from 1968 to 1972, as a result of shortages of housing the squatting type of housing could not be prevented. Unfortunately this is the reason why a law was passed to make this type of housing legal. The third "five-year" plan, which took place from 1973 to 1977, caused housing investments to decrease. The fourth "five-year" plan, which took place from 1978 to 1983, did not have any new approaches. The only new approach was that it made the land of squatters rentable. Investment for housing fell to 15%. During this period there was a high rate of inflation and this caused saving for households to flow from the housing sector to the banking sector. Consequently, this affected the supply of housing. The fifth "five-year" plan from 1984 to 1988 and the sixth "five-year" plan from 1989 to 1993 were basically for the purpose of the privatization of the Turkish economy and to open its markets to competition with the outside world (17, 18,19,20,21,22). During the last two planned terms, a law was passed for the construction of mass housing. A fund named "Mass Housing Fund" (MHF) was also set up for the same purpose. With this law the government helped the private sector using funds from MHF to construct mass housing. The private sector makes 92% of the total housing investment. MHF finances only small size housing. With the mass production of housing during the last two planned terms, cities have been changed and have lost their images and structure. Although the majority of housing in rural areas has traditionally been in the form of an independent family house with all its rural-vernacular characteristics and identity, with the raped growth of urban areas, multi story buildings have instead dominated the housing environment in urban areas (Ertürk, 1989).

During the planned terms, to encourage housing investment, cheap and sufficient land was supplied but from time to time there were difficulties in supplying it. Some agencies were founded to find a solution to this problem, however they did not succeed.

Squatting type of housing closes the gap between the demand and the supply. It is estimated that shortages were 1.5 million units in 1985. People living in these houses make up seventy percent of the population of the city of Ankara, 50% of the cities of Istanbul, Izmir and Adana, 40% of the cities of Erzurum and Samsun and 30% of the city of Bursa.

The politics of Turkiye related to this type of housing has always been between illegality and legality. Squatter housing is one of the most important factors of the Turkish housing market and cannot be ignored. Squatting is a kind of self-help and mutual aid that strengthens the social solidarity among the members of the community and encourages local participation. Since squatting is the outcome of the creative intelligence of the homeless urban poor, it maybe accepted as a useful device to fortify the self-reliance of the community members (Keleş, 1988).

Keleş's work on urban poverty in the third world has clearly indicated certain advantages and disadvantages for and against squatter housing in Turkiye (Keleş, 1988). "Autonomous" dwelling construction or self -built housing conditions appear in the absence of other solutions, based on the initiatives of people themselves. It has, of course several obvious advantages. First of all, they play a great role in filling the gap in the social housing supply, which is created as a result of the imperfections in the private market (Keleş, 1988).

One of the strongest arguments in favor of squatting in developing countries is the opportunity it provides for the utilization of idle manpower, which is a structural characteristic of those economies. It had been assumed that it would help to reduce unemployment considerably, which is endemic in developing countries such as Turkiye. Since it ensures the reproduction of the labor at a considerably low cost, squatting seems to be an optimal solution not only for itself, but also for the capital. This is the reason why the capitalist state does not really oppose it (Keleş, 1988).

There are practical problems involved with the living standards of squatter settlements, which consist of the following:

Poor people usually build on land not suited for human habitation. Selected locations are flood plains, dusty deserts, hills that are subject to land sliding, or next to polluting industrial establishments. Although their location is often functional for their residents in terms of proximity to work places, it is much less so in terms of orderly development. of metropolitan regions (Keleş, 1988).

As a result, the quality of both dwellings and the surrounding environment is inadequate for urban living. Related to this, people are forced to live in crowded and cramped conditions under which communicable diseases can easily flourish, particularly when malnutrition lowers their resistance (Keleş, 1988).

A need for partial or full renovation of squatter settlements and the relocation of its inhabitants elsewhere may arise as a result of increasing family incomes and changing tastes through urbanization and social change. On the other hand, the process of illegal construction of housing has been criticized on a theoretical basis from the standpoints of its function in the economy and of the changes in the nature of its self-help quality (Keleş, 1988).

At the first stage, a squatter house was the type of shelter produced by the individual's creativity, by his self-help, obtaining every kind of material and non-material support from his friends and relatives with practically no help by the government, but often against its will. In the second stage, the process is partly commercialized. The share of self-help labor in the total inputs during the production process diminished while the shares of subcontractors and contractors increased. At the final stage, the individual and the family labor left out the process entirely. The commercial companies began to undertake the design and construction of the house (Keleş, 1988).

Housing Research Studies in Turkiye

The real boom for urban housing research in Turkiye occurred in the 1960.s when urbanization and mass immigration started.

Housing research in Turkiye, like housing policy in general carries a heavy burden of peculiar thinking. All policies for the urban poor had the objectives to minimize costs and maximize control. The result was, the one hand, minimum standard "Iow-cost" housing was developed by the cooperative systems in Turkiye and on the other hand, when control could no longer be upheld, unplanned towns developed where the poor urban masses used their own skills and power themselves.

One of the most confusing points is that; in spite of the countless ongoing research on housing, their practical outcome is minimal. This is simply due to the lack of relations between these two sides, the first is involved in the construction side and the second is doing research.

The research, which is related to the different aspects of the housing problem, is generally sponsored by two main sources. The first one is the Scientific Research Council of Turkiye (TÜBİTAK). This institute gives research grants to those people who are working on a research project on housing in universities. The second main source for the research fund is the Universities. After 1982 each university had an independent body, which organized research funds. This university-based organization usually gives the grants to the research students. Some of them, usually in the universities, deal with the different aspects of the housing problem in Turkiye. There are some research centers in some of the Turkish Universities concentrating on housing research, but they are not active enough to give impulse to the practical world of housing in order to help solve any problems.

House is a word having many connotations; for many people it denotes security, comfort, companionship and leisure. Up to the present, unfortunately beyond this connotation, economic factors played the most important role in the developing countries' housing research agenda. Recently, one of the most popular approaches is to find out the possible ways of restoring old houses to their old use or adapting them to a new use. But the findings have very limited use since the high rate of population growth makes the requirement for new housing units enormous. Therefore the existing old parts of cities are quite inadequate to house those people not only qualitatively but also quantitatively.

It is obvious that there is not any governmental or private organizations that are responsible for the planning and the organization of the housing research in the country. In our opinion, this is the cardinal factor relating to the lack of interrelation between the practical and the theoretical side of the existing housing situation in Turkiye.

In the past thirty years more than 300 million people in the developing countries have moved to cities to find a better life. Unfortunately their living environments are still poor. Turkiye is one of these countries, and there are still a lot of measures to be taken at the strategic and planning levels. In spite of the many attempts to reduce the environmental problems, there are no major directives to be found. The reason for this situation is quite obvious; Governments have failed to realize that the issue they are faced with is not only the supply of more housing construction. They should realize that these people constitute a most important human resource that has not been comprehensively organized or utilized to improve their own living environment (Bocutoğlu and Ertürk, 1991).

If this process is utilized and sufficient technical and planning aids are provided, the quality of the squatter housing environment will be improved a great deal even in the short term in Turkiye (Ertürk, 1989).

Final Notes on Housing in Turkiye

It is claimed that the housing problem will take a longtime to solve because of Turkiye's high population growth, rapid immigration and urbanization. In the near future, squatter type of housing will help greatly in closing the gap between the supply and demand for housing.

Today, immigration is from rural areas to cities and from the eastern part of Turkiye to the west. It is clear that the immigration rate can be decreased by two factors. First, it is becoming difficult to find land for squatters in cities and there is inadequate infrastructure and insufficient employment opportunities in cities. So these can change the rate of immigration. Second, there is a well-known project (GAP), which is basically the irrigation of the area of "South-East Anatolia" between the rivers of the Tigris and the Euphrates to make the land productive for agriculture. When the project is completed, there will be more employment opportunities and this can reverse the direction of immigration from the West to the East of Turkiye.
Unless the variables related to population are in order with a fair income distribution and household income increase, the supply of housing will be lacking.

It is believed that the housing problem can be solved not only by providing minimum size units but also by allowing the contribution of local customs and values. These represent a real force of production of great quantity and quality if support is given, which still would leave control and responsibility in the hands of the people. This *form* of support could provide good environmental and infrastructure provisions for people to exercise their need to build. This is the cardinal issue, which is usually underestimated by public and private initiatives.

The unguent measurement for the development of quality housing depends on the correlation between legal procedures and the interpretation of the cultural motives of vernacular heritage.

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SESSION 1 PLANNING: Livable Settlement

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A discussion on the easement in city plans for a more livable environment

Seniha Çelikhan, Darçın Akın, Esra Demircioğlu Gebze Institute of Technology, Department of City and Regional Planning, Gebze, Kocaeli, Türkiye

Abstract

Easement can be defined as the right of an individual in another's property, which gives the user a right for a specific use and purpose, and allows him to benefit from another's land under special circumstances defined by the law. On the other hand, Turkish Civil Law defines some sanctions on the use of the easement. Easement, a limited right that cannot be converted into something else, is considered within the rights provided by urban development plans. For this reason we think that the easement is the essence of urban planning. Therefore, the meaning and importance of this right need to be discussed in the context of city planning by the local authorities who develops city plans, and the owners of private property which is controlled by public. In addition, it should be examined how effective these rights are for creating livable environments. The following questions need to be answered by the actors of the subject in the context of living on a civil government respecting human rights, and being aware of sustainable planning and land development: what is the significance of development plans for private properties with respect to the easement? What is the importance of the easement for urban development plans? What does the easement impose on local governments over the application of development plans with respect to the use of private properties for public purposes? In this paper these questions are examined with respect to the Constitution and the Civil Law act. An application of the easement is presented with an original landscape example from Germany. The evaluation of the easement is done from the views of planners, municipalities, and property owners throughout the paper. Finally, valuable recommendations are drawn for creating a livable environment.

Keywords: Livable environment, Easement, Planning, Private rights, Property rights, Public participation

1. Introduction

A livable environment can be established by only a successful collaboration among the individuals, groups and organizations that have the right over its planning by those knowing their own rights about what can be done and what cannot.

One of the basic responsibilities of a local government is to develop and implement plans within its territory in cooperation with higher-level governments. For this reason, the Constitution allows local governments conduct public plans by limiting private property rights for public purposes with the power of eminent domain and zoning (Levy, 2000). Giving these powers to local governments, lawmakers made sure that land developments and public settlements must have been planned in order to protect public health and safety, to provide adequate circulation, parks, recreational areas, schools, social services, hospitals, and the like (Public Developments act, PDA, no.3194). Besides entitling governments with these two powerful tools to control land on their jurisdictions, this act (PDA) provides individuals a very special right, called easement. The act of Public Developments (no.3194) under the title of "easement" says that the easement can be established for general public on places determined by specified area, altitude and depth without completely expropriating the whole land.

Easement can be defined as the right of an individual in another's property, which gives the user a right for a specific use and benefit over someone else's property under special circumstances defined by the law (Şakar, 1999). On the other hand, Turkish Civil act (no.5721) places some limitations on the use of the easement. Easement, a limited right that cannot be converted into something else, is considered within the rights provided by urban development plans. For this reason we think that the easement is the essence of urban planning. Therefore, the meaning and importance of this right need to be discussed in the context of city planning by the local authorities who implements city plans, and the owners of private property which is controlled by public.

1.1. Essence of individual rights

It is the nature of human that pressures him to live in a community. Thus, we all belong to communities. It is not easy for someone to isolate himself from the community and the social life, especially in this global world. Members of a community share interests, experiences, and goals. By the opportunity of living in a community, individuals can easily meet their natural and social needs in their society, and achieve a rapid development in

every aspect of the life with proper collaborations. The human who is obliged to live and share with others is always in some kind of interaction with others. Thus, it is necessary to place ordinances to regulate these relations and orders for a livable community. The most common meaning of community is a geographic one that refers to where we live.

Laws have been constituted to regulate human relationships and protect basic human rights in communities. On the other hand, public has some rights over private property in order to create public facilities such as roads, schools, social services, civic center, and so on. PDA (no. 3194) allowsmunicipalities to restrict and control settlements and developments on both private and public property for public rights. Thus, the PDA includes the characteristics of both public and private laws (Erkün, 1999).

Like in many countries, property right is one of the most important private rights in the Turkish law system. Thus, the capacity of a municipality to implement plans is circumscribed by constitutionally protected individual rights. On the other hand, the 14th item of the PDA (no.3194) under the title of "easement" states that local governments can use the easement to plan private land for public purposes without completely expropriating the whole land (Şakar, 1999). For these reasons, we claim that the easement is the essence for urban developments plans. The easement defined in the items from no.779 to 793 of the Turkish Civil act (no.5721) places some warrants over the property rights when it is necessary.

In this article, we examined the easement and claimed this right as the basis for city plans. We also underlined that authorities and individuals need to be aware of the importance of their rights and responsibilities for social prosperity. The importance of landscaping that is one of the most basic essences for livable and sustainable cities should not be neglected. In this study we presented a landscape design process from Germany, which is based on the application of the easement. By this way, we demonstrated the contribution of this practice to quality of life and social consolation in planning.

1.2. Property Rights

Land has been valuable ever since the first man set his feet on this earth. However, it is getting a highly increased consideration by its owners and users because land has been rapidly consumed by the private sector in urbanized areas. Public are left only a small part of it. Thus today the subjects of land use, property rights, and human-land interaction are much more important than ever before.

According to the Constitution (item no.35) everybody has property and inheritance rights, and these rights can be limited for only public rights, and

property rights cannot be used against the public benefit. Moreover, according to the Constitution living in a livable and sustainable community is the most basic right of the citizens (item no.56), and while meeting the housing needs of its citizens, the Government needs to take necessary measures in a planning framework which must considers urban characteristics and environmental conditions (item no 57) (Turkish Constitution, 1982).

Property right is one of the most important private rights. 'Real right' is a type of 'absolute-right' that is related to goods/properties, which can be put forward to any person or entity. But as the necessity for sharing and living together, people needed to limit some of these private rights for establishing an access among neighboring parcels.

The limited-real right is the subordinate right that comes after the property right and requires to registration at the title deed. These rights do not encompass all the rights that are provided by the property rights. These rights provide only limited rights over property, and they narrow/restrict the rights and the power of the property owner. The limited-rights-in-kind are divided into three major groups: "easement", "obligation of property", and "pawn-rights" (Karagöz, 1999).

1.3. Relationship between the easement and development plans

In this section, we sought an answer to the first main question of this paper: what is the significance of development plans for private properties with respect to the easement? The dictionary meaning of the easement is to want something in need. According to its legal definition, it is the right directly allows the owner to benefit from someone else's property described in development plans (Karagöz, 1999). There are two types of the easement (Yıldız, 1999):

- a) individual easement due to neighboring property ownership: this kind of easement allows the property owner to benefit from another property s/he neighbors with, e.g., having a passing right over his/her neighboring property.
- b) general easement: this kind of easement allows public to benefit from a private property not just because of their property ownership but just for general public to benefit it, e.g., hunting right, renting right, and so on.

The subject matter of our paper is about the easement due to neighboring property ownership. This right is used to provide passing/easement over someone else's property for one who is neighbor to that parcel. For example, in the case of unplanned access path for a parcel, which was defined based on a development plan, the accessibility of the parcel can be established based on this right. The right is divided into two, one is the positive and the other is the negative application of it (Karagöz, 1999):

- When a property owner allows his neighbor or another property owner to use his land as a way this practice, this is an example of the positive application of the easement.
- When a property owner does not build on his own property at all or build up to a definite height in order to not obstruct his neighbour's view, then this practice is an example of the negative application of the easement.

As it can be seen, the applications of the easement establish a base for regularity, which is aimed via development plans. Urban development plans regulate and limit the use of private property for public right similar to the application of the easement. Thus it can be claimed that the easement is the basis of development plans.

1.4. What is the importance of the easement for urban development plans?

Based on PDA (no.3194), municipalities can limit the use of a property and the building on it via development plans by limiting the shape, height, dimension, etc., according to regional characteristics, public rights and needs, planning principles, and public justice. These restrictions can be implemented for only public benefit according to the law. In this way, we can say that the urban design ordained by development plans is based upon the easement.

According to PDA (no.3194) item no.14 (the title of easement), municipalities and governorships can establish easements on properties over a defined area at a certain width and height without expropriating whole land for public rights during the practicing of development plans (Şakar, 1999). By this way the property rights are limited for public purposes by the regulations for building height, and the dimensions of front and backyards. Thus, it can be claimed that these yards are the areas regulated for public purposes via implementing the easement.

2. Use of the easement by municipalities to establish a livable environment: an example from Germany

In this section we presented an answer to the third main question of this paper: what does the easement impose on local governments over the application of development plans with respect to the use of private properties for public purposes?

After the World War II, Berlin Senate began to look for new methods in urban development and renewal. A project competition in the subject of urban renewal was designed. The purpose of the project was to encourage planners and architects to submit project proposals for the area of the east of Berlin-Kreuzberg which was called as the 'problematic area' causing economic, social and political insufficiency in the region. Thus, a project called 'Strategies For Kreuzberg' was prepared in 1978. With this project community residents sought a court regulation claiming a lack of parks and green areas in their community. They desired to solve this problem by redesigning the back and front vards among the buildings and open these areas to the use of the residents. They suggested combining and smoothing all vards, tearing down the walls, hedges, hangars, and so on for establishing a common place for residents to use all together for recreational purposes. Thus, the residents of the same block could use these places without any restriction and in turn, their neighborliness got strengthened. In order to make this project successful, the implementation of developments plans designating those areas opened to the use of all residents as green areas was recommended (Celikhan, 1986).

Likewise a similar project can be implemented via the application of the easement in some selected neighborhoods in our cities where such a project is seemed to be viable. Municipalities implement such a project to prevent the deficiency of urban infrastructure in some regions, and to create more livable communities. Another major benefit related to livability and sustainability that can be obtained by establishing such areas is that residents become proprietors of and control those areas and, in turn, they strive to keep them clean and alive like their own yards. It can be claimed that establishing such areas using the application of the easement is the basis of the European Landscape Agreement (ELA). As the ELA defined, by implementing the easement it is possible to establish landscape planning which is in a harmony with sustainable development, which has a landscape target quality defined by public expressing their wishes related to such areas, and which is planned with special actions regarding "landscape policies" by local governments.

3. Conclusions

If the local governments were unable to exercise control over the use of privately owned land, the practice of planning would be considerably different and limited. The power of controlling land use and planning vested on municipalities by the law made municipalities' work much easier. However, establishing public areas is not always an easy task because of property and budgetary concerns. And a situation in case lack of available open land and money to develop public areas pressures the municipalities that are responsible for providing a livable environment, urban planners, and in turn, citizens who need quality public areas. Nevertheles, municipalities can establish such public places that are needed by the public by using the easement with developing related regulations for using available places for this aim. They can control the development of parcels (as controlling building features) with proper landscape plans which should be taking regional conditions and urban identity into consideration. Because urban landscape plans of which the planning and management can bring some rights and responsibilities to everybody in a society are key elements for individual and social prosperity. With the help of other related regulations in planning and the cooperation of municipalities and public, we can have a livable environment. By this way, we can live on more livable communities without any violation to property rights.

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Spatial and social dimensions of urban poverty: the case of Ankara

Hüseyin GÜL Songül SALLAN GÜL Süleyman Demiret University, Turkey

Abstract

This paper discusses the findings of a survey conducted in the poor neighbourhoods located at the periphery of Ankara. The study is based on interviews with 68 poor individuals who received aid from SYDTF at the time of the survey and lived in squatter settlements. The study has no goal of reaching strong correlations on the issue in question, but rather attempts to explore the spatial and physical characteristics of impoverished neighbourhoods, housing and living conditions of poor families and the impact of these conditions on the exclusion and isolation of the poor from mainstream urban life, and the demographic traits of the poor. The selected three neighbourhoods seemed to have the worst living conditions and houses the extreme poor. The poor lived in low standard and insufficient squatter housing in ecologically deprived, economically excluded and socially isolated neighbourhoods. Despite receiving aid from the state and Ankara metropolitan municipality as well as neighbours, friends and relatives, they were still in need of some more basic services and goods. These conditions seemed to constrain opportunities for the poor, function to trap them in a difficult, unfair, unsuitable life of squatter settlement, and prevent them from getting fully integrated into urban life, leaving the poor in their own plight and perpetuating the cycle of poverty from one generation to another.

1. Introduction

Urban poverty is a reality of Turkey. According to DIE (State Statistics Institute), 8 percent of the population was extremely poor in 1994 (DIE, 2001). According to another count, this percentage reached 15 percent in the same year (Erdoğan, 1997). In terms of relative poverty around 25 percent of the population lived in relative poverty in 1995 (DIE, 2001). SYDTF (Social Solidarity Fund-also know as Fak-Fuk-Fon-government aid fund for the extreme poor) provided 358 trillion Turkish Liras (TL) assistance to 5.9 million poor in 2000 (SYDTF, 2001). However, due to November 2000 and February 2001 crises, these figures reached 295 trillion TL assistance to 5.9 million poor in only the first half of 2001. The number of the people who had Greencard (a government program providing only health insurance to those uninsured poor) climbed to 10 million in 2001. The number of people received in-kind assistance was 500 thousand in 2000, and 150 thousand in the first half of 2001. In Ankara, in the year of 2000, 257,041 people, or 13 percent of the people living in Ankara, received aid from social solidarity foundations (Simsek, 2001; Sallan Gül, 2002).

Poverty in Turkey concentrates in the neighbourhoods of squatter settlement in the periphery of big cities. The roots of this problem go back to the 1950s when agricultural modernisation forced high numbers of unskilled labour out of the rural areas into urban areas. Yet, it is argued that the process of urbanisation and squatter settlement took a different shape after the neo-liberal economic policies of the 1980s, creating losers and winners in urban Turkey. The processes of urbanisation and squatter settlement after the 1980s seem to have been accompanied with extreme poverty for some, on the one hand, and increased market opportunities for others, on the other hand. While extremely poor were struggling to accommodate themselves in squatter settlements in cities, winners tried to made their way out of poverty by utilising urban rants and speculative market opportunities (Öncü, 1988; Morçöl and Gitmez, 1995; Alkan, 1998; Buğra, 1998; Keyder, 2000, Pınarcıkoğlu and Işık, 2001). As of 2000, 62 percent of settlements in Ankara was constructed without a municipal permission (Keleş, 2002).

Scholars and researchers take different approaches to analyse the problem of urban poverty. A stream of academic debate focuses on ecological deprivation, social isolation, economical exclusion, limited opportunities, concentration effects, low educational attainment, dilapidated housing stock and high levels of unemployment, and other social structural constraints in poor neighbourhoods (Wilson, 1987; Ellwood, 1988; Jargowsky and Bane, 1990; Goldsmith and Blakely, 1992; Erder, 1998 and 1995; Sallan Gül and Gül, 1996; Gül, 1997; Jennings, 1999; Şahin, 2000; Şenses, 2001; Sallan Gül, 2002). Another stream of academic discussions

emphasises the behavioural pathologies of urban poor such as inferiority, helplessness, lack of participation, welfare dependency, collapse of family, feeling of marginality, and the like (Lewis, 1966; Banfield, 1968; Morçöl and Gitmez, 1995).

Drawing on the implications of the theories emphasising socioeconomic, spatial and structural constraints, the papers explore the spatial and social dimensions of urban poverty. More specifically, the study attempts to analyse the spatial and physical characteristics of povertystricken neighbourhoods, housing and living conditions of poor families, the impact of these conditions on the exclusion and isolation of the poor, and the individualistic and familial characteristics of the extremely poor living at the periphery of Ankara. It has no goal of reaching conclusive statements and correlations on the issue in question but rather attempts to describe spatial and social dimensions of the poverty by utilising descriptive statistics and crosstabulation.

2. Research methodology

An early study on emigration to Altındağ was done in the early 1970s (Kongar, 1973a and 1973b). This study is a survey conducted in April and May of 2001 and January and February of 2002. It was based on interviews with 68 poor individuals who received aid from SYDTF at the time of the survey, and who lived in squatter settlements.

Our sampling is constructed by the help of the central office of SYDV (Social Solidarity Foundation) and its district offices as well as the elected heads of the selected neighbourhoods in Ankara. The central office of SYDTF provided the names of the districts with highest number of people receiving aid from SYDTF. Then, the district offices of SYDTF supplied the neighbourhoods with the highest number of aid recipients, which were Kanuni in Keçiören, Boğaziçi in Mamak, and Serversomuncuoğlu in Altındağ. According to the name and addresses gathered fróm the elected heads of these neighbourhoods, we reached 10 percent of the aid recipients on the base of random selection. Of the selected 68 aid recipients, 34 were in Keçiören, 15 in Mamak, and 19 in Altındağ.

The survey included 57 questions. Questions on demographics include age, sex, marriage, income, work, number of child, educational attainment, birth place, the region of the birth place, and size of family. Other group of questions are related to the conditions of squatter settlement, such as location, number of rooms, rent, ownership and bathroom type, and neighbourhood conditions, such as the availability of public and municipal services and environmental problems. The remaining questions include public or municipal aid received, aid received from others, reason for emigration and reason for their poverty.

3. Research findings and results

3.1. Social dimensions of poverty in Ankara

3.1.1. Demographic characteristics and educational attainment

All the interviewees were over 18 years old. Around 67 percent was between the ages of 26 and 49. Around 28 percent was 50 years old or older. Two third of the aid recipients was married. 23.5 percent of the poor was widowed or divorced. 25 percent lived in families with 5 or more children, and 33 percent, families with 3 or 4 children.

Half of the respondents came from cities or towns in Inland Anatolian Region. 33 percent of them was born in Ankara. Most of the remaining emigrated from East Black Sea Region to Ankara. However, a great majority of the aid recipients was not new-comers to Ankara. 70 percent had lived in Ankara for 16 years or more. 4,5 percent had lived in Ankara for 5 or fewer years.

35 percent of the poor was illiterate, and 10 percent was able to read and write but did not have an elementary school degree. 52 percent had elementary school degree. Only 3 percent had high school diploma. Yet, the poor seemed to be more caring about the education of their children. 47 percent of them had children going to elementary and secondary school. 9 percent had children in high school, 4,5 percent reported that their children went to a university. There were only two school dropout cases.

3.2.3. Employment, Income and Social Security

75 percent of the poor did not work. 35 did not work because they were sick or disabled or because they had an aged person or a child in the family who needed care. 25 percent was homemakers and did not work. And 13,5 percent was not able to find a job.

Only 25 percent of the aid recipients worked but they mainly did cleaning jobs, weaving, collecting used materials and the like. All the jobs were informal sector jobs. However, 60 percent of the poor had another working person in the family. In one third of the cases the male spouse of the interviewees worked. In other cases, there was a child (17, 6 percent), a relative (10,3 percent) or a female spouse (3 percent) who worked. Accordingly, two third of the respondents had another person working at

home. Yet, children were found to be used as a source of income, only second to the male spouse in the family.

32,3 percent of the poor had no health insurance but 33 percent was found to have one or another type of social security coverage. 80 percent of those insured was under SSK (a government program of pension and health insurance for workers) coverage, and were predominantly married women or widowed. SSK insured got coverage because of her husband's insurance. In addition, 7,5 percent received aged or disability pension from the government. Of all the respondents, 32,4 percent had a Greencard, enabling them to get medical treatment at the state hospitals.

29 percent of the aid recipients reported that their household income was less than 100 million TL a month (100 million TL=75 \$). 39, 4 percent said that their household income was between 100 and 150 million TL a month, and 15 percent reported a household income between 150 and 200 million TL a month. Since a great majority of poor households in our sample consisted of 5 or more persons, we could conclude that more than three fourth of the poor had an income of 1 dollar or less a day.

Only 16,2 percent said that their household income was more than 200 million TL. The extremely poor whose household income was less than 100 million had to spend all or most of their income for food, and six of them received food aid.

3.2.4. Dependency on Government Aid:

Government aid to the poor was predominantly in-kind, and cash assistance was exception. 33 percent of in-kind aid was only food, 57,4 percent, food plus coal, and 7,5 percent, only coal. Yet, the amount of coal received was 250 kilograms at one time and was not enough to live through a whole winter season. Most of coal recipients got it once before the winter. In-kind assistance was provided during religious holidays, in Spring or at the beginning of winter. 16 percent of the recipients reported that they also received food and bread from Ankara metropolitan municipality.

No recipient expressed satisfaction with the amount of the assistance. They would like government to provide more aid. Around 40 percent of the respondents reported that they needed more food and coal. Around 17 percent expressed need for cash assistance. But more importantly, 33,3 percent asked for job and 6 percent for education. 4,4 percent expected government to provide house for them. Yet, when they were asked about what they needed in general, around two third said "house appliances and furniture" because they either did not have them or most of house appliances they had were very old and often did not work properly. Thus, they also expressed strong desire for new ones. Others said that they needed coal, clothing, or a decent house.

Our findings suggest that only 7,3 percent of the recipients received aid for 4 and more years. 84 percent of the recipients received aid for 2 years or less. Therefore, it could not be argued that the recipients were dependent on government aid to survive.

3.2.5. Mutual Help and Solidarity Among the Poor

Mutual help and solidarity played important role in the lives of the needy. Their mutual help relations may have included help in finding a house or apartment, lending money, allowing the use of bathroom, providing food, and getting information about governmental aid. One example was that they learned about the availability of the aid from the selected head of the neighbourhoods (48,5 percent), neighbours (47 percent) and relatives (4,5 percent). To give another example, 40 percent of the respondents borrowed money from neighbours and 30 percent, from relatives.

In short, the common feature of poor neighbourhoods was that relationship with friends, relatives, neighbours and fellow countryman made a very important part of the lives of the needy. Due to physical proximity, neighbourhood environment seemed to allow for mutual help relations and to play a significant role in making the life easier, affordable and sustainable for the needy. Especially, women somewhat established a communal form of help, information sharing, home-production, food sharing, social, physical and economic security, and other social relations.

3.2. Spatial Dimensions of Poverty in Ankara

3.2.1. Neighbourhood Conditions

Selected poor neighbourhoods seemed to have the worst living, housing and ecological conditions, and to suffer from inadequate municipal services and infrastructure. Inadequate planning in constructing houses and apartments along with slopping and narrow street structures seemed to make it harder to provide municipal service such as fire-fighting services, solid waste collection, and so on. Sometimes, waste water and matters were observed to run open on the streets, and solid waste was left on the sidewalks. There was no standardised use of trash cans and regular collection times but rather barrels with no top were in use for solid waste collection.

In Altındağ and Mamak, solid waste, waste water and sewer problems were very common mainly because of unplanned squatter settlements and very narrow and uphill and downhill street structures. Smell of sewer disturbed the researchers during their existence in the neighbourhood of Serversomuncuoğlu in Altındağ but neighbourhood residents did not seem to care much about the odour. Similarly, the neighbourhood of Boğaziçi in Mamak suffered from the lack of regular collection of solid wastes mainly because this neighbourhood is located in a sloping area with the risk of landsliding. In much the same way, only 30 percent of the poor in Keçiören reported that their solid waste were collected on a regular basis. Furthermore, the solid waste in Ankara was disposed in landfills which were very close to the poor neighbourhoods. In Mamak, Mamak Landfill Area threatened the nearby residential areas but was still used for solid waste disposal during our research.

3.2.2. Housing Conditions and Housing Market

A great majority of the squatter settlements were in disrepair and dilapidated. Because of municipal road construction, some of parts of the squatter settlements were demolished but people continued living in these houses.

In 90 percent of the cases, aid recipients reported that they lived in the squatter settlements. While 26 percent of the respondents lived in the same settlement since they had moved to Ankara, 42 percent moved to the present settlement due to its cheaper rent. 29 percent of the poor lived in his own resident while 28 percent, in a relative's resident paying a small amount of rent. In two cases, the poor invaded the current resident to live because they were abandoned. 38 percent of the poor rented the settlement.

Half of the squatter settlements had only two rooms, and 46 percent, 3 rooms. The concept of living room was not common. No room was specifically designed as living room. All rooms were used both as bedroom and living room. Two respondents lived in one-room settlement, and one, in four-bedroom settlement. Other than two cases, none of the houses had a bathroom as a separate room. Kitchen, entrance hall or toilet were used as bathroom. Some also said that they went to a nearby relative's house to have a shower. In 19 percent of the cases toilet was outside the house. 53 percent of the poor reported that their roofs were leaking.

In the surveyed neighbourhoods, rents were in general more inexpensive than the other areas in Ankara. 61 percent of the respondents said that they paid less than 60 million TL for rent. One third of the respondents paid 61 to 90 million. And 7 percent paid over 90 million for rent. Especially rents were cheaper in the neighbourhood of Serversomuncuoğlu in Altındağ than other two selected districts in Mamak and Keçiören because this neighbourhood is one of the oldest squatter settlements in Ankara and looked old and run-down. Besides, crime rates were very high in this neighbourhood according to the District Safety Department in Altındağ. It could be argued that Altındağ functioned to provide cheap squatter settlement for the urban poor in Ankara. As Erder points out, because of the commercialisation of urban land and squatter housing as well as speculative acts, it is much harder for the poor to even accommodate themselves in the neighbourhoods of squatter settlements (Erder, 1995). Accordingly, older squatter settlements seem to be the only option for the new comers to solve the problem of accommodation in urban area.

3.2.3. Availability of Groceries and Health Centres in Neighbourhood

Findings suggest that around 95 percent of the respondents used either hospitals or neighbourhood health centres to receive care. These hospitals and health centres were in walking distance. However, 38 percent of the poor said that they would not use hospitals or health centres because they were looked-upon and did not feel comfortable.

Most of the poor had stores in their reach to meet their daily basic needs. 78 percent said that they bought their basic grocery needs from small or big grocery stores. Around 16,5 percent utilised bazaars and street sellers to meet their daily needs.

3.2.4. Who are the Poor According to Poor

The poor seemed realistic in evaluating the reasons for their povertystricken conditions. According to 10 percent of the poor, a lack of educational attainment was the main reason for poverty. Around 55 percent said unemployment was the main reason for poverty. 25 percent considered having a bad paying job without any insurance as the main reason for poverty. Around 9 percent said that not only lack of jobs but also living in a limiting impoverished neighbourhood was the main reason for poverty.

4. Discussion and Conclusion

Our research reveals that the aid recpients are extremely poor and predominantly working-age women, elderly and widowed. The selected poor neighbourhoods seem to have the worst conditions. Ecological deprivation, dilapidated squatter housing, economic exclusion and high unemployment, illiteracy or low educational attainment, crowded families, traditional role divisions could be seen to function to trap the poor into a difficult and unfair life of persistent poverty. Great majority of the poor have lived in the impoverished neighbourhoods for more than 16 years, which indicates that they are trapped in a life of poverty. These conditions prevent the poor from getting fully integrated into urban life, leading the poor to isolation in their own plight. In turn, this could be considered to function to perpetuate the cycle of poverty from one generation to another. However, the poor, especially women, seem to develop an informal form of mutual help relations among neighbourhood residents. This plays a significant role in easing their living conditions and making the life affordable for them.

The state aid does not seem to have helped ease the plight of the poor because it requires more than just handing out some temporary aid to the poor to solve their structural and spatial problems. Coping with extreme poverty requires short and long term policies to be used simultaneously. In the short term, government policies should aim at meeting the basic needs of the poor, such as a minimum income, supplementary food or heating assistance, and at providing some of the basic services for poor neighbourhoods.

In the long term, macro economic policies to create secure jobs with decent pay and to develop the human capital of the poor along with social policies to equalise the distribution of income should be pursued. Moreover, these policies should be supported with the regional development policies to slow the migration to the big cities. Furthermore, municipalities and social workers should foster the poor to get organised at the community level and improve their inclusion in the larger urban community. Finally, the criteria for aid provision by SYDTF should be standard and objective.

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The social environmental analysis of the qualitative values in suburbs

Filiz Meşhur (Alkan) Seliuk University. Department of City and Regional Planning, Turkey

Abstract

The aim of the study is to understand social environmental satisfaction in mass housing settlements in suburbian areas. Although, quite a number of surveys on physical plannning process of mass housing areas in Turkey exist; research on the social way of life in mass housing areas are very few. Trying to percieve housing and the living environment only in the light of numerical values in considered to be incomplete and misleading. In this sense, satisfaction with housing and the living environment is an important factor for qualitative research.

The methodology of this study is based on qualitative research methods. Objective and subjective domains of qualitative research is analyzed and rational for selecting the qualitative approach as well as the main criteria for empirical research. The characteristics of social environment in mass housing areas is analyzed in terms of some physical and social indicators. These indicators relate to personal and socio-economic characteristics of residents such as income level and age. Physical and social way of life in Eryaman First Stage in this sense, constituted the content of the case study. The main focus is to obtain first hand information from the residents and their subjective evaluation of their living environment in order to understand how they judge the quality of their social environment.

Thus, in generally, Turkey follow a similar way with developed countries in many aspects. In contrast, goals and results are important points which differentiate the Turkish suburban experience from the experience of the developed countries.

According to empirical study results, Eryaman mass housing area both have positive and negative dimensions in terms of quality of physical and social environment. That is, housing and housing environment can be evaluated positively. For instance, Eryaman residents have positive opinion about privacy and safety of their living environment. Also, most of the residents do not want to move any place from their site. However, socio-cultural activities and neighbourhood relations are insufficient in the research area.

1.Introduction

1.1. The scope of the study

The aim of this study is to examine the qualitative values of social environment of suburban residential areas, which develop as an outcome of the urban growth. Trying to perceive housing and the living environment only in the light of numerical values is considered to be incomplete and misleading. In this sense, satisfaction with housing and the living environment is an important factor for qualitative research.

In 1920s, the suburbs represented the early stages of development of an exciting new urban form an area that combined the amenities of the city with the low density of the countryside a place that brought together the best of worlds (Douglas, 1925). Moreover, suburbanization has been viewed as the solution to the cause of urban ills. However, the process found as a solution to urban problems was redefined as a problem itself. The suburbs within the cities are generally in the way to become urbanised (Baldassare, 1992).

About twenty years ago, surveys indicated that suburban residents had a higher degree of satisfaction with their communities than did city residents (Baldassare, 1981). But, as suburbia became transformed from an area that is overwhelmingly residential to one that includes commercial, business and even industrial activity, suburban residents have become concerned about the impact these changes may have on their lives and communities.

Here, the questions to be posed within the framework of this research is, does this process of suburbanisation which is widely analyzed in economically developed countries follow a similar pattern in Turkey or not? How far people living in suburbian mass housing are satisfied with their social environment?

Thus, in this study, answers to the above mentioned questions are sought in the case of Ankara Eryaman First Stage mass housing area. Although many studies on the quantitative and physical dimensions of mass housing areas have been undertaken the social environmental satisfaction of people living in mass housing areas is not analyzed within its qualitative context sufficiently. In this thesis, the social environment and satisfaction with this environment, which includes physical as well as social variables, is analyzed from a qualitative perspective.

1.2.Method of the study

First of all, a literature survey was undertaken in order to understand the concept and process of suburbanisation in developed countries and to

compare it with the on going process in Turkey. Next, an emprical analysis of a suburban complex as a case study is included in order to be able to obtain first hand information on how the residents perceive the quality of their social environment. After, objective and subjective domains of qalitative research is analyzed and main indicators are selected for social environmental well-being research. The physical dimension of quality of environment in mass housing areas is examined by evaluating human and human environment interactin patterns and behavioural evaluations. Therefore, personal and socio-economic characteristics of people such as age and social class is also included in evaluation of this research. The satisfaction of user variables are classified under two main topics. Physical variables are evaluated in terms of housing and its environmental satisfaction. Social variables are examined in relation to social interaction, neighbourhood relationships, privacy and safety.

2. The rise of suburbia and suburbanisation process

2.1. The rise and definition of suburbia

Population growth and development of residential areas at the periphery of urban areas are well known natures of most of the developed countries. Likewise, this process has begun to present its effects in developing countries, especially after the introduction of industrial production. In these developing countries, with urbanisation and consequent concentration of population in some large cities, the tendency to move out of the built-up area to the periphery has arisen.

In developed countries, especially after the First World War decentralisation of urban activities have accelerated. Furthermore, housing became a commodity which could be sold and bought in the market and a new life style that is *suburban life* became attractive. Consequently the supply of suburban house with garden coincided with the desires and preferences of population and this new life style became popular in these developed countries.

However, in newly industrializing countries (NIC), the rise of suburbia offers serious differences. In Turkey, being a NIC, decentralisation of urban activities together with scattered residential settlements over the countryside has been accelerated by the development of industrial production.

A more widely used definition of a suburb, and one traditionally used by academics, is that a suburb is a community that lies apart from the city but is adjacent to and dependent upon it (Popenoe, 1988). Historically, this definition fits rather well, and it is still commonly used.

As Choldin (1985) indicates that a suburb was predominantly residential and that its citizens commuted to a city to work, but suburbs should no longer be defined in this way because many are not exclusively residential and most suburbanites do not commute to the city to work.

Suburban communities are the municipalities and places in metropolitan areas outside the political boundaries of the large central cities. Suburban communities differ from central cities in the presence of sprawling, low density land use, the absence of acentral downtown district, and the existence of a politically fragmented local government.

When I speak of suburbs in this study, I will be referring to incorparcted spatial communities of moderate density that lie outside the central city but within the metropoiten area. The area's primary economic activities are non-cultural, and government is usually through independent and sometimes uncoordinated local units. Contemporary suburbs are not necessarily.

A review of the literature on the suburbs shows that of times suburbanization has been viewed as the solution to and at other times the cause of urban ills. Suburban communities differ from central cities in these respects:

1. Low density land use

2. The absence of a central downtown district

3. Suburbs are not compact, dense and diverse

4. Suburbs having more neighbouring than cities (Palen, 1995)

5. Suburbs have a higher degree of satisfaction with their communities than do city residents (Baldassare, 1981).

However, the process framed as a solution to urban problems was redefined as a problem itself. They are generally in the way to become urbanized. They are simply getting to be cities. Their street traffic increases. They are no longer sub. Thus, there is a belief that the general quality of suburban life is decreasing (Palen, 1995).

2.2. Urban dynamics and suburbanization in Turkey

With increases in population, industrialization and urbanization more and more people moved into cities starting in 1950's. This movement led to changes in environmental ideals. Accordingly, people discovered apartment living, which represented a prestigious type of accommodation, preferred by the well-to-do and aspired to by lower income groups. This movement which still continues, give rise to higher apartment buildings, disappearance of green areas and abolishment of neighbourhoods. Thus, the closely settled neighbourhoods of homogenous people were transformed into the densely populated, heterogeneous areas where people might not be acquainted with even the people living in the same apartment building. In response to such changes, many people aspired to live in the newly developing suburban areas. Thus, parallel to the rural-urban migration, there is a relatively recent move from central areas to outskirts of city (İmamoğlu and İmamoğlu, 1996).

According to Kıray (1981), following are the aspects which direct the sprawl in Turkey;

* High technology which, with great amount of capital, tends to locate on the empty cheap land with its extensive plantation, quite for from the city center,

* Gradually growing middle scale industries which tend to locate just around the periphery of large cities and around the small cities respectively,

*With the change in agricultural production migration of population from rural sites and fluctuations of residential choices of this group within metropolitan area.

Therefore, the suburban developments in Turkey are in its initial stage and due to its recent development, there is a difficulty in reaching clear and necessary data about the characteristics of these new settlements (Ersöz, 1997). In most of the studies and discussions, these developments were considered as solution to housing shortage in Turkey.

2.3. The comparison of the suburban movement in developed countries and in Turkey

The comparison of the suburban movement in developed countries and in Turkey is summarized under following points:

*In developed countries, residential areas at the perihpery of urban areas have risen in 19.yy. and especially after the First World War decentralisation of population have accelerated. However, in Turkey, this process is observed with industrialization in 1950s.

*In developed countries, suburban areas have appeared as a reaction to the industrial city. Suburbanisation has been viewed as the solution to and at other times the cause of urban ills. Similarly, in Turkey, difficulty in living conditions of metropolitan cities can be considered as a reason for suburban growth. However, the main reason of suburbanisation is housing in Turkey.

*Suburban developments after the World War, accelerated by making use of the cheap land outside the city and of the programmes of loans in developed countries. In Turkey, with population growth and migration from rural areas in metropolitan cities, relative to the urban area, land prices on the peripheral rural area offered cheaper land.

*In developed countries, suburbs within the cities are generally independent communities. Also, they are simply getting to be cities. That is, they have both advantages and disadvantages of cities. In contrast, suburbs are not independent communities and residents of the suburbs dependent upon the city for work and cultural facilities in Turkey.

*In developed countries, the isolation from public and city life is the main problem of suburbs. Similarly, accessibility to city center is most important problem to suburbanities in Turkey.

Therefore, in generally, Turkey follow a similar way with developed countries in many aspects. In contrast, goals and results are important points which differentiate the Turkish suburban experience from the developed countries.

Ankara is selected as an example for, suburban residential developments offering new environments for the middle and upper income groups in Turkey. This study aims to a survey research about Eryaman First Stage Mass Housing area developed as a new settlement in the periphery of Ankara, in order to understand social environmental qualitative values of Eryaman residential area.

3. The Main Criteria of Social Environmental Satisfaction

Satisfaction is a reliable measure of social well-being and this measure is used as an anchoring point is assessing the relevance of social and physical indicators in the field of social well-being research.

When a good social life in both physical and social terms is considered attention must be paid to the following factors:

1. Personal and socio-economic characteristics; e.g. birthplace, age, sex, family size, employment status, income level and education level.

2. Physical variables such as housing and housing environment.

3. Social variables meaning, social interaction, neighborhood relations, privacy and safety. Also, behaviour and perceptions of people relate to their personal characteristics such as birthplace, sex and age. Also, socioeconomic characteristics such as income level, employment status and education level effect perceptions of people.

Thus, in this research, not only social but also physical indicators are used while measuring social well-being. Moreover, during the analysis personal and socio-economic characteristics of households are taken into consideration.

Sample population is chosen by stratified random sampling. A stratified random sample is one in which the population is divided into sugroups and a random sample is then selected from each subgroup.

In qualitative researches, probability sampling is widely used regarding to purpose of studies. This study claims that there is a relationship between housing type and housing satisfaction. Eryaman First Stage mass housing area constitutes both high-rise apartment storeys and dublex single family houses. That is, stratified random sample is found most suitable because research area have different types of dwellings.

Questionnaire form included total 44 questions. Out of this questions 19 were closed-ended, 12 were open-ended and 13 are scale questions. Also, in depth interviews were made with residents about social facilities, neighborhood relations and safety (Alkan, 1999).

4. Eryaman Case Study Area

4.1. Characteristics Of Eryaman First Stage Settlement Area

Eryaman Mass Housing zone is one of the settlement regions in the west corridor which is planned to be the most important housing development region in the Ankara Zoning Plan. Various industrial developments have been planned in the vicinity of Eryaman Mass Housing zone. There are sufficient number of workplaces within a 3 - 4 km. distance to the zone and the number will increase in the future by realisation of the planning investments. Transportation from this zone to the city center is facilitated by good connections at present and will be better in the future. Ankara – Ayaş road is located in the south and Ankara – Istanbul highway is located in the east. Ankara – Sincan railroad, on the other hand, is located at a distance of 1 km, in the south (TOKİ, 1994).

Total project area is 111 ha. Of this area, 24.5 ha's have been allocated for green areas, 3,2 ha's for roads and autoparks, 3,9 ha's for educational buildings, 12.3 ha's for social and commercial activities. 1,7 ha's for infrastructure, 0,44 ha's for cultural facilities. Remaining 36,1 ha's are the housing areas (TOKİ, 1994).

During the preparation of Eryaman Mass Housing Project, housing areas are reserved for all the necessary social infrastructure and facilities (Tali, 1994).

Apartment types and household characteristics can be described under four groups:

* First Group: These apartment dwellings are planned foreseing the requirements of small families with one or two members or retired people. This group of apartments have 1 bedroom. This type of blocks are scattered among other blocks in order to obtain a balanced distribution. Number of these apartments in the project area is 392 which constitutes 8 % of total number of housing stock

* Second Group: This group of apartments have 2 bedrooms. Number of these apartments in the project area is 1670 which constitutes 35 % of total number of dwellings. These type of apartments were designed as four-five storey buildings.

* Third Group: This group of apartments have 3 bedrooms. These type of apartments had been placed in all types of buildings which range from fourfive storey or fourteen storey high. Number of these apartments in the project area is 2713 which constitutes 55% of total housing stock.

* Fourth Group: This type of housing is rare in the project area. These are the more luxuries than others with their private gardens, and 4 bedrooms with an attic. The number of these houses in project area is 85 which constitutes 2 % of total housing stock.

Eryaman First Stage project area inhabits about 20.000 population, 4740 housing units, 5000 households.

4.2. Evaluation of the data

The results of the case study is evaluated under three headings: **Personal and socio-economics:**

Personal and socio-economic characteristics of the residents is influenced by their expectations from their environment. The population survey in this sample showed in terms of socio-economic characteristics a great homogenity interms of income and educational level. They were all middle income group and 80% had higher education. Therefore, expectations from the environment did not show great variety. However, in terms of personal characteristics, age and employment status presented a variation.

Physical Indicators:

There exist a relationship between housing satisfaction and housing type. Most of the residents want to live in single family detached house. Also, single family detached houses residents' have a higher degree of satisfaction with their housing than do apartment dwelling residents.

Eryaman residents are satisfied with their living environment. Low density land use, sufficient open and green areas new buildings may be an explanitation of this satisfaction. Also, the research area are plannaed regarding all social infrastructure and green areas.

There exist an opposite relationship between the desire of moving to another settlement and environmental satisfaction. By the way, most of the residents do not want to move any place from their site. Of the residents who want to move from Eryaman, complain about accessibility to office, cultural facilities and relatives in the city center. Accessibility to the center of the city and other sevices is one of the most important factor affecting the residents' environmental satisfaction. However, the distance from the city is widely known characteristic of the suburbs or new settlements in the periphery of city. Thus, residents venture the distance from the city when they move to the suburbs.

Social Indicators

Suburbs do not have sufficient cultural facilities. Actually, residents pointed out there is not any cultural facility like cinema or theatre. Also, social activities so weak so that people must go to the city center in order to participate in cultural and social activities of the city.

Suburban residents are interested in their neighborhoods and involved with each other. The data results proves this hypothesis. Neighborhood relations are important for most of the residents but, neigbors do not have any time for neighborhood relations. However, they also add that they want to have more interaction with their neighbors.

Age is the important characteristics in neighborhood relations. Older people have more interaction than younger people. Because, older people (especially retired people) have more time than younger. Whereas, the young generation does not consider neighborhood relations important.

Suburbs have more privacy than cities. This privacy is created at the design stage by the planners who tried to create a balance between openness and closedness and it corresponded to the occupants' needs.

Safety is one of the most important predictor of the social environmental satisfaction in developed countries. Eryaman First Stage mass housing area is considered a highly safe place for residents. Because, they do not experience vandalism, burglary or crime and they also do not have fear of crime and burglary (Alkan, 1999).

5.Conclusion

The aim of the study was to understand social environmental satisfaction in mass housing settlements in suburbian areas. Although, quite a number of surveys on physical planning process of mass housing areas in Turkey exist, research on the social way of life in mass housing areas in suburbs are very few. In this study, the characteristics of social environment in mass housing areas are analyzed in terms of some physical and social indicators. These indicators relate to personal and socio-economic characteristics of residents such as income level and age. Physical and social way of life in Eryaman First Stage in this sense, constituted the content of the case study. The main focus was to obtain first hand information from the residents and their subjective evaluation of their living environment in order to understand how they judge the quality of their social environment.

A secondary objective of the study was to define the process of suburbanisation in Turkey and find out if it follows a similar pattern in Turkey as in developed countries.

In the light of case study results, following conclusions can be drawn:

Housing and living environment are the most important concepts in human life and they should be considered both from physical and from social aspects. The social life of suburbs can be enriched with new design principles and planning. The creation of social interaction speaces reviving community life can be realized with mass housing regulations.

Residents' preferences can be considered in the design process of masshousing areas. According to survey results, residents prefer to live in detached house with garden in suburbs. However, they live in apartment flats. Residents' preferences and behaviours can be an input to mass housing design since housing image is effected by it to a great extent.

According to survey results, social and cultural services and facilities are not sufficient. A mass housing planning process in suburbs should provide the socio-physiological requirements of residents. These social and cultural services can be constructed at the same time as the dwellings.

It is important that sport centers for and cultural facilities are designed in the scale of settlement especially for young people and children.

It is seen in this research that socio-cultural components of environment such as house, street and open areas, provide residents visual satisfaction. Thus, social interaction can be increased if these areas are planned sufficient and good.

Streets, open areas, sport complex and public social services can be considered and supported in the mass housing design process. Because they support to social interaction.

Neighborhood relations are basic factor of social interaction. Also, it is an important determinant quality of social environmental well-being surveys. According to this research neighborhood relations are necessary and important for residents. It can be said that this result is observed in Turkey and especially in middle income group settlements. Social relationships are influenced and explained by peoples' homogeneity with respect to a variety of characteristics. This may be a reason for strong neighborhood relations in the research area. Also, relatives are important for the residents. Housewives and retired people have more neighbors and they want to close to their relatives. Their relatives live in city so that people want to live in center of the city. Because, people live in a mass housing in suburb, they do not access to city facilities and services easily. Thus, they need eachother in order to solve problems and requirements of their settlements. This may be another reason for their strong neighborhood relationships. Social services and open areas designed in housing areas affect neighborhood relationships positively or negatively. Thus, mass housing design can be done regarding to support neighborhood relations.

Thus, Eryaman First Stage mass housing area both have positive and negative dimensions in terms of quality of physical and social environment.

That is, housing and housing environment components of physical environment can be evaluated positively. Housing privacy is sufficient in the research area. Moreover, Eryaman First Stage settlement area is considered a highly safe place for residents. These characteristics of settlement area can be supported. However, socio-cultural activities and neighborhood relations are insufficient according to survey results. In order to develop socio-cultural activities and neighborhood relations, mass housing design and regulations can be enriched.

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Nature-Effective Architecture-Settlements

ÇEVİK, Sonay EMİNAĞAOĞLU, Zehra ERŞEN, Fulya KTU, Department of Architecture, Trabzon, TÜRKİYE.

Abstract

Architecture is a cultural heritage that reveals cultural riches of a country with their many aspects. Either at building or texture or city scale, it has an interaction with the nature. With its many components, nature constitutes the ground and the first point of motion. Creating artificial environments is related with men's desire to know nature, to use and alter it in terms of their needs, and to adapt and control it. Such natural formations as topography, climate, water, and green have had an effect on such qualities as the setting of the built-up areas, choice of materials, and structure. When all these environmental data combined with the socio-cultural structure of the environment in which we live, a genuine, whole and local architecture was born. The natural environmental data, have had a deterministic role in the making of this architectural culture created during the historical process. Nature is one of the musts among the man/society- architecture-nature tripartite.

This study will investigate the preservation and maintenance of nature and natureeffective settlements, and evaluate the criteria. Preserving the architecture-qualities of the settlement formed at different times on different settings and their transfer to the future will be discussed with examples. These examples in which nature, society and architecturequalities of settlement meet meaningfully provide the people living in the vicinity, region, and country with the value of "place", and presents important identity qualities. These genuine settings form the special identity value together with such environmental data as changing region, topography, flora, and climate. Especially when these locations meet with a genuine living atmosphere, the spaces-settlements with preservation-priority become valuable.

In this paper the relationships between coastal-rural architectural examples and nature in the Eastern Blacksea Region, their coexistence, and the genuine settings that they create will be investigated and discussed in the scope of creating "places", exhibiting special-local identity qualities, and of the qualities of preservation-maintenance. This paper is the summary of a study carried out by their authors. In this study, the preliminary findings of the selected sample settings will be examined through photographs and drawings.

1.Nature and Coastal-Rural Architecture Settlements and Local Identity Values

It is naturally obvious that the subject is handled multivariously in this paper since nature-effective architecture-settlements is the main topic. Natural settings and built-up locations should be considered in the scope of their elements, qualities, and meanings. In addition, it is important that the explanation of the notions of place, identity, local identity, identification, character, genius loci as key notions that arise as the products of nature, coastal and country-rural settlements, and many-sided formations be made.

1.1 Definitions-Meanings of Nature and Coast-Countryside

Nature can be defined as the entire creatures – living and non-living – or as the whole of the things that existed by itself unconsciously. It expresses the entirety without beginning or end that surrounds man. Science and philosophy started by observing the nature and thinking about it. Everything in the universe, including the conscious man, is a product of it and is formed from it, (Hançerlioğlu, 1979).

Nature without beginning or end is a harmonious coexistence of soil, water, fire and air. The earth, the sky, the sun, the moon and the stars are formed from these elements. It is nature that holds together the sky, all celestial bodies, all animals and plants, and all seasons, and in which all kinds of effects and messages are flawless. Rocks, trees, plants, flowers, winds, mountains, seas, etc. are the components of nature that we perceive with our five senses, (Erdemli, 1999;Eliade, 1996).

Since its very beginning, nature has always influenced the world and the people living in it. Apart from being the source of existence, nature has always been the most important factor men's environment, in their way of life, in their choices, in their beliefs, and in their worlds of thought.

Coast is defined as any kind of land that surrounds any water mass such as sea, lake, and stream, or as the contact area between the most shallow line of the sea and land, (Tuğlacı).

The environment in which coastal people live are the places which reflect the natural life in the invisible in the sea and in the reachable boundaries on land. A natural bay, a cape, a rock, a stream is an element or are elements that shape a settlement. Such natural elements are the factors that affect the character of a settlement.

Countryside is defined as the places outside the cities and small towns, (Tuğlacı). Rural settlements are places that contain vernacular architecture and that successfully reflect the physical conditions of their regions and the ways of living of their times into their own spaces. "Rural settlement" denotes the settlements where employment is not diversified, economy is based on agriculture, and large families and face-toface neighbourhood are common, therefore, differs from urban societies. In addition, such communities are social units which are settled in a certain geography and ecological area, which have peculiar manpower, a social organisation, a culture, a special name and a past, and which have smaller populations than that of a city, (Yavuz, Keleş, Geray, 1978).

The harmony of nature in itself in the rural settlements has necessitated the harmony between nature and building. This harmony is accomplished through the harmony of the systems in nature with the systems in the building, (Aksoy, 1974).

1.2.Natural–Built-up Settings: Elements, qualities, coexistence, relationships, meanings, functions.

The title of 'nature-effective settlements' is a problem area that encompasses a large scope: from the definition of nature to its components, to their coexistence with buildings, to their meanings, to the qualities they present, to their presentation of altered living spaces to men, to their being source of inspiration to men with their value for place-making; from meeting the needs of men to preserving the nature, to preserving the genuine natural built-up settings, to providing their continuity, to the influencing, to the influenced, to the works to be done. A small section of this area will be given in this study, (Çevik, 1991; Çevik, 1995; Çevik and others, 1998;1999; Lee, 1995; Powers, 2000; Seidel, 1997; Shulz, 1975; 1982; Trieb, 1974; Trieb and others, 1988).

- Natural and built-up locations have to have a genius loci (spirit, atmosphere, peculiarity).
- The characters of all "places" must be emphasized.
- The relationships between natural environment and artificial environment must be the top aim, in other words, must be the aim beyond the aims.
- Areas for human settlement must be created.
- The coexistence of series-rhythm-focuses-connections-topological relationships and settings must not be broken but be supported. Creating spaces, orientation and rhythm are among the important aspects of concrete spaces.
- Peculiar nature, architecture and the settings that they formed cooperatively must be preserved, the subject of local identity must be taken into consideration.

- The texture and silhouette of the settings, urban spaces-streets and squares, façades and their relationships with the natural settings create different effects.
- Humanistic identity, the components that define "place" and residence, and the relationships between the components must be studied fastidiously.
- The identity qualities of the place are locally and culturally conditional. These qualities make the identity of the place concrete by undergoing a change in spatial organisation and formal language.
- The structure of the "places" must have the necessary infrastructure and qualities that will enable orientation and identification.
- Natural elements are named as topography, water, green, light, and climate.
- Settlement-place characteristics together with the natural formations created by both natural settings and human beings are indispensable parts of the picture of the place. As well as forming the natural settings, the main base of the picture of the place of the settlement of different scales is formed by natural settings.
- It is very important to preserve, strengthen, complete, and develop the natural settings. For this, loving nature, correct observation and creating a spiritual unity are the most important conditions.
- It is important and necessary that peculiar natural settings and peculiar ways of design be developed and peculiar characteristics be created.
- There are settlements which are named and highlighted by the natural qualities. It is important to highlight the potential qualities from this point of view.
- Also in urban elements, natural locations must be considered together with city plans, city spaces, city silhouette, buildings and city furniture.
- The need for security, arrangement-association, identification, belonging to, and excitement, which is closely related to whatever we have said up to now about the things that spaces should present to men, lies in the presentations natural-built-up settings.
- The different presentations and qualities of natural settings -elements give the "nature's gate" definition in the scope of crossings-gatesentrances in the literature that presents the qualities of introductionarrangement, association-identification (it is possible that cavities in nature and tunnels that connect spaces, frame appearances, bridge connections, carved spaces, and hidden spaces can be formed and this may exhibit the effective and mysterious presentation of crossing).

- The relationship between nature and the artificial environment created by men must be accomplished in the basic forms of visualisationcompletion-symbolisation..
- All relationships between men and place are called residence. And the coexistence of natural settings, built-up settings, lives, names and meanings must be studied in creating residential places.
- Cultures must develop their own systems of arrangement-association, that is, spatial systems. As a result, creating a picture of the environment is facilitated. Environment is created and associated by an organisation of rooms in a series. Regions are connected via the roads remembered. The so-called system of arrangement-association is often seen in natural sites.
- Identification is the most important condition for residence. It is highlighted with the need for arrangement-association and security. It can be defined as being at home, being in one's native region, belonging to it, feeling oneself peaceful, and living in peace in a protected place.
- Personal identity necessitates place identity.
- Regaining, developing the lost places, and analysis and evaluation of the losses are important.
- The phenomena of the natural "place": with all their qualities and with their effective and different meeting settings, sky-earth create effective local identities. Understanding the sky-earth relationships and producing accordingly is important.
- The inspirational character of nature has been the source and starting point for artists, designers and movements.
- Having such qualities as terrifying, frightening, soothing, joyful, etc., nature presents diverse space lives.
- Green-tree is a symbol and can be increased and grown. It is often mentioned in the narrations of the paradise. Therefore, it has a sacred dimension.
- Water completes pictures of paradise. Water has a complete influence over the local character, and can be observed as a dynamic power in a romantic view/landscape. With its various presentations, it gives peace, mystery, mobility, and dynamism. The psychologic-spatial dimensions of water and green are very important.
- Water introduces micro scale (if absent) in landscape, and strengthen the mystery. Fast flowing water or a waterfall is a characteristic of its setting, and shows mobility and dynamism. Reflection-gleam effects may add motion to motionless topographic structure.
- Agreement between man and nature is one of the most important starting points.

- Light is a natural phenomenon that is less concrete and that shows the least continuity, and it denotes symbol, love, tie and holiness. Light and time dimensions are closely tied. The values and qualities of light flow with the flow of time.
- Concrete things, arrangement-spatial structures, character, light and time are the basic categories in understanding nature.
- Time is a dimension of transformation-change. It gives a character, defines a special place, is effective in creating genius loci.
- Natural place creates an whole/integral line/series from earth planes. From the continents and countries to a shadowy place or to a shadow under a tree are all determined by the concrete qualities of sky and earth.
- Topography is one of the important natural qualities in spatial formation. The form of the surface and the reliefs are effective in place definitions. They present different space characters. A mountain or a hill that constitutes a focus of attraction, rivers and valleys that creates focus of direction are important in defining the wide-distant space series.
- Natural elements introduce micro, intermediate and macro scales. They create intimate spaces at micro scales. They are large spaces for men and their activities at macro scale. They are ideal spaces for men's activities of intermediate scale.
- The common effects of ground-relief, green, green and water are very important. They are the basic elements in creating characteristic formations. The changes in the reliefs on earth reveal a series of places that have characteristic qualities. These are plains, plateaus, hills, mountains, valleys, etc. Furthermore, water, as a spatial formation, introduces different types in the scope of effective natural grounds, which are the main elements in creating islands, capes, peninsulas, etc.
- Silhouette-border properties increase in variety in terms of the various positions of the view-ground to the sky.
- The names of regions-countrysides-landscapes are reflected in the formation of the natural grounds.
- "Natural places" exist with some basic types of natural factors. These are related to the ground and sky. These two basic elements represent mutual influence (romantic, cosmic, classic, complex landscape, countryside, view).
- Sometimes the sky is the dominant factor, and sometimes the ground may expose the most important view.
- An artificial-built-up environment is the concretising of general settings as one of the artificial places created by man. If the environment created by men is meaningful, then men will feel at home there. This place in which they live is not a simple practical tool or not something that
existed accidentally, but a place which has a structure and meaning. Artificial places are created through construction, places which have special genius loci become clearer.

2. Presentation Of Effective Natural–Built-Up Environments And Coastal–Rural Architecture In Eastern Blacksea Region

As we know, such natural features as topography, green, water, climate and their coexistence with construction, activities in life, uses, names, and meanings, etc. are important for the settlements in expressing themselves.

With their green, sea, creeks, buildings, and architecture, the coastal cities-settlements in Eastern Blacksea Region present an effective regionalserial identity. Their places in this regional identity and their values of emphasis (e.g., important buildings, trees, etc.) will provide important data for both the aims of preservation, and improvement and revitalization. Rural settlements in Eastern Blacksea Region, too, present all natural characteristics such as green, water, building-architecture, and genuine identity values.

The outskirts of the cities are also in the scope of this study. They can be named as bays, hills, bridges, tunnels, fishermen's shelters and villages, important buildings and ruins.

Natural settings such as topography, water and those related with water – mountains, valleys, coasts, islands, peninsulas, bays, etc. – become prominent with the green and its effects with varying scale and quality, (Cevik and others, 1998; 1999).

This section of the study will include examples of coastal-countryside architecture in the eastern Blacksea Region which has a rich landscape with its sea, mountains and green. Some of these examples will contain coastal settlements that experienced the process of Eastern Blacksea Region Coastal Road Project and the rural settlements affected by the dam projects to be realized. In this context, the topography, sea, coast under the influence of green, green topography, countryside architecture dominated by green, and the examples chosen from the whole region will be studied.

In this study, coast denotes sea, green, and topography-effective settings; countryside denotes the topography in the inner regions, green, water-effective settings, (Kantar, 1998; Çevik, Eminağaoğlu, 2001)

On the "coast", the subject of nature- effective architecture will be examined in the 'natural settings, coastal built-up settings' (effective builtup urban settings, sparse built-up rural settings -villages) grouping; in "countryside", the subject of nature-effective architecture will be examined in the 'natural settings, built-up settings in the countryside (effective builtup villages, sparse built-up single dwellings or dwellings in groups). This paper will investigate and discuss. This paper is the summary of a study carried out by their authors, (Çevik, Eminağaoğlu, 2001-2003; Çevik, Erşen, 2001-2003).

2.1. Natural Settings on the Coast.

The coast in Eastern Blacksea Region has an effective topography-ground and relief formation (slopes and sides, hills, bays, capes, etc.); with its special blue and sea with fast-changing and wavy character, with its special green, and with the different meeting of its land and sky, it has special presentations. Colours: blue, green, special tones of soil and rock; light: sunrise, sunset, and various light effects at different times, light and time meetings, climate effects and the outstanding natural settings present special identity values that must be approached-preserved-maintained. These values are important for the region in the scope of continuity as well as for lower settings. (Figure 1).

2.2. Built-up Settings on the Coast

On the coast there are the intensive built-up settings of urban character and sparse built-up places-villages of rural qualities: fishermen's villages and lightly built-up fishermen's shelters.

The rural settings -villages: On the coast in this context, there are 6 fishermen's villages and fishermen's shelters. Fishermen's shelters are located on places that embrace the most special elements of all nature. Sea is a place where ground and sky meet in special silhouettes and (colour-texture-light-material) Fishermen's qualities shelters and villages are located in the most suitable places and bays that were formed naturally. With their houses, shops, coffee houses and mosques, fishermen's villages are considered as small settlement units. If there is lack of land, the houses are built on hills or slopes. In the coexistence of fishery-fishermen, these places offer a special life atmosphere, which realises the 'place' and local identity values. The micro climate qualities, too, in this region are among the important qualities for living space. (Figure 2, 3,4,5).

Urban settings on the coast are located and spread on such settings as bays, capes, etc. that form natural harbours. It is possible to see relationships between genuine natural and artificial environments which contributes to the setting with its components that were created in history-story in this man-made environment, when built-up environment meets with natural environment-slopes, green and other surface undulations, it creates special silhouette and displays a continuum and formations of series. The seaside where people are or the point being looked at exhibits the primary border; other topographic undulations and the series exhibit the secondary or tertiary border; and the meeting of the view with sky, and various scaling show the genuine "places" and atmospheres. (Figure 4,6,7,8)

2.3. Natural Settings in the Countryside

The examples studied here are mostly taken from Artvin area of Eastern Blacksea Region. Ground features-reliefs present specially formed natural settings such as mountains, sides (slopes), valleys, craters, lakes and rivers. In such places, the components of nature can be seen in the arrangement of earth and sky, and effective silhouette and view. It creates special boundaries-surfaces when green with its different shades (single, group, massive) meets with ground form. Depending on the day and time of the year, the changing effects of green in its shades and when blossoming and the snow on the hills and mountains may also be seen. Light presents very special space lives in single-tree regions, regions of trees in a row, and in forests. (Figure 9)

2.4. Built-up Settings in the Countryside

Different characteristics of the settlements are found among the examples chosen from the study area. Again, both sparse and intensive construction (group, row, etc.) are seen.

The banks of rivers or slopes of hills and sides of mountains can be chosen as areas of settlement. Together with man-made artificial settings, the natural settings exhibit local presentations in these examples. In addition to having all the characteristics of the natural settings in the countryside, it is possible to see both the structural qualities of construction-settlement and the beautiful dialogues created by their coexistence with nature. As a result of effective topography, ground forms, reliefs, vegetation, water, light, climactic effects and of using, changing, completing, symbolising and visualising the natural environment, genuine rural architectural presentations – form, material, detail, spatial organisations – are seen. The effective coexistence of nature and construction gives names to effective identity values and places, and, therefore, make them known. (Figure 10,11)

3. Results and Recommendations

- Nature, with its components, meanings, effects and inhabited-live environmental qualities, with its relationships with the built-up environments, is a very wide and effective subject. It is vitally important to investigate it in every respect.
- Creating a dialogue between nature and man, and creating and improving such dialogues formally-psycologically and ecologically is very important.
- Preserving nature in the coexistence of natural and the built-up settings, increasing its value of effect, and changing it according to some consciously planned aims is important. The natural setting of a place necessitates the designs-solutions peculiar to that place.
- It is mandatory that Eastern Blacksea Region and other constructions with similar effective natural settings preserve and take into consideration the genuine settings-qualities and series-relationships that occur with the coexistence with artificial settings.
- Nature has been the most important source for all design activities necessary for man (man-directed). With its inspiring and influencing-orienting-attracting-creative qualities, it has been the current field of investigation-study under the title of 'nature and design'. Nature and design activities have been the source-base in creating important and different spatial lives from the whole the detail (from macro scale to micro scale). We have to know them, be interested in them, solve them, and take them into consideration.
- The special-structural setting values and the beauties of the natural settings and of architecture and settlements where there is a good dialogue with natural settings must be preserved, interventions must not conceal their beauties, and necessary policies must be determined and applications must be carried out.

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SESSION 2 REVITALIZATION: Policies and Tools

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Strategies, Policies And Tools In The Urban Design

AYDIN Yelda

KTÜ, Department of Architecture, Trabzon, Turkey

Abstract

Cities with their physical (architectural and natural) environment are the reason for the existence of human being and cocoon of common life. Although, since ancient times, cities have been equally designed and planned, after the World War I, planning begin to overcome urban design. However, in developing countries, both, the planners and urban designers have had little control on the development process of cities. After 1970's in the Western world, postmodern planning stimulated revitalization of urban design. This fact is influenced by postmodern formations, post-fordism, development of enformation society, conciousness about environmental problems and socia-cultural sustainability.

The process of reconciliation the city with the citizens include a number of works that begin with planning approaches and reaches to third dimensional urban design practices. The best way for the creation of successful and sustainable cities is the integration of urban design and planning processes.

In this context, in recent decades, in the Western world, planning and design have been regarded as the parts of an integrated system. In this system, the design takes place in planning at various scale; regional, metropolitan, urban, sub-urban, etc. In these contexts, there are many successful applications. Both development plans and local plans are considered together with the design tools such as design policies, design guides, design frameworks, development briefs and/or supplementary planning guides.

The aim of this paper is to examine; how the design policies and design principles can be concretized, and what type of toolkits can be used to do this.

Keywords: Urban planning, Urban design, urban design policies, urban design principles, design tools.

1. Introduction

Urban design, in general, is an intersection between urban planning and architecture in scale and content(Vardar,1997, p:16) Urban design has been regarded as an action which puts planning decisions at various scales (urban, local, etc.) as the design policies and three dimensional projects into life (Günay, 1993). In this context, urban design can be defined as the whole of the conscious interferences made to the formation of psychical pattern of the city.

Although a city can not be shaped in the designer's tables, however designers can make contributions to the formation of the city. Many factors that affect city formation at macro and micro scale can be improved with design so, public areas/urban environments can be more livable and can gain identity (Çelikyay, p:5).

The best way for the creation of successful and sustainable cities is to integrate of urban design and planning processs. To leave the urban design to the end of the planning process creates indefiniteness and unnecessary conflicts. For that reason, design should cover all stages of the development process by backing up the anticipated urban pattern, formulated in the urban master plan through urban design plan (Anon2,2000, p:12). However, this fact couldn't be very successful in developing countries such as Turkey. But, in the Western world, the conditions are different; the role of design in planning system is rather well defined. In this system, the design holds a place in planning at various scales; regional, metropolitan, urban, sub-urban, etc., though the emphasis on the scales can vary between countries. Also, design tools such as design policies, design frameworks, development briefs, supplementary planning guides and/or design guides can vary from country to country. However, among them policies and guides are the most widely used tools. Policies and guides that can be area, site and topic specific exhibit mutual and hierarchical relations. When it is examined in detail it is seen that the aims and principles of guides are, in the general, to create cities having identity, livability and legibility. These mean protection of local context, provision of rich and livable public realms, encouragement of developments that enhance nature and landscape from micro scale to macro scale. In addition, especially at the preparation and control of policies and guides the participation of interest groups (e.i. public, landowners, developers, local authorities, business and community organizations etc.) are very important.

The aims of this paper are;

* how the design policies and design principles can be concretized through design tools such as design guides, and doing this, what type of toolkits can be used.

* What the relation between toolkits and scale of design and planning is.

In this context, based on literature the design guides of five cities (Portland, Raleigh(North Carolina), Las Vegas, Mankato and Hong Kong) will be analyzed descriptively, giving emphasis to scale, design policies and design toolkits. In relation to the design principles and scale, the results will be discussed in connection to planning and design scale.

2. Urban Design Principles, Policies and Toolkits

For the creation of livable and quality environment development plans ought to consider design principles, design policies and other toolkits as a whole.

2.1. Urban Design Principles

Design principles can help us what should be sought to create a successful place. Successful streets, spaces, villages and cities tend to reveal good urban design principles (Anon2, 2000, p: 14). They, by themselves are abstract. But, they have an impact on people's lives and on cities by being concrete in development process. Principles, influence patterns of use, activities and movement in a place, and the experiences of those who visit, live or work there. They set out the most important characteristics of physical form of development, define the overall layout of place, its scale, its appearance and its landscape (Anon2, 2000, p:17). Urban design principles can define as character, continuity and enclosure, quality of the public realm, ease of movement, legibility, adaptability and diversity. There is considerable overlap between the principles and they are mutually re-enforcing.

Character: Shortly; it means a place with its own identity (Anon2, 2000, p:15). Character is the quality which emanates from the fusion of topography, geology and built forms, traditional buildings, urban fabric and boundaries (Manley, 1998, p: 72). In other words, it means promoting characters in townscape and landscape by responding to and reinforcing locally distinctive patterns of development. (Anon3, 2003, p: 19). Character makes city memorable. In a city/city area the usage of elements that form its character in a suitable context, contributes to the city's sense of identity; Landscape, building traditions and materials, patterns of local life, and other factors that make one place different from another. (Anon 2, 2000, p: 19).

Continuity and enclosure: It can be defined as promoting the continuity of street frontages and enclosure of space by development which clearly defines private and public areas. (Anon3, 2003,p: 19).

Quality of the public realm: It can be defined as promoting public spaces and rotues that are attractive, safe and working efficiently for all in society, including disabled and elderly (Anon2, 2000, p:15). The success of public realm depends on paving, planting, orientation, shelter, signage, street furniture, and the uses in and next to it (Anon2, 2000, p: 23).

Ease of movement: It can be defined, as promoting accessibility and local permeability by making places that are connected to each other and are easy to move through, giving priority to people not to traffic and integrating land uses and transport (Anon 2, 2000, p.15). The convenience, safety and comfort with which people go to and pass through buildings, places and spaces play a role in determining how successful a place will be. Streets are more than just traffic channels for vehicles, and should offer a safe and attractive environment for all. Well designed streets encourage people to use them, and make going outside a safe and pleasant experience (Anon 2, 2000, p.26).

Legibility: It can be defined as providing recognizable routes, intersections and landmarks to help people find their way around (Anon2, 2000, p: 15).

Legibility is often overlooked in planning, hence to strengthen it is important. Researchers using various techniques, such as questioning people, asking people to draw their mental maps, etc., try to interpret how legible the city/ city area to sections of society/public is(Bently,1985, p:43). Because the process of design needs to take account of the fact that people don't all read, interpret and enjoy a place in the same way. Men and women, children and adults, residents and visitors, old and young people, and people from different cultures will experience it differently and be encouraged to feel at ease by different aspects.

Adaptability: To promote adaptability through development that can respond to changing social, technological and economic conditions (Anon 2, 2000, p:15).

Places should be adaptable to changing people's live at every scale. The most successful places prospered in changing circumstances. Therefore, cities as a whole have to adapt as industries rise and decline, demand for housing and the nature of workplaces changes, and buildings and infrastructure (Anon 2, 2000, p:29).

Diversity: It can be defined as promoting diversity and choice through a mix of compatible developments and uses that work together to create viable places that respond to local needs(Anon2, 2000, p:15).

The variety of uses can help show how well-used a place is, and what economic and social activities it will support. Creating a variety of uses, diversity of layout, building form and texture can contribute to making successful living and working environments (Anon2, 2000, p:32).

These design principles can only make sense when they are concretized. In this respect, design policy is an intermediate and indispencible design tool, which leads to more materialized and directly applicable tools that governed by design principles.

2.2. Urban Design Policies

Design policies that provide a framework for whole design procedure, are the regulatory tool for the investment or application programmes. Its main aim is to assure that development should be unified visually, socially, functionally, and environmentally with its context (Koç,2000, p:34).

It has three basic functions:

. To provide common language for all design works whether single or comprehensive.

. To provide consistent link between planning and design, and to ease planning-design relations.

. To provide flexible frame in formulating the aims of design as design objectives.(Koç, 2000, p:31).

The contents of design policy can vary at each city/region/country, since each city/region/country has its own natural, social and cultural characteristics. Therefore, how the design policies are set out in the plan will depend on the emphasis that is appropriate locally (Anon 2, 2000, p: 43), even in some cases specific design policies can be needed.

The issues given attention for the formation of design policies are:

. It should be compatible with legal and organizational system (Koç, 2000, p: 36)

. Policies should guide planning applicants as to the council's design expectations but should avoid unnecessary prescription or details, be clearly expressed and be concise (Anon 2, 2000, p: 44)

. It can be adaptable to changing demands over time.

. It should offer enough variation to cover all the unique elements and characteristics of the city (Koç, p: 36)

. If policies formed for different city areas they should be consistent with each other

. Planning policies and design policies should be considered consistently.

. Policies should make a meaningful contribution to planning decisions,

To set design policies alone is not seen as a solution and need to be interpreted for putting into practice correctly. Urban design guide toolkits implement this task.

2.3. Urban Design Toolkits: Briefs, Frameworks, Guides

Urban design toolkits, complementary tools of planning process, are effective at application stage of urban planning policies. In the western world the most comprehensive and widely used tool is the "design guide". The guide is a written document, supported by two and three-dimensional explanatory models/ drawings, covers suitably defined design objectives related to design policies. It can be either area based that may cover to whole city, to a specific area or site or topic based (i.e. singes, landscape, furniture, etc.). In some countrics, such as UK, besides design guide, "design framework" and "development brief" are also used consistently with each other. Framework that can be prepared at different scale comprises mainly of two and three-dimensional models/drawings. It also provides basis for development brief, which is used only at specific sites.

Design guides and other tools, which become the legal document after approved by the local authority councils, are prepared and controlled in a participatory approaches; local authorities, citizens, landowners, developers, business and community organizations are the participants.

2.4. The Relationship between Urban Design Policies and Design Objectives

As mentioned above; if the urban design principles can be concretized they can convey important meanings. In this context, effective design policy and design objectives should focus on how the urban design principles can be accomplished successfully and how can be carried in to urban planning in general.

In order to illustrate these relations the design objectives, as defined in the design guides of five cities (Portland, Raleigh (North Carolina), Las Vegas, Mankato and Hong Kong) are examined. The objectives of five guides are identified with which design principles they are attributed, and in which context of planning they can be considered; development planning (P), development planning + site design (P+D) and only site design (D). The design policies of cities summarized in five groups, the design objectives related to policies, principles and scale are given in Table 1. Table1. The Relationship Between Design Policies, Design Objectives and Design Principles(Numbers in celts refer to the design guides of

five cities;

1-Portland 2-Raleigh(North Carolina) 4- Mankato

rolina) 5- Hoi

3- Las Vegas

5- Hong Kong

Policy/Goal	P, P+D, D	Design Objectives	Character	Continuity & enclosure	Ease of movement	Quality of the public realm	Legibility	Adaptability	Divesity
	P	Protect the lanscape specials	1,2						
	P	Protect/enhancthe city's silüette(Protect identical peaks, enhance strategic areas and high sites)	5				5		
	P	Conform existing character in the historical areas	1						
	P	Enhance pedestrian connectings between the areas of the city			1	1	1		
Enhance	P	Provide contunuity and enclosure in the public places		2					
Development	P	Enhance connectings of public places with each others and the streets				1	1		
Character And Local Content	P	Provide secure and easy relationships/passings between building and public spaces	1,2			1,2			
(12345)	P+D	Develop urban/rural landscape (enhance the townscape)	4			4			
(1,2,5,7,5)	P+D	Select popular and accessible superiority sites for people and protect them	5				5		
	P+D	Provide legibility for important centers, areas, landmarks, entrances and art works interested history of society.	1,2,4				1,2,4	e.	

				Contraction of the second second second second second second second second second second second second second s			Contraction in the second second second second second second second second second second second second second s		
	P, P+D, D	Design Objectives	Character	Continuity & enclosure	Ease of movement	Quality of the public realm	Legibility	Adaptability	Divesity
	P+D	Conform existing built environment(at scale, harmony, mass etc.)	3			-			
	D	Settle services areas, mechanic plants and vehicles exterior from public appearence.	1	1					
	D	Develop new and different building styles	1				,		1
	D	Consider important for building details	4,3			4-	4,3		
	D	Legible entrances/signs harmonies architecture of building		1		1,2,3	1,2,3		
	D	Consider climate conditions direction of buildings				1,2			
Provide Suitable	P	Provide places in which people rest and be social				1			
Active Public	P	Provide accessibility of open places				2			
Life (city plazas	P+D	Enhance legibility of public places					2		
nocket parks	D	Provide usage of open places for 24 hours						2	1
etc.) (1,2,3,4)	D	Perform public places(Orienting building elements such as windows, entrances towards to public places, whole entrances of building with transportation)			1,4,3	1,4,3	4	-	
Enhance	D	Develop flexible sidewalk-level spaces				1,2			
Relationships	D	Enhance activity of corners	1,4			1	1,4		
Building And Pedestrian (Active uses of ground-level) (1,2,4)	D	Differentiate the sidewalk-level of buildings							1

186

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	P, P+D, D	Design Objectives	haracter	ontinuity and iclosure	ase of ovement	uality of the ablic realm	egibility	daptability
			U	05	Щ В	Øā	Ĺ L	
	P	Protect pedestrian environments from vehicles	1,3			1,3		
	P	Effective and comfort usage of streets	1,2		1,2			
· · · · · · ·	P	Provide wide sidewalks and passings for pedestrians	3			1,2,3	1,2,3	
Provide Bicycle	D	Develop weather protection systems to mitigate the effects of rain, glare, shadow, reflection and sunlight on the pedestrian environment.				1		
And Pedestrian	D	Develop detailed streetscape design				1,3		
Environments (1,2,3,4)	D	Pathways shall be designed with the special needs of the handicapped in mind.				1,2		
	D	Provide street furnitures				1,2	•	
	D	Provide security and protection for pedestrian environment(lighting, lansdcape, pavement etc)			-	1,2,4	-	
Security (1,3,4)	D	Orientig building elements such as windows, entrances towards to public spaces				1,4,3	4	

- 1

The policies can be categorized at 5 groups;.

1. Enhance Development Character and Local Content: This policy tends to be materialized by a number of objectives (Table 1). Some of them are to emphasize view of significant features (Fig.1a); protect the existing natural and manmade local characteristics (Fig.1b); improve legibility enhancing pedestrian links between public spaces and city parts, and also improve relations between landscape, buildings, public realm and landmarks (Fig.1c), etc.

2. Provide Suitable Open Spaces for Active Public Life (city plazas, pocket parks, etc.): Plazas, parks, and open spaces are crucial amenities of the cities. Public open spaces can accommodate a variety of uses that range from contemplative pursuits to structured athletic activities. Particularly, pocket parks provide amenities for both children and adults alike(Fig. 2a). In order to realise this policy the design objectives formulated in guides are to offer citizens places for resting and socialising, to provide active land uses and improve legibility and to make public spaces attractive and lively for 24 hours (Fig. 2b-c), etc. (Table 1).



Figure1: Design objectives that enhance character (Anon1, 1990)



Figure2: City's plazas and pocket parks (Anon1, 1990)

3. Provide Bicycle and Pedestrian Environments: Successful right- ofway design must recognize the implications of mixing pedestrian, cyclists, and motorist. For this reason the objectives put forward are to protect pedestrian environments from vehicular movement by street furniture elements (Fig.3a) (Anon1, 1990, p:66), to provide sidewalks that can be used for variety of functions, including walking, stopping, shopping, and talking(Fig.3b-c), to develop streetscape design/ character, etc.

4. Enhance Relationship Between Buildings and Pedestrian: It is important for public spaces to remain public in character. Buildings should develop transitions from private spaces to public spaces to strengthen the character of urban environments. Active building uses at the sidewalk- level are critical to the development of an active pedestrian environment (Anon1, 1990, p: 124).

The objectives are to enhance building corners and to be located flexible sidewalk-level retail opportunities at corner locations which create spaces for active outdoor uses and unique spaces for people (Fig.4a-b) and contributes to the legibility of the area; expressing the sidewalk-level of buildings differently than the upper levels of the building in order to reinforce the human-scale emphasis of the built environment (Anon1, 1990, s: 122) (Fig.4c) (Table1).



a (Anon 1, 1990)



c (Anon 1, 1990)

b (Kostof, 1992)

Figure 3: The Orders Based On Pedestrian



Figure4: The relationship between building and pedestrian(Anon1,1990)



Figure5: Security for public places (Anon1,1990)

5. Security: Windows facing public places provide a sense of security for pedestrians. For this reason, display windows, entrances, etc should be towards to public places(Fig.5a-5b). Also, the soft and hard landscaping of public spaces and lighting are effective for security.

Conclucions:

As it is seen in the above section, design objectives that concretized design policies/ goals are related to design principles from micro scale to macro scale. The design objectives can cover at macro scale planning and planning+ design, at micro scale design. In context of design principles, design objectives provide guides at macro scale related to whole city/ part of city and/or public areas and at micro scale related to buildings, furniture, etc.

The examination of design guides of five cities reveal that;

* among design policies the most comprehensive one is provision of sustainable open spaces. This followed by almost equally enhance development character and comfortable environments for pedestrians and bcyclist. * looking at the density of design objectives attributed to "quality of public realm", "character" and "legibility", these design principles seem to be key principles for creating city identity, quality and sustainability.

* almost half of the objectives, especially, those related to enhancing development character and pedestrian spaces, need to be considered in planning process directly.

In short, policies, principles, design objectives and relationship between them are important for successful developments and cities at micro and macro scale. Because for livable and identical city/ city areas or public places needs these orders in planning and design process.

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Revitalization of traditional neigborhoods according to the socio-cultural characteristics of inhabitants

N. Gül ASATEKİN *METU, Faculty of Architecture, Ankara – Turkey*

Abstract

Most of the traditional districts of Anatolian settlements have been flourished as one of the important focii of different specializations.

Their importance has been limited to their touristic potentialities in recent times in our country. This scope turned out to be the main aim of conservation implementations without taking the inhabitants into consideration. Now, these environments are being used a "shells" comprising several touristic functions-mainly gastronomic in nature.

The aim of this paper is to discuss the importance of the inhabitants of such areas and find the clues of conservation policies according to their demands, needs and requirements.

This scope requires the analysis of inhabitants to understand the interrelation of between the family/dwelling unit and inhabitant/neighborhood. The keyword of this analysis appears as "privacy". This scope requires to understand the users of the traditional dwelling units as well as the users of newly constructed dwellings and non-residential unit which create the "wholeness" of the neighborhood to be conserved. The paper will try to set the basic questions of be answered from the socio-cultural wievpoint by the social surveyat one hand, the architectural and environmental characteristics, potentials and/or problems in the corresponding mam-made environment to be preserved. This method will be supported by examples from Ankara case.

Keywords: Architecture, Sociology, Cultural Heritage, Change, User, City.

Introduction

Traditional residential architecture in Anatolia creates a great part of the housing stock of Turkey today. The dwelling units, and surviving with the same function, still represent different problems: The change in the quality of users, introduction of new users from differing socio-economical and cultural groups, new styles carried by these new comers and their contemporary needs and requirements define a new "dwelling unit" and cause great changes in the original architectural characteristics.

Within this general scope, the traditional dwelling units should also be analyzed architectural products those are re-shaped, re-arranged and reorganized due to the family characteristics of the new users. Then, the keyword becomes the "lifestyle" within which prestige, welfare, modern can also be added to the requirements of the contemporary living standards. To understand the interrelation between them gives the clues of restoration scopes.

When these dwellings and the environments they created are examined, it is observed that these districts are created as a part of the urban center next to them. The most general case in the pressure of rapid urbanization is expansion of the density of population as well as introduction of new, different and unsuitable functions into them. They all cause great changes in the cultural values.

Their importance has been limited to their touristic potentialities in recent times in our country. This scope turned out to be the main of conservation implementations without taking the inhabitants into consideration. Now, these environments are being used as "shells" comprising several touristic functions-mainly gastronomic in nature.

The aim of this paper is to discuss the importance of the inhabitants of such areas and find the clues of conservation policies according to their demands, needs of requirements.

Methodology

"Continuity" in the traditional characteristics of the social group who prefers to use these existing spatial systems is noticed when the presents situation of the traditional residential architecture is observed. This observation leads to the point of questioning the user/space relations as being one of the main themes of architecture in Turkey. This scope requires a dual definition of the dwelling unit; the social unit, and the architectural unit.

The former unit is the family whereas the latter is the dwelling. The reciprocal relation of these two units constitutes the basic theme of the this paper.

It should be noted that the theoretical framework of the family institution drawn by different fields such as sociology, anthropology, psychology and several others is not the major interest of this study.

In general, it is observed that the theoretical framework of the family institution is questioned only from social, psychological, anthropological viewpoints those are mainly depending on European and American cultures, and there is no reference to the reciprocal relation with its corresponding architectural unit in these scopes. It can also be said that there is no relevant cross-cover the native characteristics of different cultures universally.

As an architectural unit, the traditional residential architecture should be evaluated more than a mere physical medium. If the dwelling unit is considered within the framework of the reciprocity, than, the concept of privacy can constitute the basis for evaluation. This basis can be the continuity in publicity/semi-publicity/semi-privacy/privacy when evaluated both architecturally and socially. So, publicity may be the interface of the two units that represents itself by the interrelations of person/family/ neighborhood relations of room/ dwelling unit/street/neighborhood in the field of architecture.

One step further, evaluation of these interrelations at different intervals may give information about the original characteristics of the unit as well as its contemporary situation. So, the comparison and evaluation of these two will give the clues of a relevant conceptual framework of the restoration criteria for each case. Here, the concept of change is introduced as a variable of the investigation.



Figure1. Methodology of study

194

Theoretical Framework

Modernism, as being the conceptual parameter of Single World Civilization emerged as an intellectual as well as a practical process which had caused a radical disruption in the continuity of social values, norms and traditions. Modernism, originated from Euro-American ideologies those have influenced the whole world. Naturally, its impacts on different societies were at different rates both in the social and the architectural fields. Turkey, of course, like elsewhere, has been influenced by modernism during twentieth century. The strategy of the newly emerging Turkish Republic has also been an accelerating factor of modernization in the country. But, undeniable evidence of cultural erosion due to the ideology of international civilization, the societies including Turkey are becoming aware of the problem of loosing the native culture for the sake of modernization. Interrogation of the necessity of taking part in universal civilization and cherishing national cultures as Ricoeur (Ricoeur, 1965) points out have been a crucial dilemma for the cultures who try to take part in the "modern world".

But, this scope, if not comprehended and interpreted may easily produce mediocre artifacts as the products of mediocre culture as clearly observed in reality and contemporary may turn out to be modish and universal may mean only international.

Present Situation of the Dwelling Unit as a Social Institution

The social change of a community does not represent a synchronic character with respect to the changes of other aspects. This diachronic nature is mostly attributed to the major forces of change :industrialization, urbanization and bureaucratization. The term technology is mostly accepted as a general concept that can underline all of these factors (Scheider, Kongar: 1972). Still, there are debates in scientific discourses to explain the reasons of change and modernization. It should be noted that, the process of change is not included in the framework of this study. Therefore, neither the theories of modernization nor change will be discussed. The focus will be on the brief summary on the contemporary family characteristics living in traditional residential districts of Turkey.

When the Euro-American studies on contemporary family systems are thoroughly overviewed, it is observed that most of the approaches criticize the new meaning of the family created for the benefit of modernization ideology. Within these limits, the community is diversified to the society within which the person is transformed to be an individual. If interpersonal association is the determinator of the community, than, the fracture of this defines the society. The person of a community is a finite and unique individual and he/she symbolizes being human where specific personalities are of primary importance. On the contrary, the individual is a prototype of millions of people that constitutes a society (Schneider: 4-6).

Naturally, this process of change towards "modernism" directly influences the family institution as a subsystem and modernist ideology proposes a new family model shaped mainly due to independence myth.

But, those ideal models are not representing the present situation totally. Neither proposed family systems nor the ideal personality expectations are relevant even in the Western World. This modernist idiom was designed and defined for the typical middle-class Euro-American family type and the alterations were labeled to be in the state of transition or rejected due to ethnicity based differences or economical class differences.

This framework of the contemporary family concept cannot be directly applied to the case of Turkey: In the case of historical/traditional districts of urban settlements in Anatolia, the inhabitants are mostly the immigrants from rural and/or semi-urban settlements.

The majority of migrants were young men between 1950-60 that can be accepted as the beginning of rapid urbanization in Turkey. But, the young-age groups preferred to migrate as a family affair from 1965-70 onwards (Özbay, 1985:60). So, the family types created in these areas have changed due to time.

When the intrafamilial relations are analyzed, it is observed that the women's role do not change much: They are still engaged in domestic activities (Şenyapılı, 1981). Consequently the traditional characteristics still survive. Thus, traditional spatial systems are still valid for such a functional hierarchy.

They may be nuclear families in the state of migration. But, they are not totally isolated. They are either supported by the relatives in the native land or by other relatives settled in the same neighborhood. There may be other migrants joining the household forming a transient extended family. The vertical extension is also possible due to the tradition of the "care of the older" though the authority is still in the hands of the son for the fact that he is the one who earns money. So, social solidarity in this close-knit community still prevails as a continuation of tradition.

As a result, their family structures and their ways of living are still traditional. The spatial systems designed for modern/internationally accepted lifestyles do not fit to their needs and requirements. Consequently, they prefer to live in the environments that are similar to their own cultural background. This is one of the reasons of their choice of living in traditional districts. The other point is that, their concepts of "modernity" are different than the international models, and their not only physical-spatial-but also social and economical expectations are different than the urban inhabitants.



Figure 2. Traditional lifestyle in urban centers

So, the newcomers that are mostly traditional in nature prefer to live in the traditional/historical district of urban settlements. The spatial systems of such areas are similar to the systems in their native lands, and consequently, this specific choice gives the ability of continuation of at least some of their traditional characteristics. Of course, the new users of these traditional dwelling units are different than the family that originally owned the house, it is inevitable to have physical alterations in the dwelling unit. Not only the intrafamilial relations, but also the economic conditions, and the environmental characteristics effect these alterations.

So, generally, traditional buildings are altered to form a laterally and/or vertically organized "apartment's in the modern" sense. But still, this physical division does not end with similar inter familial relations and traditional community relations continue within this general scope, the traditional dwelling units should also be analyzed as architectural products those are re-shaped, re-arranged and reorganized due to the family characteristics of the new users.

Present Situation of the Dwelling Unit as an Architectural Unit

General

Today, in Republican Turkey, there are great changes: Technology, economy, politics and consequently, the culture is being changed. Architecture, as a material witness as well as a physical product of these factors, also changes. The residential architecture finds its contemporary interpretation within this framework.

Modernization or, rather, Westernization has been injected to Republican Turkey instead of being acquired through a natural process. So, old/new, traditional/modern co-exist in our settlements. The newly developed areas comprise internationally shaped, planned and organized architectural products in one hand, and slum areas exhibit traditional characteristics of an organic -but illegal- architectural formation on the other hand. The historical/traditional districts, still surviving though being subjected to a great pressure of modernization can be thought as one of these dichotomies as well: The old/new. In this case, even preservation/architecture turns out to be a conceptual dichotomy within this chaotic phenomenon –though they cannot be though they cannot be thought apart.

When the residential architecture is observed within the scope of these dichotomies, the modern vs. tradition is still relevant, and, the variety comprised by these two poles is much more chaotic from architectural interrelation between the dwelling unit and the family who lives in.

The residential architecture should be thought as a medium in which physical, social, psychological and communication links among the persons and families are achieved. This scope can be used to understand, evaluate and interpret the existing environments as a design/restoration criterion. In this respect the interaction in relations of family/dwelling unit is not a part of a historicist scope of analysis; on the contrary, it contributes to the progress of the contextual quality of design, and, as its physical configuration, reputation of architecture from perplexity to perpetuity.

When the traditional residential architectural units are examined "change" turns but to be the keyword of the phenomenon:

When the changes in environmental characteristics and the building lot/street relations are examined, it is mostly observed that the streets change to be totally public in character. So, the hierarchical system of dwelling/street/ neighborhood corresponding the hierarchy of private/semipublic characteristic alter to be dwelling/ street/neighborhood and respectively, private/semi private/public. Its social reflection is that continuation of domestic life in the street is totally broken. As a continuation, the interface loses its importance and acts as a barrier rather than a transitory zone permitting communication.

Another factor accentuating this change in the hierarchical interrelations is the contemporary functions of such buildings. These buildings created for the characteristics of original owners are being abandoned by them. Then, due to the location of these historical districts within the urban settlements, either the functions or the quality and quantity of the inhabitants alter. Both cases are influential and cause alterations to a great extent. In the first case, introduction of new functions require different spatial systems which do not fit to the original spatial system. In most of the cases, more than one single function are tried to be fulfilled in the traditional dwelling unit. So, privacy zones are directly effected and new hierarchies are tried to be created.

In the latter case continuation of the residential function can be observed. But, even in this case, there are several possibilities: The most common possibility is the use of an architectural dwelling by more than one social dwelling unit. In this case, alterations are inevitable. New privacy zones are to be described for each social unit sharing the architectural unit. So, it turns out to be a public zone in itself. On the other hand, even in the case of having one social unit in the traditional dwelling, contemporary needs, requirements and expectations of the new users may cause a great deal of changes for being different than the original creator.



Figure 3. Contemporary hierarchy of spaces

Finally, the change in the traditional dwelling cannot be evaded and eliminated. The problem requires recognition and evaluation of these changes to reach to correct propositions within the theoretical framework of restoration.

To reach to a correct understanding enflaming the whole aspects of the phenomenon, the changes in the spatial system at each level should be analysed. In this respect, the changes in the spaces and their architectural features of the architectural dwelling unit should be questioned.

Empirical Survey

255 residential buildings in 7 historical/traditional districts in Ankara had been analyzed to evaluate "change" to understand user/space relationships (Asatekin, 1994). Interface had been taken as the basis of this research as being the main denominators of privacy: maintaining interrelation between in/out, private/public, family/community.

When the general distribution of types of change is analysed, it is found that 85% of the cases has the problem of deterioration which indicates the lack of maintenance.

Change District	Deteriora tion	Demoli- tion	Removal	Altera- tion	Addition	New Corst.
Erzurum Ulucanlar İstiklal Bent Doresi Hacı Bayram İsmet Paşa Citadel	20 31 47 10 58 19 70	5 2 4 2 1	7 3 2 13 2 13	16 36 37 7 53 15 79	9 20 26 46 4 52	7 2 14 14 24
TOTAL	255	15	40	243	162	58

Figure 4. Changes in Ankara

When the general distribution of types of change is analyzed, it is found that 85% of the cases has the problem of deterioration which indicates the lack of maintenance.

Second important group emerges as alteration with 81%. The high rate of alteration proves the importance of the constitution of a restoration framework for the implementations.

New constructions are of secondary importance with 19.3%. This is a positive factor within the conceptual framework of restoration/preservation. Because, this phenomenon points out the fact that, most of the problems can be solved without new constructions with in the original organization. Respectively, the conscious projects can be able to solve the problems with lesser interventions.

The general statements depending on the above-mentioned quantitative analyses are given below:

The characteristics of the nearby environment are influential on the rate of change of traditional dwellings. In this respect, the location of the building lot becomes important. The types of change can be of similar characteristics although, the rate of change increases in the environments that are subject to alterations to a great extent. As a result, where the quantity of traditional dwelling is less, the loss of quality in the surviving traditional dwellings can be observed. Consequently, in the environments that are partially altered, the rate of change at dwelling unit scale is moderate in general, and, in the environments those mostly preserve their traditional characteristics, the dwelling units are subjected to lower degree of changes.

The second item of evaluation is the relation of the traditional dwelling with the transportation routes. It can be stated that, if the dwelling unit is near to a traffic artery, the rate of change increases; and, if it is on a traditional route of lesser importance, the rate of change decreases. As a result, there is a direct correlation with the type of transportation route and the rate of change at architectural scale.

Third evaluation is on the relation of the change in dwelling units and land use of the nearby environment. It is observed that if the building is in a residential neighborhood, the rate of change is limited to create comfort conditions by the inhabitants for themselves. But, if the land use of the nearby environment is altered to be non-residential function, the rate of change increases to a great extent. As a continuation in the case of commercial district, the rate of change at building scale is lesser than the environments where small scale industry is developed. As a result, the change in the land use directly influences the rate of change in the buildings.

As a consequence, the present function of the building is also important. Naturally, if the dwelling unit is surviving with the residential function, the rate of change is limited to alterations required by contemporary living conditions; and if the function is altered to a non-residential function, the rate of change is higher.

Observations show that, the lack of legislative measures increase the rate of change, on the other hand such limitations cannot totally stop the interventions at architectural scale.

Results of Empirical Survey

The rate of due to environmental characteristics is discussed above. The main observation on the type of change is that, the variety of change is not in a direct correlation with the environmental factors. On the contrary, it can be stated that, the changes are very repetitive and can be observed in any kind of environmental conditions. In this scope, the types of change are analyzed in general at Ankara case, and, six main groups which can cover almost all possibilities of change at architectural scale is determined. These can be listed as follows:

Deterioration and demolition are observed in all of the cases at different rates due to climatic conditions. The rate of deterioration or demolition is in direct related with the degree of maintenance.

Removal, as a conscious change, is mostly observed in architectural element scale. They are mostly removed to reach to the special quality required by the 'modern' objects. So, if the lifestyle of the user does not fit to the spatial characteristics of the architectural unit, removal is preferred for the sake of being 'modern'.

Alteration is the most general type of change observed in any scale. There may be spatial changes or it can be at the scale of architectural features. In the first group: The quality of space may alter. The windows and the exterior doors form the group of mostly altered architectural features. Their sizes are generally enlarged. It may be stated that social factor is very influential.

Addition resembles the same factors discussed in the previous item.

New construction is mostly done to acquire some new requirements of the users and observed in the construction of service spaces or to have living spaces. The main reason of this is the existence of more than one social unit within the edifice.

The architectural characteristics of new constructions are of very low quality in most of the cases.

In addition to the spatial alterations, the use of objects and household appliances are also important to alter and/or differ the spatial system. The most striking example of this attitude is the use of bed/sofa combinations. The main aim of this furniture is to achieve a dual use in a room. This may due to the above mentioned alterations or due to the household size/spatial potential correlation if their denotations are estimated, but their connotations may vary according to the status and character of the family. There are quite a number of examples varying from most fashionable designs to very low quality ones.

Fluorescent lamp can be a sparkling example of meaning level of an objects. It's denotation is "lighting a space" though, it's connotation is "modernization" of the lower-middle class. A parallel example can be given from the kitchen: then symbol of "modernity" shows an evolution in the use of material with respect to time as in the case of the importance of copper. Zinc, aluminum, melamin were the fashionable materials chronologically. And, today pyrex and stainless steel are the materials as the configuration of "status" through the use of objects.

So, the object becomes an effective tool of communication among persons and it carries symbolic meanings due to the cultural values as well as the lifestyles of their owners. In this framework, it can be claimed that, they carry social messages. Not only their type and/or form, but also the ease or difficultly or their possession give message about the characteristics of the society (Bilgin, 1986 for further information). That's the reason of their importance for giving information about the identity of users. Their symbolic meaning emerges from the fact that the needs and requirements are not totally free from social factors. They are not the products of pure bare necessity. They are shaped and modeled due to the social-cultural status and consequently to the consumption patterns of the society with the direct influence of mass-media. In this respect, the studies on the use of spaces and their elements should cover the choice and the use of the objects and the household appliances as well.

The typology of the 'change' given above is valid for most of the traditional/historical settlements of Ankara. So, the most important conclusion of the general survey is that, the exterior characteristics and its modifications are the direct reflections of interior qualities. The façade, as the interface of the public/private relations of the dwelling unit becomes the denominator of the change not only architecturally but also socially. In this respect, the family, as the social dwelling unit is deeply influential for modifying the architectural dwelling unit. Furthermore, the interface appears to be a relevant medium to understand and to evaluate the problem.

Preservation/restoration requires the continuity of a cultural value of any kind and of any scale and transmission of it to the future in its most proper condition. This brief definition can be accepted as a universal discourse in theoretical base. But, it should be formulated due to the special characteristics, the potential(s) and/or the problems of each specific case. This is also a universal statement. Still, it is possible to reach to some general conclusions as follows:

First of all, definition of the social and architectural dwelling unit should be clarified in relation to the characteristics dwelling unit should be clarified in relation to the characteristics of each case under investigation. This definition should be based on the native characteristics of Turkey and not aim to reach to "modern" idealized models of international idioms. As a continuation, the terms "contemporary" and "lifestyle" could be evaluated in the same framework. This scope will permit a realistic reference both to the social dwelling unit and the architectural dwelling unit.

Secondly, the future of a traditional/historical settlement can only be decided in relation to the environment that it belongs to. Thus, feedback is a prerequisite to correlate the site and settlement which create the unity together. So, there are several factors of different characteristics effecting the subject and all of them should be taken into consideration in the phase of proposition.

At this stage, it is a fact that there is no continuity in the one-to-one correspondence of the social and the architectural dwelling units in most of the cases. Neither the continuity of the creator family can be easily found, nor the quantity of the social unit using an architectural unit.

Thirdly, the users of these dwelling units represent a great variety: The ownership pattern, the socio-economical characteristics of the families, the number of persons within a family, the number of families sharing a traditional dwelling unit and its architectural characteristics all effect the reciprocal relation. And of course, the general factor which shapes all of the items listed above is the contemporary "lifestyle" of the social units and their needs and requirements. They all together shape the physical "change" of the architectural dwelling unit. So, as mentioned several times, these changes should also be evaluated from the viewpoint of restoration theories at the last phase.

The reason(s) of choice of these dwellings by the newcomers of urban settlements should be questioned. It can be stated that the immigrants mostly prefer to live either in the traditional districts or in the squatter areas within which they can constitute the spatial system that they know or they are familiar with. The visible reason of this tendency may be economic in character, but, the social and cultural background is also important (Senvapili, 1981). The communication with the relatives or fellow townsmen who had migrated to the urban areas before is also effective in this choice. So, a continuation of the relevancy in both person/family/ neighborhood related and room/ dwelling unit/street relations can be stated. From the theoretical scope of restoration/preservation, this hierarchical relation of privacy/ semi privacy/publicity is to be evaluated. If there is a continuity, the changes become more natural though unconscious. The meaning of courtyard or street are still the same. The continuity of private life on the street is still relevant, and the street facade of the architectural unit is still an interface. In this respect, the main problem of the restoration/preservation discourse is the evaluation of the physical change for the benefit of the edifice that is questioned. On the other hand, if these edifices are subjected to an alteration of the function, the problems become more crucial: In this case, the natural continuity is to be broken, and several other factors come into the scene: These users of the injected function directly effect the environmental characteristics and the meaning of the street and the interface directly change their characteristics: The street turns out to be a totally public space whereas in the previous case it may be accepted to be semi-public and even semi-private in accordance with the center of concern of the study. As the natural impact of this shift in hierarchy, the interface becomes a barrier. The privacy zones are to be reorganized and this ends with new definitions of the interfamilial and intrafamilial relations.

Another possibility may be regentrification. In this case, a new socioeconomical group is introduced to the existing traditional/historical environment but a conceptual continuity of function, i.e. residential, can be considered. The main point of this situation is that the new users belonging to a different socio-economical group should bring their own lifestyles into the traditional dwelling units. Their needs and requirements, the privacy concepts and the corresponding spatial systems are different than the natural case. The physical reflection of the unfitting characteristics is the increase in intervention to the edifice to fulfill the reciprocity. The other impact will be the social shift of the previous group to other districts. Respectively, due to the new situation, the speculation will be accelerated. So, more restored and more converted edifices will be the future of this situation. Whereas, on the contrary, the continuation of natural user/dwelling unit relation will require an organization of maintenance with it financial resources in addition to the decisions on the architectural interventions for each case.

The studies on the traditional residential architecture should not only cover the use of spaces and their elements but also should cover the choice and the use of the objects and the household appliances. This is an important tool of catching clues of restoration implementations in the case of traditional residential units. This approach leads to below-mentioned decisions to be taken in advance at he very beginning of restoration design process:

1. Restoration of a traditional tissue does not aim to create a brand-new building. The color, the patina, aged materials are all documents of the past. All touches of the past generations worth to study and evaluation.



Fig. 5. Patina is important.

2. Conservation of the original material is the main aim of restoration implementations. Otherwise, one can only reach to an old-looking new copy that cannot be accepted as a cultural value.



Fig. 6. Brand-new "restored" building

3. The users of the architectural unit that will be restored should be investigated carefully to understand the "lifestyle" of them. This term includes needs, requirements as well as expectations of the family. Such an understanding helps to create the most proper solution of the spatial system for the user. The need for more natural light, creation of well spaces according to contemporary comfort conditions, number of families who can live without harming the architectural values can be detected through the interpretation of changes.

Some changes made by the users may cause harm to the traditional tissue. These should be removed, but, some of the interventions may be correct from conceptual viewpoint but they may need architecturally better solutions. Some changes may be quite intelligent and must be evaluated by the conservation architect. Because, most suitable use of the architectural space system can be found by the user. Such clever solutions can be found by the user. Such clever solutions can open new scopes for other restoration interventions.

4. The main scope of conservation must be for the benefit of the community living in it. Restoration of the "physical shell" can not be the main aim. Financial benefit from these areas must not be the climax of the restoration criteria. The role of the area to be preserved should be decided according to the role of the district within the whole settlement in a well defined balance. Inserting a new but disturbing function ends with the destruction of the characteristics if the potential and the limits of the area is misunderstood or misinterpreted.



Fig. 6. "Restoration" for the sake of speculation...

5. Free from the function to be given, spatial system of the whole building lot is important as the documents of the lifestyles of the past community. To reach to conserve this document, not only the main building, but also the open, semi-open and closed spaces including service spaces should be analysed and conserved. The changes in time are also worth studying to learn the life of the architectural unit.

6. Tourism should not be the main of restoration activities. On the contrary, it can only be a tool to reach to correct conservation implementations. Even in the case of introducing tourism within a traditional district, the type and limits of it should be carefully decided. Otherwise, most of the architectural characteristics change or vanish. The spatial arrangement, façade characteristics, hierarchy of spaces and many of the architectural elements can be lost if the function does not fit to the architectural edifice. Than, a newly created old-like-new elaborate "stages" flourish instead of conservation of the historical document.



Figure.7. Tourism alters the architectural characteristics.

7. Restoration implementations never allow the elaboration of the cultural value to create a "nostalgic", highly decorated theatral stage for touristic functions. These buildings are valuable with their own modest nature.

8. Not only the restoration implementations in a traditional residential district, but also the design of new and harmonious building are important. The cheapest and easiest way to make is to copy them. In most of these cases, the product is "kitsch".

9. Using architectural elements belonging to cultural values as "prestige objects" is now a fashion in decoration implementations showing the welfare of the owners. One can observe the conflict between the social groups: While traditional families belonging to lower-middle economical stratum use "modern objects" as status symbols, the high-class families try to own and exhibit the pieces of cultural values probably to refer to a "prestigious root". This second group create a new trade system which causes vandalism/destruction of our cultural heritage from different periods.



Figure 8. Pediment for the sake of "harmony"...

Finally, respect to our cultural background, understanding and interpreting it from the scientific approaches of conservation/architecture is necessary to create native environment belonging to our own culture. The social side of conservation is of primary importance and much more valuable than financial benefit.

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Revitalization of the historic urban neighborhood: Case in Giresun

AYDIN AKSOY, Arzu ÖZEN, Hamiyet BİRLİK, Süheyla KTÜ, Department of Architecture, Trabzon, Turkey

Abstract

Urban conservation has been an alternative way to reduce further destruction of the historic district from the new development surrounding. Despite this physical and functional obsolescent of historic neighborhood have been under pressure of these rapid development. The key issue of urban conservation is to address revitalization and reuse of the old buildings in terms of their physical and functional aspects. This also helps to protect the urban identity with sense of place, content of historic heritage, pleasant feeling of visual appearance and special feature of urban architecture

Revitalization of Zeytinlik neighborhood is based on existing the conservation development plan that had made by Ministry of Culture to preserving architectural heritage of Dik street. However, this conservation plan does not have a comprehensive approach for solving the problems and developing the modern conservation criteries for the areas. Because it focuses on only the restoration issues of the single buildings in the neighborhood without consideration of entire area.

In this study, approximately fifty houses and their settlement pattern have been examined to define identity of the district. The results of this study demonstrate solutions for how to preserve historical values and how to create a physical revitalization which will result in attracting people to historic area of the city. Therefore, the current resources, demography, socio-cultural condition, economic value of the neighborhood have been analyzed based on experience growth, change and decay in the area.

Keywords: Revitalization, Historic Neighborhood, Restoration, Reuse, Identity

1. The City of Giresun

Giresun is located on the eastern part of the Black Seas region and has hilly topographic land (1). The land rises from the cost to hinterland and the mountains areas are separating with the steep valleys (2). There is a dominant warm and rainy climate at the costal areas and arid-cold climate on the hinterland area. The plant cover is usually dense at the forestland where is closer to coastal area and steppe land behind the mountains due to change in topographic confirmation (2).

The history of the city goes back to bronze age. It has known that Giresun was inside of the boundaries of Azziz city that was belong to Great Hittite Empire. Historically, Giresun hosted many civilizations. While it as under control of Byzantine, Ottoman Empire conquered it in 1461. Further with declaration of the Turkish republic, it became a city (1).

Giresun has valuable historical heritage from its rich past. Architecture heritage includes various types of historic structures both in the city center and the surrounding settlements.

2. Historic District: Zeytinlik

This historic district has located skirt of city's fortress at the west slope of the peninsula of Giresun. Zeytinlik is very close the center of the city and one part of the district is inside the boundaries of Kale Çinarlar neighborhood and the other is in the Haci Hüseyin. There are very important monumental architectural heritage near it. The area is listed as a first degree of historic district in the national monument list.

This historic district and surrounding area are the oldest settlement in Giresun. The future usage and development strategies of the revitalization project are defined upon the existing architectural character and urban pattern of the district (Picture 1).



Picture 1. Pictures of the district in 1900's and 2000's.

The district has the historic buildings and the ruins remaining from the past civilizations. This area is the evidence of how people had lived in the past and shaped their built environment. Today, this neighborhood is under pressure of the rapid change in life style, traditions and constructions technique and urbanization. Zeytinlik district is a unique with its historic houses and original street patterns (Table 1).

2. 1. Pattern of Zeytinlik District

The case study includes Çinarlar and Kale and a part of Haci Hüseyin neighborhood. The district is surrounded with Fevzi Paşa Avenue in the south, Kalebayırı Street in the west that is the down rout of Giresun Fortress, Zeytinlik street in the north, Yıkık Passes and Doğramacı Street and Yüzbaşı Street in the east. The case study has been done at the Düz street (Table 2).

Zeytinlik district in general has a traffic free zone. The main pedestrian roads are narrow and paved with irregular stone. There are many roads with steps in the west direction because of sloping land. The street patterns are usually formed to both on the ownership of the building plots and topographic formation. The historic houses are the dominant feature of Zeytinlik neighborhood but there are other types of historic structures.



Table 1. The boundaries of the district and the buildings

Table 2. Dik Street



There is no infrastructure problem except the narrow street patterns has prevent emergency entrance by car near the houses. Besides this, visual pollution due to electricity poles, street lighting and waste container problem exist. There are limited public green and more private garden.

2.2. Architecture Features

Relationships of street-garden-house: The streets are either at the same level with the ground floor of the houses or above the garden level. In this context, the entrances to house are categorized as the single entrance from the street, the single entrance from the garden and two entrance: one from the street the other from the garden. The entrance to the house from the garden is examined in two main headings with stair and without stair (Table 3).

Entrance with stair: The ground level had raised almost a half floor to separate the entrance from the garden level to provide daylight to the basement. The top of the entrance stair has covered either a balcony or console on the facade. In some houses, there is no balcony and console of the house. There are two types of entrance to the houses according to location of the stair on the facade. One is the stair locates on the symmetry axis of facade and the other the stair locates on one side of the symmetry axis.

Entrance without stair: Ground floor and garden are at the same level. If the house does not have a garden, the entrance of the house is from street. There is only a step difference between inside and outside level of the house. There is no basement floor in this type houses. The top cover of the stair has same features with other type.

Plan characteristics of houses: There are two types of the house plans (Table 3).

1. Sofa at the middle

2. Sofa at the corner

The ground floor is the main living area with the entrance hall, living room, guest rooms, kitchen, bathroom and toilet. There are doors between the rooms for passing from one room to another almost in every house. The upper floor of the houses has only master, children and guest bedrooms. There are double wing doors between the rooms in this floor. There is no loft room under the roof.

Features of the facade: According to the number of windows and their orders, there are two types (Table 3):

1. Facade with three windows order

2. Facade with four windows order

Significant elements of the facades are the entrance stair, the balcony on the upper floor of the most houses, the main doors at the center of the entrance façade, windows and eaves. Some of the houses look like mansion in terms of the ornamentation on the façades and the size, the others are appearing to be very plane.



Table 3. Architecture Features of the Historic Houses

Height between floors: Historic houses have generally two stories ground+upper floors and basement+ground+upper floors. The storey height of the basement is usually less then ordinary storey height. In addition to this, there are three storey houses ground+2. These are located on the flat part of the area without basement.

Building system and material characteristic: The houses have been constructed in two types according buildings system.

Masonry Houses: Every floor of the houses had constructed masonry system with stone. The walls of the basement are not plastered, but the walls of the other floor are plastered. There are some examples of entirely buildings without plastered.

Partly Masonry System: Some of the houses are built in stone masonry in the lover floor and wooden skeleton system at the upper floor. The black stone had used for building the houses because it is easy to use and is a native stone of Giresun and surrounded areas. The wooden parts of the houses were usually made of chestnut and hornbeam, beech and pine threes. Many houses were built in masonry in the study area.

Element of interior space: The interior spaces of the houses are decorated as much as exteriors. Interior doors, ornamentation of the ceilings, cupboard and fireplace are the valuable interior elements of the houses.

2.3. Social Structure

The age group of the population is range between 29 and 50 in the district. Entire male population has occupation and most of the female are housewife. Percentage of the ownership of the houses are 33% owner, 7% owner and tenant, 2% owner and tenant, 12% only tenant, 2% 2 tenants, 3% own by the government and 41% the buildings are unknown. According to origin of the residents in the study area, 68% from Giresun, 23% from the surrounding areas or 9% of from the other cities.

3. Conclusion

Historic neighborhood, Zeytinlik has been analyzed in four quality areas according to conditions of the historic houses. These areas have preserved houses with in good conditions and have valuable architecture features (Table 4).

There are only a few new buildings in the first and the second areas. The new buildings in these areas can be adapted to the historic environment very easily with few interventions. This situation of the new buildings will increase the quality of the areas.

The third and the fourth areas are separated from the other parts of the study area with theirs important and mostly well preserved historic houses. Especially in the third area, the new buildings are in harmony with building plot and height of historic houses. The fourth area includes highly quality two houses.

In summary, it has been possible to propose some of the preservation and revitalization decisions based on the analyses of the result to able addressing the problems and management issues in Zeytinlik Neigborhood. The following recommendations can be given for future development;

Recommendation at settlement scale

- Creating point of the urban vistas
- Help to residents and local people to understand and be aware of the value of the historic, cultural and architecture heritage.
- Giving new functions such as accommodation-entertainment-recreational.
- Taking control over the development and to prevent further physical destruction and deterioration of the area.
- Making new arrangements at the streets based on the new functions.
- Creating spaces for the cars during the emergency cases.
- Designing open public spaces for the social gathering of the residents.
- Modernization and rehabilitation of the existing infrastructure.

Recommendation on group of houses or street scale

- Keeping continuity of the historic street patterned and protecting the houses with their garden walls.
- Preserving the street life, creating livable street spaces and giving new functions to the houses on the streets that can be utilized the street spaces.
- Using the traditional streets for only the pedestrian and designing these streets as the traffic free zone to avoid the visual pollutions.
- Removing the buildings without harmony with existing environment if it is possible rehabilitating them.
- Consolidating the wall of the gardens, removing the electricity poles and wires, replacing the waste containers with the new one at the proper places.
- Protecting and redesigning existing or new gardens with native plants and trees for the areas.

Recommendation on single buildings Scale

- Defining the houses in good condition first and giving them priority to study their architectural details.
- Renovating the houses that have physically obsolescent parts.

- Restoration of the middle degree damaged and bad conditioned houses.
- Adapted reusing houses if they are not using as a house.
- Redesign the landscape surround the houses.
- Proposing new elements for the façade of the houses if they will add value to the existing aesthetic.



Table 4. Quality Districts

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Renovation / Revitalisation works in city centres an example to shopping -pedestrian spaces: Trabzon Kunduracılar Street

Sonay ÇEVİK; Filiz TAVŞAN; Serbülent VURAL; Özgür AŞIK *KTU, Trabzon, TURKEY*

Abstract

Cities take their identities from their historical and cultural continuity. Renovationrevitalisation works have an important role in maintaining this continuity. In addition, there are some other reasons which make revitalisation a necessity. Inadequacy of the spaces in serving the daily needs, economic factors, physical deformation, environmental factors, etc. can be given as examples for revitalisation works.

The most important point in renovation-revitalisation works are transferring the buildings or texture to the next generations, maintaining the continuity, and introducing certain activities into the city and urban life by preserving these spaces. Getting rid of the incomplete, faulty and inharmonious formations, improving the ugly and faulty components, supporting social and psychological needs, improving the building facades and re-use are the main issues to be considered in renovation-revitalisation works.

In this context, one of the most important areas in which renovation-revitalisation works are applied is pedestrian spaces. Pedestrian spaces can be described as urban spaces which meet the relaxation needs of the people/users, which contribute to the individual culturally, and which meets the physical needs of the individual. The most important areas for pedestrian areas in the whole of a city are the centres where there is heavy pedestrian and vehicle traffic.

Creating pedestrian areas in city centres is seen as an important problem/area of study. These works can have diverse sub-purposes and phases of the study depending on such qualities as the characteristics of the texture of the city; historical/traditional characteristics of the environment; containing buildings to be preserved; qualities of effectively structured and livable environment (completeness-incompleteness, desolateness, lifelessness) etc.

In this paper, the renovation/revitalisation project for the historical Kunduracılar Street, which is one of the most important shopping arteries in the centre of Trabzon and which has all the above mentioned disadvantages, will be introduced and discussed. These renovation / revitalisation works have been prepared cooperatively by Trabzon Municipality and KTU Department of Architecture for the purpose of revitalising Kunduracılar Street as a positive, pleasant pedestrian space which will meet the needs of the city and its people.

1. Purposes, uses, qualities and policies in creating pedestrian spaces in city centres

1.1. Purposes, uses and qualities in creating pedestrian spaces

It is considered very important and indispensable to think of the planning and desing of the pedestrian areas/spaces in city centres in the entirety of the city. Pedestrian spaces that have a wide shopping function are important as the attractive places of the city. Increasing the structural quality, creating new formations with green, variety, providing a lively-active atmosphere (street artists, musicians, weekly markets, flower markets, street arts, exhibitions), providing facilities, increasing the variety of the functions, and alterations are only some of the works that can be carried out in these areas. (Diht 176, 1979)

It is apparent that spaces which are pedestrian-friendly and which will give the pedestrians a chance to live every hour of the day and the week, must be created in accordance with the qualities that they must meet. The main purpose is human being: for human beings the purpose is to create living-livable environment and to improve the quality of the living environment.

Putting the traffic in order, reducing its intensity, improving the environmental conditions, supporting shopping, increasing the quality of centrality, preserving the historical visionary of the city, strengthening the leisure functions, strengthening the communication, identificationownership, and supporting image creation can be considered among the planning purposes. Intended designs and purposes of diverse scopes can be detailed under such different topics as social purposes, urban-structural purposes, infrastructural purposes, and economic purposes. (Heybey, 1977; Monheim, 1977)

Recreating or developing sincerity, pleasantness, beauty and attractiveness by creating pedestrian spaces; creating and improving the identity and personality of the space; and carrying out works to create spaces which have different characters can be considered among the intended designs. When other purposes are detailed as social, urbanstructural, infrastructural and economical, it may be seen that it is an area of study of a very wide scope.

Social purposes: preserving the society/social life (supporting communications and information exchange, making the social integration possible), preserving the environment/atmosphere (preserving and supporting the form of the place, improving facilities for living and identification-belonging), improving the micro climate (improving the environmental protection, improving the local climate).

223

Urban-structural purposes: meeting the local responsibilities (creating functional centres nearby areas and enlarging public places), supporting improvement/renovation (preserving and supporting the places of attraction centres-the sub centres, supporting the residential uses), supporting multi-functionality/diversity (keeping the functions together, providing diversity through intensity arrangement).

Infrastructural purposes: improving the service functions (increasing the services, improving the shopping facilities), the social and leisure functions (providing and improving the social and leisure functions), the traffic functions (clearly marking pedestrian and vehicle traffic), reducing private transportation.

Economical purposes: supporting business enterprises and commerce (supporting individual and commerce in general, increasing local business enterprises), supporting the image and tourists (visitors) (supporting the tourists, preserving the image), determining the economy regarding the structure and business enterprise (reducing the investment costs, reducing the operating costs).

In creating pedestrian areas, program for space and usage and determining the functional spaces of pedestrian areas are important. Of these, the pedestrian areas-spaces as an urban design can be considered as a tool for being city-dweller, for city protection, for leisure and playground, and as an element of areas of diverse characteristics. (Uhlig, 1979)

Principles that can be considered important aspects in designing pedestrian areas-spaces:

- creating pedestrian spaces instead of streets for pedestrian traffic,
- creating pedestrian-friendly connections,
- creating scales-scalability through forming tools, determining the road flow and space components, creating the sub-spaces.
- colourful but not motley,
- choice and arrangement of street equipments, and preparing them as advertising elements and meeting points,
- Creating peace-relaxation areas is important but they must be away from the notion of 'pedestrian-park areas'.
- In pedestrian spaces, it is important to solve in a natural way the problems of movement, speed, changing direction, stopping or walking, communicating with other users, perception of the environment or isolation from the environment, sitting somewhere, playing, etc.

1.2. Equipment and lighting in pedestrian spaces

Equipment and lighting play an important role in creating pedestrian spaces. Pedestrian spaces are important elements in forming street-square-courtyard spaces. It can be said that for the pedestrian space to fulfil its function depends to a great extent on them. They have many duties in terms of meeting the needs of the spaces. In fulfilling their functions successfuly, the equipment and lighting must be designed in terms of the qualities regarding the form-colour- equipment qualities; suitability for the function; dimensions, production quality, arrangement (positions relative to each other) and other equipment with which they are used; space characteristics that they define; target objects and dimensions of space perceptions; different time and space presentations, creating-changing spaces; movement strings; equipment; texture differences; light-shadow; contrast; movement-change; night-day change, diverse points of view; and qualities of not getting lost-finding the direction. These are very important elements in the related urban spaces. (Heinier; Keunecke, 1997)

These elements: Plantation, furniture, forming the floor surface and the material, lighting, traffic and technical equipment, billboards, notice walls, and structural traffic facilities.

The trio of functional; (need), emotional (value for life), aesthetic (beauty) are important in forming the aforementioned elements. The aesthetic points of view must be detailed and worked out within the factual-live, meaningful, formal, optical, and dynamic points of view.

The heading of lighting is very important in desining and forming pedestrian spaces, and it indicates important dimensions within the scope of linear-horizontal, vertical, spatial (static and dynamic) targeted space effects and structure as well as sufficiency, source of light, light dispersion, light quality, light effect, form effect, sizes. Presenting the notions of "safe mobility", "arrangement-association", "feeling tranquil and good" to the city-dwellers, visitors and pedestrians in the city and urban spaces are among the purpose designs of lighting.

In summary, creating pedestrian-friendly cities and ideal urban spacesurban pedestrian spaces, the following wide-scope criteria-qualities-aims should be carried out under the following sub-titles: maintaining retailingshopping, creating human-friendly pedestrian spaces, regaining the city notion that keep the pedestrian alive, meeting spatial needs under the titles of 'need for information-being informed', 'need for arrangementassociation', 'need for excitement', 'need for identity-identificationcommitment', 'need for aesthetics-security', 'need for private-public'; maintaining and improving the building stocks that can be improved and that have different qualities in terms of their characteristics, presenting humanitarian activities; eating, passing, stopping, relaxing, diversity, liveliness, distinguishability, and facility for arrangement-connection, presenting possible environments, rain and sun protection, readabilityclarity of the spaces, the beginnings and ends of pedestrian spaces, etc. (Çevik, 1991; Kohler, 1981; Schmidt, 1977; Uhlig, 1979)

As can be seen here, when pedestrian areas-pedestrian spaces come together with the preservation-renovation-revitalisation trio in city centres, the subject exhibits a multifaceted and wide expansion.

1.3. Related policies

The policies that are used in planning and designing pedestrian precinctsspaces can be studied under such aspects as functional-renovation areas, new construction areas, normally developing urban structure; in general urban design policies: the environmental improvement, creating pedestrian spaces, forming-improving building facades, the spaces and tools that present the preservable values and atmosphere can be studied under general, political, economical and legal aspects. (Çevik, Kara, 1993; Trieb, Grammel, Schmidt, 1979)

These policies are general ones and different strategy formulae, tools and policies that are peculiar to the problem and place for each position should be developed. In this context, public-private cooperation/partnership has been seen as an current subject. Different participation models are produced and tested in forming the public places. The subject of policies and their exemplification have a wide scope and the "cooperation" heading, which will be heavily drawn on here, will be dealt with in this study.

In this study, the notion of "cooperation" which is in the scope of the policies to be applied will be given in more detail.

Policies manifest themselves as a way/ways in the attempts to find solutions to, and reaching a synthesis of, the problems. In this context, cooperation-partnerships display very wide meanings-aims-expansions. In here determining the users (affected people) and their roles are very important. Participating in the decisions about the living and livable environment and affecting cooperatively occupies an important place from the point of making decisions to the implementation process.

The matters of the level of cooperation, the steps and forms of cooperation in participaing in the process, how the distribution of the roles will be made among people, users and organisations, what kind of cooperation, strategy and tools will be used in realising the strategies are seen as important sub-areas of work about cooperation-partnershipcollaboration.

This matter requires special solutions and strategies-tools in the diverse problem areas. In other words, each problem brings forth a new responsibility. It manifests itself as an important, current, sensitive and multifaceted matter when detailed in different disciplines, different points of view, different problem areas, and different policies. This subject of investigation-application can be defined and discussed in different levels and details, in space-related needs, in social point of view-social, political and legal orientations, in the process of conformity, in operational theories, and in urban design policies. (Çevik, 2001; Trieb, Grammel, Schmidt, 1979; Kohler, 1981; Pieper, 1979)

If the terms about cooperation-partnership are examined closely, the following can be seen: public-private partnership, public initiatives, participation, collaborative forming, collaborative approval, creativity and self realisation-formation, meeting the space related needs, associations, cooperatives, unions, societies, public, public planning, collaborative effect of the users-affected people, desings regarding groups-affected people-related people, participation forms, needs of the affected people, level of participation, public initiatives, labour unions, work groups, professional groups, private initiatives.

The main subject of forming and realising the participation-cooperationpartnership model is an important factor in planning and designing pedestrian spaces.

2. Renovation - Revitalisation works for Kunduracilar Street

This study will present the project which aimed at renovating/revitalising the Kunduracılar Street, which is one of the most important shopping arteries in the centre of city of Trabzon, as a lively and livable city space. Kunduracılar Street is a pedestrian shopping space which has buildings/values to be preserved, which has important connections with the city texture, and which exhibits some important disadvantages in terms of city furniture, lighting, street facades, and its ground. It has a heavy pedestrian traffic during daytime, but it is impossible to see such crowds in the evenings and on Sundays. During these times and days, the street is almost dead. One of the most important factors for this inactivity in the street is that other than the shopping purposes it has almost no spaces and activities that would attract people.

This study will present and discuss the renovation/revitalisation works prepared by Trabzon Municipality and KTU in cooperation for the purpose of eliminating the aforementioned disadvantages and of fulfilling the necessary steps; the programme, purposes and sub-purposes, steps in the project, methods and techniques (measured drawings, models, computer modelling, photo-video shots, observation and interviews ...) conclusions reached, problems encountered and project prepared.

2.1. The history and position of Kunduracılar Street in the city

"Kunduracılar Street", which embraces all kinds of commercial activities for many years, is connected to Moloz (old port) with Semerciler Sokağı in the west, to the new port with İskele Street in the east, and to Iran transit road with Erzurum Street in the south. Clavijo, who visited Trabzon in 1407, refers to a trade road which connects the two ports in Trabzon (the trade port and the royal port). According to Bryer, this trade road is Maraş Street. However, according to aerial photographs and in terms of the directions of the roads, it would be more relevant to say that the road that connected the two ports was Kunduracılar Street. (Emiralioğlu, 1998)

2.2. Reasons and purposes of the study

Kunduracılar Street is a shopping-pedestrian street in the city structure with its spaces (the axis up to Kemeraltı area that encompass the Meydan Park, by streets that lead to the main road), which has values to be preserved, and which requires renovation-revitalisation works. It is apparent that this study is an important one for the city of Trabzon and its people under the following headlines:

- Improving the quality of urban-architectural environment.
- Considering it with its position in the urban structure and with its connections
- Preserving and emphasising its values to be preserved (exposing its power of effect), maintaining its continuity,
- Refunction and programming
- Creating diversity in the functions, enriching actions and activities,
- Enhancing purposes and times of usage, opening it to night and weekend use,
- Creating lively, living and safe spaces,
- Creating new spaces and designs,
- Planning/designing a space-pedestrian friendly city centre for pedestrians;
 - Purposes
 - Benefits
 - Effective qualities
 - Determining and considering at length the needs-actions and activities

For this reason, urgent works need to be caried out on the following areas:

environmental improvement: getting rid of incomplete, flawed and very inappropriate formations; pedestrian areas: arranging pedestrian areas, preserving the environmental and urban image, reducing the density, supporting the social and psychologic needs; façade formation: renovation

and alterations; preserving historical buildings and areas: preserving areas that have physical-vital values

2.3. Steps of the study – methods and techniques

2.3.1.Survey and Analyses:

Kunduracılar Street; its location in the city, photo and video survey (Figure 4, 5), measured drawing works (Figure 1, 2, 3, 13), Models: models and computer modelling and presentations (Figure 14), site analysis (number of floors, building techniques, functional distribution, intensity of use, points of visual pollution), observations, interviews (within the participation model and in coordination with the local authority, university, shop owners, users and other related institutions and organisations).

Observations: Three observation points were determined (entrance to Semerciler, entrance to Gazipaşa, entrance from secondary streets observation point) in order to determine the intensity of use at different times on different days, and observations were made at five different times (10:30-1130, 12:00-12:30, 14:00-15:00, 17:00-18:00, 20:00-21:00) on five different days (Monday / Wednesday / Friday / Saturday / Sunday) (Figures 8, 9, 10).

Interviews: Two different questionnaires were prepared – one for the users and one for the shop owners – in order to elicit their views about the street and their expectations, administered to 100 users and 15% of the shop owners, and the results were evaluated (Figures 11, 12).

Determining the functions: For the purpose of determining the functional distribution in the street (what functions are there, which are lacking or excessive) and the change in terms of years, the functions in the street acording to the floors were determined, plans and sections were prepared and evaluated (Figures 6, 7).

2.3.2 Synthesis-Evaluation

The study covered the following headlines:

image: spaces for relief in the city/city centre, opportunities for coming together with other people meeting the needs and preserving the image of the city, maintaining continuity.

space structure, sub-spaces, organising the traffic: clearly marking the connections with city structure and providing a healty functionality, creating entrance-reception spaces, creating flow and relaxation areas, determining the sub areas that requires fast flow, creating symbolic points and areas.

improving facades and the environment, values to be preserved: carrying out necessary works for the building facades and street silhouette. evaluating/discussing the profiles that change in time (clearing the inappropriate. incomplete. flawed elements facades. on preserving/rearranging sizes and ratios, recommendations for colour, material and texture, etc.), preserving historical buildings, determining their effectiveness and formulate proposals in terms of facade continuity. rearranging the material, colour and texture of the floor of the street. Providing the change and transformation in the entirety of the building and street; unloading, drawing back, additions, alterations in the inner spaces, recommending spaces in terms of age groups (children, the elderly, the disabled, etc.).

programme for space use: obtaining safe and controlled spaces in which the citizens may live all the time by opening the street for use at nights and weekends, programming new functions and activities, determining the actions and activities (shopping, exhibitions, fun spaces, cafeterias, restaurants, cinemas, societies, etc.),

urban equipment and lighting: forming the urban furniture and preparing the organisation in the space, lighting. Lighting should be designed with the following in mind: informing, lighting, security, control, aesthetics, and providing positive relationships between lighting and other city furniture.

Some conclusions in the scope of declared aims, sub-aims and work steps were compared with the findings of a study carried out on the same subject in 1998 in order to determine the change and different points of view (Emiralioğlu, 1998).

3. Conclusions and Recommendations

- This study calls attention to: the importance of, and necessity for, planning pedestrian areas and designing pedestrian spaces in city centres; creating pedestrian spaces which aim to preservation-renovation-revitalisation; the policies under the headlines of aims-functional areas-strategies and tools in the politics to developed-produced-used in the realisation these studies.
- This study, which will be put into practice, more importantly, which will have an important contribution to being an example to similar studies, is an important study for the cooperation between municipality and university and for cooperation between citizen and city representatives. In addition, the use of participation model which includes the local administration, citizen, users, shop owners, visitors, private institutions-unions and groups is another important dimension of this study, which is essential for such studies.

- The authors of this paper had the chance of actively taking part in the process from the planning to the design and to application of the study. Besides this, being a citizen of Trabzon and living in Trabzon were perceived as a chance during this study which was based on a voluntary basis. A significant interim result which is very important in the realisation of this project is that shop owners, users, municipality representatives are like-minded on the positions of the researchers and on the details.
- The most important point that attracts attention here is that as well as the findings, analyes, and the realisation of synthesis-design-product-application steps, only the reorganisation of Kunduracılar Street will not be enough, even it will not be successful, and that creating pedestrian areas-spaces in the context-whole of the city centre will be very important, which will be studied in detail in the scope of this study.
- This study will continue to be realised with all of its dimensions explained in this paper.

"People of Trabzon: With the hope of meeting in a beautiful Kunduracılar Street needed for the city of Trabzon and its visitors . . . "



Figure 1: Elevations of Kunduracılar Street







Figure 3: Connection Plan



Figure 4: Visual Pollution Points



Figure 5: Visual Pollution Photographs



Figure 6: Functional Distribution Of Ground Floors



It was found that ground floors are mostly used as clothing shops, and then as jeweller/silversmith.



First floors are usually used as Health Services (doctors/laboratories) and as warehouses.

It was found that there have been quite a lot of unused spaces (empty/warehouses) on the 1st floors throughout the street.



When the functions of the street are closely examined, it can be seen that the commonest function is Health Services (doctors/laboratories/policlinics/ pharmacies). The second commonest function of the street is Clothing Shops, Jewellers, and Offices. The number of offices and warehouses is the same.

Figure 7: Functional Distribution Graphics



Figure 8: Observation Points



Figure 9: Photographs of Observation Points



At observation point 1, 2:00 pm -3:00 pm and 5:30 pm -6:30 pm on Wednesday (23 April, holiday) and Saturday (rainy) were found to be the most crowded days and hours.

- The street is used very little on the whole Sundays and between 8:00 pm - 9:00 pm on all other days.



At the 2^{nd} observation point, except for Sundays, the street was found to be the most crowded between 2:00 pm - 3:00 pm, and between 5:30 pm - 6:30 pm on all other days.



At the 3^{rd} observation point, except for Sundays the street was found to be most crowded between 2:00 pm – 3:00 pm and between 5:30 pm – 6:30 pm on all other days.

* On the whole Sundays and between 8:00 pm - 9:00 pm on all other days the street was found to be least crowded.

Figure 10: Usage Intensity Graphics



Most users stated that they were disturbed by visual pollution, disorder, signs, narrow and disorganized roads, and intense population.



Users demand such functions as relaxation areas, lighting, green (trees), pools, reastaurants, and cafeterias, and such function arrangements for all age groups, banning the peddlers, diverse and orderly shops.



Entertainment, relaxation, cultural, artistic spaces, restaurants and street cafeterias are the most important activities wanted.

Figure 11: Interpretation of users' questionaries



The shop owners highlighted such characteristics of the street as having no vehicle traffic, its historical texture, and its active and busy nature. 13% of the shop owners responded as "no-none left".



Shop owners first demanded sitting areas, street cafeterias, tea gardens, fast food shops, cafeterias, restaurants, Street furniture, preservation and arrangement of historical buildings.



The shop owners demanded that such elements as signs-awnings-air conditioners that create visual pollution be put in an order -peddlers and counters set up in the street be banned

-Installation elements (telephone, electric wires, etc.) be put under the ground.

Figure 12: Interpretation of shop owners' questionaries



Figure 13: Examples of Building Identity Cards




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SESSION 3 SUSTAINABILITY: Energy Efficient Building

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Energy efficient housing design -in terms of heating and lighting-

Gül Koçlar Oral, Alpin K. Yener, Ş. Filiz Akşit Istanbul Technical University, Faculty of Architecture, Turkey

Abstract

Energy consciousness has become increasingly popular in building design because of the shortage of energy sources in today's world. As the energy demand increases due to thermal and visual comfort requirements, a considerable portion of energy is consumed for heating and lighting purposes in buildings. To ensure conditions of thermal and visual comfort with a minimum of energy consumption is of great importance for the health of the user and the conservation energy. Energy efficient design of houses will result in an increased performance of its passive system which in turn will reduce the load of active systems. In other words; energy efficient housing means houses which are heated and lighted with reduced energy demand. Orientation of the buildings, building form, building envelope are the most important design parameters affecting energy efficient housing design in the scale of building. For this purpose, the aim of this paper is to introduce the approaches which can be used to determine appropriate values for the design parameters. Following the proposed approaches it is possible to determine elements of passive heating and natural lighting for energy conservation during the design of energy efficient housing. Finally, the current negative financial effect associated with the creation of comfort conditions in housing on both the individual user and the national economy will be removed, and comfort conditions can be achieved with minimal cost with the right decisions taken as early as at the design stage. Moreover, the design on the basis of appropriate values of design parameters will facilitate the realisation of sustainable environment.

Introduction

Heating and a lighting of residential buildings with the aid of active systems accounts for a growing share of the energy consumption in Turkey and constitutes one of the main problems which needs to be addressed in order to solve the energy problem. The idea of renewable energy which has been brought into the discussion in connection with the efficient use of energy in residential buildings is an important element of the concept of sustainable energy in connection with sustainable development as well as sustainable economic and social development. The main condition for the application of renewable energy in residential buildings is the design of energy efficient systems using natural energy resources and technology. An approach on the basis of these principles would facilitate the design of environmentally friendly, energy efficient systems, which reduce energy consumption for heating and lighting to a minimum without any sacrifice to comfort conditions. It would be an important contribution towards conservation of energy as well as natural resources and would at the same time constitute an important step towards realisation of sustainable environment.

In the present study an approach is outlined by which appropriate values of parameters providing comfort conditions with respect to heat and light in residential buildings are determined in such a way as to reduce active systems to a minimum by making use of natural systems. It also comprises a concept of selection of optimal combinations of those parameter values.

1. Parameters with an effect on energy efficient building design

The objective of modern building design and construction is to provide a secure, healthy and comfortable built environment which at the same time addresses sensitive subjects such as energy consumption and impact on the natural environment. The parameters which are considered in this context can be divided into three categories: the parameters regarding the user, parameters of the physical environment and design parameters of the building (Figure 1). The designer, restricted in the scope of his planning by the framework of currently valid regulations, will take aspects and related parameters such as aesthetic impression, technology, function, cost and others into account. The objective is to realise the internal conditions, the comfort conditions on heating and lighting on the basis of the above values with a minimum of energy consumption.



Figure 1: The building design parameters with an effect on energy consumption

2. Determination of appropriate values for parameters with an effect on energy efficient building design

Appropriate values for parameters with an effect on energy efficient building design are determined after having decided on building envelope alternatives, the form of the building and its orientation. The approaches which have been used to determine appropriate values for design parameters are explained in the following chapters.

2.1. Determination of appropriate building envelope alternatives

Residential buildings with optimal performance in energy conservation for heating and lighting purposes are those which reduce total heat loss to a minimum during heating periods (underheated period) and total heat gain to a minimum during periods when heating of the building is not desired (overheated period), and which in both periods make maximum use of solar radiation. In order to provide thermal comfort by consuming minimum supplementary mechanical heating energy architects should pay attention to determination of the appropriate values for the thermophysical and solar radiation properties in accordance with the prevailing outdoor climate. The combinations of the values of the thermophysical and solar radiation properties which facilitate the maintenance of indoor comfort conditions by consuming minimum artificial energy, can be qualified as optimal combinations. Such combinations define the building envelope, which has optimal contributions to passive utilization of heating effects of solar radiation and air temperature. In other word, they define the optimal building envelope which provide permissible inputs to the total heat loss and total heat gain through the building envelope during the underheated and overheataed periods respectively (Berköz, E., 1984).

With respect to control of natural light, the orientation dependent transparency ratio is the most important parameter of the building envelope. The transparency ratios must be specified such as to ensure a sufficiently daylight illumination within the building rooms. The transparency ratio as an element of the passive heating and daylighting system is a parameter with correlated design properties. It is obvious that with respect to passive heating an appropriate obstruction angle has to be selected while control of the level of daylight illumination requires an appropriate transparency ratio (Oral, G.K., 2001). The approach followed in the process of determining appropriate building envelope alternatives during the design of residential buildings is schematically depicted in Figure 2. With the aid of this approach, combinations of room dimensions and obstruction angles of appropriate envelope alternatives can be determined (Berköz, 1995).

2.2. The determination of combinations of appropriate orientations and building forms

In order to determine appropriate combinations of building orientations and building forms in relation to the thermophysical properties of the building envelope and with respect to heating energy conservation, it should be decided which conditions to take as basis, the underheated period or the overheated period. This decision is taken on the basis of their comparison of the duration and climatic conditions of the respective periods. In regions with cold and temperate regions the heat loss during the underheated period and in hot climatic conditions the heat loss and heat gain during the underheated and overheated periods respectively are calculated on the basis of the hourly heat values obtained on a daily average for so-called design days (21st of January and 21st of July respectively). These values are displayed graphically in dependence of building form factors and other parameters related to the built environment. This graphic system facilitates comparison and evaluation. On the basis of the heat loss in cold and mild climatic regions, and heat loss and gain in hot climatic regions, a decision on the appropriate orientation and building form with respect to the thermophysical properties of the building envelope can be taken with the aid of these graphics. Finally an evaluation of the amount of daylight availability with respect to specific combinations of appropriate orientations and building forms is to be carried out (Figure 3).

Figure 2. Design of building envelopes that ensure economic use of heating and lighting energy





Figure 3: Determination of building forms and orientations that ensure economic use of heating and lighting energy

3. Conclusions

In this study the proposed approaches which permit the determination of appropriate design parameters with the objective to reduce the amount of energy consume on heating and lighting of residential buildings without compromising comfort conditions.

The proposed approaches are based on previous scientific research (Berköz, 1995). From the heating and lighting energy conservation following the proposed procedure, it is possible to determine appropriate energy saving values for

- elements of the passive heating systems such as the thermo-physical properties of the building envelope, its orientation and the building form, as well as
- elements of the daylighting system such as window area, room dimensions and obstruction angles

with respect to regional climatic conditions and external illumination levels.

The above given system elements are at the same time design parameters used in the design of the built environment in different scales such as settlement unit, building, room and building element. It is obvious that projects designed on appropriate sets of values for these parameters will result in energy efficient models of residential buildings. Minimization of the energy requirement for artificial heating and lighting during use and operation of buildings constructed on the basis of these models will contribute to the development of an architectural concept that will contribute to achieving one of the main objectives of modern societies: use of renewable energy resources and realization of a sustainable energy and sustainable environment.

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An investigation into ecological houses in the example of apartment blocks (mass housing) in terms of sustainable environments

Ayşc SAĞSÖZ, Derya ELMALI, Reyhan MİDİLLİ KTU Department of Architecture, Trabzon, Türkiye

Abstract

In order to lead a happy and healthy life, as one of the significant criteria, people need a natural and humanly physical environment. Communities are psychological and physical under the negative effect due to the lack of biological and ecologic construction.

Especially contributions that concrete dominant planning approaches dominating the century do, are said to be inadequacy solutions in the short term. Instead of wasting time in endless analysis, it will be much more rational method to look for a solution of proven suitability and of meeting the needs.

From that point, the architecture of science called ecology (supporting the relationship between the species of living creatures as well as the preservation of the nature and its circular reasoning by using renewable and harmless energy) means much more than a style. Ecological approach with the interpreted form of regional tradition and understanding in daily living standarts has a structure of preserving and improving all living creatures for centuries. These approaches primarily encourages local usage of food, water and clean energy sources with building materials. It requires construction of buildings integrated with the nature. By the way, ecological architecture tries to set a relationship between natural and artificial environment by making contribution to the preservation and improvement of all sources and biotops while meeting physical and psychological needs of man. Ecological architecture supported by sustainability which is the form of responding today's need and balancing the usage of sources for next generations aims at catching an harmony between man and nature.

Ecologic architectural need comes up against this planning approach which denies man and nature and ignores understanding of sustainability. This paper primarily covers the study on examples of ecologic houses depending on literature. The second and main part covers both how defective the buildings are ecologically and what positive respects they carry in Turkiye.

Keywords: ecology, ecologic houses, sustainability, massive house

1. Introduction

Ecology has had different uses since its advent as a term. Ecology, in its general sense, investigates the relationships of live organisms with such outer living conditions as climate, nature and other organisms. Today, with the increase in man-nature relationships and with the importance that the environmental problems gained, this term is used for the science that supports the use of renewable and harmless energies, and for the preservation of the nature and its recycling (Cook, Özkeresteci, 2001).

The natural and cultural understanding has changed with the growth of ecological consciousness. The notions of environmental knowledge, techniques, methods and assessments have gained importance. Societies, groups and individuals have been thinking of and questioning the life quality both physically and psychologically. And the architectural tradition has taken on new dimensions as a result of these changes.

For architects and all layers of the society, the target that may interest the architecture most is the ability of mankind and nature to sustain their lives. In order to understand the notion of sustainability, it is essential to grasp the ecology of natural and built-up environments. This very need for conforming to the ecological criteria in terms of the notion of sustainability and effective design creates the architecture of ecology or ecological architecture. It follows from this that the thoughts, activities and assessments of architects and of all those who work with buildings in ecological framework can be called ecological architecture.

Sustainability has been one of the basic problems of mankind since the onset of settlement. However, in its earlier stages, architecture did not undergo such a rapidly advancing technologic evolution as it does today. Providing human beings with living areas has been a serious problem as a result of the rapid increase in world population. Furthermore, it is quite obvious that the life styles of some societies have practices that are harmful for local, regional and global ecology.

The factors that will make any eco-system ecologic or sustainable are harmony with the nature, adequacy and interactional connections, that is to say, the character of the second nature that the architecture created through intervention in nature. When this second nature becomes inharmonious with the real nature and the needs of mankind, then the sustainability has been seriously damaged. The buildings in which we made people live will be successful as long as they are able to carry the available resources into the future by making them harmonious with nature. Because the notion of sustainability incorporates the meaning of not harming the future generations' ability in meeting their needs as we meet today's needs. The ecologic approach that takes this notion as the basis was put forth as the ecologic design principles in architecture.

These principles can be summarised as follows:

- 1. Grasping the eco-systems
- 2. Perceiving and theorising the systems and eco-systems in a holistic way
- 3. Grasping the design as an environmental effect/interaction
- 4. Design with nature (Cook, Özkeresteci, 2001)

The sustainability of the ecological structures that are designed according to these principles depends on the urban context and their success in land use as well as the material, water, garbage, atmosphere, and energy recycling.

An ecological house is not a machine that stands on systems that are complex, difficult to build and run, expensive, and that require continuous maintenance. With their own physical and biologic dynamics, they are metabolisms that affect and enliven the dynamics of the culture of mankind. In short, an ecological house, with its form and materials, that is to say, because of its nature, is an organism that establishes positive relationships with the environment. It is based on tested, reliable and simple principles. It has to be ecological as well as economically sustainable (Tasarım123, 2002).

2. Application

In this study, firstly the design criteria were determined in terms of sustainability (Appendix Table 1). Then a total of 18 ecological houses which were designed in Holland, Germany, Switzerland, Norway, Austria, England and the United States were investigated in terms of design criteria(Appendix Table 2).

According to the investigated ecological houses general and different characteristics determined (Table 1-2).

Today, the importance given to ecology has increased as a result of the reductions particularly in the species of living creatures and in natural resources such as water and energy. In order to preserve such resources different design approaches have been developed. However, it is believed that this attitude which has been followed decidedly on a global scale since the 1970s has not been given enough importance even in today's Turkiye. The second and the main aim of this study is to find out whether this approach is employed in highrise mass housing which is more common in Turkiye, and if yes, on what scale. Based on the general characteristics found as a result of our investigation into the 18 ecological houses, the examples from Turkiye were considered at length (Appendix Table 3).

REFLECTION of DESIGN CRITERION		GENERAL		
		CHARACTERISTICS		
	Site Plan	Personal house -mass housing		
	Building Form	Rectangular plan		
	Space Organisation	Living spaces facing the south, service spaces		
		facing the north to make buffer zones		
Planning	Garden-House	Winter garden facing the south		
	Connection			
	Vehicle-Pedestrian	Pedestrian priority		
Relation				
	Direction of Building	North-south		
Fresh Water Gain		Use of rainwater		
Used Water Recycling		Used Water Recycling		
	Choice of Materials	Renewable, healthy		
	Outer Elements of the	Energy gain, insulation		
Construction Highrise Building				
	Roof	Contribution to energy recycling, insulation		
Structure	Traditional Systems	Wooden construction		
Modern Systems		Glass-steel		
Renewable energy	Solar Energy	Active and passive solar gain		
	Wind Energy	-		

Table 1: General characteristics of investigated examples

Table 2: Different characteristics of investigated examples

REFLECTION of DESIGN CRITERION		DIFFERENT
		CHARACTERISTICS
	Site Plan	-
	Building Form	Triangle, square, trapeze, arch, organic planned
	Space Organisation	Living spaces around the services
	Garden-House	Roof-central garden(s), lawn coverage
Planning	Connection	
	Vehicle-Pedestrian	-
	Relation	
	Direction of Building	Focused on central garden
Fresh Water Gain		-
	Used Water Recycling	-
	Choice of Materials	Local, natural
	Outer Elements of the	-
Construction	Highrise Building	·
	Roof	-
Structure Traditional Systems		Reinforced concrete, adobe filling
	Modern Systems	Concrete-steel, prefabric
Renewable	Solar Energy	-
energy	Wind Energy	Vacuum air collector, wind turbin

Results

It was found that the 18 houses sampled from Ankara, İstanbul, İzmir, Kocaeli and Şanlıurfa were not congruent with the characteristics defined. The majority of these buildings can be considered as unsustainable houses mainly because of their failure in terms of their contribution to energy recycling, energy gain, direction, space organisation, use of greenery, vehicle-pedestrian relationships, use of renewable materials and energy. However, it was observed that some effort was made, if not complete, in some of these houses (Table 3).

Table 3: Determinated ecological approaches in mass housing

MASS-HOUSING	ECOLOGICAL APPROACHES			
PROJECTS	legal materials reduction priority courty and			
Şanlıuria Mass-Housing	local materials, pedestrian priority, courtyards and			
Project	pools for airflow circulation, space organisation			
	that is sensitive to cooling wind direction			
İTÜ-TÜSİAD's New	the pedestrian priority, green-producing texture			
Housing Project in	designed with an ecological consciousness, wind			
Kocaeli	energy, and garbage and domestic sewage			
	recycling systems			
Earthquake security	Producing energy by the photovoltaic system on			
houses Project in	parapets of balconies			
Ömerli, İstanbul				
Yakacık Mass Housing	Direction determined in terms of wind and sun			
Sürücüler Terrace	Pedestrian priority and harmony with nature			
Houses				
Mercan Houses	Use of greenhouse			
Yamaç Houses	Pedestrian priority			

As can be seen from our investigation, there is no detailed ecological consciousness in today's mass housing. The attitude towards such concerns can be considered as unimportant efforts that can be ignored. However, it can be said that there is a conscious approach to ecology in the projects that are yet to be implemented.

On the other hand, the reflections of ecological approaches in Turkiye are seen in some single- or few-storey houses that accommodate conscious or unconscious applications such as the use of vernacular architecture and sun collectors, covering the balconies with glass, or decorating the balconies with flowers.

Conclusion

More and more highrise apartment blocks are built in all points of cities under the pretext of having limited areas for housing. These buildings are highrise apartment blocks that have no infrastructure, are randomly located, are built on farm lands and without any consideration of wind and sun, are built with the sole aim of quickly housing the immigrants peasants. The most important and the only benefit of such buildings which have no visual and physical and therefore ecological contribution to its owner and surrounding can be no more than the income of their owner or constructor.

It is an inevitable necessity that we should consider the ecological design approaches important when forming the artificial environment to create a sustainable environment and to minimise our damage we give to the natural environment through unconscious consumption of resources. While meeting the needs for housing it is an undeniable fact that the gain in highrise mass housing will be more than the gain in few-storey buildings in which more applications of ecological approaches are used.

For the purpose of obtaining this gain which is important in terms of natural and national resources, ecological design approaches must be appropriated and applied. In addition, necessary adjustments must be made in regulations which, in terms of ecology and sustainability, will be parallel to the applications in the world.

Appendix Table 1: The examined design criteria of ecological houses for each example (4,9)

REFLECTION of DESIGN CRITERION		House1	House2	House3	House4
	Site Plan				
	Building Form				
	Space Organisation				
Planning	Garden-House Connection				
	Vehicle-Pedestrian				
	Connection				
	Direction of Building				
	Fresh Water Gain				
	Used Water Recycling				
	Choice of Materials				
Construction	Outer Elements of the	4			
	Vertical Building		-		
	Roof				
Structure	Traditional Systems				
	Modern Systems				
Renewable	Solar Energy				
Energy	Wind Energy				

Appendix Table 2: Investigated ecological house examples (1,2,3,5,6,7,11,12,13,14,15,16,19,30,31,32,33)





Appendix Table 3: Investigated mass housing examples (8,10,17,18,20,21,22,23,24,25,26,27,28,29)





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Building materials and technology in constructing of exterior skin of building by ecological approach

KARS Figen, ŞAHİN Şafak KTU Architectural Department-TURKEY

Abstract

Sources of the world, where we live in, are limited and one of the most important problems in recent years has been the necessity to spend them within the sustainability principles. The energy being spent is the indication of the development level of countries. Therefore energy policies of the countries changed and thus the use clean and productive energy increased and the use of polluted energy decreased. The architecture, which is responsible for building special spaces for all activities related to life, has important responsibilities for using materials and energy sources of the world.

The most of energy consumed is obtained from energy sources which can be exhausted soon. The most important factor on heat-up qualities in buildings is the physical characteristics of exterior surface components of the buildings. Because of this exterior surface components of the buildings can be built by ecological approaches, by using many technological materials.

The heating energy necessary for building changed according to climate conditions of geography and the thermal performances of building skins. In other words, heat permeability resistance, junction details, production methods and heat storage capacities are very important for using heat energy in buildings.

The aim of this paper is to explain effects of architecture practices on life quality and sustainability considering building materials and technology. Technological building materials and termal insulation in the context of ecological architecture will be hightlighted.

1. Introduction

People have extremely been dependent on energy with developing technology and the increase in life standard. Energy is an indispensable part of life today. And The most of consumed energy in life is obtained from energy sources which can be exhausted soon. However, the sources in the world are limited and scientists state that these sources will be used up before end of this century. Even these sources have influenced the world politics because of the fact that they are needed for life and limited in the world.

Energy sources which can be exhausted soon and also named fossil have caused environmental pollution by damaging to ecological balance. One of the environmental pollution which is perceived as the fastest and the most dangerous for people's health is air pollution. Air pollution has a universal dimension besides its regional problems. Because of the fossil sources which were exhausted before, pollution exceeding than the purification capacity of nature by itself is spread into atmosphere. Moreover, that green spaces have been speedily consumed has introduced very important difficulties in purification capacity of nature by itself. Because of this, it created a risk for losing convenient atmosphere and conditions for the continuity of life.

Most of consumed energy is used in buildings for especially air conditioning. Characteristics of building which are present or newly built are particularly very important in this. The role of architects is very influential on characteristics of buildings built by design decisions. Architects role on the realization of vital activities in high quality terms, brings along serious responsibilities. It is impossible that every designer who is aware of his responsibilities is not sensitive against problems of world and his countries.

2. Exterior Building Skin

Architecture is always in an interaction with environment and people. This interaction has positive or negative influence on life quality and sustainability. It is a national result that a continual consumption is in buildings which entail a long time for design, construction and using. As a result of this, wastes which cause environmental pollution have occurred. This is a polluted identity of buildings. What is important is to design and build healthy and environmentalist buildings.

Most of buildings existing are exposed to heat losses in winter and extremely heat gains in summer. The most important affect in heat quality of buildings is physical characteristics of exterior building skin. Fuel quantity used up for heating increased due to heat insulation which is not be considered important. But energy saved in buildings is very important in a coon's age.

Energy saved is to be used more effectivly without wasting and reducing to quality and production of energy by using new technologies or applying improvement methods. Energy saved is accepted as the most important effective precautionary against air pollution.

New materials are in designs and buildings together developing technology. Transparent materials, one of these technological materials, reduce heat losses in spaces and moreover assist in heating and lighting energy by transmitting to interior spaces or solid wall. It is known that energy gain about 50-150 kWh for a year is possible by transparent insulation which has area of 1 m^2 .

3. Transparent Heat Insulation Material

New building materials are produced by development technology. It is aimed at gains from solar energy together with heat protection in heat insulation applications nowadays. Traditional opaque insulation works as a shield against sunlight. But now, exterior skin of building can be constructed as with heat protection and gains by new insulation materials. Transparent insulation applications can reduce losses of heat in exterior walls of building and provide that exterior walls in buildings work as a thermal mass for transmitting sunlight to solid walls (Figure 3.1). Besides, it can be gotten hot water by mixing systems. The most important characteristics of transparent insulation systems are highly heat insulation, sun energy gains and sunlight (1).



Figure 3.1. General principles of transparent insulation (2).

3.1. Transparent Insulation of Characteristics

- High thermal insulation
- High solar energy gains
- Daylighting (3)

3.2. Comparison of Transparent with Conventional Insulation

Conventional insulation materials only block heat transitions. Both insulation on heat transitions and heat gains can be obtained at the same time by transparent insulation materials (Figure 3.2).



Figure 3.2. Comparative functioning of opaque and transparent insulation (3).

This system productivity in wall construction with transparent insulation is related to structural construction of insulation material and its direction organized (4). Transparent insulation materials transmit lights with short wavelength and is opaque against lights with long wavelengths. Lights with short wavelengths which pass through transparent insulation are absorbed by absorbent surfaces and transformed into heat energy. Then this energy is transported to spatial by radiation.

Optimum insulation thickness has been accepted as 10 cm for many years. But energy experts has calculated optimum insulation thickness as 50 cm or over. Now, many regulations and standard in Europe are necessary uvalue of 0.2 W/m²K. In other words, optimum heat insulation thickness must be about 20 cm. In this condition, traditional insulation materials are insufficient. Air is generally used in traditional insulation material and these materials performances are limited by u-value of 25 W/m²K belonging to air. U-value by transparent insulation materials, especially aerojells, is lower than u-value by accustomed insulation materials with 10-20 W/ m²K. In addition to it is observed u-value has been lowered to level of 5 W/m²K

by vacuum technologies and results, have been obtained with more slightly thickness of insulation than thickness in traditional insulation materials (5).

3.3. Types of Transparent Insulation Materials

Various transparent and translucent materials can be used for transparent insulation, such as glass, acrylic glass(PMMA), policarbonate(PC) and quartz foam, in varying thickness and structures. To protect them from the effects of weather and mechanical stress, these layers are sandwiched between two panels of glass. Transparent insulation materials can be classified according to geometric media of the structure (Figure 3.3) (6).



Figure 3.3. Types of Transparent Insulation Materials

3.3.1. Parallel Arrangement To Absorbent Surface

This is an arrangement which consist of a build-up of several layers, setting behind one another parallel to glass surfaces and enclosing separate air gapss (Figure 3.4).

System activity is connected with reflection and absorption rates. Increase of layer numbers has positive effect on heat insulation, but has negative effect on light permeability. Insulation value can be increased by using argon, krypton, xenon as filling materials in many layers constructions (1).



Figure 3.4. Parallel Arrangement (5)

3.3.2. Perpendicular Arrangement To Absorbent Surface

These type arrangements make sun lights possible for incoming wall surfaces without back reflected. There are louvres, honeycombs and capillaries, which divide the cavity into small air cells. According to sun location, sun lights which arrive at perpendicular with narrow angle in summers can't come into capillaries (Figure 3.5); but in winters, incoming beams as about horizontal is reflected several times from surfaces of insulation materials and transmitted to absorbent surface (Figure 3.6).



Figure 3.5-6.

Heat energy stored into solid wall is transmitted to interior spatial by convection and radiation. Insulation materials in this group have advantages of lower optical losses. The transparent insulation materials having this type structure have an affect of increasing levels of natural daylight resulted from the relationship between the diameter and the depth of the air gaps (1).

Honeycomb structures consist of transparent polycarbonate (PC) with ultraviolet- -stabilizing additives (Figure 3.7). They are extruded as continuous honeycomb structures, 700 mm wide and 15 mm high; the rectangular honeycomb cells have 4 mm side lengths. Generally honeycomb structures are used in thickness of between 50mm and 100 mm, and they are sandwiched loosely in a double glazed unit. The U-value of a 100 mm thick honeycomb structure(PC) is between 0.80 and 0.90 W/m²K. The T_{düf} value is approximately 0.57 and g_{düf} is 0.64 (4).



Figure 3.7

Capillary structures are made up of many small plastic or glass tubes.

The plastic tubes, of acrylic(PMMA) and polycarbonate(PC), have a diameter of 1-4 mm. A 100 mm thick capillary sheet made from acrylic tubes, 3 mm diameter, will achieve a U-value of 0.89 W/m²K and a T_{diif} of 0.69. Capillary structures made of glass have great resistance to high temperatures and more durable than plastic, but require a extremely careful choice of diameter and thickness, as glass has seven times higher heat conductivity than plastic. 100 mm thick prototypes with tubes of 1-8 mm diameter and of 0.1 mm wall thickness achieved U-values of around 1 W/m²K (4).

3.3.3. Bubble Structures

These type of structures are cavity types, which combine parallel and vertical structures. Here materials with bubble structures in order of a few millimeters are used, such as acrylic foam. Although this largely suppressed heat is lost through convection, the losses through reflection, as with the parallel structures, and through heat conduction is a limiting factor (4).

3.3.4. Quasi-Homogeneous Structures

Aerogels and xerogels, which have microscopic cavity structures have high radiation transmission and thermal insulation properties. Both properties are a result of their structures. The thermal insulation properties are as a concerned with the dimensions of the air microcells. The movement of air molecules is restricted and convection is reduced. Heat transport on the other hand is strongly suppressed by the continuous absorption and reradiation process in the material itself.

An aerogel is a porous structure of 2-5% silicate and 95-98% air interspace (Figure 3.8) (4).



Figure 3.8

Insulating glass with a filling of 20 mm thick aerogel can have a theoretical U-value of 0.7 W/m²K and a transmission of T_{diif} 0.69. The thermal insulation properties can be additionally increasing by a vacuum in the cavity and at a pressure of 50-100 mbar the U-value could be reduced to 0.37 W/m²K. Materials with basic of silicondioksit(SiO₂) have a lower reflection rate and can be transmitted lights of 90% (1). Because of its transparent structure, it can be used in window glasses. But granular aoregels have a poorer optical and thermal properties. The manufacture of granular aerogels is cheaper and easier than monolitic's. Nevertheless, beam transmission value is lower.

Today glazing systems comprising multiple panes of glass or plastic films lead the field in terms of transparence. They reach U-values of between 0.5-W/m²K and 1 W/m²K. Honeycomb and capillary structures have better radiation transmission properties than granular aerogels. But in discussing dimensions, honeycombs structures are 100 mm thick, granular aerogels are only 16 mm thick. The development monolithic aerogels, particularly with regard to transparence, would seem to be very promising. In a study by the Technical University of Denmark it was estimated that the use of aerogel insulating glass in housing would lead to a 20% reduction in heating costs (4).

4. Insulated Buildings And Providing Lights

Transparent insulation materials can be used on opaque walls and glass surfaces. Sun beams pass through glass and transparent insulation and reach to wall as in figure. Various combinations can be tried in this application (Figure 4.1).

Sometimes, air gaps can be between wall and transparent insulation. This air gaps facilitates vapor diffusion. Transparent insulation is thickness of between 4-8 cm and u-value of $0.8-1.6 \text{ W/m}^2\text{K}$ (Figure 4.2).



Figure 4.2. Cross section of walls with transparent insulation from the left to the right

Performance of traditional windows is quite inadequate in comparison with insulated walls. The windows with transparent insulation have u-value of 1 W/m²K, u-value of 3 W/m²K in with double glasses. The attractiveness in using of transparent insulation obstructs to negative dazzling and lights reached from ordinary glasses. For example, negative light is caused headache for the workers in office buildings. Transparent insulation materials can provide to suitable conditions.

4.1. New Buildings

Transparent insulation materials make many varieties possible for aesthetic, structural design and thermal design. Optimum building forms and organization are designed by building construction and lands. The Self Sufficient Solar House is an example for this systems.

4.2. Protection of Existing Buildings

Transparent insulation materials are not only reduced to exhausted energy in buildings, but also give a long life to buildings because of increasing of comfort conditions in interior space and reducing humidity.

4.3. Structural Design

Transparent insulation materials for buildings applications are a module form with glass layer in both of sides. Some modules separate from absorbent surface with air gaps.

4.4. Thermal Design

Insulation and optical transmitting properties, expected from transparent insulation materials change base on the thickness in using of materials. Generally thickening of materials is important because they affect insulation. But then it reduces sun lights passing through component. It is the best performance to thickness of 10 cm in transparent insulation materials.

4.5. Aesthetic

Even if they are used in wide surfaces, design styles of transparent insulation materials don't create discomfort environments. Unreflecting glasses can be used on exterior surface of transparent insulation modules for not causing a mirror effect in old buildings. The colors of structural frame and materials are very important for new facades. These are same or different colors. Many different facades can be created by modules in different dimensions. For example, small modules are harmonious with bricks and wider modules can be used together big panels (4).

5. Using Areas Of Transparent Insulation

It was attempted to develop more efficient solar collectors during the 1930s which are largely responsible for the present interest and activity in transparent insulation materials. The operating principle is identical to that described earlier in building installations.

5.1. To Provide Hot Water By Collectors

Solar energy is first caught, then saved and transmitted to interior space by the systems (1).



Figure 5.1. Transparently insulated solar collector for domestic hot water or general fluid heating

5. 2. Direct Gains System

Transparent insulation is applied to glass surface without any wall. Beams, directly going into space, are transformed into heat in surface on which beams strike and heat of interior space increase in parallel with heat of surfaces. Heat transmission under control can be provided by arranging shady components against extreme heating up problems. The applications together both of direct and indirect gains systems are suitable for energy saved (1).

5.3. Indirect Gains system

Transparent insulation in application of sun wall is located in front of a solid wall. The heat is transmitted from wall section to space in times due to insulation properties of device. Energy gains in wall construction can be controlled by shady components.

6. Conclusion

In the event the optimum insulation thickness are selected it can be highly profited from sun contribution for serving of total heat load. Transparent insulation contributes to energy gains with two methods. Firstly, they guarantee energy protection as traditional insulation materials and other is possible more sun energy gains contrary to traditional insulation materials. Both of these effects is quite increased sun energy contribution on saving of heat load.

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Control of the lost light energy at houses

Banu MANAV

University of Bahçeşehir, Faculty of Architecture, Turkey

Abstract

In Turkey, an important amount of the consumed electrical energy at houses is light energy. To control light energy consumption, alternative solutions can be stated by examining user preferences' for lighting and housing. This paper discusses how energy consumption at houses can be controlled through lamp and luminaire selection, lighting hardware and control systems. As general beliefs of people are influencial on their preferences, tendencies in lamp selections were investigated through a questionnaire. Results indicate that 64 people (%44,13) prefer to use incandescent and compact fluorescent lamps together. A total of 80 people(%55) use fluorescent lamps in any part of their houses. While 16 people (%11,03) use only fluorescent lamps, 65 people(%44,82) reject to use them at all. When the reasons for rejection were examined and categorized, it was seen that parallel statements are valid in different countries regardless of the cultural differences. Though the necessity of a lighting consultant for any project is indespensible, results of the questionnaire indicates that, only 2 people (%1,3) out of 145 believed its importance and took the advice of a consultant. The care given to the lighting design of a house at the construction stage was also investigated in the study. When the responses were evaluated, it was seen that, generally no specific lighting solutions were offered. Special care should be attended to lighting design considering economical and technical data. Consumers should also be more concious about the properties of the products they select and use.

INTRODUCTION

The more energy resources diminish, the more it becomes valuable and this leads to find new design solutions. If we control energy consumption, we also can offer more economical and energy-efficient designs. Energy efficient lighting design depends not only on the choice of the lighting equipment, but also, on how the installed equipment is used by building occupants, after the designers and the electricians have left. It has been stated that, for Turkey, around 50% of the consumed electrical energy at houses is light energy (Onaygil, 2001). Such an amount of energy should carefully be planned and used. As the role of the occupants can not be disregarded in this process, their preferences for lighting equipment shall be studied to prevent energy loss.

This study concentrates on the control of artificial light energy at houses basicly. Important factors to control artificial light energy can be listed as, lamp type, luminaire selection, lighting control systems and influences in preferences. The research question for the present study is based on the results of a previous survey that was conducted by the author (Manav, 2001). The survey was about user preferences on luminaire selection at houses, at the living area, mainly. Tendencies in luminaire selections were investigated including lamp types. Depending on the results of the previous research, it was seen that generally incandescent lamp is preferred at houses (approxiametly 76%). This study aims to investigate the tendencies in lamp selection, preference, application and will offer alternative solutions to control energy loss at houses.

1.Energy Efficient Lighting Design For Houses

1.1 Lamp Selection

There are four general lamp families of electric light sources:incandescent, fluorescent, high intensity discharge (HID) and cold cathode. Among them, incandescent and cold cathode lamps are used for general lighting, decorative and accent sources. Fluorescent lamps are primarily used for general lighting and HID lamps are generally preferred for outdoor lighting applications. However, as manufacturers continue lamp development, we can see broader use of all lamp types, that is; fluorescent lamp use is likely to be increased in residential application while HID lamps may gain popularity in interior environments.

Incandescent lamps are likely to be selected for decorative lighting or at areas requiring very low light output source (Steffy, 1990).

Lamps should be selected according to their technical data. When catalog descriptions are compared, it is clear that, fluorescent lamps are more efficient with respect to incandescent lamps (please see Tables 1-2 for lamp comparison).

type: incandescent lamp	W	Lm	Efficacy(lm/W)
bulb type:clear			
glass	60	730	12,1
	75	960	12,8
	100	1380	13,8
	150	2250	15

Table1. Catalog values for incandescent lamps with (Osram, 1998)

1 abicz. Catalog values for muchescent famps (Ostam, 1990)	Table2.	Catalog	values	for	fluorescent	lamps	(Osram,	1998)
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type:tubular fluorescent	W	Lm	Efficacy (lm/W)
	18	1350	75
	36	3350	93
	58	5200	89,6
type:compact fluorescent	W	Lm	Efficacy (lm/W)
	20	1200	60
	23	1500	65,2
	15	900	60

Previous research shows that, at houses, approxiametly 76% of the participants prefer incandescent lamps (Manav,2001). In addition to incandescent lamps, fluorescent lamps can also be used. Compact fluorescent lamps have also E27 dip shape, similar to incandescent lamps, that brings easier installation. Recent developments in lamp technology provide various size and shape of fluorescent lamps, with very good color rendering properties and long lamp life.

In our country, with a nearly 70 million people population size, let's assume that, there are 20 million dwellings (in case, there are 3-4 people in each dwelling). In case, a 100 W incandescent lamp is replaced with a 15W compact fluorescent lamp, the amount of the saved energy will be as follows; operating hours: 20.00-24.00 (4 hours every day), 1460 hours annual,

Energy saving annual = $20 \times 10^6 \times 1460 (100-15) = 2482 \times 10^9 \text{ kWh/year.}$

Even this calculation has a striking result. End-users shall select lamps considering their technical properties and lamp manufacturers should label lamps, so technial properties will be noticed while selecting.

1.2 Luminaire Selection

Luminaires are responsible for the distribution of light on room surfaces, people, working plane and related tasks. Properties of an efficient luminare can be described as follows: to control the distribution of light energy, to protect and cover the lamp, to hold lighting equipment and hardware, to be economical, to have a high efficacy, to have a resistant and durable material, to be coherent with other interior design elements by means of form, size, shape et cetera.

Depending on the properties of the selected luminaire, light energy can be spent inefficiently. Luminaires should be related to the working plane, their geometrical properties are important together with the lamps installed in them. End-users' preferences are important as they are the user group. A research on user preferences on luminaire selection at houses shows that, statistically, there is no relation between users' age group, education level and being the owner or the renter of a house and preferences for luminaire selection (Manav,2001).

The link between the manufacturer, consumer and the technical consultant should be permanent. Manufacturers should produce luminaires according to the technical data, they should be in contact with technical consultants and should give necessary information about lighting to consumers while selling the product.

1.3 Lighting Hardware and Control Systems

Lighting hardware consists all the necessary equipment for the lamp to operate. Depending on the properties of this equipment, lighting quality and energy consumption may change, psychological and physiological problems may arise.

To decrease energy consumption, lighting control systems are available. The most widely known and used one is, the dimming process. However, the quality of dimmers is important for energy consumption. Also, technological solutions like LUXMATE are available. LUXMATE satisfies the requirements of optimal lighting level and adjustments for individual lighting needs, different light sources can be dimmed digitally.

There are studies on the role of fluorescent lamps and lighting hardware on subjective well-being; such as the impact of the non-visible flicker from
fluorescent lamps. In these studies, conventional and electronic ballasts are compared. As discussed in a study by Küller and Laike (Küller,1998), flicker rate may influence the brainwave pattern that has been established through medical research. The role of flicker rate from fluorescent lamps on well-being, performance and physiological comfort was investigated and depending on the statistical results, it is recommended to use electronic high-frequency ballasts of good quality. Electronic ballasts are also recommended from energy-efficiency point of view (Onaygil,2001).

Effects of lighting quality on well-being has also been investigated. When people are subjected to poor or low quality lighting supplied by fluorescent lamps, in a number of cases, they can suffer from eye strain and fatique (Bommel,2002). Lighting control systems are important to satisfy lighting of good quality.

1.4 Influences In Preferences

Perception of a choice has an essential role in the realization of a process. General beliefs and expectations of end users are functional on lighting decisions. A group researchers were interested in the topic and investigated memory processing, psychological process for information storage and retrieval. As cited in Veitch (Veitch, 1993), Craick and Cockhart proposed a model. According to this framework, acquired information can easily be recalled at a later time. Our memory does not function as a simple recording device, we remember events, categorize them, and make decisions. We remember best the information that is coherent with what we know or believe.

General beliefs for fluorescent tubes, for example, are critical on end users' decisions. Results of a survey indicates that, a large group of people believed that fluorescent tubes can be detrimental to one's health, and believed that natural light is superior to artificial light (Veitch,1993). These individuals are unlikely to invest in any similar technology regardless of its potential. In a similar manner, successful uses of environmental technologies can diffuse to other individuals or even institutions. Individuals, who are satisfied or pleased with their lighting system, will advocate it to others (Veitch, 1993). Advertisements, campaigns can be designed to take advantage of this fact.

Cost of a system or lighting equipment is also effective in decision making process. Governmental supply may be needed to spread the use of certain techniques as well. In Brazil, for a project, user group is separated into three groups by means of their income level. 30%, 60% and 70% of the cost was supplied by the owners of the project and user group was encouraged to use that technology. At the end of the first year, energy

consumption w/s reduced 630 Wh and energy production was decreased 120 million dolar (Tunuli, 2000).

2. Material-Method

The research method of the survey is questionnaire. The questionnaire consists of 7 questions that investigate the tendencies in lamp type selection, reasons behind their preferences and the importance of lighting for houseowners. 145 people from different professions with different income levels participated in the study. No personal data was evaluated, only percentages of the responses were evaluted to see the general tendencies.

The first question asks preferred lamp types for houses. Participants were free to select more than one choice. The choices were, incandescent lamp, tubular fluorescent lamp, compact fluorescent lamp, halogen lamp and others (they were asked to define).

The second and the third questions were related to each other. The second question asked whether fluorescent lamp is used at houses, so the percentage of people who reject fluorescent lamps could be found. Third question was for the ones who reject fluorescent lamps and tries to find out the reasons for rejection.

The necessity of a lighting consultant for a project is in indespensible. The fourth and the fifth questions intend to find out the percentage for the ones who took the advice of a lighting consultant for their homes and to give the reasons.

In recently constructed settlements, special lighting solutions are offerred. The last two questions are related to this, asking whether there was a special lighting solution for the houses they settle down and if any, for which part of the house?

3. Results

Results indicate that, 64 people (%44,13) prefer to use incandescent and compact fluorescent lamps together. A total of 80 people(%55) use fluorescent lamps in any part of their houses. While 16 people (%11,03) use only fluorescent lamps, 65 people(%44,82) reject to use them at all (Fig.1 shows the percentages for lamp preference).



Figure1: Preferred lamp types with percentages

Reasons for rejection were asked to be stated and are categorized in Table 4. Nearly 10% of the participants state that they do not like fluorescent. Other statements are as follows; disturbance (%2) and disturbance from flicker rate (%2). This is parallel to Küller and Laike, who studied the role of flicker rate from fluorescent lamps on subjective wellbeing.

According to the completed questionnaires, general beliefs play an selection. essential role in lamp This is similar to relevant literature(Veitch, 1993), people who are familiar to use incandescent lamps in their houses do not need to find another solution and believe that, fluorescent lamps are unfamiliar to them (%5,3). Other statements about general beliefs are like these; it has white light (%3,3), it is a useless lamp, not functional(%2,6), it is aloud (%2), it makes glare (%5,3), it creates cold space (%2), it is unaesthetical (%1,3) and %2,6 state that they use compact, not fluorescent (actually compact fluorescent is a fluorescent lamp type). However, fluorescent lamps have some advantages over incandescent lamps, that are also important for energy efficiency. Individuals who are satisfied or pleased with their lighting system, will advocate it to others. As advertisements, media news, campaigns are effective on increasing the awareness of people, they can be designed to take advantage of this fact.

Among the participants, a percentage of %3,3 believes that, fluorescent lamps are expensive, %1,3 mention that they are on rent and lamp selection is not important for them. As cost of a system or a lighting equipment is effective in decision making process, certain projects, such as governmental supply may be needed to spread the use of certain techniques and products.

Though the necessity of a lighting consultant for any project is indespensible, only 2 people (%1,3) out of 145 believed its importance and took the advice of a consultant. They listed their reasons for not taking advice as follows; no need for a consultant, familiarity to traditional products, lamps et cetera. Responses clearly show that, for a group of people, lighting of a place still means to install any kind of lamp. People who took the advice of a consultant (%1,3) point out that, they know the importance of lighting. In some of the recently constructed buildings, suspended ceilings in bathrooms with tighting fixtures and counter lighting at kitchens are offered, but generally, no specific lighting solution for the rest of the house. The last two questions were asked to figure out this belief. When the responses are evaluated, it is seen that, out of 145 people, 128 (%88,2) say that they do not have a specific solution for lighting at their houses. 17 (%11,7) people have been offered a lighting solution when they moved to their homes, and these were for the kitchen, bathroom and living area mainly, as seen in Figure 2.

Lighting solutions are counter lighting for kitchens and bathrooms, sockets for lighting on the ceilings or on the walls. Apart from these, there are no specific lighting control system like wall washing, cove lighting in any part of the home, or a remote control system.

	no of	
statement	people	Percentage(%)
disturbs	3	%2
unsuitable to the existing		
luminaire	4	%2,66
a useless lamp, not		
functional	4	%2,66
flicker rate disturbs me	3	%2
it has white light	5	%3,33
it is aloud	3	%2
it makes glare	8	%5,33
unaesthetical	2	%1,33
I am on rent, no need to use		
it	2	%1,33
we use compact,not		
fluorescent	4	%2,66
expensive	5	%3,33
it is unfamiliar to me	8	%5,33
creates cold space	3	%2
I do not like it	15	%10

Table 4: Reasons of fluorescent rejection at houses



Figure 2: Need for a lighting consultant for houses

4. Conclusion

Energy saving is not only achieved by turning off the lights. Number and type of lamps can be arranged to save energy as well. Lamps should be selected according to their technical data, and all of the products in the market should be labelled according to the technical properties.

According to the results of the present research, an important amount of people reject to use fluorescent tubes as a result of their beliefs, without being aware of the technical properties. Reasons for rejection indicate that, regardless of the cultural differences, parallel statements are valid in different countries. Cross-cultural studies on lamp preferences and reasons for rejection can be done to make more general statements. To overcome certain beliefs, advertisements, campaigns can be designed, projects can be realized by governmental supply or by international lighting firms' sponsorships.

Lighting hardware and control systems are available to decrease energy consumption. These systems can be advised to people and be applied to projects.

Luminaire selection is also important from energy consumption point of view. Luminaires should be designed and produced according to certain principles.Manufacturers should be in contact with technical consultants. They should give necessary technical information about the products and consumers should be more concious about the properties of the products they prefer.

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SESSION 4 CONSERVATION: Policies and Proposals

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Efficiency of institutions in preservation: A case in historic districts of Estern Black Sea Region

CANDAS, Nimet

KTU, Department of Architecture, Trabzon, TURKEY

Today, nations are in competition with each other regarding cultural possesions / wealth and with their introduction to the others in the most ornamental way, and this functions as a way in which they seek to prove how powerful they are spritually in addition to their material strenght [1].

Abstract

The statement above sums up the percpectives of leading nations of the word over cultural wealth, starting from 20th century to the present time. For the most developed nations, the preservations of cultural possesion is a concern handled and put forward at just the right moment. However, this is regarded as a luxurious attempt in developing nations, such as in Turkey. The reason why Turkey couldn't attain enough success in this field results from how differently these nations treat the matter. Preserving cultural possesion is now regarded as a need in Turkey, in spite of that different consideration. The reason Turkey hasn't been able to reach the require level indicates deficiencies in implemantation of these attemps. This paper includes by whom cultural preservation is carried out in Turkey and how well they do it.

Historic districts on the Black Sea are included as the study area, and institutional efficiency in these activities came into question.

In this study, the institutions related to preservation activities are divided in two groups, one of which is the one in charge, and the other is the participant.

The actors (Governer, Municipality, Sector): It is the institutions which take over and carries out the preservation.

The participants (*Public, State, Non Governmental Organization -NGO-*) : The second institutions which supports the first one / in charge.

Which institutions, in the Black Sea Region, became effective as the one in charge or the participant were proved in preserving each one of eight listed historic districts and lasting till today in each, through numerical and proportional figures.

The conclusion reached is only valid for the Black Sea Region, and cannot provide a generalization for Turkey but just can give an idea about it. Of course, different results, more positive or more negative, can be obtained for different parts of Turkey according to the levels of education and economic structure.

Keywords: Historical Districts, Preservation, Institutions, Efficiency, Eastern Black Sea Region

1. Introduction

The aims of the preservation of historical environment are to save the historical sites from destruction and to combine the cultural heritage with modern life [2]. In other words, it aims to transfer information into the future by freezing the images of the past in the present day. Another aim of the preservation is to make concrete the devotion to the national values and the strength of the nationalist feelings [3].

Long before the development of the notion of preserving the historical buildings or environment, the notion of preservation has always been present as part of the life, but, as well as its present meaning, it only consisted of the notions of making the life of the possession longer and making more of it. Today, the historical environment is preserved due to its present cultural and untouchable status, which was absent in the past [4, 5].

As can be seen, the need for the preservation of historical environment has two important dimensions. The concrete benefits of the preservation of historical environments that were obtained by using the buildings of the cultural heritage that have come down to us with the same or different functions constitutes the first dimension of the need for preservation. Man's exhibition of the level of knowledge and experience of the civilisation to both his own nation and the world constitutes the second and most valid dimension of preservation of historical environment.

In conservation the historical environment, a number or regulations have been devised at both national and international levels, though their feasibility is a matter of debate. In the framework of these regulations, the preservation of the historical environment is an activity which should be accomplished through the collaboration of the public, state and civil institutions, and which incorporates the obligation of social sensitivity.

Although the public, state, and civil institutions are required to be involved in the preservation of the historical environment, the necessity of the extent of the involvement of which institutuion at which level varies according to different social structures. When we have a close research into the history of preservation, it can easily be seen that the theoretical and practical development of the notion of preservation started in the West and that the applications which form a model for the world were put forth in these countries; Italy, France, and United Kingdom have been a guide for Turkey with succesfull applications in preservation. [6, 4, 7]. Regarding the intensity of the old works of art and the context created by these works, the level of public consciousness that is observed in Italy and particularly in Rome, which incorporate historical environments of the same density, is a good example to the importance of the involvement of the public in the preservation in Turkey, where the same level of consciousness cannot be observed.

The perception of the effectiveness of the state in France, which resembles the centralist system developed in Turkey and which was very effective in the applications in the previous century, is a prominent example in the presence of the state in preservation. The United Kingdom is the country in which the leadership of the civil institutios in preservation is the most effective. With its present position, the United Kingdom forms a model for the efficiency of the civil institutions in the triangle of the public-state-civil institutions, which are considered to be a must. Together with the historical developments in the system of charitable foundations, the number of civil institutions in Turkey is increasing and they are becoming more and more effective in taking direct or indirect decisions about the historical monuments and districts in recent years. It is assumed that any country that was mentioned above has been, and will continue to be, a guide for Turkey with their successful applications in the preservation obtained under the lead of an institution in the public-state-civil institution triangle [4].

Since the 1950s which is the onset of becoming conscious in preservation, all legal arrangements have been made by such standard setting and inspecting institutions as Higher Committees for Preservation, Preservation Committees, related ministries, and volunteer organisations. Cultural wealth are classified and named according to pre-determined parametres, and all cultural riches are dealt with in their own class. Firstly, they are dealt with in two classes as Movable Cultural Riches and Immovable Cultural and Natural Riches (monuments, sites). Secondly, after the separation of Immovable Cultural and Natural Heritages into two as monuments and sites, the sites are named as urban, historical, natural, archeological, etc, depending on their characteristics. If a region meets the conditions to become a site, it is declared a 'site', it is taken under protection, protection plans for future physical development of the region are made, the needed amount of financial resource is determined by the government, and now all kinds of practices in the listed site are carried out according to these regulations. Sometimes, however, the preservation committees, tired of the pressure by civil institutions, make their decisions for sites without obtaining the needed financial resource and with a superficial content, and then they don't do anything nor do they allow people to do any construction in the region. The public, state, and civil institutions are in a continuous conflict, and the terrify and painful dimensons of preservation are revealed. In this way, day by day the most historical districts in country are becoming full of meaningless 'sites'. Sometimes the required infrastructures for the sites are provided fastidiously and the preservation plans are made through cooperation with universities.

However, other than the happiness caused by the 'satisfaction' and 'peace of mind' obtained through the contribution of planners to the historical districts, these plans, which were prepared with such intense labour, become useless in the end. At this point, it is a matter of discussion that the notion of 'site' that was created through scientific criteria at national and international levels has been degenerated, lost its seriousness, meaning and importance.

The method that is employed as the state policy in conserving the cultural riches in Turkey is, in general, confined to "listed". Although Turkey completed the legal dimension of its preservation policy simultaneously with the West [7], the planning and application phases have taken progress slowly owing to the difficulties that Turkey encountered in forming its economic infrastructure. Of the 188 historical districts in Turkey, one of those whose plans have already been made and that have been kept alive as to form a whole with the city is few. At this point, it would not be fair to give the whole responsibility of the cost of the failure to the "state" which was left alone in the task of preservation. As stated earlier, successful applications of preservation can only be accomplished through social participation. In Turkey where preservation activities were undertaken by the state; if the public does not have enough level of consciousness, if there are not enough civil institutions, the present level of progress in preservation may not be considered so successfully. Successful results can only be achieved not by giving the whole responsibility to other institutions but by the contribution of each institution.

It is assumed that such questions as 'has the responsibility for conserving the historical environment that-directly pertains to all layers of the society been accomplished?', or 'how much progress have been made since the onset of the preservation?', or 'has the desired results not been obtained because of the vicious circle when intending to do some things?' which question the developing process and today can be answered by looking at the works done on the subject in Turkey.

In this context, the efficiency of the institutions in preservation was brought up in a section of a masters thesis titled "Approaches and Techniques in the Conservation of Historical Environment, Case Study: Historical Districts in Eastern Blacksea Region", which aims at considering at length the present conditions of the historical districts in Blacksea region.

2. The Study

This study investigated the the processes that the listed historical districts undergo after the registration, and the contributions of different institutions to the preservation of the historical districts in these processes.

2.1. The Fieldwork

This study, which investigated the efficiency of different institutions in the preservation of the historical districts, was carried out in the historical districts in Eastern Blacksea Region which are under the responsibility of Trabzon Preservation Committee.

Case study method was employed in this study. A three-stage analysis method was developed and used in all historical districts in the field of work together with such compelementary methods as photography, observation, interviews with local residents, interviews with supervisory and administrative institutions, The three-stage analysis method incorporates the general analyses of the sites, analyses of the sites at building level, and comparative analyses of the sites.

The listed historical districts that constitute our field of work which are under the responsibility of Trabzon Preservation Committee are:

- Historic District No.I, Trabzon / City Center
- Historic District No.II, Trabzon / City Center
- Historic District No.III, Trabzon / City Center
- Akçaabat Historic District Trabzon / Akçaabat
- Giresun Historic District, Giresun / City Center
- Konakönü Historic District, Trabzon / Araklı
- Historic District No.I, Trabzon / Sürmene
- Historic District No.II, Trabzon / Sürmene

The preservation processes of the historical districts in the field of work that started with their registration dates are shown in Table 1.

2.2. Analysis

Among the detailed analyses carried out at single structure level in the listed historical districts in Eastern Blacksea Region, the section that investigates the activities of the preservation institutions are arranged under two headings as "Actor in Preservation" and "Participation in Preservation".

Actor in Preservation:

The aim of this section is to find out those that preserve the buildings. This section tries to find answers to whether the preservation is done by the owners with their own resources or whether preservation is done with the support of the state. If the building is preserved by the state, how does it do it? There are two ways that the state employs in the preservation of the buildings. The first way is to have the governorships through the Ministry of Culture do it, and the second one is through the municipalities. These ways which provided the financial resources are as follows:

• Governorships

• Municipalities

• Sector: The public provides the financial resources or provides it through charitable foundations.

The aim here is to find out the efficiency of different institutions in the provision of financial support for the preservation.

Participation in Preservation:

Whether or not the financial sources, which were mentioned above actors in preservation section, are supported by other institutions is the subject of the analysis in this section. In other words, this section tries to reveal whether the state or civil institutions (NGO) take part in the preservation through arrangements such as credits, etc., while the public tries to preserve their own buildings with their own resources.

Table 1. The preservation processes of listed historical districts in Eastern Blacksea Region [11].

RECORDED, PLANNED AND APPROVAL DATE (BEGAN TO APPLY)				
	Date Recorded as Historic District	Planning Condition of Transition Period	Planning Process of Preservation Plan	<u>Approval Date</u> of <u>Preservation</u> <u>P</u> lan
Akçaabat Historic District	Dated <u>26.04.1988,</u> Numbered 19	Dated 26.04.1988, Numbered 19	Between PCTP and ADPP Time	Dated <u>15.07.1997,</u> Numbered 2898
Giresun Historic District	Dated <u>14.02.1986.</u> Numbered 1917	Dated <u>14.02.1986,</u> 1917	Between PCTP and ADPP Time	Dated <u>16.05.1997,</u> Numbered 1781
Konakönü Historic District	Dated <u>18.07.1996.</u> Numbered 2526	Dated 28.01.1996, Numbered 3371	РСТР	-
Sürmene Historic DistrictS No.I-II-III	Dated <u>16.05.1991,</u> Numbered 1003	Dated 30.01.1992, Numbered 1268	Between PCTP and ADPP Time	Dated <u>31.03.2001,</u> Numbered 4100
Trabzon Historic DistrictS No.I-II-III	Dated 04.09.1985, Numbered 1426	Dated 04.09.1985, Numbered 1426	Between PCTP and ADPP Time	Dated 01.06.1989, Numbered 334

	Actors	Participants
Historic District No.I, Trabzon / City Center	Governor 4% Sector 4% 85% Municipal. 11%	State NGO 15% 0% Public 85%
Historic District No.II, Trabzon / City Center	Governor Sector 4% 87% Municipal 9%	State NGO 13% 0% Public 87%
Historic District No.III, Trabzon / City Center	Governor Sector 87%	State NGO 15% 0% al. Public 85%
Akçaabat Historic District Trabzon / Akçaabat	Governor Scctor 93%	State NGO 7% 0% Public 93%
Giresun Historic District, Giresun / City Center	Governor 12% Sector 88% 0%	State NGO 12% 0% Public 88%
Historic District No.I, Trabzon / Sürmene	Sector Governor 100% 0% Municipal. 0%	State NGO 0% Public 100%
Historic District No.II, Trabzon / Sürmene	Sector Governor 100% 0% Municipal. 0%	State NGO 0% 0% Public 100%
Konakönü Historic District, Trabzon / Araklı	Sector Governor 100% Municipal 0%	State NGO 0% Public 100%

Table 2. Proportional representation of actor and participant in preservation

2.3. Evaluation

The contributions of the institutions described as actors in Preservation (Governorships, Municipalities, Sector) and Participation in Preservation (The Public, State, Civil Institutions –NGO-) to the preservation in the preservation processes of eight historical districts / site in Eastern Blacksea Region are shown in proportions in Table 2.

2.4. Findings

The historical districts in the study area are preserved by the institutions namely as Sector, Governorships, and Municipalities in the following proportions.

	Sector	Governer	Municipality
	(%)	(%)	(%)
Historic District No.I,	85	4	11
Trabzon / City Center,			
Historic District No.II,	87	4	9
Trabzon / City Center,			
Historic District	85	15	0
No.III, Trabzon / City			
Center,			
Akçaabat Historic	93	7	0
District Trabzon /			
Akçaabat,			· · · · ·
Giresun Historic	88	12	0
District, Giresun / City			
Center,			
Historic District No.I,	100	0	0
Trabzon / Sürmene,			
Historic District No.II,	100	0	0
Trabzon / Sürmene,			
Konakönü Historic	100	0	0
District, Trabzon /			
Araklı,			

Table 3. The Actor institutions in preservation in historical districts in the field of work.

For all the historical districts in the study area, the most effective institutions in Preservation is listed in terms of their intensity of involvement.

Sector%92
Governor%5
Municipality%3

• The participation of the Public, State and Civil institutions in the preservation in historical districts in the field of work is as follows:

Table 4. Indicators of participation in preservation in the historical districts in the field of work.

	Public (%)	State (%)
Historic District No.I,	85	15
Trabzon / City Center		
Historic District No.II,	87	13
Trabzon / City Center		
Historic District No.III,	85	15
Trabzon / City Center,		
Akçaabat Historic	93	7
District Trabzon /		
Akçaabat,		
Giresun Historic	88	12
District, Giresun / City		
Center,		
Historic District No.I,	100	0
Trabzon / Sürmene,		
Historic District No.II,	100	0
Trabzon / Sürmene,		
Konakönü Historic	100	0
District, Trabzon /		
Araklı,		

It can be said that the civil institutions (NGO) do not participate in preservation.

For all the historical districts in the field of work, the most effective institutions in Participation in Preservation is listed in terms of their intensity of involvement.

Public.....%92 State....%8

3. Conclusions

The criticism made by a group of academician and practitioner, who have fully grasped the preservation in Turkey, and who trie to practice some of their successful applications, towards the state as "a centralist and superficial understanding of preservation" has been verified by this study. The findings of this study have revealed that in order to preserve the historical districts, the state, the most effective institution in preservation, only "listing" them. By leaving the rest to the owners who live in them, the future of these buildings, that forms the historical environment, is confined to the lives of the buildings.

The findings obtained through the study on the historical districts in Eastern Blacksea Region, which are under the authority of Trabzon Preservation Committee, were summarised and the following results were arrived at:

- Although the state is the institution that takes the first and most important step by listing the historical districts, it does not contribute adequately to the preservation in later stages, and, therefore, the most effective institution in any site and in the whole region is the "public." However, this finding may not mean that the public always contributes to the preservation consciously. The public contributes to their property by repairing it with methods that are not so scientific in order to make it last long and, therefore, by delaying its destruction.
- After the investigation and listing procedure, the contribution of the state to the preservation of the historical districts is only at the level of single building. Restoration of the listed buildings of the highest quality that can be used as public buildings meets the state's need for building and contributes indirectly to the preservation. This contribution is as little as 8% in the whole region. 92% of the contribution is coming from the public.
- The "general public" is usually the participant as well as the actor in preservation. That is to say, neither the state nor the civil institutions support the general public who wants to preserve their property with their own resources. The state is only in a position of financing the preservation of its own property that it nationalised, which is equivalent to a proportion of as little as 8%.
- The civil institutions that have made important contributions to the preservation in the more developed areas of Turkey did not take part in the preservation of the historical districts in this part of the country.

Preservation is not a simple job that the public, state, and civil institutions may alone cope with. Therefore, in order to attain successful preservation applications, it is mandatory to obtain social participation under the initiative of an institution. It is assumed that though this is a big problem, it is not insoluble; with will power, enough effort, and etc. ...

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Reusing of the early twentieth century architecture heritage: Case in Trabzon

ÖZEN, Hamiyet BİRLİK, Süheyla *KTÜ, Department of Architecture, Trabzon, Turkey*

ABSTRACT

Early twentieth century built heritage had formed under modern architecture movement around the world. This movement also developed at the end of the Ottoman Empire and the early age of the young Turkish Republic as the First and Second National Architecture Movement in Turkey. Various types of building had been built and designed under the impact of these styles at the early part of twentieth century by Turkish and foreign architects.

The aim of this study is to emphasize the remarkable role of the early twentieth century built heritage for the contemporary urban places in Turkey as well as the other countries. Trabzon has been chosen as a case study because the city has only a few existing buildings from this period. Four important buildings are selected to address restoration and adapted reuse issues of the buildings. Today, these buildings are still in good conditions due to continued usage of their original and different functions. These buildings are Old Governor Office, Trabzon High School, Ziraat Bank Office and Costaki Mansion. All of these buildings locate the important node points in the city. Thus, both architectural features and the location of them are valuable for contemporary built environment. The study aims the analysis and demonstration of the architecture features of the each building. Further, it presents their role in the new urban environment both functional and physical terms.

Keywords: Heritage, Restoration, Reuse, Identity, Twentieth Century

Urban Identity and Heritage

Identity of a city is a total of the architecture heritage from its rich past. Each architecture periods add something to living urban places. Another word, the city is the collective memory of the past in term of social, economical, environmental and political aspects. According to Giedion "a city is the expression of the diversity of social relationships which have became fused into a single organism. Thus, eities are about the buildings, space and above all and people (1). Each important event and its heritage have valuable contribution to the identifiable spaces and an important role in continuity and future development of the sense places. The city itself is the collective memory of its people; and like memory it is associated with objects and people (2). Therefore, the identity of urban place can be considered the some of many incidents. Contemporarily, it has accepted that having harmonious of the buildings from the past helps to avoid monotonous urban environment.

Restoration and adapted reusing of the existing historic and old buildings have been very important aspect of the historic preservation last few decades in terms of conveying local identity. On the other hand, it has been realized that restoration of the historic buildings as a museum piece is not enough but also necessary to give them new functions. In this way, many historic structures find a new life with their new ways of usage. With this approach, the historic buildings from the past have chance to survive and continued their existed in the contemporary urban environment. This means that historic and old buildings from the different architecture styles can be able to coexist side by side in a harmony in the new urban places.

Historically, the buildings that human being has created over the years are constantly change functions under different the civilizations. For example, Greek and Roman temples became Christian churches and English monasteries were recycled as county houses. More recently, ninetiethcentury American mills and railway stations have been turned into shopping malls and hotels. Reusing existing buildings is, first and foremost, a matter of common-sense economics and it is a process that has gone on throughout history. In another word, the driving force behind the reuse was functional and financial (3).

Twentieth Century Architecture Heritage

Architecture concept and form have started to change with the industrial revolution end of the nineteenth century. The meaning of the architecture changed due to usage of the new materials such as glass, steel and concrete. These resulted in fundamental transformation in the way buildings were conceived in the mind of architects. Also in so many cases industrialization was considered the root of the problems and reason of the destruction in the built environment but yet it is also offered potential solutions. The brave new world of mass production inter-global travel, and instantaneous longdistance communication was given an elegant new architecture language (2). This architecture language that emerged out of the Industrial Revolution had constitute a wide range of alteration in the aesthetic of buildings. The usage of same forms and materials everywhere else in similar manners and concepts are resulted in creating identical built environment. This was the one of the negative phenomenon about it.

While late nineteenth and early twentieth century building heritage formed under modern architecture movement around the world, at the same times, this movement was developed at the end of Ottoman Empire and early age of the new Turkish Republic in Turkey as the First and the Second National Architecture movement the modern architecture. The First National Architectural Movement (1908-1927) (National Architectural Renaissance) was a revival and reinterpretation of Ottoman forms and details under the direction of the modern movement of European architecture. This movement has been also considered the first "modern movement" in Turkish architecture. Many administrative, educational and civic buildings have been designed under the impact of this movement. The leading architects of this movement was architect Kemalletin (1927), Vedat Tek (1930) and Guilio Mongeri (1928) (4-5).

After the World War I, with declaration of the Turkish Republic reconstruction of the nation had started under the modernization of the nation. The Second National Architecture Style (1927-1940) began with the works of Turkish and foreign architects. The main theme of this movement was the revival of the distinguish features of the Traditional Turkish House. Sedat Hakkı Eldem was the leader of this movement and Vedat Tek and Emin Onat were the follower of his footsteps. Recognizable characteristics of the Second National Architectural Movement were chipped stonewall or coated with, large eaves and usages of window proportion from traditional Turkish house (5).

Many German architects were invated by the government to help reestablishment of the cities at that time. They were Ernst Egli, Bruno Taut, Hans Poelzig and Bruno Zevi (5). Both Turkish and foreign architects designed significant public buildings such as school, hospital and administrative. Many of these buildings are still in use and stand out in very good conditions. This new architecture movement is the result of the social, economical and political system of that period in Turkey as well as the world.

Early Twentieth Century Architecture Heritage in Trabzon

Historically, Trabzon has been one of the important ports cities of the Black Sea Region. The city was founded in BC. 2000. Since than, many nations had come to Trabzon and established their civilization. These are Roman, Byzantine, Greek, Ottoman and Turkish republic (6). Therefore, the city has significant and diverse cultural heritage from its rich past.

There are three major historic districts and many single standing monumental buildings such as churches, mosques, fountains and houses in Trabzon. Thus, these diverse and continuous built environments have a significant impact on the urban identity of the city.

Three of these selected buildings are registered to national monument inventory list. Trabzon High school building is not register but it is an important building because it had designed by German architect Bruno Taut. Architecture features of the building reflect the typical characteristics of the International Style.

Kostaki Mansion

Kostaki Mansion is one of the most important historic houses of the city. The house designed by an Italian architect in the beginning of 1900's for Kostaki who was one of the riches Greek businessman during that time in Trabzon. Architecture and ornamentation of the house was under the impact of Neo-Renascence style. The building has 3 main floors and a basement and built by stone, brick, wood and with the traditional construction technequ. The building is a register to the national historic monument inventory list (Figure 1).





Figure 1. Views of Kostaki Mansion

Kostaki Mansion has changed the function and usage over the years such as Army Head quarter during the First War I, Russian consulate and Governors building. Further the building was taken over by the government in 1923 (7). After this it started to use a Girl Profession High School from 1937 to 1987. When the a Girl Profession High School moved to another building, Ministry of Culture took the building in 1987 and restored to be The Museum of Trabzon in 2001.

The plan and facades features of the building are very distinguished from the other houses in Trabzon. Beautiful paint and decorative elements are on wall surface and especially ornamentation of the ceilings has inspiration from Renascence. The entrance floor of the building has the living spaces, the first floor has the bedrooms and the roof has the rooms for the servants. The main entrance is in the east side of the building and from its garden. The steps lead the enterance to a small hall and after that rectangular large hall area comes. There is a nice two arms stair goes up to the musician balcony in the west of this hall.

Today, the entrance floor of the building has the ethnographic section of the museum. The rooms that dedicate to display the local cultural artifacts locate both side of the "L" shape corridor. There is a cafeteria in the west end of the main hall. Administrative spaces locate on the second floor. Archeological artifacts display at the basement and a conference room and other service spaces are also in this floor (Figure 2).



Figure 2. Plan of the entrance floor

The facades have characteristic stone works and a tower with the dome on it. The building can be easily perceived from a distance or upper section of the city.

Old Governor Office (New Cultural Center)

This building was built after the fire of the old wooden governors office building in 1926. New building designed by leaden architects Vedat and Kemalettin of the First National Architectural Movement (8). The building had started used as governor office buildings in 1931 until the new one was built in 1987. After this date, it had restored and opened as a cultural center under the control of the Ministry of Culture in 1992 (Figure 3).



Figure 3. Views of Old Governor Office building

The building is located in Ortahisar that is one of the most important historic districts of Trabzon. It surrounds with significant historic buildings such as Hüseyin Kazas Cultural Center that was the old prison building in the south the valley and historic bridge of Tabakhane in the east and the historic Ortahisar Mosque in the west side of building. The major inner city traffic road also passes at the front of it.

The building has rectangular plan form and 2 inner close courtyards that covered with glass. There is a dominant symmetry axis on the plan according to main entrance of the building. In the main floor, there is a staircase across the main entrance and offices, exhibit rooms and conference hall both side of the entrance space. In the second floor, there are office spaces. The ceiling of the building is very high (Figure 4).

The facades had characteristics elements of the First National Architecture Style or National Architectural Renaissance period. These are windows size and proportion, ornamentation on the top of the windows in the exterior, large eaves and construction technique.



Figure 4. The plan of the entrance floor

Trabzon High School

German Architect Bruno Taut designed the High School building in 1937. Bruno Taut was one of the modern architects and many of his buildings were designed under impact of the International Architectural Style that was the common architecture style during his era around the world. Taut had changed original the design and position of the building in order to preserve the historic magnolia tree. (9) (Figure 5). Today, magnolia tree stands out in the front garden of the building with magnificent look.

The flat roof with red tiled building extended on the hills of the city that was breaking into pieces like a calm and unified profile. With this appearance, it reflects many inspirations from his other buildings in Berlin and Japan and especially it had resembled Cottbus/Senftenberg School building in the southern Berlin.





Figure 5. Views of Trabzon High School

The courtyard that surrounded by wings of the building, long, compress, covered open steeps creates a tense composition. This courtyard has a beautiful view toward the Black Sea with main buildings, its wings and four historic plane trees. There is a rhythm in the windows order in the façades. In this context, windows are stand out as a single entity of the large façade surface and create an extensively tense surface. The windows with fixed shade devices look like unified plastic composition between two roofs. The shade devices prevent the direct sun light and at the same time convey the light goes trough the least far corners of the spaces by aid of the ceiling. Taut was developed this shade devices for Okura house in Japan. In addition to this, many architecture elements of Senftenberg buildings has used in this building (10).

The rhythmic arranged with the walls does no live corridors spaces empty. The main stairs above the main entrance is very comfortable and feels very natural. Direction with light and movement are the luxury elements of this plain school building (Figure 6).

There are not many changes on building especially the original red plaster was replaced with white one and the frame of windows was changed over the years.



Figure 6. The plan of the entrance floor

Ziraat Bank Office

The building locates on main traffic zone Maraş Avenue. It built under the impact of the Second National Architecture movement in 1950. There was a

church on the ame location before this building until 1948 (11). An important historic pedestrian street, kunduracılar is behind this building. The building is a register to the national historic monument inventory list.

Architecture characteristics of the building are the facades coating with chipped stone from the ruins of the old church, the square shape four columns in the entrance and their arch type connection. Besides this, the facades have symbolic and stylistic architectural element as a good proportion of the windows openings, large eaves, stairs that lead to the main entrance and the chipped stoned corners borders (Figure 7).

The plan of the building is and square form and has two stories and a basement. The main floor has service spaces and a stairs at the corner in this floor lead to the other floors. The top of the services spaces covered with glass to get light to inside (Figure 8).



Figure 7. View of Ziraat Bank building



Figure 8. The plan of the entrance floor

Simple restoration works has been done on the building over the years but the building has not change the function. It has design to be a bank and still use in same way. As the result of this, it is in good condition. This means that if the building able to keep its original function will not get destruct and to be continue to its existing.

Conclusion

The meaningful way or restoration of the old building is keeping their original function alive if it is possible and makes them a valuable part of the new urban environment. If the building has a functional and physical obsolescent, it requires a good restoration and adaptation of the new functions to it. In this way, old building can be a part of city as a living organism. Another word, reusing of the old building is a meaningful way of historic preservation today.

It is necessary to preserve the building from each period to have diverse living environment. Each building is a living evident of the past and they carry on significant cultural and historical heritage to contemporary built environment. The study shows that the city like Trabzon needs to protect its rich historic past as well as twentieth century architecture heritage because there are only a few buildings that can reflects characteristics of the this period. Thus, each building has its mission in the urban place.

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A callous diversion from a livable stage-set; the 75year story of a "high-market" street

Gaye BIROL, Murat ÇETİN Balıkesir University, Department of Architecture, TURKEY

Abstract

This study probes the relative decline in the quality of commerce in Balikesir in relation to its urban-architectonic stage. Milli Kuvvetler Street in Balıkesir, an astonishing insertion of 1916 into the organic town fabric, is examined in this paper. Its deviation from an urban space representing a new social model of Turkish Republic in the early 1920s towards a mediocre and untidy streetscape, has been of long interest particularly from the viewpoint of parallel processes of morphological and socio-economic transformation in small towns. This study aims to elucidate spatial dimensions of traditional commerce by investigating a small western Anatolian town and the evolution of its most exquisite linear space of its time and the first upper-class commercial street of Balıkesir. In a historical perspective (between 1920s and 1980s), the principles of the stage design of this social act or ritual in the city, whereby a Western European lifestyle is appropriated are examined for the purpose of discovering their relation with the ritual itself. Within the framework of morphological aspect of the townscape, urban effects of key interventions are analysed adopting methods of townscape analyses such as building heights, plot widths, sequential continuity of urban paths as well as figure-ground relationships in order to achieve a comprehensive understanding of the physical context in which the economic nucleus to flourish. Some results are noteworthy especially in the case of Balıkesir. It is suggested that the changes observed in the fabric of the square, building height and plot width might have negatively affected the rhythm of shopping activity. Environmental quality and appropriateness is evaluated retrospectively towards a better and vivid social life in the historic centre of the city of Balıkesir. Milli Kuvvetler Street is suggested as an urban generator to reactivate the social life in the city for a much more liveable Balıkesir.

Introduction

Enhancement o. human social experience has been slightly downplayed within the debates of 'sustainability of the city'. Therefore, economic sustainability and quality of human action in a city should be considered as complementary issues. Revitalisation of historic quarters should not only aim at sustaining their economic life but also improving public activity and movement in the streets. Regeneration of historic centres should also enhance as the quality of commercial activity, which constitute one of the main indicators of social life, that is to say the liveability of the town in the city.

Along this purpose, this paper probes the relative decline in the quality of commerce in Balikesir after 1950s in relation to its urban-architectonic stage. Milli Kuvvetler Street (this was named as İstasyon Street since it constituted the axis connecting Municipality Building into the Railway Station) in Balıkesir, an astonishing insertion of 1916 into the organic town fabric, is examined in this study.

It is observed that a significant alteration have gradually occurred in the physical layout of Milli Kuvvetler Street. Accordingly, it is assumed that such physical transformation may have contributed to the gradual decline in the quality of shopping activity along with other socio-economic input. To this aim, the relation between urban-architectural morphology of Milli Kuvvetler Street and urban ritual of shopping along the street is scrutinised.

Urban-architectural Morphology and Urban Ritual of Shopping

The deviation of Milli Kuvvetler Street (Figure 1) from an urban space representing a new social model of Turkish Republic in the early 1920s towards a mediocre and untidy streetscape, has been of long interest particularly from the viewpoint of parallel processes of morphological and socio-economic transformation in small towns throughout Western Anatolia.

This urban transformation is, at the same time, the transformation of both economic and social structure. Milli Kuvvetler Street has become a new axis physically and functionally detached from the traditional core of city, and one with shops that sell goods brought from other cities and countries as well as the one with bank buildings on its both sides particularly in 1940s and 1950s. Opening of the street and selling of imported goods on this new street were quite significant from the viewpoint that it was the generating point of the modernisation process in Baltkesir.

The ongoing socio-economic process in Balıkesir is examined in the light of various facts such as; overall economic change in Turkey, impacts

of global economy, and in particular, channelling of upper-middle income groups to out-of-town shopping areas (e.g. MM Migros, Gima) in Balıkesir. Due to the scarcity and deficiency of the historical documents, it was considered to be most appropriate method to follow the decrease from the newspaper adverts as well as headlines related to the economic context in the city between 1940 and 1960. The major parameters of the quality of economic and social life are assumed to be; amount of goods for uppermiddle class social groups, and that of import goods, availability of services, particularly for the early republican bourgeoisie in Western Turkey while their indicators are restricted to newspaper advertisements. Hence, the newspaper headlines showing considerable changes in these parameters are highlighted throughout this study. For instance, advertisements of various retailers such as those who sell exquisite hats, elegant fur coats and fashionable watches are typical manifestations of the quality of commercial life along Milli Kuvvetler Street around 1950s (Figure 2). At this point, it is of interest to understand how physical context support and enhance this positive quality of shopping.

Within the framework of morphological aspect of the townscape, urban effects of key interventions are analysed adopting methods developed by various scholars including Lynch and Curran (Lynch 1960, Curran 1983). Morphological aspects that can be considered to have influenced the quality of socio-economic life, are synthesised from above-mentioned references. Various townscape analyses are conducted such as building heights, plot widths, sequential continuity of urban paths as well as figure-ground relationships in order to achieve a comprehensive understanding of the physical context in which the economic nucleus to flourish. Some results are noteworthy especially for the fact that one could establish principles of the relative decline in the quality of shopping in the case of Balikesir. For instance, replacement of traditional bazaar (which appears to have been a collector space) with shopping arcade of 1950s (which became a distributor space) has significantly contributed to isolation of this street from the broader urban context and thus pedestrian movement. Moreover, removal of the first Municipality Building (which served as an urban magnet) seems to have caused the destruction of the continuity between the Zagnos Pasha Mosque and the Railway Station. This formation may have been accelerated by the domination of the node -Cumhuriyet Square- (a potential urban square) by traffic junction (round-about) in front of the Railway Station, particularly after the opening of Bursa-İzmir motorway. Furthermore, functionally and spatially (at least locationally) organised and differentiated trade groups for the control of tax (Bac) collection -which was a significant input in the commercial life of the town- had later been brought together in mix-use commercial buildings. This type of unification of these dispersed

commercial units may have reduced the human movement between these *nodes* through various *paths*. It is suggested that the changes observed in the fabric of the square, building height and plot width (hotels) may have negatively affected the rhythm of shopping activity.

This study elucidates spatial dimensions of traditional commerce by investigating a small western Anatolian town and the evolution of its most exquisite linear space of its time and the first upper-class commercial street of Balıkesir. In a historical perspective (starting from the early republican period until late 1980s -which represent the ramification of the post-modern consumerist era in less developed areas), the principles of the stage design of this social act or ritual in the city, whereby a Western European lifestyle is appropriated are examined for the purpose of discovering their relation with the ritual itself. However, visual materials of this formal analysis could not be totally illustrated due to the limitations regarding the space in this paper.

When the transformation of silhouettes on both sides of the street is analysed, one cannot fail to notice that the deformation in the proportion of width-to-height is so abrupt that the sense of "high-market street" is lost (Figure 3). Thus, one could observe that length of shopping period for individuals is profoundly reduced along the street. Moreover, the analysis of the transformation of plot widths also reveals that the regularity of the rhythm of shoppers is impaired to a great extent via enlargement of shop windows (Figure 4). Furthermore, continuity of shopping paths is interrupted with the deformation of figure-ground relationship as the basis of the web of shopping.

Some results are noteworthy especially in the case of Balıkesir. It is suggested that the changes observed in the fabric of the square, building height and plot width may have negatively affected the rhythm of shopping activity. Furthermore, web of shopping is stretched to such a great magnitude that a series of interruptions seem to have occurred. Additionally, insertion of web of vehicular traffic right into the heart of the former web also seems to have caused the destruction of the shopping fabric (thus social fabric) within the historic town centre.

Consequently, one can suggest that Milli Kuvvetler Street has been fragmented from the broader urban context with a series of misguided interventions since 1955.

At this point, master plan of 1944 by German architect and planner E.Egli arouses one's interest because of his humane approach (Egli 1944). The Egli plan (Figure 5) is examined as an attempt to heal and rehabilitate this disconnected network. As could be observed in his original drawings recently found in the municipal archives, Despite its modernist approaches

the plan exhibits an urbane attitude that brings human purpose, action and role forward in planning.

Human purpose which should be the essence of sustainable urban design seems to have been achieved by Egli plan to a certain extent.

However, various revisions have diverted the plan from its soul and seem to have become the catalyst for the retrogression process mainly after the 1950 fire. Despite its orthodox approaches, the modernist plan planning - quite similar to Jansen plan for Ankara in late 1920s - exhibits an urbane attitude that brings human purpose, action and role forward in planning as could be observed in his original drawings recently found in archives.

Conclusion

Although pitfalls of the analyses due to the scarcity of documents before 1940s can be discussed, the mojor principles behind the decline in the quality of shopping could be formulated as follows:

- 1. Length of shopping time is significantly decreased.
- 2. Rhythm of shopping has become quite irregular.
- 3. Continuity of shopping flow has been interrupted.

In relation to above-listed points, principles of urban-architectural transformation are further determined as follows respectively:

- 1. Silhouette of Milli Kuvvetler Street is irregularly and excessively raised at the cost of human scale.
- 2. Plot widths have been enlarged due to the widespread standards of display.
- 3. Figure-ground relation is drastically reversed at the peril of pedestrian continuity.

Hence, it is concluded that there is a clear and quite strong correlation between the principles of decline in the quality of shopping and that of physical environment. Consequently, it is proposed that highlighted matters should be improved to bring back the original quality of shopping to the street.

Environmental quality and appropriateness is evaluated retrospectively towards a better and vivid social life in the historic centre of the city of Balıkesir. In conclusion, following points can be stated as a guiding framework for planners and administrators of the city. Firstly, reconstruction of the triangular continuity of Egli Plan (triangular formation connecting commercial, religious, administrative and interchange centres; namely 17th century bazaar, 15th century mosque & late 19th century municipality, government, and mid-20th century railway station) with infill projects throughout the historical quarter. Secondly, (re)reversal of the figure-ground relationship for the design of better urban spaces so as to

achieve the revit lisation of human movement within the centre. Moreover, silhouette should be regulated to bring human scale to the street, and larger plot width should be further divided to give a sense of traditional high-market street. Milli Kuvvetler Street is suggested as an urban generator to reactivate the social life in the city for a much more liveable Balıkesir.

Figures









Figure 4



Figure 5

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Lighting the buildings around the city

Ramiz ABDÜLRAHİMOV, Mustafa KAVRAZ Karadeniz Technical University, Department of Architecture, Türkiye

Abstract

Light has always been an indispensable part of architecture, and throughout the ages of development it has been used as a tool to emphasise the forms of objects, to reveal the complex structural forms, their silhouettes and beauty. The invention of electricity and the development of electronic and automatic systems resulted in the development of different artificial light sources which are close to natural light. In using the daylight, it is not so easy to intervene with the lighting apart from constructing the building in the direction of the daylight. However, light can be directed to any place at night by using the required amount of artificial light at the desired place with the desired power, therefore the desired effect can be created.

The increase in buldings, streets, squares, parks, fountains, sculptures and landscapes of different functionality together with the development of urbanisation process has put the problem of regular night lighting on the agenda. In this paper, the problem of city lighting is considered as a whole. Lighting of a city can be achieved in two ways: lighting for urban values whose aesthetic dimension is of prime importance and lighting that provide a safety in environment at night. In this study, the choice of lighting types are considered depending on the functions of the buildings which form important parts of the city, their historical properties, purposes of use, forms, dimensions, etc. It was observed that depending on the situation, the following types of lighting are used: widespread lighting on the whole façade, lighting of the buildings from the interior. Also covered in this study are the types of perception of the façades depending on the placement of the light sources at different heights and distances.

In this study, the properties to which attention must be paid in the scope of the specified city lighting were presented in detail supported by visual material.

Key words: urban values, lighting, form, façade of a building
1. Introduction

From the early ages, lighting has been used by architects as a strong tool for the purpose of an effective appearance and a dynamic perception of the architectural compositions. Light arouse a sense of life and confidence as well as creating an opportunity for us to preserve the environment. In this context, light can be considered as a symbol of human life. The advances in electrical, electronic and automatic systems led to the development of artificial light sources whose spectrum is very close to that of natural light. Therefore, human beings are able to easily carry out what they used to in day light do under artificial lighting at night. The desired effect can be created on a building by directing the light source to a desired part with the desired power and size.

In this study, the basic components of night lighting are explained, and the color characteristics of the light that reveal the appearance of importance of buildings and areas in a city, emphasizing the aesthetic properties of a city through the level of light that techniques help people to travel and move safely and comfortably at nights.

2. The Indicators And Sources Of Artificial Lighting

The primary aims of artificial lighting are allowing people to perceive the environment by making them feel more comfortable without getting tired, easy movement, strengthening the architectural effect of buildings or monuments, security at night and economy in night lighting. Also in the perception under the effect of artificial lighting are the minimum perception of brightness, contrast and dazzle. The light levels of the façades change in proportion to their brightness. The brightness that the eyes receive depends on the real brightness, brightness contrast and adaptation of the eyes to the environment.

At small light levels the sensitivity of the eyes weakens, and as the light level increases so does the quality of the sight. This is because of the better perception of the difference of contrast among surfaces. As well as contrast, the light source which is used to light the surface is of paramount importance (Phillips, 1997). Reduction in or removing any of these indicators negatively affects the accurate perception of the surface.

2.1. Light Sources and Installing Lighting Tools

Contrary to natural lighting, artificial lighting can be controlled at an appropriate level and power suitable to the function of the building when creating the desired lighting composition. Places where the light sources are

to be mounted depend on the geometric forms and heights of the buildings. Geometric forms of the buildings comprise square, rectangle, polygon, cylinder, cross or some complex forms that are a mixture of such forms. In terms of their heights, buildings are divided into two categories as multistorey buildings and single-storey buildings. When lighting buildings, the brightness of their close surrounding and backgrounds must be taken into consideration (Öztürk, 1992).

Another way of establishing relationship between the buildings and their close surroundings or backgrounds is the "colour contrast." The light reflection coefficients of the colours of the materials used on the building surfaces and the shapes of the materials determine the quantity of light flux (Cayless & Marsden, 1991).

Depending on the function of the environment and buildings, light sources used at night architecture can be classified as street lighting, main road lighting, square lighting, boulevard lighting, shop window lighting, advertisement lighting, etc. Sodium and halogen projectors with different power levels are used in lighting the parks, tree branches, grass and the pools. Also used here are mercury-vapour lighting sources whose spectrum contains green light. Mercury-vapour lamps whose spectra have purple, blue, yellow and green lights are used in projectors that are utilised in lighting the façades and monuments at night. Such light sources provide narrow-angled, wide-angled, and equal light density distribution.

Appropriate installation of the light sources usually ensures less sharp overlaps of light and shades on buildings, less interference of the shades, less deformation of the decorations on façades, and less deformation of façade architecture. The locations where the projectors are to be fixed must be chosen in terms of the function of the building, its architecture, its proportions, its relation to its surroundings, etc. Projectors may be fixed on top of a street lamppost, or on top of a specially erected post or on top of a neighbouring building. On very high buildings, projectors are fitted on special metal sailovers which are fixed at certain heights. Depending on the situation, floodlights may be placed at the bottom of walls, behind flowerbeds and bushes, in pit holes, hidden from sight.

2.2. Lighting Forms of the Buildings

In lighting the buildings, indicators in terms of the functions of the building, the geometric form and proportions of the building, the colour, material, ornaments, etc. of the façade, the relation of the building to its close surrounding and background, presence of such areas as sea, lake and river, and its topographic position determine the types of lighting. The following are the lighting types: • **Diffuse lighting**: This technique provides uniformity in the amount of light around the building, but disperses the light which cannot emphasise certain aspects of shady building (work of relief, engraving, colour differences) and which produces a simple appearance. It can best be obtained with wide beam floodlights.

• **Highlighting:** Highlighting is achieved by sending light at the speed of middle lighting at an acute angle from above or from a certain angle using one or more projectors. It highlights the façade and colour details, but may not isolate the objects in the background. When the object is lit up by a single source it may both be illuminated strongly and shaded deeply (Lyons, 1992)

• **Back Lighting:** In this lighting technique, the light source is placed behind the object in order to create a shady vision effect and to illuminate the material in the back of the building. The surrounding of the building must be identified well. However, colour and physical characteristics are concealed by the dark.

Figure 1 shows the lighting of a building whose central part is highlighted by projectors at various heights and distances. Because the shadow of the façade of the highlighted mass illuminated by a single source from a single direction is sharp, the mentioned building which is illuminated by several light sources from a single direction is perceived more naturally if it catches the normal appearance of the building (Figure 1a). As in natural lighting, giving the building a soft light and shadow is achieved by lighting the building with several light sources of varying power from both sides of the building (Figures 1c, d).

An example to various perceptions of a certain composition under the varying effects of day and night lighting is given in Figure 2. The normal perception of three clock posts of different heights in daylight is given in Figure 2a, the different perceptions of the clocks at night under the effect of an inner light is given in Figure 2b, and the normal perception of the whole composition under the effect of the projectors that are placed at certain distances is given in Figure 2c (Abdülrahimov, 2001).



Figure 1. Lighting the façades in terms of the locations of light sources a. with single source from one direction, b. with multiple sources from one direction, c. with single source from two directions, d. with multiple sources from two directions



Figure 2. Perception of a clock post day and night lighting under different lighting types

3. Lighting Cities At Night

Today, lighting the cities at night is an indispensable part of modern life, and with recent positive developments it contributes to the beauty of the cities at night. Some buildings which seem not to be part of the city can be made to have a better relation to its surroundings, can be more positively perceived, and can be made part of the city by making their inner spaces seen from outside through successful and different lighting effects.

3.1. Important Components of Lighting the City

In general, in the night lighting of the important buildings in the city, the lighting must be as close to that of day lighting as possible. In addition, the necessary components and ornamets of the building must be highlighted when needed through the effects of artificial light sources. In terms of their values, historical buildings, art buildings and sites whose lighting are considered important can be listed as follows:

architectural and historical monuments, ornaments, historical sites,
public, social and cultural buildings,

important public squares, statues

and groups of statues, bridges, towers and public gardens,

pools, rivers,
waterfalls and fountains,

landscape design of living spaces and landscape

architecture,

windows of the shops and markets facing the main roads,
various night advertisements in the city.

Night lighting helps people to commute and carry out their social activities safely and comfortably, and which has no aesthetic contribution to the lighting of the city must be used for the lighting of such places as open fairs, airports, coach stations, train stations, sports areas, cultural parks, streets, main roads, parking spaces, etc. (Abdülrahimov, 2001).

3.2. Lighting Architectural and Historical Monuments

The architectural history of any city is reflected by its architectural monuments in the city build at different times. Such structure can be perceived under the artificial lighting sources with the same aesthetic values as if they are lit by day light. Successful lighting of the monuments, walls and historical ruins built at different times reveals the multi-cultural aspect of the city. If we consider the dark sky as the background, first the silhouettes of the monument must be foregrounded by lighting on this background. In addition, other architectural components such as arches, cornices, ornaments which are placed along the horizontal axes and heights must also be foregrouded by lighting. An example to the night lighting of the monuments is given in Figure 3. Some architectural elements, plastic composition and ornamental components of the monument which are not noticed under daylight may be noticed in more detail through lighting. However, miss application may result in the opposite.

3.3. Lighting Public, Social and Cultural Buildings

Public, social and in particular cultural buildings which are open to the public at night must be highlighted in the city through lighting. In contrast to their silent and calm appearance during the day, these buildings may contribute to the value of the city by making them the focus of attention through artificial lighting at night.

Research has shown that, depending on the situation, such buildings may be lit up by using the following methods; widespread along the whole façade,
lighting building elements
separately,
lighting the façades and different masses along the edges,
Lighting from interior

Lighting the façades with widespread light from above the building by using several floodlights and from certain distances is close to the day lighting, and it allows the natural perception of the building. If light sources are placed near the building or are lowered, a lighting similar to the lighting of the scenery at a theatre stage is obtained. As well as widespread lighting, original, abundant and more natural lighting is achieved through additional lighting of the building elements with hidden light sources. So, the recessed and cantoned elements and the plasticity of the façade are perceived. The floodlights should be placed by considering their distance from the façade, the height of the building and the power of the light source. Figure 4 shows examples to the buildings that are positively lit by widespread light.



Figure 3. Lighting the monuments at night

Lighting the façades alongside their edges is usually done during holidays for the purpose of adding a new appearance to the night lighting of the city. Such lighting does not aim to reflect the general architectural aspects of the building, but provides an opportunity for light sources to be placed along the contour, window and cornice elements. An example to such lighting is given in Figure 5.

In general, lighting the buildings from the interior is achieved by lighting window openings, main doors and frontons from the interior of the building through the use of hidden light sources. In such lighting, the viewers are given the details about the aspects of the façade. Figure 6 shows the lighting of the façades from the interior (Abdülrahimov, 2001; Güzer, 2001).



Figure 4. Lighting by widespread light



Figure 5. Lighting the façades alongside their edges



Figure 6. Lighting the buildings from the interior

The placement of the light sources should help not to perceive the façade ornaments incorrect and to keep the façade ornaments unharmed.

Lighting the public squares differs depending on the number of streets mercing to the square, the height of the buildings surrounding the square, the geometric shape, etc. of the square. If there is a building of a distinctive architecture in the square, special care should be given to its lighting.

With the effect of artificial lighting, the images of the buildings near rivers, pools and the seaside are reflected on the so-called reflector surfaces.

Hence, a special effect can be obtained. As well as reflecting on water surface, sometimes intensely and artificially polished stone, metal and glass surfaces, upright or slanted, can be used for this purpose. The images of the façades of different buildings on reflector surfaces are given in Figure 7.

Lighting the fountains and waterfalls is a technically and aesthetically complex problem. Lighting of a fountain shows variety depending on the various positions of the light source. In recent years, it has been possible to automaticly create color effects in accord to sound frequency on a "water wall" created by squirting pressurized water through pipes of different lengths and diameters.



Figure 7. The images of different buildings on reflector surfaces

Attention should be paid to the artificial lighting of monuments, important public buildings and their premises, resting areas, and all landscape. Lighting the buildings, landscape and recreation areas, and the perception of the masses should be considered together.

Lighting of the shop windows on the ground floors of the multi-storey buildings facing the streets and main roads should designed very carefully, and must be considered as part of the night lighting of the city. One of the most important tasks here is that the light sources should be hidden from the viewers, and that the level of lighting should be greater than the general lighting of the building in which they are. Various light sources used in lighting the shop windows from the interior are given in Figure 8.

Lit advertisements are important components of the night lighting of the city, and the power of the lighting tools and the sizes of the advertisements must be chosen by taking into consideration the width of the streets and roads where they are and the ratio of the surrounding buildings to each other. They must also be in harmony with the form, ratio, colour and brightness of the building on which they are placed. The more powerful the night lighting and brightness of the surrounding buildings and streets, the brighter the lit advertisements must be. Advertisements include moving, flashing, and informative types. Other types of lit advertisements are used at airports, bus and train stations, and sports centres. An important point in lighting the streets and main roads is that it provides a safe use of the pedestrian and vehicle roads. This must be achieved through the heights of the lighting posts, the distance between the posts and the type of the light sources. Depending on the category of the streets, the lighting posts may be placed in the center of the street, or on one side along the axis of the street, or on both sides of the street, or in a grid. Examples to the placement of the posts in streets and main roads are given in Figure 9 (Abdülrahimov, 2001).



Figure 8. Various light sources used in shop windows.

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b	<u></u>	d	<u>&</u>
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Figure 9. The placement of the posts along the streets a. Along the axis, b. On one side, c. On both sides, d. In a grid

4. Conclusions

In this study, it was emphasised that the night lighting of a city is an indispensable part of the modern architecture, that it contributes aestheticaly to the scenary of the city at night. In addition, the importance of night lighting, and the artificial lighting of the important historical and public buildings are explained. Moreover, lighting for the purpose of safe and comfortable commuting and social activities of people at night has also been dealt with. Such functional indicatiors as brightness in perception, dazzle, and contrast were explained in detail. It was pointed out that achieving a positive artificial lighting depends on the choice and placement of light sources and tools.

It was also emphasised that in deciding on the type of lighting the façades of the buildings, the various characteristics of the building such as the function of the building, its close surrounding, the materials used on the façades, the colour of the light, the geometric shape of the building, the architectural composition, the ratios, etc. are also important.

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Effects of coastal filled areas on Istanbul

Fatma Ayçim Türer Istanbul Technical University, Turkey

Abstract

Following the industralization and rapid urbanization period, among the cities experiencing the problem of insufficient public open area, it has been a great opportunity for the coastal settlements to utilize filling techniques and get their littoral open spaces back. Positive effects of filled areas on the quality of urban life cannot be undervalued when they are constructed by appropriate technologies and arranged by landscape principles, after the geological and ecological investigations.

In Istanbul, a comprehensive coastal filled bank with a length of 61 km exists. However, in an urban system the importance of coastal filled areas are not determined by their sizes but by their effectiveness on urban system.

In this study, Istanbul's coastal filled areas are investigated by considering their structural sustainability, sensitivenes to ecosystem, effectiveness on urban green system, transportation system, fiscal vitality, public satisfaction and urban identity.

1. Introduction

Throughout the history, water bodies have happened to be vigorous attraction points for human settlements. However, while the ways of benefiting from water bodies have severely changed by industralization, developments in transportation and altering life standarts caused by rapid urbanization, the coastal cities have faced with the problem of uncontrolled migratory movements, owing to their commercial and industrial labour opportunities. Subsequently, the public open spaces of these littoral cities have been densely built while the water bodies and strands have been devastated by human activities.

Necessity for coastal landfills comes about when littoral areas are unable to participate in urban open system and a reliable relationship between waterside and human can not be estalished. (Türer, 2003)

2. Process Preparing the Formations of Coastal Filled Areas in Istanbul

It is not right to consider filled areas as merely the new open spaces obtained from wetlands and consider the rearrangement of these filled areas as revitalization of waterfronts.

When we pay attention to how close are the urban waterfronts to the city center and how related are the downtown areas of the old urban structure to the new coastal formations, it is possible to consider arrangements of coastal filled areas as the reorganization of urban open space system.

By rapid industralization, Istanbul has experienced a fast increase in population and unplanned development. Uncontrolled development has created four main urban problems from which many diverse sub-problems are stemming;

• Decrease in the amount of open spaces by the impact of increasing real estate values,

 ∞ Rapid and uncontrolled construction of watersides,

 ∞ Existence of decaying central districts,

 ∞ Insufficient frontier for the city to expand.

In order to reduce these impacts of unplanned development and to adapt the littoral areas to functional urban system, construction of coastal filled areas considered to be necessary, in Istanbul.



Figure 1. Process Preparing the Formation of Coastal Filled Areas in Istanbul



Figure 2. Coastal Filled Areas of Istanbul

3. Coastal Filed Areas of Istanbul

Istanbul Metropoliten Municipality has started new urban studies after 1984 with the New Improvement Law period. Among these studies, projects related to rearrangement of decaying strands exist. By considering public profit, rearrangement of strands which had lost their public accessibility owing to the existence of densely constructed areas on the shores, has been the main goal of these littoral projects. During these littoral studies, beside the revitalization of former strands, a 61 km long coastal formation, from Avcilar to Tuzla, has been constructed for the city by using the filling techniques.(Türer, 1999)

4. Criteria Related to Effectiveness of Coastal Filled Areas on Urban System, Case of Istanbul

In Istanbul, a comprehensive coastal filled bank with a total area of 3.025.445 m2 exists. These filled areas contain 17.58% of active urban green areas. (Türer, 2003) However, in an urban system the importance of coastal filled areas are not determined by their sizes but by the criteria of structural sustainability, sensitivenes to ecosystem, effectiveness on urban open system, economic vitality, and urban identity. Filled areas have a power to reorganize urban open system. (Figure3)

Initial stage of the landscape studies is to define main goals accurately, and determine the appropriate utility areas which are capable of serving these goals. Design is to settle these defined utility areas with the most suitable, functional and esthetical way. Main goal of waterside arrangements is to establish a reliable relationship between waterside and human beings. Necessity for coastal landfills comes about when littoral areas are unable to participate in urban open system and a reliable relationship between waterside and human can not be established. (Türer, 2003).



Figure 3. Effects of Coastal Filled Areas on Urban System

333

4.1. Structural Sustainability

Structural sustainability depends on the coastal filled areas' capacity to carry on their existence and sturdy conditions, for the benefit of public services standing on them.

Construction techniques for waterfront reclaimation depend on the intended use of the new land and physical conditions of the site such as its geology, landform, depth of water, currents, tidal range and weather.

In regions of seismic activity, whether they are littoral or not, filled areas arc susceptible to earthquake damage. Areas experiencing different geological formations from each other, experience different seismic motions. Soft lacustrine, alluvial and marine deposits can amplify seismic ground motion relative to the amplitude and frequency of the shaking. Therefore urban areas developed on coastal landfills may be under a risk of earthquake damage, related to their construction techniques and geological formations of the former watersides which they are attached to.(Kaptasli, 2003)

When we deal with the subject in Istanbul, along its waterfront, the city experience 8 different geological formations. However, at the construction techniques of coastal filled areas, this differentiation is missing. During their construction, rocks from quarries are used as a filling material, which is a better selection than many other metropolitans have made. Although, their construction materials are not weak, lack of consideration of geological formations creates a negative impact on their structural sustainability.

In some low-lying coastal areas, even in places outside the regions of major seismic activity, eathquakes may bring disaster in the form of tsunamis. These huge sea waves sometimes can traverse enormous oceanic distances wreaking havoc far from the epicentres of the earthquakes which generate them. Much more common are storm surges and waves which can cause extensive coastal flooding and serious erosion. These events remind us that land won from the sea has to be kept intact against an enemy which never tires and, on exposed shores, massive sea defence works may be required to protect urban areas which are developed on reclaimed land. (Hudson,1996)

Although they have been constructed according to scientific investigations, during the construction of Istanbul's coastal filled areas, tsunami's effects were not sufficiently considered. Public anxiety about coastal landfills' structural sustainability has amplified since Kocaeli Earthquake. However, the chance of Istanbul's coastal filled areas is that, unlike many metropolitans experiencing waterfront reclaimation process, construction of residences and buildings are forbidden on them, because they are owned by government. Structural sustainability is especially important for a funtional urban system because many public services with urbanwide importance are standing over them. (Figure 3)

4.2. Sensitiveness to Ecosystem

Sensitiveness to ecosystem depends on the ability of coastal filled areas to minimize their negative impacts on the environment. Undoubtedly, coastal filled areas have drastic effects on the natural environment. However, most obvious effect of their construction, is on aquatic environment. Construction of landfills alter the behaviour of waves and currents. By the construction of landfills, a reduction appears in the area of enclosed water surface. As this reduction shortens the fetch, wave amplitude is reduced. During the reclamation process, constriction of channels may boost to amplify waves, tides and increase current velocities, especially in the lakes, estuaries and bays. (Kaptaşlı, 2003)

By changing the construction of the shoreline, reclamation cannot only divert current flows but may also alter wave refraction patterns, possibly resulting in the concentration of wave energy on some shores.Reclamation does not necessarily increase the velocity of currents and heights of waves, the extension of land into the sea can create areas of stagnant water which may have undesirable consequences such as silting and pollution. (Hudson, 1996)

The diminution of water surface area and volume reduces a water body's ability to moderate the local climate, including the generation of sea and land breezes, thus increasing the possibility of air pollution. Besides its effect on air pollution, a water body reduced by reclaimation, may lose its capacity to maintain adequate oxygen levels and assimilate waste, adversely affecting the ecology and contributing to problems of water pollution. (Hudson, 1996)

In the aquatic environments, the richest ecosystems exist at the shallow waters, existing nearby the natural watersides. Therefore the landfills along the waterfront stand on the former richest ecosystems.

When we deal with the subject in Istanbul, along its new 61 km long coastal formation, the city extends itself 50 metres toward the sea. Although coastal filled areas are constructed according to the scientific investigations and after 1997 by considering the Environmental Impact Assessment, it is impossible to get rid of all the negative impacts of this construction on the natural environment. However, Istanbul owns the advantages of its geographical condition. For example, owing to the changeable salt density of Marmara Sea, diverse currents are formed in the sea, which purifies the water. By acting as a wind corridor, to some extend, Bosporus prevents air pollution.

4.3. Historical and Cultural Sensitiveness

As they are new additions to the existing urban system, coastal filled areas are need to be compatible with the urban images. Acceptability of these new open spaces by public, is related to their sensitiveness to cultural origins. Owing to their longitude and linear formation, coastal landfills experience different districts along the waterfront. In the districts that have historical background, coastal filled areas need to be harmonious with them and tempt to increase their cultural qualifications. The Golden Horn case study in Istanbul is a successful one for showing the unification of coastal filled areas with revitalization of derelict urban structure.

4.4. Effectiveness on Transportation

A wide range of transport related facilities is accomodated on littoral areas. Docks and related port facilities are obvious examples; however, airports, roads and railways are very often built on reclaimed land. (Hudson,1996)

In order to upgrade functional capacity of urban system, it is necessary support transportation system. In the littoral cities experiencing rapid and uncontrolled development, mostly the main aim of waterfront reclamation is to open new transportation lines along the waterfront and reorganize the urban transportation system. However, these new railways and by-pass routes along the waterfront may cut off the city form its waterfront, by reducing the public access coming from the terrestrial regions to littoral areas. Therefore, for supporting the public access from terrestrial regions, robust transportation lines perpendicular to the city's waterfront are necessary. Pedestrian access is an important factor for public satisfaction and security. (Figure 3)

The disadvantage of Istanbul's coastal filled areas is that, unlike the majority of other urban open spaces, they are not surrounded by settlements and they remained away from the existing settlements by robust transportation lines. Pedestrian access is not appropriately provided. While these factor unifies with the longitude of coastal landfills, waterfronts transform into public spaces vulnerable to vandalism.

4.5. Effectiveness on Urban Spatial Development

Once a settlement is established, its scale, direction and form of growth usually indicate responses to several factors, commonly reflecting interaction between physical conditions and socio – economic forces. In

waterfront cities, the major physical characteristic is the water frontier. (Hudson,1996)

Istanbul has a shortage of land for development. While the city has completed its expansion along the waterside, it is going to expand to the northern regions where the forests and water basins exist. Reclamation increases the spatial and scenic quality of waterfront. When it is combined with the derelict littoral areas' revitalization, waterfront reclamation have the capability to take investors' attention to qualified littoral areas rather than northern regions. There are some examples of giving new functions to background. the buildings having historical such as Sutluce Slaughterhouse's transformation to a cultural center and Cibali Cigarette Factory's transformation to Kadir Has Universiy.

4.6. Effectiveness on Urban Green System

Using reclaimed areas in urban green system, overlaps littoral images, while it is also providing the recreational needs of citizens and increasing the public satisfaction. In the Governing of Planning Principles, quantity of active urban green areas is defined to be 10 m2 per head and out of the municipality area's borders it is defined to be 14 m" per head. However, in Istanbul the amount of active green areas is just 1.9 m2 per head. (Aksoy, 2001) In such a city where the amount of active green areas is so insufficient, existence of coastal filled areas with a proportion of 0.32 m"/person is an important point that should be taken into consideration. However, for sustainable landscape arrangements, severe environmental factors should be taken into consideration and hard - soft landscape elements durable to this severe microclimate should be used. Especially in metropolitans, coastal filled areas are densely used by citizens. Unified effect of microclimate and usage, establish open spaces vulnerable to deformation. Therefore for the sustainability of green spaces, it is necessary to obtain permanent maintanence and repair. Unification of maintenance and repair, gives the impression to public; "you and your public areas are respected". By this impression, citizens tempt to adopt and protect their public open areas. (Turer, 2003) Self-control of public is the key point to sustain the open spaces that have severe environmental factors.

4.7. Effectiveness in Fiscal Vitality

Coastal filled areas, increases the spatial and scenic quality of to littoral areas. Therefore, new investment opportunities appears at waterfront. Investments such as new luxury settlements, tourism centers, marinas for sea recreation, revitalization of old littoral buildings reach the waterfront.

Owing to its effectiveness on transportation system, reclaimed waterfront supports the functional capacity of urban system, which is also effective on urban-wide fiscal vitality. In Istanbul, by the increase of spatial and scenic quality of littoral areas, real-estate values have increased, new tourism centers such as - Galeria, new settlements - such as Atakoy and revitalization projects related to the derelict littoral areas - such as the Golden Horn.

4.8. Effectiveness on Public Satisfaction

When the urban system is responsive to public's needs/demands and is still functional, public satisfaction can be obtained. Coastal filled areas have an improving capacity for urban problems, by their spatial, social, cultural and fiscal effects. However, for obtaining an urban-wide public satisfaction, a great knowledge about urban system, planning - design principles of coastal filled areas, a comprehensive maintenance and management on reclaimed areas are necessary. Especially in metropolitans where there are different people with different needs, it is necessary to analyse waterfront visitors' profile. So that the needs and demands of their citizens are satisfied.

4.9. Effectiveness on Urban Identity

Coastal landfills have spatial, social, cultural, economic and ecological effects on urban identity. If they are correctly used in urban system, they have the capability to direct city's extension, to respond citizens social needs, to improve cultural values and create an urban-wide fiscal vitality.

5. Conclusion

Transformation power of coastal filled areas alone is not sufficient to establish an urban-wide alteration, unless it is used together with other transformation tools of urban system.

In order to reduce impacts of uncontrolled development and to adapt the littoral areas to functional urban system, construction of coastal filled areas considered to be necessary, in Istanbul. Reclaimed waterfronts, have had positive impacts on decayed littoral areas, urban green system, transportation system, investment opportunities, urban expansion, urban-littoral identity and public satisfaction. However, it is necessary to improve these impacts by benefiting from experiences.

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The aesthetic and functional expectations of the community from a city park and its reflection to design: a study on Bursa Soğanlı City Park

Bahar Başcr Istanbul Technical University, Turkey

Abstract

For the succesful urban greenstructure planning green areas should not recognized as isolated areas and it should not forgetten that greenspaces are important parts of the cities and they are living spaces. The city parks, which developed and planned in the context of urban planning and greensystem, should have an integration with people living around there (WOUDSTRA, 2000). Bursa Soğanlı City Park that is our study area has been planned in the frame of Bursa greenbelt project and designed as a city park for the purpose of answering the recreational needs of Bursa's citizens. In this paper Soğanlı City Park will be evaluated with regard to accessibility, uses & activities, comfort & image, sociability that was defined as the criterias of the community expectations from public spaces.

1.Introduction

City parks are green areas which response the recreational needs of people from different social, cultural and economical structure. City parks, which answer people needs such as relaxing, enjoing, sporting, being with nature, reduces the impacts of city life making it felt more day by day. Moreover, apart from their cultural and educational benefits these open spaces are the areas reinforcing the social relationships among people (WOUDSTRA,2000). City parks having different scales and functions are the local management service areas for public use and to answer recreational needs of citizens (FOGG,1981),.

The city parks, which developed and planned in the context of urban planning and greensystem, should have an integration with people living around there (WOUDSTRA, 2000). When they establish powerful relations with people who live there, city parks will perfectly serve. At that point, the expectations of the community from these places and the providing to people needs of the park project are quite important.

A succesful city park has to have two main qualities. First is the strong and flexible design, second is to have several activities (RUTLEDGE,1986) providing socialization among citizens, giving the sense of sharing place with other people, encouraging and organizing the usage of open space. When people describe a place they enjoy, words like 'safe', 'fun', 'charming' and 'welcoming' tend to come up repeatedly. These type of adjectives describe the intangible qualities of a particular space in subjective aspect (MADDEN, 2001). As we analyse intangible qualities objectively we have found four key qualities of successful public spaces:

- Accessibility (Access & Linkage)
- Uses and Activities
- Comfort & Image
- Sociability (MADDEN, 2001)

Apart from the ecological benefits, city parks should be planned to provide spaces for several open space activities such as sporting, walking, cycling, eating, learning (cultural act.), relaxing etc. Moreover, city parks should give opportunities and provide spaces to experienced nature by city people.

Bursa Soğanlı City Park, which is our study area, has been planned in the frame of Bursa greenbelt project and designed as a city park for the purpose of answering the recreational needs of Bursa's citizens.

2. The Analysis of Bursa Soğanlı City Park

Bursa Soğanlı City Park, which is located on the northwest of the city center and covered 320.000 m² area next to the Bursa freeway, also because of its location Bursa Plain has been protected negative effect of urban extention. In the urbanization process, Soğanlı City Park starting to serve people in 1998 had been organized to add new cultural and recreational areas, to connect the plain and city with the various samples of natural living cultures. In the design of Soğanlı City Park the main idea or theme is to introduce the culture of nature to Bursa's citizens. In addition the culture of nature theme, socio-cultural activities, relaxing, enjoying and sporting facilities also exist in the park. In the context of the park design, these activities had been arranged according to the zoning principles on the whole area. These activities had been gathered in seven groups (Figure 1.).

1.Access and circulation

2. Theme gardens

- 3. Authentic Bursa Houses
- 4. Recreational areas (Surrounding of the pool and green areas)
- 5. Sports areas

6. Children play areas

7. Service areas (toilets, cafe)



Figure 1. The existing plan of Soğanlı City Park (BAŞER, 2002)

2.1. Access and Circulation

In Soğanlı City Park locating next to the Bursa-İzmir freeway three main entrance areas had been designed. There are two accesses on the northwest and south sides of the park; one more entrance is on the east part of the park. There are three car park areas on the each entrance for 550 numbers of cars. The most used entrance is the south gate, but the usage densities of the other entrances are changeable depending on the purposes and directions of the users. The south and northwest entrances had been connected with a pedestrian trail that marked by Linden Trees (Tilia argentea) and a small water-play pool exists at the center of the axis. The second pedestrian trail starting from the east access ending on the water-play pool had been emphasized by plane trees (Platanus x acerifolia), which is the one of the symbol of the city. The third axis, which defined as the bicycle trail, is able to reach to all functional areas. Bicycle trail had been designed in natural forms and emphasized with the Maple Trees (Acer saccarinum).

2.2. Theme Gardens

Theme gardens locating the south-west part of the park and covering 50.000 m^2 area consist of Japanase Garden, French Garden, English Garden, Azalea-Rhododendron Garden, Rose Garden, Coloured Garden, Fragrant Plants Garden, Rock Garden, Pine Trees collection, Formed Plants Garden, Oak Trees collection, Fruit Trees Garden. Apart from that, for the sericulture that is a part of the historical culture of Bursa, mulberry tree area

and a miniaturized silkwarm plant had been designed with the purpose of representation of the historical living resources to Bursa's citizens.

2.3. Authentic Bursa Houses

Next to the south entrance, the infallible application of famous traditional five Bursa houses such as Halici İzzet Evi, Havuzlu Konak, Çift Bacalı Ev, Abdulvahap Evi has been built around an authentic Bursa Square. The houses have been organized for accomodation, eating and drinking facilities. The aim of the area is to represent the historic architectural samples to the citizens of Bursa City.

2.4. Recreational Areas

The recreational areas had been designed especially at the surroundings of the ponds and on the green areas located on the south of the big pond. These areas enable being with nature and relaxing in the silent and natural environment of the park.

2.5. Sports Areas

The bicycle trail and walking trail had been organized to encourage healthylife sports in the area. Sporting facilities had been settled as suitable for the natural characteristics of the park and the solutions, which are harmonious with nature, had been used in the construction materials and details.

2.6. Children Play Areas

From the aspect of accessibility on the whole design, children play areas had been placed on the areas, which are closed to the southwest and east entrance and their locations, are away from the cultural activity areas.

2.7. Service Areas

There are five toilets, a management building, a cafe, three buffets and a bicycle-renting center in the park. The solutions of the architectural details and materials of these buildings are harmonious with nature.

3. The Evaluation of Soğanlı City Park From the Aspect of Community Expectations

In this part, Soğanlı City Park will be evaluated with regard to accessibility, uses & activities, comfort & image, sociability that was defined as the criterias of the community expectations from public spaces. The evaluation results will be based on the data obtained from the survey, which is made in the area with fifty users. (In summer, weekdays and weekend)





3.1. Accessibility

The evaluation of a city park from the point of view accessibility criterias might be dealt with in two aspects. The first is accessibility from the neighbourhoods to the park; the second is accessibility among different functional areas. Because Soğanlı City Park locates next to the Bursa freeway and it can be perceived from the road, demand of reaching to the park increases. Besides, being closed to the city center and having easily accessible position can be evaluated as an advantage for the park.

According to the results of questionnaires, apart from the 68 % people coming from Bursa, 28 % people comes from Istanbul and % 4 people from other cities (Table 1.). The reasons are mainly the location being closed to the freeway and easily accessible position of the park.

Table 1: Distrubution of the users according to the cities (BAŞER,2002)

Cities	Percentages (%)
Bursa	68
İstanbul	28
Others	4

Walking trail and bicycle trails, which can reach to the all functions easily, had provided the accessibility inside the park. In conclusion, it might be said that the park has shown a good quality with regard to accessibility from outside to the park and among the functions inside of the park.

3.2. Uses and Activities

For remaining as continuous living green areas, the most important condition of a city park is to have different using forms which encourages the usage of open spaces (ARRIOLA, 1998). Bursa Soğanlı City Park, which is different from other parks in Bursa, has various activity areas which present the local culture and designed with the aim of providing that city has been owned by the citizens in the frame of nature and culture theme.

Besides, there are recreational areas, cafes, sports areas, children play areas and service areas for relaxing, enjoying and sporting. According to the evaluation results in the context of uses and activities, the purpose of the park users are 56% to be within the natural environment and recreation, 14% for the natural beauty of the park, 12% strolling with their children, 12% sporting, 4% social meeting (Table 2.).

Access Reason	Pecentages (%)
To be within the natural env.	28
Recreation	28
Natural beauty	14
Sporting	12
Walking with children	12
Meeting with friends	4
Others	2

Table 2: Access reasons of the users (BASER,2002)

From the aesthetical and functional point of wiew, users are quite satisfied from the entrances, trails, recreational areas, children play areas, theme gardens and service facilities. The percentages of the results can be seen in Table 3. Apart from that, the most preferred areas are ponds and recreational areas around them with the 42 %, theme parks have 16 % percentage, and sports areas 16 %, walking trails 10 %, green areas 10 %, children playgrounds 6 % (Table 4).

Fuction Area	Functionally Efficient (%)	Aesthetically Efficient (%)
Entrances	92	84
Pedestrian Trails	98	99
Recreational Areas	86	96
Children Play Areas	78	92
Sports Areas	94	98
Theme Parks	99	98
Service Areas	62	90

Table 3: Aesthetical and functional efficiency percentages (BAŞER,2002)

Tablo 4: Distribution of the preferences of usage areas (BAŞER,2002)

Prefered usage area	Percentages (%)
Surroundings of the ponds	42
Theme Gardens	16
Sports Areas	16
Children Play Areas	6
Walking Trails	10
Green Spaces	10

Users had pointed out the insufficiency of the cafes and children play areas especially in summer seasons and at weekends. But, because the park had been designed with the natural and cultural theme, these functions should be harmonious with the theme. Therefore, the cafes and children play areas designed for providing user needs in optimum degree. Besides, 22 percent of the people had negative opinion about the social activities. But, according to the planning objectives of the park that kind of activities has been organized permanently in different seasons each year. In the interviews, 14 percent of the person had determined the insufficiency of sports areas. Because of planning principles of Soğanlı City Park, only personal sports have been organized on the park area instead of the collective sports (Table 5).

Negative Features	Percentages (%)
Cafe ,buffet etc.	32
Social Activities	22
Sports areas	14
Children Play Equipments	8
Maintenance	12
Safety	6
Others	6

Table 5. Negative Features of the park (BAŞER,2002)

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3.3. Comfort and Imaje

Because Soğanlı City Park was designed with the natural approach, organic forms were used in design. Due to the level topography of the park area, the artificial slopes had been designed between the functional areas to create physical and visual boundaries and to change the monotonious ground surface of the park. These slopes have a natural characteristic in the scale, width and high.

The equipments of the park, pavements, benches, lighting elements, shelters, pergolas, sign and information boards are quite successfull because their location, materials, styles, forms and textures are harmonious with the natural characteristics of the site. Furthermore, these elements had been chosen by considering the risk of vandalism. The results of survey have shown that users are quite satisfied from the equipments either aesthetically or functionally (Table 6).

According to the observations, which were made in the area, on the urban furnitures there are no damages that proceed from vandalism. That result can be shown as an indicator for the owning of the park by the citizens of Bursa.

Equipments of the park	Functionally and Aesthetically Efficient Percentage (%)
Pavements	98
Benches	82
Lighting elements	76
Shelters	72
Sign and information boards	76
Cafes, toilets	74
Water elements	88

Table 6: Efficiency of the equipments in the park (BAŞER,2002)

The results of survey are shown that, the most important reason of liking and choosing Soğanlı City Park is its natural characteristics and being closed to the nature with the percentage of 68%, the other important reason that is having comfortable environment with the percentage of 23 % (Table 7). That conclusion shows us natural and cultural theme of the park had been created successfully in the park and visual and functional image of the park is quite effective on the people mind.

Liking features	Percentage (%)
Being Natural	68
Being Comfortable	23
Social Activities	4
Sports Facilities	3
Park Environment	2

Table 7: The distribution of liking features of the park (BAŞER,2002)

3.4. Socialization

Even though a park has a perfect design aesthetically, if the park does not have the social activities which provide remaining as continuous living green areas and having different usages which encourages the using of open spaces it is impossible that joining urbanization process for that city park.

In Bursa Soğanlı City Park, social activities and programs which can be effective on establishing interaction between human and environment organized by local managements and community organizations.

Because of Tulip Festival, which was organized every year approximately 200-250.000 tulips were planted in the park. Furthermore, various spaces had been designed for table tennis, running competitions, bicycling tours, and activities enabling the socialization. In addition that, Bursa Soğanlı City Park was the place which accomodated people in day and night after "August 17 Earthquake".

4. Conclusions

As the expectations and needs of people has formed the space as, also the aesthetical and functional potentials of the space has affected the people demands (BASER, 2002).

With its natural and cultural theme Bursa Soğanlı City Park introduces the historical and traditional characteristics of Bursa to the community. Apart from that, the park provides the recreational needs of people by uses and activities areas such us relaxing, sporting, sporting and enjoying. Soğanlı City Park presents various opportunities for meeting and acting in that place, thus the citizens has owned the park before the city later.

Soğanlı City Park should be taken as a sample for the city parks (especially for designed in the future) because of its accessibility, having different activities and uses, introducing the nature and local culture, containing comfortable urban furnitures, enabling socialization and reflecting the city image successfully. In this context, Bursa Soğanlı Botanical Park is a good example as an indicator for city parks designed with a conscious approach and planned according to the needs and expectations of city people.

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Research on the recreational use of Ankara Atatürk Orman Çiftliği

Dicle OĞUZ

Ankara University, Faculty of Agriculture, Department of Landscape Architecture, Ankara, Turkey

Abstract

In the 21st century one of the main problems that developing countries face is the rapid urbanisation. This subject rapid urbanisation has various negative effects on open-green areas and also on agricultural lands. The amount of open-green areas that are stuck and divided between the built up areas has decreased enormously by the urban expansion. The urban development of Ankara is actually a specific example of this phenomenon. The rapid urbanisation has been the reason of the necessity for using the decreasing urban green areas effectively. There is a direct correlation between the effective use of the open-green areas and the sufficiency of these areas in fulfilling the needs of the people. Since the recreational needs and the behaviours of the users change by time, the institutions which arrange the urban recreation programs should be aware of this fact. Atatürk Orman Cifligi (AOC) was selected as the case area for this research, as it is one of the main areas with an important recreational potential. AOC which has been initially established as an urban farm, at the same time has been used intensively by the residents of Ankara as a recreational ground. Through this research the current use of AOC as well as its performance have been investigated via the techniques of questionnaire survey filled up by AOC users and face to face interviews held by AOC management authority. The subject questionnaires have been prepared so as to clarify the points such as; the AOC's qualifications of which the users are aware of, user satisfaction and problems, users' expectations and also their further recommendations. In addition to these, the questions have been asked to the management authority so as to define the level of AOC's main functions as a "city farm" and a "recreational ground", and how the management authority plans to sustain these functions. These interviews have also been used to clarify the points of how the AOC management authority defines the problems of the area and what their plans and projects are for the future of it. Based upon the findings gained from these techniques, recommendations have been made for the effective land-use and re-organisation of AOC.

Introduction

In the 21st century one of the main problems that developing countries face is the rapid urbanisation. This subject rapid urbanisation has various negative effects on open-green areas and also on agricultural lands. The amount of open-green areas that are stuck and divided between the built up areas has decreased enormously by the urban expansion. The urban development of Ankara is actually a specific example of this phenomenon. The city of Ankara has expanded from 250 hectares to an area of approximately 80 000 hectares from 1920s to 1990s and its population has increased a 100 times. However the plans could not provide the same increase for green spaces (Öztan 1991).

Although the need to open-green areas in the city increases gradually, the effective use of these areas by the residents decrease due to the development of city macroform. The fall in open-green area proportion per person leads to the must of using the existing green areas with the maximum performance.

Another important effect of urbanisation on the use of open-green areas is that it creates the loss of the agricultural lands that are close to the city centre. Every year the agricultural lands gradually decrease, fruit and vegetable gardens as well as field crop production areas located within or close to the city area disappear day by day (Atasagun 1962; In Yavuz 1980). "...The improvement of the urban environment is a prerequisite for protecting the countryside. Developing greener urban environments is a key component of sustainable development (Greening the City: Guide to Good Practice 1996). The existence and the protection of not only the agricultural lands, that allows the connection of places around the city to the city centre, but also the open and green areas are the key factors for the sustainability of city life and urbanisation. These areas have an important function for the protection of city's soil, air and water circles on ecological basis and on the other side they also have social and cultural functions since they provide new opportunities for the recreational needs of the citizens. For Ankara, Atatürk Orman Çiftliği (AOÇ) is a crucial open-green area since it obtains ecological, social as well as cultural functions. AOC was established in 1925 as a city farm from which the farmers of that time would learn the modern agricultural techniques. Now it covers the area of 3300 hectare which extends to the centre of the city. From the beginning of its formation, AOC functioned not only as a modern farm for the farmers but also as a recreational area for the citizens of Ankara.

This research aims to investigate how AOÇ today sustains its two main functions as a "city farm" and a "recreational area", and aims to appraise the current use of the area. Through the techniques of questionnaire surveys and interviews, this research also aims to make recommendations on the possible precautions that should be taken for the better use of AOÇ as a more effective public open-space.

Materials and Methods

The research materials are based upon the questionnaires, filled up by AOÇ users, and interviews held by AOÇ management authority.

The subject questionnaires have been prepared so as to clarify the points such as; the AOÇ's qualifications of which the users are aware of, user satisfaction and the problems they face up with, users' expectations and also their further recommendations. Questionnaire survey is applied to AOÇ users on site in all geographical areas open to public. Random sampling method is used and the sampling size is 300 that is determined as the 0.003% of the total number of the visitors that are using the site in June 2002. The user survey is conducted in daytime on weekdays and weekends during a month period of July. For the statistical analysis of the results Chi-square test is used.

The related information has been collected from AOÇ management authority via interviews. The questions have been asked to the management authority so as to define the level of AOÇ 's main functions as a "city farm" and a "recreational ground", and how the management authority plans to sustain these functions. These interviews have also been used to clarify the points of how the AOÇ management authority defines the problems of the area and what their plans and projects are for the future of it.

During the appraisal of the open-green area use the related parameters have been selected as; effective service area, the size of the area, functions of the activities and the services.

Results and Discussion

Effective service area of AOÇ

There is a close relationship amongst the place, accessibility and the use of the open green areas. According to Alexander et al. (1977) people tend to use the green areas that are close to their living environment (Yuen 1996). Proximity from this perspective is a value quality in the open space experience that "pull" or "attract" respondents to the open space. Hatry and Dunn (1971) state that if all other indicators are the same, the more the user is away from the service the less he tends to use it (Beler 1993). On the other hand, some of the researchers advocate the importance of the quality criteria as well as the closeness and accessibility. Lineberry (1977) states that the quality factor is an important indicator for using the recreational services and consequently Forster (1989) believes that people tend to travel long distances if they believe that they receive more qualified service than usual.

AOÇ users have been asked so as to define whether AOÇ is an attractive place for the users and also figure out which parts of the city AOÇ serves mostly.

Due to the questionnaire results, the total of 292 users answering this question are from 30 different parts of the city. When the distribution among these 30 places are clarified, it has been concluded that the highest number of users comes from Çankaya district with 32% and secondly 29% comes from Yenimahalle district. The areas of AOÇ that are open to public are within the territory of Yenimahalle municipality. Therefore it has been concluded that the users do not necessarily come from the same environment but also travel in the city to reach the area. Due to this factor, it has been understood that AOÇ has gained a centralised function in the city and has been perceived as an attractive place, therefore its service area is very wide (Figure 1). The reason of extensive use of AOÇ by the residents living in Çankaya and Yenimahalle districts can be attributed to the fact that the socio-economic level of these regions are more developed (Türel 1987) than the other areas of the city.

The size of AOÇ area

"Site parameters that invoke a good response from users are those that allow users to isolate themselves from the rest of the world. A quality environment possesses properties of size and structure which engages the user. Too small sites which allow too much urban intrusion, noise and inappropriate views do not offer this. Larger sites that contain the user and which dominate the senses do" (Bussey 1996; Coles&Bussey 2000; In Coles&Caseiro 2001).

AOÇ covers a large area of 3300 hectare within the city centre limits. The related proportions of the area are as follows: 56% agricultural production areas, 15% parks and forests, 10% non-agricultural area and 2% is the 'zoo'. The proportion of the areas used as parks and recreational areas to the total area of AOÇ is eventually very low. Based upon current use of the site, AOÇ's publicly open areas are "picnic areas" within the parks and forests and its 'zoo'.

Most of the users considers AOÇ as only a publicly open-green area without being aware of the facilities in other parts of it. On the other hand while some of the users (9.3%) indicate the reason for their visit as the wideness of the AOÇ landscape, others (5%) considered this wideness of landscape as an advantage for the creation of more green areas.
"Urban spaces are capable of multi-functional outputs, ie. each user takes from the site their own outputs which can be delivered at a range of levels" (Coles&Caseiro 2001).

In order to clarify the current functions of AOÇ the users have been asked for their reasons of visit. Due to this clarification the related reasons for visiting AOÇ are as follows: spending time in an open-air area (47.7%), eating meatballs and ice crcam of AOÇ (32%), visiting the 'zoo' (30%), shopping for AOÇ products (19%), meeting with friends and chat (18.7%), taking children for a walk (18.3%). These figures indicate that AOÇ is used for its multi-functions and for its various recreational services.

The proportion of the users that visit AOÇ so as to buy AOÇ products is found relatively high. This is an indicator for AOÇ being recognised as a city farm of which its trade mark is highly preferable.

Quality refers to the way in which sites are interpreted by the user. "Individuals use and interpret sites and the landscape according to their needs and how the sites support their lifestyles" (Norberg Schultz 1979; Bunting 1995; Craik 1975; Cascrio 2001; In Coles&Caserio 2001).

The users are being asked for stating the first thing that comes to their mind when they think about AOÇ and their answers are as follows: 'Zoo' (38%), AOÇ products (33%), picnic areas (24.3%), Atatürk and his heritage (20.7%). The results show that the image of AOÇ within the users comprehension consists of mainly the 'zoo', AOÇ products, picnic areas and Atatürk`s heritage.

User satisfaction

The satisfaction derived from recreational experiences is a multidimensional phenomenon requiring multi-dimensional analysis. The intraparty and interparty experiences and management decisions can affect the formulation of the recreationist's satisfaction (Pitt 1989).

Users' satisfaction level based upon the services they receive has been stated as follows: 57.2 % responded that they were completely satisfied, 29% stated that they were satisfied to a certain degree, and 13.8% of the users pointed out that they were completely dissatisfied. On the other hand, another indicator of users' recreational satisfaction is the frequency of users' visit to the recreational area. Considering visit frequency of the AOÇ users; 27.7% of them, as the highest proportion, uses the area once or twice in a year, following 19% uses once a month and 17% uses once in every three-four months and finally 11.3% uses in every weekend. Therefore according

to the research results although the users declare that they are satisfied by AOÇ, their frequency of visit does not indicate such a satisfaction within the figures.

In the questionnaire survey the users declare the main problems of AOÇ as the poor service quality (47.9%), over priced services and activities (25.4%) and consumption of alcohol in the area (31%). Users made recommendations both for specific areas of AOÇ and for the whole area. The users generally complain that AOÇ does not renew itself in its recreational activities, services and facilities. For instance, even in 1920s AOÇ Marmara pool was able to create swimming and sunbath options to users, but in recent years the variety of activities has been lost and the area is only based upon catering facilities.

The recommendations of the research on specific areas are basically about the 'zoo' and the 'picnic areas' within AOÇ. It is requested by the users that the 'zoo' should be developed and be a more modern one, whereas also the picnic areas should be well maintained and cleaner with much better service facilities.

The general recommendations on the area are as follows:

- AOÇ should be greener and the areas with the natural characteristics should be enhanced
- The areas for public-use should be enhanced
- The security units should be established around AOÇ
- There should be organized social and cultural activities, recreation programs (such as concerts, guided tours, various cultural activities, activities for children, sports areas etc.)
- The area should be conserved with regard to the legacy of Atatürk, and the building construction should be ceased within the area.

The data collected via interviews with the management authority

The management authority of AOÇ has been asked to whether the leading role of AOÇ as an urban farm still continues or not. The management authority revealed that during the years, the unique and leading role of AOÇ as an urban farm has been disappeared eventually (by the transformation of this role to the research institutes and universities). It is declared that the most important problem of AOÇ is the financing problem. The management authority also stated that it would be wrong if one considers AOÇ only as a profit centred organisation and on the other hand, in the current situation of open market conditions it is nearly impossible for an organisation to be financially well only by their own products. Second problem has been indicated as the structure of the management mechanism. AOÇ legally an autonomous institution in the control of the Ministry of Agriculture. Due to this autonomous structure, AOÇ is not exactly free from the political pressures and obviously its projects and decision-making mechanism is affected from any political change in the government.

The management's plan for AOÇ in the future is that to regain AOÇ's old leading and educational role if they can find the related financing options. It is planned to create AOÇ as a laboratory through which not only the farmers will be aware of the new technological developments in agriculture but also the urban people especially the new generation will receive information on various agricultural techniques and activities.

Conclusion

AOÇ creates a very important landscape potential based on the issues that it not only addresses to all districts of Ankara and but also covers a respectable amount of open-green area within the city centre. This research declares that AOÇ still keeps its urban farm role via its various productions yet lost its function being a training centre for farmers. People make use of AOÇ mostly for its recreational potential today.

The questionnaire results and the interviews with the management show us that AOÇ should create new and developed strategies for the future. It is important that AOÇ regains its leading training and educational functions for new generations as it is considered as a heritage of Atatürk.

Although AOÇ covers reasonably a large area in the city centre, its areas that are open to public are considerably low in wholc proportion. Although AOÇ is not designed with a commercial company status, field crop production is a sign of accustomed use of AOÇ by time. It is necessary that the management redesigns the land-use of AOÇ according to a master plan that will keep the leading role of AOÇ as well as keep the public interest in consideration. AOÇ should also redesign its management due to this new structure. It is crucial that sub management teams should be formed so as to be able to organise recreational activities and programs.

This research expresses the importance of monitoring the urban green areas constantly since the use of these areas has changed a lot by the passing time. "A major challenge facing researchers is trying to understand how past, current and future populations differ in their recreation demands. Without such forward-looking research, those charged with deciding how to evolve and realign the outdoor opportunities being offered are forced to guess at what new to provide, or what could be worse, continue to provide what always has been provided" (Cordell et al. 2002). The changing needs and expectations of the users should form the basement for the reconsideration and reorganisation of the open-green areas.

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Definition of user satisfaction with the Kano Model

F. Hilal HALICIOĞLU

Dokuz Eylul University, Faculty of Architecture, TURKEY

Abstract

Quality is important factors when we try to express users' needs and requirements of buildings, as well as to describe the features and the characteristics of buildings. Today, many organizations are working with the product development, improvement processes and there is a strong trend in the construction and service industries toward increasing their emphasis on users' satisfaction. Users' satisfaction plays a major role in today's product planning process and in the concept design stage. A major problem for many organizations has been in providing direction on how to improve performance on particular user requirements due to a poor understanding of what will make users the happiest. When developing new products many different customer needs must be fulfilled. Often a few of the needs are prioritized and most effort in the project is focused on these needs. However, even though there may be only four or five customer needs that are important, it is not easy to develop a product that complies with all of these. The universal question is how to deploy an organization's limited resources to obtain the greatest positive impact on user satisfaction. A more advanced technique for identifying "types" of user requirements comes from application of the Kano Model of user satisfaction.

The purpose of this research is to define user satisfaction with the Kano Model.

Introduction

During the last decade, customer' satisfaction has become a priority in almost every industry. Today, there is a strong trend in the construction and service industries toward increasing their emphasis on customers' satisfaction. Customers' satisfaction plays a major role in today's product planning process and in the concept design stage. Research since the mid 1970s. first in Japan, and later in the U.S. has shown that talking to the customer is essential to understanding customer requirements. However, even what customers say they want or need seldom provides sufficient information alone to improve customer satisfaction (Akao, 1990; Johnston & Silvestro, 1990). An advanced technique for identifying "types" of customer requirements comes from application of the Kano Model of customer satisfaction (Kano, Seraku, Takahashi & Tsuji, 1984). This model also supports the trend in the product design process and its relationship with the customers.

Definition of The Kano Model

This model was investigated by Professor Noriaki Kano of Tokyo University. Dr. Kano, former President of JUSE (Union of Japanese Scientists and Engineers) is considered as a leading customer satisfaction researcher in the last two decades. Dr. Kano proposed his theory of customer satisfaction, suggesting that there are three types of customer requirements (see figure 1):

1. BASIC Quality (Must-Be Quality or Expected Quality)

2. ONE-DIMENSIONAL Quality (Normal Quality,Performance Quality or Unitary Quality)

3. EXCITING Quality (Attractive Quality or Delighted Quality)

Kano's model illustrates the relationship between customer satisfaction and product performance.



Figure 1. Graph of Kano's model (Franceschini, F. Terzago, 1998)

The set of all product characteristics (or quality features) is then allocated into these three groups. The following chart describes the two-dimensional Kano's Model (see figure 1).

Kano distinguishes between three types of product requirements which influence customer satisfaction in different ways when met:

<u>1. Basic Quality:</u> Basic or Must-Be (also called expected) requirements are those that are so obvious to the customers that they do not speak about them at all (unspoken group). The absence of these attributes or satisfiers leaves the customer's needs unmet, resulting in dissatisfaction. Expected requirements are typically taken for granted, but if they are not met customers are very dissatisfied. Failure to meet expected requirements often leads to customer defection (Spencer, R. A., 2000). In this group the requirements are visible when they are unfulfilled. When the attributes are present, the customers do not notice, and become neutral (i.e., not satisfied and not dissatisfied). This is the lower curve Kano's chart (Weiler, M. M., 1988).

<u>2. One-Dimensional Quality:</u> One-Dimensional or Normal requirements are those visible attributes that the customers normally state (spoken). When these needs are met, customers are satisfied; when they are not met, customers are dissatisfied. This is the linear curve on Kano's chart. Kano (1995) clarifies that this type assumes that the "...customer satisfaction (or the degree of satisfaction or dissatisfaction) is proportionate to the degree of physical materialization of each quality element. In other words, it assumes linear relationship." As opposed to the Basic group, here an increase in fulfillment of a specific need does yield greater satisfaction(Weiler, M. M., 1988).

<u>3. Exciting Quality:</u> Exciting requirements are those invisible attributes that the customers even are not aware of them (therefore unspoken also). These are referred to as "latent" needs. They are real, but not yet in the customers' awareness. The reason for this unawareness is basically either the lack of knowledge (in the specific field) or when it is really not exists yet. If these hidden requirements are not met by a product/service provider, there is no customer response (or dissatisfaction) (Weiler, M. M., 1988). They are not dissatisfied, because the need is unknown to them. Exciting requirements are seldom identified by customers (the unspoken needs), but have great long-term impact on customer satisfaction. These are the requirements that when met create customer "Wows" and set the organization apart in the customer's eyes as delivering superior service (Spencer, R. A., 2000). If a provider understands such a need and fulfills it, the customer is rapidly delighted.

The Analysis of the Kano Model

A popular way of looking at the Kano Model is in terms of interpreting customer requirement as satisfiers / dissatisfiers and exciters / delighters (Spencer, R. A., 2000). Dissatisfiers are the features that are expected in a product or service (Expected or Must-Be requirements). Satisfiers (Demanded or One-Dimensional requirements) are features that customers say they want. Exciters / Delighters (Exciting or attractive requirements) are the creative, innovative, and new features that customers do not expect, but which can have great influence on how satisfied a customer will be a product or service (Gitlow, 1998).

The Kano Model offers two powerful theoretical perspectives on customer satisfaction. As summarized in Table 1 the model proposes that there are different kinds of customer requirements (Dissatisfier, satisfiers, and Exciters), each having a unique contribution to customer satisfaction. Further, the model describes how the three kinds of customer requirements are related one to another, and how the handling of each requirement impacts a singular dimension of customer satisfaction (Spencer, R. A., 2000).

Kano requirements classification	Impact on customer	Expression of requirement	Impact if present	Impact if absent
Basic	Dissatisfier	Expected, but not stated	Normal	Dissatisfied
One- Dimensional	Satisfier	Explicitly stated	Higher satisfaction	Lower satisfaction
Exciting	Exciter	Not stated	Highest satisfaction	Normal

Table 1. Impact of the satisfaction or dissatisfaction of customer requirement according to the Kano Model(Spencer, R. A., 2000).

The Kano Model clasifies product attributes based on how they are perceived by customers and their effect on customer satisfaction. These classifications are useful for guiding design decisions. The basic tool is a two-sided question. The same question is asked in the positive and in the negative case (www.servqual.com/kano.html). Example:

• Positive question: How do you feel if our product has feature X?

• Negative question: How do you feel if our product does not have feature X?

Customers should be asked to answer with one of the following responses:

- 1. I like it
- 2. It is normally that way (that feature is expected).
- 3. I don't care.
- 4. I don't like it.

The different posibilities are summarized in the following table (table 2).

	Negative Q	uestior	n Answers	5	
Positive		Like	Normal	Don't Care	Don't Like
Question	Like		Excited	Excited	One-Dimensional
Allsweis	Normal				Basic
	Don't Care				Basic
	Don't Like				

Table 2. The customers' I	Requirements	Metrics
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For example, if the answer for the positive question was Don't Care and the answer for negative question was Don't Like, then we have a Basic type of need or requirement. The blank areas are for either irrational results (e.g., the answer for the positive question was like, but the answer for negative question was like also, or when the customer does not like the feature at all (e.g. the answer for the positive question was Don't like are the answer for the negative question was like) (Weiler, M. M., 1988).

In the following steps I will explain how product requirements can be classified by means of a questionnaire.

. Identification of customer requirements: Development of a Kano questionnaire begins with on identification of customer requirements.

. Construction of the Kano Questionnaire: The Kano questionnaire is designed to obtain measurements of fulfillment of requirements and satisfaction with requirements for each of the three types of customer requirements (Must-Be, or Dissatisfiers; One-Dimensional, or satisfiers; and Attractive, or Exciters). In addition, the questionnaire includes indifferent requirements toward which the customer has neither a positive or negative opinion (Spencer, R. A., 2000).

The Kano questionnaire provides a systematic way of grouping customer requirements into different Kano categories. This grouping can be further improved by using a two-step classification to distinguish categories to a deeper degree (Shen, X.X., Tan, K.C., Xie, M., 2000).

. Kano questionnaire evaluation and interpretation: Data collected in a Kano questionnaire is evaluated in three phases (Sauerwein, 1999). In the first phase customer requirements are interpreted within the categories of Basic, One-Dimensional, Exciting and indifferent requirements. The second phase involves calculation of requirement category and total strength measures to further clarify assignment of requirements to type categories. In the third phase an index is calculated to estimate how strongly each customer requirement influences customer satisfaction or customer dissatisfaction (Spencer, R. A., 2000).

The advantages of classifying customer requirements are very clear:

. The product criteria which have the greatest influence on the customer's satisfaction can be identified.

• Classifying product requirements can be used to focus on priorities for product development. It is, for example, not very useful to invest in improving basic requirements which are already at a satisfactory level.

. If two product requirements cannot be met simultaneously due to technical or financial reasons, the criterion can be identified which has the greatest influence on customer satisfaction.

The benefits of using the Kano Model

Based on publications of Kano's model, Matzler and Hinterhuber (1998) summarized its following benefits (Tan, K. C.&Pawitra T. A., 2001):

• Kano's model promotes understanding of product/service requirements. The attributes that have the greatest influence on customer satisfaction can be identified.

. It provides valuable guidance in the following trade-off situation. If two product attributes cannot be promoted simultaneously due to technical or financial reasons, the attribute that has greater influence on customer satisfaction, can be determined.

. The use of Kano's model can lead to developing a wide range of product/service differentiation by examining the attractive attributes. The attractive attributes are the key to beating the competition in the marketplace.

Conclusions

Kano's Model describes that the degree of customers' satisfaction depends on the degree of fulfillment (Basic, One-Dimensional, and Exciting).The Kano model helps project team members differentiate among various types of customer requirements so as to obtain an imaginative understanding of the underlying needs (Shen, X.X., Tan, K.C., Xie, M., 2000). Classifying customer requirements into their appropriate Kano categories and subcategories helps us understand different requirements for future products. Some product attributes can only make sure that customers will not be dissatisfied, while some can delight customers. The general guideline would be to seek to fulfil all must-be requirements, be competitive with market leaders on the one-dimensional attributes and include some differentiating attractive elements (CQM, 1993).

There is no doubt that to be competitive, products or services must flawlessly execute all three quality types. Meeting customers' basic quality needs provides the foundation for the elimination of dissatisfaction and complaints. Exceeding customers' performance expectations creates a competitive advantage, and innovations differentiating the product and the organization creates an excited customer (Ungvari S., 1999).

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SESSION 6 MASS HOUSING: Culture and Change

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Examining Harmony With Cultural Factors In The Temporary Houses Which Were Built For 1999 Earthquake Wronged In Kocaeli

Sibel Demirarslan University of Kocaeli, K.M.Y.O. Kocaeli – Turkey

ABSTRACT

In 1999, the East Marmara region was shocked by a very intensive earthquake, whose magnitude was according to some references Ms=7.4 and according to others Ms=7.8. When the earthquake was over, a quite lot of buildings collapsed. Unfortunately, many people died. Also, other buildings, which did not collapse, was damaged in different levels, which were classified as less, medium or heavy. Many people were homeless.

For solution to all these, some temporary houses were built on both private and public areas. At the East Marmara containing cities from Yalova to Düzce and From Sakarya to Kocaeli, Lots of temporary houses were built in different settlement areas. These houses were 13854 each for Kocaeli, They were built in different districts of the province Kocaeli, for example; Kullar, Köseköy, Bahçecik, Yeniköy etc.

Turkey is generally a seismic zone. So, there is always earthquake risk. Lastly, on 27 th.01.2003 an earthquake shocked Tunceli-Pülümür and its neighboring settlements with Ms: 6.5.

Therefore, in this study the main aim is collecting data on production of temporary houses for later uses. For this paper, study areas were chosen the temporary houses at Kocaeli's different settlements. The users of these houses were originating from other different settlements, cultures, life-styles, educations, incomes etc. So, same plan type was used by different people. It can be also observed some additional modifications applied to these houses. It is examined here the harmony with cultural features, especially the "privacy" during the period of living and/or use in and/or of these houses. So it is obvious that there must be some needs emerged during the living and using period in these houses. The methods used for this study was question form, meeting, observation, taking photograph and drawing.

Key words: Temporary house, plan type, culture, privacy, earthquake

1. Introduction

On 17th August 1999, a very strong earthquake has been experienced in East Marmara. This caused many deaths and suffering damages in houses/buildings. This earthquake had affected 9 cities, 70 towns and 2000 villages.

The duration of the earthquake was only 45 seconds and its magnitude 7.4. Many buildings have been suffered damages in different levels. These levels were; collapsed, heavy, medium and less.

The province Kocaeli has a big percent (13 %) production capacity of Turkey. So, this earthquake also affected the city in economic point of view. There were 1062 each company in Kocaeli and after the earthquake 32 % of them suffered losses. The causes for this were, collapsing production buildings or damages of production materials, injures or deaths of employees or their relatives etc. Both lives, properties and incomes have been affected in negative sense. So, both government and other association came together and worked for emergency solution of problems in this process.

2. Emergency solutions: Tents, Shelters and Temporary houses

Living people without home or other people (such as those whose houses could be livable but they did not want to live there because of earthquake shock) were in an need for emergency housing, of course. At first, they built up some shelters from simple construction materials such as woods, metal pipes, nylons, bricks from wrecks, etc. namely, whatever they could find close at hand. They set up these shelters or pitched tents near to their houses, on the sidewalks, in school gardens or Child Parks etc. In the same time, Government and Ministry also tried to find a solution for this problem of "shelter and eating". So, especially K121lay, TSK and other associations, private societies send tents and pitched them on the specific areas (private or Public)(Table:1). In addition to need of tent, there were also some other needs, for example; WC, taking bath, kitchen etc. So tents in sufficient numbers for these needs were established.

Table 1: Number of tents and tent concentration centers in Kocaeliaccording totheir numbers

Settlement (Town)	Number of tent center	Number of tent	Population
İzmit	18	5.877	28.418
Gebze	1	82	470
Gölcük	15	3.399	13.117
Karamürsel	1	260	700
Körfez	1	498	1.273
Total	36	10.116	43.978

But, the season was autumn and living in tent would be difficult. So, Ministry had begun to study for temporary houses. These houses were built up by the concerned Ministry or by donating establishments on private or public areas (Table: 2). The aim was choosing areas in different districts, towns or villages because victims of earthquake didn't want to change their social environment or living area. So the Ministry and Municipality examined all the alternatives existing carefully. Workings on substructures were completed. For example: roads, water and electric energy supply lines etc.

Table 2 :	Distribution	of	temporary	prefabric	houses	according	to
	settlement re	gio	ns.				

Town	Number of temporary housing settlements	Population
İzmit	11	29.476
Derince	2	5.357
Gebze	1	640
Gölcük	1	5.630
Karamürsel	1	510
Körfez	1	7.494

Table 3: The list of temporary houses in Kocaeli

Temporary housing settlement	Number of houses
Kullar 1	1438
Kullar 2	970
Kullar 3	860
Uzunçiftlik	1322
Yahyakaptan	802
Köseköy	732
Derince 1. Bölge	692
Derince 2. Bölge	742
Bahçecik	500
İzmit 8-B	724
Yuvacık	874
Döngel	178
Yeniköy	460
Gölcük	1474
Körfez	1462
Gebze	472
Karamürsel	144
Toplam	13.846



Figure 1 : Plan of a Temporary House

Plan type is twin houses plan (Fig.1). Interior of the house is separated with curtains into bedrooms. Only bathroom is separated with walls. Kitchen also is in the same place. There were some fixed or moving goods like bunk beds, curtain etc.

3. Privacy

The word is originating from "Arabic". In the Islam society woman's privacy is very important and the word symbolizes this. But, in our language this word explains secrecy between persons or secrecy between family and other people. This determines a good social connection. Cultural factors, namely tradition, custom, life-style, behaviours, family type etc. determine the limits of privacy. The Turkish family also has the behaviour and understanding of privacy. During the history, this has been reflected in Turkish settlements and plan types of Turkish houses. When traditional Turkish houses and streets were examined (for example; connection between garden-garden wall, entry doors, windows location etc) every plan solution has been oriented itself towards the interior but with a sight to outside at same time. Also user's psychosocial needs are included in privacy. Providing necessary and sufficient privacy is required.

There are big differences between today's and traditional houses in regard of their plans and settlements. By the way, family structure and life style have changed. At the end of these, getting privacy had changed too. Because of to-day's widespread house plans, getting privacy against to the outdoor is not very easy. So individuals use their personal area more efficiently and they can provide enough privacy to others. If the privacy cannot be provided, behavioral degenerations can be observed. Even they can be aggressive. A specific example for this can be given from life in temporary houses. As a result of this, users of the temporary houses started to quarrel with each other and divorcement of pairs has observed. In this study it has been tried to examine this problem by question-forms PRIVACY Action areas open to outdoor Sitting/Resting Eating Entry / Connection Storing households Action areas of semi-private Circulating actions Meal preparing Cleaning/Toilet etc. Action areas of private Bathing/cleaning Sleeping/laying Private study etc.(Arcan&Evci, 1992)

4. Methods used

In this study the harmony of user's culture of temporary houses with their houses has been examined. Group chosen to be studied was a sub-group, which was chosen from the entirety of total temporary houses users.

- Firstly, the aim was to establish addresses of temporary houses settled down in the province Kocaeli and to gain some information.
- Secondly the other aim was to reach every region for meeting with people and to apply random access method.
- QUESTIONNAIRE: Question form prepared and then checked by pilot application.
- Meeting time was very important. It mustn't be boring and not too long for people interviewed.
- Meeting for interview must be "face to face" method and used Question forms, which must be not given them for answering, because some questions can be explained more clearly, when applied face to face.
- Questions came together in some different question forms; those are close or opened end, multiple choice, and questions in form of yes/no. For some questions more than one choice can be selected.
- Due to scope of this study, there was need for pollsters. These have been chosen from university students on volunteering basis. Students have been formed in groups consisting of one female and one male student. They have been trained on how they act when they are meeting with people. There were 44 pollsters. Each one went to about 20 houses for interviewing.

- Regions where pollsters had to go to were determined before and the addresses were checked.
- OBSERVATION: There was another questionnaire form to be filled in by pollsters. This form should be answered according to their opinions and observations.
- DOCUMENTING BY TAKING PHOTOGRAPH: Photograph is a very useful document. This was also used. With the permission of house users, pollster took some photographs; so some important views have been documented.
- TAKING INFORMATION: information was collected from written or visual sources.

5. Conclusion and findings

As explained in the fourth part, this study was designed in form of a questionnaire. In this part, results derived from answers to some important questions are presented in a graphical form.

Reasons of living in this house:

- A. Being a victim of earthquake: from a collapsed house
- B. Heavy damaged
- C. Medium damaged
- D. Psychological causes
- E. Others



Type of house lived in before earthquake:

- A. Mass house
- B. Apartment
- C. Single house
- D. Others



If adding a room to the existing house could be possible; which one is firstly preferable:



Importance of privacy:



Spaces where privacy must be:



Any complaints about getting privacy:



If yes, what are they?

- A. Each house is very close to others, and single; so, windows are preventing from getting privacy.
- B. From the entry, the full interior of house can be easily seen.
- C. There are no walls separating the rooms.
- D. Parents and child bedrooms are very near and separated by a curtain.
- E. Parent's bedroom hasn't a private bathroom.
- F. WC is in bathroom.
- G. One WC is not enough.
- H. Entry in bathroom is from hall.
- I There are voice isolation problems in walls.

J Each house is very close to each other, so garden cannot be used comfortably.

K. Others.



If there are both daughter and boy in the family, where do they sleep:



Is this fact acceptable or not :



If there is anybody sleeping in living room:



If yes; is there any problem therewith:



If there is anyone coming to the door, spaces he should definitely not see in the interior of house:



If there is any visitor coming into hall, spaces he should definitely not see:



6. Result

Home, should be big or little, is a shelter of its user. It is a shelter, bunker, and castle for its user. It must be a comfortable place for its users. House and its user must always fit to each other. Anyway, they forced each other for fitting together. This can be reached by furnishing, alteration and some parts added to.

In the living process dimensions of temporary houses was not enough to reply to needs originating from number of users, family structure, life-style, and cultural structures. Although they are nominated as "temporary houses" there are still users since 4 years after the earthquake.

Its mean in dictionary is, "a house like a hut/shed, which was built on their or other's area".

It can be easily seen from the result of this study that, unfortunately, the houses were not big enough for their users. So they had to add some parts, especially to the part to the houses. This is firstly related with privacy. Due to plan, the entry door was located directly to interior and there were really important needs for storing and living room etc. So they aimed to cover these needs by means of some parts added hereto.

Unfortunately, most of users furniture was damaged in the earthquake. But other goods and furniture could not fit to temporary houses. So as a practical solution, as mentioned above, they applied some modifications; or they rent a store, shop, room or they leaved the surplus households in a room of their relatives (like a store).

So generally they did not need a fixed furnishing as they had their own households. For example; they pull out bunk beds and part of this and they used them on parts added to hose as a structural material, on window fenders for security, another place at the garden as a hedge. For other needs in future, we must take care some important factors. These will not affect too much economically. These factors are; culture, life-style, habit, familytype, behaviour and their expectations. As we evaluated in conclusion part, result and data must be taken in consideration.

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Privacy signs in transition

İlkay M. ÖZDEMİR, Nilgün KULOĞLU, Ali ASASOĞLU KTU Department Of Architecture, Trabzon, Turkey

Abstract

"Privacy" generally referred as secrecy appears in various ways according to societies, customs and traditions and individuals. Privacy can be defined as a concept originating from culture-behavior-space interaction. Within this concept, which is closely related to life style, some religious elements are known to be dominant in some societies. This can be easily observed in the formation of Turkish traditional houses.

In this paper the changing privacy symbols will be emphasized and the element of privacy will be discussed. This discussion will focus on positive and negative aspects of privacy concept on traditional and modern spaces. First of all this concept will be defined theoretically, the spatial reflections of individual space or territoriality, which originate as a result of this concept, will be dealt with.

It is known that in traditional Turkish house, that more than one family is living a traditional life. The increase in the number of people in one house makes it necessary to seek alternative solutions. But it has been argued that the concept of privacy in the Turkish house was influenced not only by Islamic beliefs but also some Central Asian beliefs and some other concepts of "introversion" based upon nomadic lifestyle, which formed the house. All these above mentioned formations have played either negative or positive roles in the organization of "traditional space". Today, with some rapid changes in many areas, and with the development of technology, our lifestyle has also changed. There have been some changes in our behavior based upon our needs and demands. Therefore, a different concept of "house" has been formed with the help of the interaction between culture-behavior and space. First of all, the number of people living in the same house has decreased. Then the concept of "nucleus family" has come to the agenda, and then the number of people living alone is increased. This caused a shortage in the size of houses.

Types of house-plans have changed, spaces have been divided according to their functions, and concept of "specialized spaces" has been brought into use with. Since various activities are done in the same space, we had had some border elements modern organization style. The visual privacy is created in the house with border elements. To conclude, this study will highlight the concept of privacy in different spaces (modern and traditional) and examine some changing privacy symbols with their reasons. Especially the concept of "changing privacy" in modern spaces, and the factors that influence this change will be exemplified and investigated in this study.

Keywords: Privacy, personal spaces, specialized spaces, border elements, signs.

1. Privacy Concept

The concept privacy, which is defined as "secrecy" in the most general sense, appears in various ways according to societies, customs and traditions, and person (age, sex, socio-economic and socio-cultural level...). Privacy can be defined as a concept originating from culture-behavior-space interaction. Research shows that privacy concept should be understood as having three aspects: perceptional, cognitive, and behavioral, (Çakın, 1988). This concept has been described and studied in detail by many researchers.

According to Gür, "privacy concept, which plays a central role in harmonious relation between people and their environments, is person's desire and right to control his or her interaction and communication with other people, (Gür, 2000, p. 75).

Altman describes privacy as "a behavioral process that controls interactions of person's and groups' with each other, appearing in different patterns, and regulating different behavioral mechanisms". He emphasizes that privacy is not just a one-way secrecy-no passage process, but also a dialectical control process, which is affected by societal traditions and changes according to people's desires to be in relation with each other. He talks about three types of privacy behavior, (Altman, Chemers, 1980; Turgut, 1990, p. 40)

- 1. Public privacy, which originates among strangers coming together temporarily,
- 2. Social privacy, which regulates the relations between family members and guests and among family members,
- 3. Personal privacy, which originates from close relation between spouses and between parents and children.

Privacy plays an important role in regulation of social relations. Privacy behavior constitutes the center of human relations in all cultures and appears at different levels at different cultures. Privacy signs in spatial appearance show differences in accordance with behavior.

2. Privacy in House

In this study, the effects of privacy concept in house organization will be discussed in detail. In this context, the reflections of this concept on first traditional Turkish house and then today's house will be compared by examples. Thus, different interpretations of privacy concept will be emphasized as "the signs of changing privacy".

In some societies, this concept, which is closely related to lifestyle, is strongly influenced by religion. These effects are especially observed in shaping of traditional Turkish house. Privacy is a very important concept in Islam and is based on woman-man secrecy. Courtyard entrances between thick walls, wooden-caged small windows, separation of floors, assembly of room concept (wall-dependent open middle space organized in traditional style), "baş oda", separate rooms for man and woman, "gusulhane" (bathroom) in large "yüklük" (cupboards) etc. can all be given as examples of spatial reflection of privacy concept in Islam on Turkish houses.

However, it has been argued that the concept of privacy in Turkish houses, which shaped the house, was influenced not only by Islam, but also by Central Asian customs/traditions and introverted nomadic lifestyle. (Küçükerman, 1985; Turgut, 1990). All these factors mentioned above have played either negative or positive roles in assembly of traditional space.

Together with the changes in the structure of society, changes in lifestyle are seen, as well as changes in privacy concept with regard to personal needs and desires. This is especially reflected in different ways in house organization. (Asasoğlu, Kuloğlu, 2000). Today, the presence of this concept cannot be disputed. However, changes in its reflection on space, and in short, changes in elements constituting privacy can be discussed. (Kuloğlu, 1994; Özdemir, 1996).

"As the transition from primitive and traditional societies to modern societies occurs, increase in physical and psychological means providing privacy is observed. In primitive societies, roles for each sex, social roles, taboos, and family responsibilities were determined by strict rules established by clan leaders and older family members. Whereas, modern societies are more flexible in terms of interpretation of privacy and are richer in solutions and means providing privacy", (Gür, 2000).

As Gür indicated, in terms of solutions and means, the way privacy concept dealt with in contemporary spaces differs from the way it is dealt with in traditional spaces. Technological developments, causing rapid changes in many areas, have also resulted in changes in our lifestyles. There have been some behavioral changes based upon people's needs and desires. Consequently, different house organization has been formed in connection with the culture-behavior-space interaction. The most important reason for this is the change in family structure. Kongar claims that patriarchal family structure is being replaced by nucleus family structure and says that this change is one of the best examples of institutional changes being observed in Turkey. (Kongar, 1993). With the appearance of nucleus family concept, the number of people living in the same house has decreased and this led to the construction of smaller houses. House plan layouts have been changed, spaces have been divided according to their functions, and specialized space concept has been described. Spaces for day and night use have been separated, and open style kitchens that are exposed to living rooms have been brought into houses. Living rooms have replaced

380

the "baş oda" in traditional houses and have become a place where many activities take place. In contemporary organization, activities take place in the same space made up of sub-spaces. This put more emphasis on border elements, which separates different activities from each other, (Özdemir, Ural, Gür, 1991). Border elements can be provided by building components (column, beam, stairs...), as well as house elements (equipment, furniture, accessory...). In this way, visual privacy is created inside the house. Privacy is carried to different levels especially by developments in building technology and by appearance and use of very different materials. As a result, privacy threshold has been changed in contemporary houses. In particular, religious privacy (spatial separation of man and woman) has lost its importance in contemporary houses. In addition, sub-spaces have been created inside the house in order to provide more personal privacy. This signs that in today's house, privacy concept still exists but in different ways.

3. Privacy signs in traditional and contemporary spaces;

In this study, spatial signs expressing privacy concept were examined in connection with house interior-exterior space relation and main activities (living, eating-drinking, resting, and hygiene activities). Examples were selected from literature among traditional and contemporary spaces, which reflect these relations, shed light on the subject, and are appropriate for the scope of this study, and were organized in tables comparatively. Within these limits reflections of privacy in space can be classified as follows:

3.1. Privacy signs between interior and exterior spaces

While these privacy signs are provided by building elements in traditional spaces, in contemporary spaces, they are interpreted differently and achieved with different material and technology. In the first three example houses compared, similarities are observed in terms of selected façade elements and space organization in the building. However, some differences are observed in terms of selected building elements and technology that was used. In this sense, changes in privacy signs can be observed. For example; caged-window protectors were replaced by metal framed facade cladding, (table 1a/b), small window slices, glass surfaces, and window-shades in traditional houses were replaced by large window surfaces and modern structured window-shade elements in contemporary ones, even though same or different material may be used, (table 2 a/b), while courtyards are used as a mean for providing privacy in traditional space, today in addition to providing privacy, the appearance and the functionality of courtyards are also taken into consideration, (table 3 a/b).

3.2. Privacy signs in living space

Today's designers, instead of providing solutions for spatial separation of man-woman seen in traditional space, they think towards the use of border elements for creating sub-spaces. In these areas where different activities are separated from each other within the main space, it can be said that there is a privacy suited for today's lifestyle. Level differences in space, wall pieces used for creating sub-spaces, and galleries are all examples of changing privacy symbols, (table 4 a/b and table 5 a/b).

3.3. Privacy signs in cating-drinking spaces

In traditional spaces, eating-drinking activities take place in multi-functional rooms, (table 5a, 6a, 7a). Today, while eating-drinking activities within the family take place in kitchen or spaces connected to the kitchen, in the presence of guests, this activity may take place in living rooms (guest room-salon) from time to time, (table 6b and 7b).

3.4. Privacy signs in resting/sleeping spaces

Resting/sleeping activities which take place in multi functional rooms in traditional houses, have been moved into more specialized spaces, bedrooms, in today's houses. Consequently, in today's houses conversion into specialized spaces and spatial individualism can be said to have strengthen the privacy concept, (table 8 a/b).

3.5. Privacy signs in spaces where hygiene activities are carried out

In traditional houses hygienic spaces for family members, such as "gusulhane" (bathroom/bathspace) and "abdesthane" (religiously hygienic needs), have been placed inside "yüklük" (cupboard) in multi-functional rooms. In today's houses, bathroom/toilet spaces serving family members are located in night hall. Toilets, similar to those found in traditional houses, generally have been designed for daytime and outsider use and placed in house entrances, (table 9 a/b).

Table 1	(a) traditional	(b) modern
	In this traditional house example, visual	Similar privacy understanding in contemporary
	privacy elements between exterior and interior	space is attained by the use of different material
	space are attained by the use of traditional	and technology.
	material and techniques.	

Table 2	(a) traditional	(b) modern
·		
	In another traditional house, visual privacy is achieved by wooden window-shades	In contemporary space, however, large glass surfaces may be used for achieving privacy with different kind of understanding.
Table 3	(a) traditional	(b) modern
	Courtyard element has been commonly used to separate exterior space from interior space.	Courtyard, in this case in contemporary space, in addition to achieving visual privacy is used for other reasons and with a new point of view.

Table 4	(a) traditional	(b) modern
	In traditional life, the use of spaces designated specifically for man or for woman is a symbol of privacy.	In today's living spaces, however, sub-spaces are used to achieve privacy for residents and for different activities, and to draw boundaries.

Table 5	(a) traditional	(b) modern
	In traditional organization, space is a place where many activitics take place. Each room by itself is multi functional.	In contemporary living spaces, however, activities are separated from cach other by various border elements.

Table 6	(a) traditional	(b) modern
	Kitchen items in traditional houses are generally kept in closed cupboards	In contemporary solutions, kitchen is pretty much open and is in connection with other spaces.

Table 7	(a) traditional	(b) modern
	Eating activities in traditional house generally take place in living area. However, in those ones that are still being used today, eating activities take place in kitchen.	In contemporary examples, however, eating activities take place either in kitchen or in spaces that are closely connected with kitchen.

Table 8	(a) traditional	(b) modern
	Sleeping activity is carried out in a closed, generally multi-functional space, which has borders to outside and may be used for other purposes.	In today's houses, this space is specifically designed for resting/sleeping activities and serves to limited number of different activities and only to its users.
Table 9	(a) traditional	(b) modern
	"Gusulhane" in traditional house is the place where bathing activities are carried out. In times when there is personal privacy, it is used inside the rooms.	In contemporary houses, there is generally only one bathroom and it is shared by house residents. Other hygienic needs, such as toilet, sink etc, may also be met in bathroom.

4. Comments

If privacy concept is thought as a secrecy process, it is clear that concept itself as well as its spatial reflections show some changes especially in connection with socio-cultural changes and developmental processes. However, this does not mean that privacy is less important or there is no privacy. On the contrary, today, dependent on to the needs of contemporary lifestyle, sometimes it may be possible to say that it appears stronger.

Factors that cause changes in privacy signs can be summarized as follows:

In traditional Turkish lifestyle, spaces are generally organized according to the needs of patriarchal family structure and Islamic effects. However, today as a result of transition into nucleus family structure, designers have been forced to look for alternative solutions. In this case, need for privacy has been met by space components (column, beam, stairs...) and space elements (furniture, accessory, various equipments...). Instead of spaces that meet many needs (multi-functional), designs that meet fever functions and achieve privacy by various border elements have become preferable.

With the taking place of nucleus family structure in life, increase in personal activities and in specialized spaces has been observed. In connection with this, importance given to personalization in designed spaces and solutions to these resulted in changes in privacy concept and its signs.

As seen in examples given, spatial organization as a result of lifestyle closed to outside in traditional house has been replaced by an understanding that is more open to outside (wide window surfaces, open terrace, balconies, etc.), and makes personal privacy more important within space (book reading spaces, study rooms, hobby spaces etc.).

Building elements used as privacy signs are taken up with a different understanding in parallel with the changes in material and technology. Thus, wooden cages have been replaced by metal protectors in some cases, and stone courtyard walls have been replaced by structural elements surrounding the building that are more transparent. It is possible to give more examples of this.

It is clear that important changes and improvements have occurred in building design process with time. This process also shows itself in design theories. This resulted in different shaping of space organization and space elements and components constituting it.

In this study, privacy concept, which play important role in shaping of traditional and contemporary houses, has been exemplified by spatial reflections. It is clear that this concept has changed dimension for various reasons. Changes in spatial indicators that are privacy signs are discussed in

traditional and today's house examples. As a result of examination of examples and findings, it has been found that privacy concept continues in today's houses with some changes within a technology, material, visual expectations, and as related to the other functional needs. It is thought that privacy signs, even though they are not the same as in the past, are still being used in houses.

Photographs;

1.a. Göynük traditional house, The Environment-Behaviour Technics Courses Student's homework, 2001-2002 education semesters.

1.b. The Environment-Behaviour Technics Courses Student's homework, 2001-2002 education semesters.

2.a. Safranbolu House, Nilgün Kuloğlu's archieve.

2.b. XXI, number 9, 2001, p. 102.

3.a. Malatya house, The Environment-Behaviour Technics Courses, Student's homework, 2001-2002 education semesters.

3.b. XXI, number 9, 2001, p. 109.

4.a. Barınaktan Öte, Anadolu Kır Yapıları, Kemal Aran, p. 190.

4.b. 1950'ler Kuşağı Mimarlık Antolojisi, Enis Kortan, Hayzuran Doğan Hasol-Çamlıca'da Bir Ev, p. 121.

5.a. Geleneksel Safranbolu Evleri ve Oluşumu, Reha Günay, pic. 135.

5.b. Mimarlık Antolojisi, 1950'ler kuşağı, Prof.Dr. Enis Kortan, Balçovada bir ev projesi, Tuna Doğan, p.181.

6.a. Erzurum Evleri, Dr. Haşim Karpuz, p. 151.

6.b. AD Art-Decor 119, p.105.

7.a. Erzurum Evleri, Dr. Haşim Karpuz, p. 118.

7.b. Villa Dekorasyon 22, p.24.

8.a. Barınaktan Öte, Anadolu Kır Yapıları, Kemal Aran, p. 145.

8.b. Tasarım 56, Bodrum Bitez Evleri-Ahmet Berk evi, p. 80.

9.a. Geleneksel Safranbolu Evleri ve Oluşumu, Reha Günay, pic. 217.

9.b. Tasarım 56, p.93.

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Effects of changes in life styles since the Tanzimat (the reforms) on house planning in the process of Westernization

Deniz Demirarslan, Kamuran Öztekin, Didem Erten Bilgiç, Tevfik İlter Kocaeli Üniversity, The Faculty of Fine Arts, The Department of Interior Design, Turkey

Abstract

A civilization was born in Europe with the industrial revolution based on economy and technology. That civilization was to dominate the whole world. The first movements of westernization occurred in the Ottoman state during the Time of the Tulips (1718 - 1730) mainly in military matters. With the Reforms (1839) westernization became the rule in every aspect of the society. This movement continued into the Republican era. Unfortunately, westernization in our country has often been limited to mere imitation. Importation of western elements into the Turkish society caused a deterioration of the original Turkish culture. Following the example of the big cities of industrialized Europe, Istanbul started to grow from early 19th century on. The population increased rapidly. Westernization started first in Istanbul and continued in Thessaloniki, İzmir and, in the Republican Era, in Ankara. The pioneers of the western culture were members of the Ottoman bureaucratic elite. They brought to Turkey the life style they had witnessed in Europe during their missions. French, cultural elements, including table manners, bourgeois education, cloths, tastes, furniture and European ways in family, marriage and house life. This is a factor that has had an effect on the dependency of the individual on a given place as far as eating and drinking, sitting and comfort are concerned and has changed the life style in the house and the organization of the interiors. With the Republic, the status of women in the family and in the society changed, which had an effect on the house plans and interior designs.
1. Introduction

With the English Turkish trade agreement signed in 1838 and similar agreements made with other states, the reformist laws enacted in 1839 under the name of the Reform Decree, has been a fundamental step towards modification of many Ottoman cities, mainly Istanbul, and the inhabitants of these cities in Western meaning. Consequently, industrial investments and enterprises of major European powers were supported and lead the way to a modernization of the Empire management. However, before declaration of the Reforms, Grand Vizier Mustafa Resit Pasha, one of the founders of the Reforms Decree, sent a letter to the Sultan for attracting his attention to criticism in European newspapers towards Turkish wooden building system. This traditional wooden building system was shown to be the main cause of fires, which completely destroyed many areas of settlement down to ashes. The Grand Vizier stated in his letter "wooden houses should be substituted by wooden masonry buildings." For this purpose, the authorities focused primarily on constructing houses and shops conforming to the style widely used in Europe, using European engineers and architects for opening the path to development, sending young people to foreign countries for architecture education to have architects educated in western culture. Examining the housing architecture in European countries in the first phase, the Grand Vizier noted that in France, many families lived in one building, the houses were not suitable for Islamic traditions, in England there were wide and individual houses just like those in Islamic countries and for this reason foreign architects should be brought from England. (Barillari, Godoli, 1997) Of course, the cause for searching innovations particularly in housing architecture is not only the fire incidents. Following the Reforms Decree, innovations emerged in the field of architecture as in all other areas and the Turkish society entered the process of westernization with the changes in its style of life. Westernization in Europe and in the U.S.A. meant compliance with western diplomacy, whereas the Turks adopted the concept, at all times, as an imitation of what is seen in foreign countries. Consequently, data of western origin contradicting with Turkish culture have always been imported since the Tulip Age. Large-scale immigration of Moslem population to certain cities including Istanbul, Thessaloniki, Izmir from several states of the Empire accelerated the process of westernization.

2. The Effects Of Changes In Living Habits During The Period Of Westernization On Internal Spaces And Planning Of Houses

During the period of westernization, French language and literature was widespread, and the effect of westernization was first seen in bureaucrat

segment of the Ottoman community, with the effect of French language and literature regarding the style of life, culture, table culture, clothing, pleasures and value systems. These people influenced the public, urban life and family environment. Moving the Palace to the Bosphorus and settlement of bureaucrats in the Bosphorus, in areas in the vicinity of the Palace has great in this interaction. Furniture, kitchenware, heating and lighting equipment either of western origin or imitations thereof were used since the Reforms period. This also changed home life and house planning by influencing several actions including eating, drinking, sleeping, etc. On the other hand, some experts suggest "á la Franc" addiction of rich Ottomans changed the structure of traditional Turkish house. (Barillari, Godoli, 1997) The rising of Turkish people from floor table to normal table to have their meals resulted in the creation of the dining room concept. Using certain pieces of furniture as means of exhibiting welfare, such as chests, consoles seen in western houses resulted in living rooms and guest rooms which were larger compared to other spaces. With the introduction of beds used in the western culture into the Turkish homes, the sleeping habits of the Turkish people changed and they were acquainted with bedrooms. Among elements of internal spaces of houses, the highest level of change was in kitchens, however, designs aimed to minimal use was not compatible with Turkish kitchen culture. And the use of lighting and heating equipment and other technical facilities had great effect on house planning.

3. Types Of Housing Following Westernization

With western influence, ground floors began to be used; ground floors were designed according to same plan schemes with upper floors; house entrances began to be opened to streets and new construction materials were introduced. Particularly, in 19th Century, Istanbul became a market where a considerable quantity of western products was presented to sale as have never seen to that date before. These products mainly consisted of bricks, roof tiles and glass. With these new materials and technology, window sizes were enlarged; building facades were ornamented in Neoclassical and New Baroque style in addition to Ottoman motives and style characteristics. However, the major change was the emergence of apartment buildings, in addition to changes in traditional houses. In November 1874, the Reforms Assembly divided Istanbul into 14 management zones and Galata-Pera-Tophane zone, which acquired municipal regulation in December, was granted "pilot" municipality status as Zone VI. This status was spread to all urban area in 1871. 47% of the population in Galata-Pera-Tophane Zone consisted of foreigners and non-Muslims (particularly Levantines). Public works, also supported by western countries were performed to provide

proper urban conditions for foreigners and non-Muslims residing in the zone. The objective of such works was to prove to European centers the determination in the implementation of the reforms. Administrative reforms provided establishment of building construction regulations, urban planning studies, using means of mass transport, and modernization of Galata-Pera-Tophane zone. There was an increase in the demand for houses within the zone parallel to the rising level of population, which resulted houses to transform into apartment buildings due to limited number of lands. Consequently, the zone developed vertically and a high density of buildings occurred. This new formation of buildings consisted mainly of three types particularly in Pera of Istanbul in the 19th Century. Large individual mansions for rich families, apartments for the rising bourgeois class and house for one family, called "the Reform box". Detailing these types of housing will be helpful to understand the changes in household space organization due to westernization. (Sunalp1999), (Enlil, 1999)

3.1. Large Individual Houses For Rich Families

Traditional Turkish House plan types have frequently been used since the 18th Century in big waterside residences and mansions inhabited by the bourgeois segment. The Ottoman-Turkish tradition has dominated those plan schemes, however, furniture, equipment and tools have been subject to westernization and particularly facade ornamentations have been subject to innovative styles. For example, Cemil Bey Kiosk in Erenköy has a minaretlike tower in addition to its traditional plan scheme. Certain architects like D'Aronco included elements such as dining room, study, library in his designs according to requests, for people who want to live as in Europe but also who do not want to give up their traditions. In certain house samples, the entrance floor covers a large hall uniting various spaces, whereas displacement of the rooms at the first floor required the use of corridors. On the other hand, the emphasis given to stairs in large houses since the 18th century caused the Turkish house its originality within the internal space, because a typical Turkish house does not contain elliptic stairs or stairs with multiple platforms. Showy staircases were followed by showy rooms. Consequently, the traditional Turkish house was deprived of its plan characteristics. On the other hand, balconies made to extend the living area and to let more light in became an element of the house after westernization. (Barillari, Godoli, 1997) (Fig.1)

3.2. Apartment Houses Inhabited By The Rising Bourgeois Class

Although Pera has large-scale apartment buildings constructed at the end of the 19th Century and the beginning of the 20th Century, like Cité de Pera, Afrika Hanı, Botter House, Doğan Apartment, Cité de Syrie, Tünel Apartment, Kamondo Apartment, most of the apartment buildings in Pera were smaller in size. These houses have generally been constructed on narrow parcels at various regions of the city, particularly in areas frequently inhabited by people of medium income class and bear characteristic of Neoclassical, New Baroque, Art Nouveau and Eclectic styles. They resemble houses called "Reform Boxes" because of their narrow facades. Typical floor plan of such houses generally consist of two rooms, one facing the street and the other one, which is usually smaller than the other, facing the back yard, and the staircase and service spaces in between. The buildings are four- or six-storey. They have a bay window on the front. The bay window extends along the full width of the face in some buildings. A balcony exists at the second floor above the bay window. The rooms have been specialized according to the purpose of use in big apartment buildings. That is, each room has a purpose of use. In this period, the family structure in the Turkish community experienced a gradual change towards the core family structure. For that reason, men's and women's separations were eliminated in houses built during the period of westernization. The apartments resembling a tower house in Pera have two different plan schemes, which are square plan or hall-sofa type and the rectangular plan or corridor type. Some examples include both the sofa and the corridor. Corridor type plan was used to place two apartments at each floor and a hall-sofa plan was applied to place one apartment at each floor. Houses with square plan and central hall resemble traditional house plans. The size of these central halls is about 9 to 28 sq.m. (Fig.2,3) There were about five rooms around the central hall. Sofa or central hall have been applied more frequently in splendid houses of distinguished and rich people. Bathroom and toilet are at the most insignificant part of the house along the corridor or a small hall. Ground floors and suspended floors of certain buildings were used as shops. On the other hand, ornamented entrance atriums and large stairs existing in Art Nouveau style bourgeois buildings in the West, which reflect the social status of the inhabitants do not exist in the said Pera and Galata houses. The objective in floor plans of these houses was to obtain as many rooms as possible. This necessity undoubtedly prevented search for new styles. The Botter Apartment in Pera, the leading building among large buildings constructed during the period of westernization is one of the best samples of Art Nouveau architecture in Istanbul and of an architecture of housing to contain multiple families. This building was constructed on a

narrow and long parcel and facing to the street the building is a combination of housing function and commercial activity. Combination of housing and commercial functions is based on European tradition. The face of Botter apartment is 11 m. and its depth is 42 m. (Barillari, Godoli, 1997)



Figure 1: Erenköy Cemil Bey Kiosk' view and plan



Figure-2: The apartments of Pera's plans



Figure-3: The apartments of Pera's plans



Figure-4: The Reform boxes.

3.3. Reform Boxes

The type of building called Reform Box is a masonry building common not only in Pera but also in all other regions of Istanbul for inhabitation of one single family. Because they were mainly built for non-Moslems, they were also called "minority houses" or "non-Muslim" houses. It is usually a twoor four-storey building with bay windows. In buildings higher than two floors, a balcony exists over the bay window. There are also examples of buildings without balcony, with bay windows rising along the full height of the face. The Building Regulation has established the dimensions of projections on the front faces of buildings towards the street and of building heights. This has consequently provided a discipline along the faces of the buildings. According to the Building Regulation, basement floors in the said buildings constitute another characteristic of the buildings. However, the most prominent characteristics of these buildings are their narrow faces not more than 4-6m wide and the shallow depths not more than 8-15 m. These houses are usually single room wide. Front and rear rooms are connected with a narrow corridor or a tiny hall. (Sunalp1999), (Enlil, 1999)

However, the buildings constructed within the scope of westernization efforts and Europeans criticized the houses known as Reform Boxes. Giulio Mongeri defined the houses, in one of his articles published in 1900, as with uncomfortable and unhygienic internal spaces and criticized the houses in that they had small and poorly lighted rooms, dark corridors, chest room, toilet and small kitchen, narrow and deep internal yards hardly providing the air necessary for a proper ventilation. Westernization initiated in housing, following the Reforms was accelerated after the declaration of the Republic. Western style house and apartment life was adopted. With the alteration of women's position in the society and in the family following the foundation of the Republic also changed house plans. In post-Republican housing design, Savoille Villa of Le Corbusier was a source of inspiration for Turkish architects. Small houses designed by German architects during the same period as well as multi-functional and modular furniture also influenced Turkish housing architecture. Technical properties of a house were emphasized in ideal modern house designs. Particularly hot water, power and heating systems are important elements. All modern tools of comfort for the period were considered as new facilities to release women from the burden of household work. Following political and cultural changes in Turkey since 1950's, cubic house experienced a great change, also with the influence of the income provided by high apartment buildings and the corridor based plan covering 2 or 3 bedrooms and a living room has been widely used throughout the country. This plan scheme applied in single apartment blocks priory, was used in mass housing applications which was accelerated after 1980's. (Barillari, Godoli, 1997) (Fig.-4)

4. Conclusion

The particular modification in housing structure in Turkey is a fact specific to the second half and particularly the last quarter of the 19th Century. Factors influencing the change in housing architecture as put forward in this study: Increasing population of cities due to migration, the effects of westernization on urban management, title and professional organization, the effects of westernization on life, culture, consumption and pleasure elements, changes in social structure (development in urban community,

transfer from traditional to core family), development in construction materials and building technology, urban transport, fires and post-fire public development and legal actions, western relations resulting in changes and development in furniture, heating, lighting, kitchen equipment and similar items. In conclusion, apartment houses emerging as the result of efforts of westernization were built in Western countries to meet increasing housing demand by white and blue collar workers parallel to increasing industrialization, whereas the same type of construction was built in Turkey as a kind of housing directed to bourgeois segments, contrary to the fact in the West. This change resulted in substitution of the traditional street-yardsofa by street-building block-building parcel –apartment building - stairs – hall/corridor alignment. These multi-story buildings existing at every corner of our country from West to East and from North to East, built on same plans everywhere, caused our cities to acquire a status of no identity.

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Mass Housings In Kocaeli - Yesterday And Today: First Permanent Houses For Wrongeds Of Earthquake And Other Plan Types

Sibel Demirarslan University of Kocaeli, K.M.Y.O. Kocaeli

Abstract

Kocaeli is an industrial area where many people want to moveto. But, number of buildings constructed without regarding current laws and rules governing building construction are quite less. Because moving people are qualified persons, they have good incomes and prefer liveable houses for theirselves. For this reason, there are plenty of apartment houses, cooperative housings or mass housings in Izmit.

In 1970's, the first mass housings trial by means of a house-constructing organisation was made in Yenikent settlement area of İzmit. But, for a number of various causes this project could not be completed by these organizations. Later, this project has completed by different cooperative organisations.

In 1980's, another mass housings project was started by the Emlak Bank in Yahyakaptan district, and completed by 1990's.

At the end of 1990's, "Yuvam Mass Houses" were built by the Municipality of Kocaeli and "Akçakoca Houses" were built by the Municipality of Bekirpaşa (Bekirpaşa is also district of Kocaeli).

On 17th August 1999, a devastating earthquake shocked almost every part of East Marmara region. Many of buildings were damaged seriously or collapsed. Also, railway and highway were damaged.

Again, the need for a great number of houses was appearing in Kocaeli. In those days, the Government built up houses for temporary settlement. The damages of earthquake were tried to be relieved by means of temporary houses. After that, the aim was permanent solution, of course. For this reason, some districts, counties and villages of the province Kocaeli were chosen for the areas where permanent houses are going to be built. Possesion of these areas were in The Public or Private. Today most of houses were completed by Government or a part of them were donated by some foundations.

This study covers mass housings in Kocaeli. The special aim is to examine types of approaching plans, namely the "Permanent houses" which were built for relieving earthquake damages and other mass houses.

Key words: Kocaeli, Mass housing, Permanent houses, and Plan types, Earthquake

1.Introduction

There isn't any research about the history of Izmit, pertaining to prehistoric period. But, only the period after BC 12 century can be known. In this period, Bebriks lived in Izmit region for six hundred years and after this period Megaras, Frigs, Kimmers, Lydias, Perses lived there in turn. In 326 BC, Izmit was the capital city of the kingdom Byhinia with the name Nicomedia nominated to the King Nicomedes, the establisher of the city. In addition to this, Roman Empire, Byzantions and Ottomans reigned in the same region. By the time a lot of civilizations have taken place in Kocacli.In the early 1960's the city has began to become an industrialized area. So, the result of this was "migration". In this period of time it can be easily seen the quick increasing in the population from several census (for example: in 1980's census; the population of Kocaeli was 596. 899; in 1990's census:936.163). Kocaeli is the fourth province by ordering in taking population movement.

Izmit, the capital city of the province Kocaeli, is situated at the east of the Marmara region. There are coasts to the Marmara Sea and Black Sea (Karadeniz). The surface measurement is 3626m2, which is equal to 5 % part of Turkey surface measurement. In the first Development Plan, the East Marmara region was considered for Industrial progress, which covers the cities İzmit, İstanbul, Sakarya, Bursa etc. From the known periods of its history up to date, this part of settlement region has always been the center of industry and trade. In course of the historic periods and lastly on 17 th August 1999 Kocaeli has been damaged by a number of earthquakes resulting in economic and industrial losses for the area where a lot of valuable investments exist. For this reason many of factories suffered losses for example; from employees whose relatives died, or whose houses were damaged, or people deciding to leave the area. Economy was destroyed. After the earthquake period; the causes resulting in this were being examined. These are:

- · %19.4 Damages in buildings,
- · %3.5 Damages in stores,
- · %15.3 Damages in machines and equipment,
- · %5.3 Employees' injury or death,
- %12.8 Family member injury of employees or death,
- · %5.6 Damages in raw materials,
- · %5 Calibration problems of machines,
- %13.2 Restriction in the energy,
- %19.8 Other causes.

Redesigning zone and construction plan, ceasing permission for public works on buildings, study on a new control system for building construction and moving away ruins also affected building sector.

2. 17 th August 1999: Earthquake

The earthquake on 17th August 1999 at 03.02 shaked allover the east Marmara region starting from Bolu up to Tekirdağ and from Zonguldak to İstanbul. Buildings suffered damages in different levels that will be then classified in less, medium, heavy levels or collapsed completely.

Earthquake is a nature phenomen, a normal process. Can we call an earthquake "disaster" if it had not been resulted in any damages or deaths Unfortunatelly, east Marmara earthquake has really become a very big disaster... If we don't want to experience the same again, we must take in consideration some important factors such as:

- · Following to technical construction rules,
- · Soil examination,
- A simple system inspecting and checking building construction,
- Insurances covering buildings etc.

3. Problem of taking shelter: Urgent solutions

A part of 95 % of our country is taking place on the earthquake line. In the last century, 130 earthquakes of great magnitudes have been experienced. These earthquakes resulted in 85.000 deaths and 125.000 injured people. More than 500.000 buildings suffered damages.

The earthquakes on 17th August 1999 in East Marmara and on 12th November 1999 in Düzce caused damages in 376.425 buildings and many deaths. After these earthquakes many people had lost their lives, families or relatives, their houses and all properties, etc. In such case, somebody can survive. But, survivers are both in psychological and physical point of viewe injured and unfortunately homeless. There is no place to go, any home and noone...Alone... They didn't leave their city, town, vilage, district, street etc. they lived in. Most victims of earthquke were afraiding. Furthermore, users of less and medium damaged houses also didn't want to live in their homes during this period. Firstly, they built up some simple structures by using any material they could find, for example; a part of wood, some balconies parapets, naylon sheets, iron bars, etc. From these materials they built up a single room shelters by their houses, in parks, in school gardens or in other public areas. Anyone having a tent pitched and lived therein. All these were urgent solutions, which they simply applied by themselves. Of course, Government took meanwhile some measures. The first step for urgent solution was providing tent. But, needs were too much. So, Kızılay, TSK, donations from other foundations and tents sent for aid came together. (Table 1)

Province	Kızılay	T.S.K.	Other Countries	Ministry of Foreign Affairs	Private	Others	Total Tents	Tent center
KOCAELİ	15.990	1.540	24.762	7.990	-	4.992	55.274	47

Table 1: Distribution of tents according to associations

In this period, other solutions were Foundation's guesthouse and even ships as well. But, the season was autumn and really cold. Living in tent was not very easy. By the way, the Government began the studies on temporary houses. Both Government and Private sector's lands were examined carefully for this purpose; several contracts covering construction of temporary houses have been been signed.

Twin blockhouses of 30 m2 have been choosen as a model of temporary house(Fig.1). In Kocaeli, these were built up at 14 different regions. On 30th November 1999 they were handed over to users.



Fig. 1: Plan of a temporary house

4. Permanent Houses

After building process of temporary houses, permanent houses have begun to come in question. This study brought forward both size of design and designing region. Urban problems pertaining to soil, earthquke affection, developments in urban planning etc have been defined. In studies pertaining to selection of regions for construction permanent houses, preliminary studies are attained considering the factors such as geological structure of land, fatures related with earthquake and other disasters, topographical, possession, transportation and other substructure possibilities, relations with other urban areas and land sizes in connection with numbers of houses to be built. (Tables 2 and 3)

Province	Settlement area	Number of houses
Kocaeli	Gölcük	1242
	Değirmendere	444
	Bahçecik	942
	Döngel	708
	Yuvacık	1708
	Gündoğdu	1606

Table 2: The Permanent houses to be built by Ministry

Table 3: The Permanent houses to be built by World Bank Credit.

Province	Settlement area	Number of house
Kocaeli	Gölcük	3592
	Gündoğdu	2820
	Hereke	980
	Gebze	558
	Karamürsel	506

In addition to this, 3918 each house on donation basis has been built. Today, most of permanent houses have been delivered to the owners (In Kocaeli, only the permanent houses at Karamürsel –a county of Kocaelihave not been yet delivered. Because of some area problems those houses have been started rather late with their construction.)

5. Housing in Turkey

Increasing in population, becoming industralized, change of life style and people movements affected urbanising. Housing needs has been covered from the 1950's up to day by multistorey houses. For Turkey, urbanizm means multistorey apartment houses. The best way for covering this need was considered as building apartment houses (Kuloğlu etc., 1995). In urban areas, there are generally some types of houses applied. These are;

- · Apartments
- Single houses
- Villas
- Mansions
- Special houses for unmarried people

6. Conclusion: Situation in İzmit

Izmit is an industrial city. Most of its population is employed in different sectors of industry.

The dominant family type is, "core family"/"small family" type. The popular house types are:

- Apartment houses
- Mass houses
- Single houses
- Shanties (Very seldom in the city center).

Most popular and widespread house type is apartment. Because the city of Izmit is settled down on a line running from east to west as a result of its geographical situation there are more place left for expaning. So having a house in the city center is not possible for everybody. Low-income families live in apartment or single houses at different districts. Shanties appear in rather less quantity for city center. Because, working-class of İzmit are qualified persons, as mentioned above, so they have a regular monthly income. They work at industry sector.

Cooperative housing organizations have began in 1970's in a rather widespread manner. There are also lodging houses in İzmit for employees of factories. For example: Lodgings of Seka etc. In the last years, mass housing type are being presented for covering house need. This is being achieved in different ways as in entirety of Turkey;

- By the Municipality,
- By the Bank (eg:Emlakbank) and Administration for Mass Housing,
- By cooperative organizations,
- By lodgings of factories,
- By permanent houses built for earthquake.

6.1. Mass housing in Kocaeli

First, in the 1970's, İzmit Municipality has began a big cooperative organization. Construction of 30.000 each flat was the target of this organization. But, this was not being completed by single organization. So this construction project could only be completed by sharing among other organizations of subcooperative systems. At the end of 1990's other mass housing projects have been organized by İzmit, Bekirpaşa and Körfez Municipalities and by Emlak Bank as well.

Akarca mass housings have been organized by İzmit municipality. At the first step 2000 each flat have been aimed. Now these houses were handed over to owners and people are now living there.

Akçakoca mass houses have been organized by Bekirpaşa Municipality. There are two types houses which were built, these are blocks of 10 and 15 storey. Total 1300 flats have been aimed. 96 flats of them are designed in form of dublex flats.



Fig. 2: Plan of a Akçakoca house of 15 storey-block

Meanwhile mass houses at Ilimtepe have also been organized by Körfez Municipality. 2600 each flat have been aimed. 2000 flat of them have been completed and handed over to.

Along with the construction organizations of municipalities, organization by bank has also been used in district of Yahyakaptan. 5368 each of flats were being built at this stage, and lastly they handed over to their owners in 1995.



Fig. 3: Plan of flat in Yahyakaptan mass houses, Type A

Unfortunately, as mentioned above in details, the last mass housing organization was "disaster houses" for earthquke victims. Mass houses in big quantities have been built for this purpose. In the region of the province Kocaeli, wide areas in both private and public possesion have been allocated.



Fig. 4: An example for plan of permanent houses

Both geological and geotechnical investigations on the concerned area have been done before starting with construction of permanent houses. Later some important rules for construction have been determined.

These are:

- Building of max. 3 storey in every plot,
- 150-200 persons per hectare = low density,
- Urban social and technical buildings (such as school, hospital, shopping center etc.),
- Wide, fluent traffic net work with alternative streets,
- Arrangement of buildings enabling good neighbour relation.

Every 5 or 6 buildings must have a area for common use where a qualified life was aimed at. Permanent houses have been built by some different institutions and associations, that is; 57.27 % of them by the concerned Ministry, 36.51 % by World Bank and 6.22 % by donations. Table 4 shows distribution of houses among the counties within the province Kocaeli.

All these mass houses in Kocaeli have been built in different plan types, but, they have similar function schemes, these schemes are; 2 rooms+hall, 3 rooms+hall+2 toilets and they have also, 1 balcony or 2 balcony.

Kitchen cupboard, fixed wardrobe, WC-bathroom outfits, floor coating have also been included in both disaster and other mass houses.

Settlement Name	Number of	Total	Confisticted areas
	House	area(1000m2)	(1000m2)
Merkez-Yuvacık, Döngel,	3430	814	814
Bahçecik			
Gölcük-Değirmendere	444	101	101
Merkez-Uzunçiftlik	250	82	82
Merkez-Arızlı	1000	108	Government area
Merkez-Köseköy	200	70	Government area
Derince-Merkez	300	78	78
Körfez-Merkez	500	78	78
Merkez-Gündoğdu	2526	1231	1231 •
Gölcük-Saraylı ve Örcün	1242	505	505

Table 4 : Permanent (Disaster) houses in Kocaeli

7. Result

Although province of Kocaeli has always been prefferred as a settlement area, startin from BC up to now there are few in numbers shanties. Due to its geographical position and various features, Kocaeli has been always very "important". The city is very close to other big cities. There are lots of factories in and round the city; traffic is quite easy between with other big cities, etc.

By the time, different systems of housing have been poffered. In the city center, as the result of urban planning only building on plots is possible. So, apartment houses can be seen in city center and "single house" can be seen in the district where people with low-incomes lives. Out of the city center, villa houses can be seen. But, these are too expensive. Opposite to villa houses, mass houses are rather cheaper. At the mass houses settlements, houses contain more flats / houses in numbers as their number of storey varies between 4-15.

After earthquake, disaster houses have been built by using of tunnel mould system. Function schemes were similar to other mass housing schemes. But, the most important point is they are, of houses with fewer storeys. They have been built, limited with max 3 storey.

Other important point is, disabled people have also been considered and special plans have been designed for some settlements.

Plans with 2 rooms+hall and 3 rooms+hall have been designed and built. These types of function schemes are popular and widespread. So, similar function schemes have been often applied in all the mass houses in the province Kocaeli. Because these function schemes can easily fit to everybody's need these are used widespread.

The function scheme, which has been applied very often, is:

- 2 or 3 bedrooms,
- 1 hall,
- Hall, kitchen and WC branching from the entry hall,
- Bedrooms and bathroom on a separated corridor.



Function scheme which was secondly often applied :

- Room+hall+kitchen+toilet branching from entry hall,
- Room/s+bathroom on separated corridor.



Surface area of halls generally varies between 19-25m2. In general, kitchen isn't enough large area for eating. So, if there is a balcony linked with kitchen, balcony can be closed up with joinery to extend the total area of kitchen. So balcony is included into useful function area of home.

Child parks, park areas, and buildings such as shopping center, school etc. have been also placed in the settlement areas.

In addition to all these, at the designing stage of the houses some other criteria must have been unavoidable taken in consideration. For example; cultural factors, life styles, family types are very import points. In cases where these are not considered, some differences realized afterwards by users can be observed in the flats.

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The changing position of the architect in the context of social sustainability

Deniz İncedayı Chamber of Architects of Turkey, Istanbul Metropolitan Branch

Abstract

Design is a type of multi-disciplinary activity covering a vast field of knowledge and it is quite complex in accordance with the interferences of these disciplines. Different design areas have different features or priorities, however the importance of the social dimensions in the architectural design is an undeniable fact. The reason is that the object of design is 'space', and its subject is 'the human being'. With this assignation, the questions on how the (hu)man will participate in the design process and the ways of perception of the problem inevitably come on the agenda. In this process the architect should establish 'rules of play' as a basis for dealing with the environment. In relation with this, architectural design carries the responsibility of analyzing the society that it houses. Mostly the design process is conducted on the problem of forming the 'space' solely. However, the complicated nature of socio-economics, culture, philosophy and psychology are influential when the process is observed from the point of 'human being'. These dimensions put the empathy on the important role of the architect in the formation of a socially integrated architecture. In this context the paper tries to discuss the changing position of the architect which is extremely vulnerable. The necessity of interdisciplinary and holistic approach in design education is emphasized. The aim of this methodology is the formation of an architectural design philosophy by redefining the scope of related fields of specialisation. The paramount importance of development of social consciousness in design is, herewith, underlined. At the same time, some proposals regarding the handling of this problem in the educational process are being made. The future of the environment is evaluated in accordance with the success of the architect, who will fight for 'rules of play' for a socially conscious design process. Finally it is emphasized in the paper that the problem lies not with architecture but with the circumstances that lead to architecture.

1. Introduction

Design, which extends over a wide spectrum of knowledge and includes various disciplines, is a complex area of action as a consequence of the interaction among these many disciplines. Although the various themes of design have different characteristics and priorities, architectural/urban design is an area where social dimensions intertwine with technical dimensions. The underlying reason is that as long as the problematic of design is "space", its subject inevitably happens to be the "the human being".

".....space is an important dimension that distinguishes architecture from all other three-dimensional branches of production and design. Design contains man together with space. At least for this reason, cognizance of man and society has to be included and retained in design cognizance. However, cognizance of man cannot be reduced to ergonometric, to the needs of the user or to statistics about dwelling stocks. Man cannot be envisioned without space and neither can space be envisioned without man."(1)

Following this statement, the questions regarding how man as subject will be incorporated into the process of design and discussions on how this question is to be perceived, inevitably come on the agenda. The methods to be developed to incorporate knowledge of society into this process become of crucial importance.

Broadly speaking, *design* is an instrument for man to develop himself, his environment and his culture. Therefore, architectural design (and consequently the discipline of architecture) cannot be limited to spatial organization solely, it is also responsible of researching the society it is serving. However, generally the end product of design is given priority in the education of the architecture. This approach has led to an attitude that looks upon the related-disciplines as secondary; at the same time focusing on the *product of design* rather than on the *process of design*. As a matter of fact, when the process is viewed from the stand point of man and society, the complex structure of the human being enters the picture; and social, anthropological, psychological, historical, philosophical etc. dimensions start to appear as determining factors.

Today, we live in an era in which, on the one hand, globalization with all its rules about consumption and competition are in effect, while on the other hand pluralism and search for identities are under discussion. Therefore, the roles of the architect as a designer are multiplied. In other words, the guiding role of the architect in the process of "changing the environment" becomes multi-dimensional. What is attempted in this paper is to emphasize the following questions; $\hfill\square$ "What is of crucial importance in choosing roles in society for architects?" and,

□ "What should the criteria be in this choice?"

Even if the architect assumes various roles, the basic principles he/she has to determine cannot create a *professional philosophy* unless such principles are conceived in relation to a policy of social development. The principles to be determined bear importance for the future. As they set the grounds for the policy of a profession to defend the priority of collective interest against the understanding of individual competition.

2. A short history of man-environment relations in the context of architectural responsibilities

Towards the end of '50s, especially in western countries, a certain discomfort started to be felt in evaluating architecture as a profession with weak relations to social content.

Walter Gropius emphasizes that architecture which does not include the social dimensions will be wanting in its suggestions. As a consequence of the changing role of the architect, architecture calls for differentiation in the area of knowledge. (2)

The Design Graduate School (Hochschule für Gestaltung) established in Ulm in 1949 is a good example for this approach. This school has been a pioneer in introducing theoretical and scientific research into the process of design. In doing this, the school administration (3) has set the designer right into the middle of the society, in the centre of production and industry. We witness that in such an approach the architect is not considered solely as an artist or an executer. Quite on the contrary, he/she is a co-ordinator in full awareness of all the needs and requirements of the society.(4)

In the 20th century the issue of re-arranging the man-environment relations has been brought to the agenda by defenders of different approaches. The destruction of the environment as a result of the world wars in particular, as well as problems such as housing shortage, migratory movements, etc. has called for the revision of production and renewal methods in all areas of the society. In many fields, problems of planning methodology became the object of research for production models. This process has in turn led to the emergence of various approaches to the issue. After the 50's, a considerable number of scientists started to take an interest in urban problems and to probe the emerging concept of "alienation". (5) of political consciousness was mounting accompanied by The differentiation in the conceptualization of urban design. The researches of Kevin Lynch towards the theory of the relation between environmental design and the human behaviour confirms this change of approach. Lynch was interested in how the citizens of Boston, New Jersey and Los Angeles perceived their cities (by mental maps) and in 1960 he published his book, *The Image of the City*.(6) Greek planner Doxiadis, grounds his theory of urbanisation on the concept of "*ekistics*" and explains that the environment exists as a result of the interactions amongst the economic, social, political, administrative, technological and aesthetic dimensions. According to him, the architect who is responsible for producing a "liveable environment" has to enrich his/her area of knowledge by incorporating other branches of science/occupation into architecture and to maintain "team work" with them.(7)

These years mark the world's transition from "machine principles" to "human principles".(8) After the '60s, the key concepts in urban and architectural design are to be *metabolism*, *transformation*, *ecology*, and *symbiosis*. If *machine* denotes homogeneity, economics, and globalisation, then *life* denotes pluralism, diversity, and multi-culturalism. The "mancentred" philosophy and the concept that places man above and beyond all living creatures is being abandoned. From an ecological point of view, saving life is evaluated in accordance with the capacity to adapt oneself to the rules of symbiosis and to the sustainability of the eco-system. And probably this is why eco-architecture and eco-cities are the primary targets of contemporary architecture.(9)

Movements that dwell on the social dimensions of architecture are seen throughout many European countries. A small but active group in Amsterdam called "Amsterdam Provos" has succeeded in activating citizens through happenings they organised around discourses such as "the political potential of architecture" and "free city". Their aim is to help diffuse the understanding of a qualitatively better (urban) life, urban conservation and development.(10) "The Kabouters", a similar political group, has managed to attract the attention of numerous people and gain many followers by underlining the problems of "the polluted environment", "insufficient green", "the deterioration of the historical/cultural heritage" and "urban population". In 1965, American planner Paul Davidoff, introduced the concept of "advocacy planning", which focuses on the involvement of the user to have a say on his own environment, to urban design. This approach has proven to be quite effective in the rehabilitation activities carried out by Van Eyck and his team in various districts of Amsterdam.(11) In the '70s many architectural and urban design projects emphasizing social and political dimensions were implemented. SAR (Stichten Architekten Research) of the Netherlands aimed at transforming architecture into a social reform movement in accordance with the climate of the day. SAR realized various projects and research work geared to create interaction between architecture and social sciences and involve the political,

economical, social and psychological dimensions of the project into the process.(12)

Broadly put, new objectives based on different approaches and methods in man/environment relations have been on the agenda for a long time.

3. Probing the changing role of the architect in the context of architectural education

Having underlined the importance of the social awareness of the designer, we shall now turn to a discussion on and suggestions about how such an approach may be incorporated into the education of architecture.

It is worth underlining that the education of architecture has to undertake the responsibility of equipping the architects to be with a basic occupational philosophy that rests on consistent and sound motives. Focusing on this approach throughout the basic professional formation process will enable architects to become intellectuals equipped to perceive the environment as an integrated whole.(13) Since educational programs are divided into branches and since they are defined in accordance with different fields of knowledge, it would not be possible to reduce this approach to a simple formula. However, constructing such an approach as an educational model in co-ordination with basic educational fields or disciplines that form the main core of architectural education can be planned as a policy. The lack of such a plan is heavily felt in present educational systems.

Suggestions regarding the basic areas considered can be summarized as follows:

3. 1. In the basic design studio

"Basic design" education, which is constructed as an important discipline expected to trigger creativity within the education of architecture, is of great importance for preparing the students to think systematically. Basic design education does not aim at teaching the students to represent a project solely through geometry or technical drawings, but to teach them the history, the culture, the theory, the sociology that lie beyond those lines. Therefore, basic design should be considered as something more than a discipline of the initial years of architectural education; but rather should be approached as an educational method, a teaching of visual and relational sensitivity.(14) The strategy of basic design atelier should aim at training environmentsensitive individuals at transforming and designing the world with such a sensitivity. Dressed with such qualities, the education of basic design undertakes the task of being the "basis" for project ateliers. Basic design cannot be conceived independent of plastic arts, literature, music, social sciences and philosophy. Therefore, in the planning stage of this education, it is important to provide interaction with other branches and to enrich studies in this context.(15) Particularly at the philosophical level, the cultural, historical, psychological connotations of the "architectural line" are dimensions that should be presented to students of architecture. It is only possible through such an approach that the architect takes a first step towards relating his/her profession with a way of living and a system of thought.

3. 2. In the architectural design studio

The design studios are the places where all the disciplines are transformed into architectural syntheses. Consequently, claiming that the architecture project ateliers form the main core of architectural education would not be an exaggeration. This statement leads to the assertion that the choice of subjects to be analysed in the ateliers is of crucial importance. Students may be asked to work on certain issues related to above mentioned aims. For example, the method used by Cervalatti,(16) (planner of the Bologna historical core) in order to create awareness of historical/cultural heritage among the citizens can inspire an architectural exercise. Cervalatti had designed an exhibition space in the centre of the historical core where he, by using the images of the old town, invited the citizens of Bologna to a voyage in urban history and urban memory of their (t)own. In a similar manner, studio themes, that will enable the students to conceive architectural design in relation to the social background. Experimental projects, conceptual projects may be constructed as examples to support this approach. Inviting specialists of different disciplines to the ateliers and asking for their contributions is another possibility for enriching the programs. The discussions, the exchange of ideas between the students and specialists from social sciences and other branches or disciplines should be monitored in order to serve the same purpose. The most valuable contribution of such activities will undoubtedly be the inclusion of criticisms from outsiders. Hence, the system will enable the students to learn to criticise and to be criticised. Such an approach is an attempt at a wholesome educational system where disciplines are not handled separately but are considered in relation to one another and where questioning is placed at the focus of the system.

3. 3. In the theoretical disciplines

The theoretical courses in the existing educational programs of architecture are mostly related to architectural 'form' concepts. However, as mentioned above, architecture is at the same time a field of social and cultural planning. Knowledge of the society, is inseparable from the process of spatial transformation and architectural design. Adopting this approach in educational programs requires that culture-based disciplines be given priority in architectural education programs.(17) Such an approach can be regarded as a preparation to form a cultural base for students of architecture. On the other hand, the manner in which these issues are presented to students of architectural practice. Specialist of other disciplines should undertake the task of enlightening and opening the way to students to start thinking about the relations between these specific disciplines and spatial design. Hence, this will enable the appreciation of parallel ideas and approaches from the perspective of different branches as well as enable the architect to increase the effectiveness of ideology and philosophy in activities pertaining to his/her profession.

3.4.Underlining the philosophy

As mentioned above with some proposals for special architectural education phases it is necessary to develop new criteria in the design process for architects, to question the existing system and to re-consider certain concepts of today. This approach leads to suggestions as follows;

o A new interpretation of creativity

• Updating the area of knowledge and inclining towards a philosophy of education

o An architectural understanding integrated with social sciences

• Emphasizing the choices of the architect not solely as a professional but also as a "human being"

o Increasing theoretical studies, thus enriching the cultural base.

The main principles of these suggestions are the following;

□ *Integrated approach:* Acceptance of the understanding of the interdisciplinary interactions in the design process

□ Sensitive approach/sensitivity in design: Co-operation in researching and sustaining sensitivity in the society towards social, environmental, economical, psychological, ethical, etc. issues.

□ *Conservational approach:* An approach aware of the natural, cultural, historical, etc. values. (The concept of "conservation" is to be understood as "re-producing the existing values by improving their unique qualities".)

□ *Sustainable approach:* An approach that assumes co-operation of nature, man/society and design in order to achieve a livable environment.

The system called for is to be constructed in educational institutions as well as in professional organisations and can be carried out in concordance and synergy. Forming a common platform with non-governmental organisations and the relevant institutions, working to provide the support of the state and local governments, providing the co-operation of specialists in social sciences and considering this as a requirement in certain implementations play a paramount role in the process.

At this point we have to emphasize that this process is inherently dynamic, since the premises of the approach rest upon principles of change. The approach has to be flexible enough so that, in time, it may be revised in accordance with the changing circumstances. Therefore, in time, the educational programs will have to be remodelled and reformed to fit the changing conditions.

Conclusion

The objective in the preparation of this paper has been to deliberate and discuss on the important role of the architecture within the development process of societies.

Architecture is the joint venture of technology, design and social development. As a result of his/her professional attitude, the architect becomes a social stimulus. Production policies, planning, control mechanisms are the basic parameters of the architect's professional realm. It is well known that in the globalisation era the building production process is becoming more complex and acquiring new dimensions. In a sense, the architect is becoming increasingly more important and furthermore a choice of a variety of different roles are emerging. In other words, just like an actor, the architect is in a position to choose his role in the reformation process of design which is related to social development and cultural restoration processes. In this process the roles of all the actors (such as the client, the investor, the designer, the user) have diversified. The architect is participating in the process of *changing the society* with his/her creativity he/she brings as a designer.

Today's individual seems to have accepted the city as a reality developing independent of him/herself. But since 'design' is a kind of *social and cultural process*, the crucial importance of the relationship between the designer and the society in establishing "rules of play" in order to improve the "quality of life" emerges as the *basic* responsibility of the designer.

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The journay of circle in the architecture in time

Muhçu, Emriye *KTU, Department of Architecture, Trabzon, Turkiye*

Abstract

The intention that drive the architecture at the very beginning is to create space. The action of architecture, from the very early ages was always triggered with the instinct of creating a space for living. As a natural consequence of this action, a form was needed. At the early ages the space was a natural shelter, which protects the humans from the harsh effects of the nature and wild life. These have showed themselves amorph shapes that were carved into the trunk of a tree or a rock. Afterwards, in the direction of human being's development, their needs have been diversified increasingly. All these needs affected the environment that the human lives, and as a result an artificial environment was created that surrounds the human. In this process, prime geometric shapes such as square, rectangle and circle have been used at first. It is an undeniable fact that these forms have practical benefits in the meeting man's need.

Architecture came into existence through geometry, and was able to define itself by means of geometrical forms. These forms are tools that the human used to shape and construct the living environment, to provide the requirements, and to prove his creativity in front of the divinely architected nature.

Circle requires special attention among all these geometrical shapes. As its center is located at a point which is in equal distance from all sides, i.e. its perfect symmetry makes a significant distinction between circle and other shapes. There is no other geometrical shape that has a smooth round side like circle. It is unique from this aspect and it is different from others. Circle had very wide spread use due to its physical and structural properties. It has been known that, it is only possible to cover such wide openings by circular and curved surfaces at the lack of reinforced concrete.

Due to some special characteristics peculiar to circle, it was used most widely in the architecture since it was seen as the most convenient form to express the mistic emotions and thoughts. These special properties can be lined up as the physical ones; having a center, a perfect symmetry and a continuous smooth curved surface, and as the functional ones; collecting at the center, radiating through the perimeter, continuity and enclosing fairly.

The differences between densifiying meanings, that are very close to each other, cultures, religions, ideologies and the mythological indicators are also all described by using circle.

The main objective of this work is to establish all these concepts setting systematically and verify them on the examples of architectural spaces taken from the city of Trabzon.

Key words: Circle / Architecture, centralization, collection, distribution, monumenality, universality, eternity.

The journay of circle in the architecture in time

What is Circle?

"Circle is defined as a set of points that are in equilibrium and at the same distance from a particular point" and also "circle is centric,normally stable and self centered, concave figure". (Divanlıoğlu,1997, Ching, 2002)

If these properties are going to be handled from a different aspect, circle is a self centered, stable, symmetric and curved surfaced form. It is the only form that has a perfect symmetry and has no corners. As a result of this perfect symmetry, in a circular structure there is an equal and uniform load distribution among the edges. With its simple and effective form, it emphasizes human formally with the artificial architectural element in the nature.

At this conjuction, when the shelters of the Euroasian nomadics were inspected, it is seen that they have a circular plan and covered with a dome. (Figure:1)

In the eskimo shelters, it is seen that climatic factors enforces to take the benefit of structural properties of circle. (Figure:2)



In the architecture circle was also used in the city planning.

Filarette was the first Ronesans designer who used the ideal circular form in the planning of a city. (Roth, The Story of Architecture, page:439) (Figure:3)

The circular shaped Stonehenge, which was built around 2000B.C., in the Slisbury Platoo of England is thought to be a place for observing the space. (Figure 4)

It is seen that some of the physical and functional properties of the circle was used in architecture from the very early ages. Beside these properties, due to its physical distinction from other primary geometrical forms and as it's seen the only defectless form that can symbolise the perfectness of the god, nature and universe, some symbollic characteristics were dedicated to circle.

From this point on, at the proceeding steps of this work, the caharacteristics that the circle consists will be inspected. The relationships among these concepts are given in tables, the concepts are defined. Later, they are going

to be examined on the forms which are circle and /or circular examples in Trabzon.



The Form / Physical Characteristics of Circle

The Symbolic/Conceptual Characteristics of Circle

Table-1: The relationship of circle consisting charesteristings

The Investigated characteristics of circle

1. The Form / Physical Characteristics of Circle

1.1.Center/Definig a Focus

The solid, rigid, symmetric, balanced and self finished inside form of the circle acquires a very strongly percieved center and focal point. (Figure 5)

1.2. Sides are Equally Distanced From the Center/Symmetry

The lines that will be drawn from the center of the circle will have the same length regardless of in what direction and on what axes they are drawn. This characteristic gives circle a perfect symmetry.

1.3. Curved surface/single surface/no direction/ continuity

During the creation of the edges of the circle, as the result of curvilinear motion around a single center, circle acquires a curved surface. As this surface is not interrupted by a corner, as it was so in the other prime geometrical forms, circle has a continuous single mass.



2.The Functional Properties of Circle

2.1. Central Organization/Collection

According to Ching's definition; central organizations are dense compositions that are composed of secondary spaces grouped around a larger, more dominant and central space. (Ching, 2002)

Thanks to its stable and perfectly symmetric form, circle collects all the functional properties surrounding it at the center, visually, aquistcally and perceptionally. And also, directs all the primary and secondary spaces located on its edge to the centre. (Figure 5)

2.2.Radiational Organizatins/Distribution

In architecture, radiational organizations are actions that develops from the center to outward. Actullay, in architecture this tool is used to scatter a function or a

formation at the center to the surrounding primary and/or secondary spaces on the circumference. At the same time, since circle is a very convenient form for sound and visual distribution, its prefered in functional architecture. (Figure 6)

2.3.Encircling / Surrounding

As it is seen occassionally in human physocology; to designate that something is important or to attract attention on something, it is taken into a circle or hoop, and the same thing applies in architecture too; curved, continuous and single surfaced circular forms are used. While performing this task, regular or irregular geometries, forms are surrounded and collected by a single circular form to establish a regular central architectural organisations. (Figure 7)

2.4.Smooth Pass/Continuity

The smooth, curved edges of the circle enhances the feeling of continuity in the architectural space. The application of this concept can be seen easily at the corner buildings in cities.

3. The Symmbolic/Conceptual Characteristics of Circle

3.1.Strength

Some superior meanings were attributed to circle in the history, due to it stable, rigid, symmetric form and special central characteristics. As the social, cultural, ideational and spiritual relations increased and developed in the society, circle is used both in the explanation of spiritual powers like God, nature, universe and mythological powers like ideology, authority, status.

3.1.1.Spiritual Powers

From the ancient times till today, circle is the most appropriate form to define the perfectness of god and nature. Beside this in religious buildings the dome symbolized the heavenly, sacred sky. Consequently, in the spaces where spiritual relation between the human and the god is emphasized, circle and domes are used.

3.1.2. Mythological Powers

The distinct form of circle compared to other prime geometrical forms gives circle a previliged situation among other geometries that has corners and flat surfaces. By this means, in architecture circle becames a very effective form to emphasize the ideological, politic and social differences in the society. (Figure 8)

3.2.Universality

In the history and also today, circle is thought to be a model of universe. The center of circle and the units accomodated around the center and the cicumference enveloping these units, help to percieve the architectural space like a universe. In addition to this, if the space is covered with a dome symbolizing the sky this perception even becomes more powerful. (Figure 9)

3.3.Equality

As the circle bears a perfect symmetry, enables a single perception of the surface and focus it in the center, it provides equal visual and sound perception for functional purposes in the architectural space. At the same time circle is an effective form that is used very often symbolically to

designate the social equality between the individuals and equality of humans in front of the god. (Figure 10)



3.4. Monumentality

The very powerful central/focal properties, the continuity and eternity feeling that is evoked by the uniquely perceived curved surface, creates strong and immense lofty feelings in the architectural space. The space becomes a monumental due to these athmosphere. (Figure 11)

3.5.Eternity

For the humans to conceptualize the existence of the god in the eternity, especially in the religious spaces to create a mistical athmosphere, circle and circular forms are prefered. These forms compared to flat and cornered forms are much more effective in creating the feeling of holy sky and desire to reach the god, and provokes the feeling of eternity in the architectural space more succesfully. (Figure 11)

According to Ogel; circle symbolizes the eternity and at the same moment among the signs it is the most

powerful one to define the eternity. As it consists of both the source and the end, it is the symbol of the order and unity in the universe.(Ogel, 1994)

	r	,			mi
Δ	The Form / Physical	в	of Circle	C	The Symmbolic/Conceptual
1.	Characteristics of Circle			Ŭ	Characteristics of Circle
	Sides are Equally		Control		
	Distanced From the		Central		-
AI	Center/Symmetry	B1	Organization/Collection	C1	Equality
	Control		Radiational		
A2	Organization/Collection	B2	Organizatins/Distribution	C2	Universality
	0 1 6 /0: 1				
A3	Surface/No Direction/Continuity	В3	Encircling / Surrounding	C3	Strengty
			Smooth Pass/Continuity		
		B 4	Sincon 2 and Communy	C4	Monumentality
				C5	Eternity

Table 2: The codifying of circle's characteristics

Building name	The realized building	Chara cterist ics	Building name	The realized building	Char acter istics
Figure12, Akçaabat Belediye Binası, Trabzon		A3 B2 B4 C3 C4	Figure13 ,Farabi Göz Hastaha nesi, Trabzon		A1 A2 A3 B1 B2 B3 C3
Figure14, Atapark, Trabzon		A1 A2 B1 B2 C1	Figure15 ,Çay Bahçesi, Boztepe, Trabzon		A3 B1 B2 C1
Figure16, Restauran t, Boztepe, Trabzon		A1 A3 B2 B4 C4	Figure17 ,Cephan elik, Trabzon		A1 A2 B1 B2 C3 C4
Figure18, Cemil Usta, Akçaabat		A3 B2 B3 B4 C4	Figure19 ,İş Merkezi, Meydan, Trabzon		A3 B2 B3 B4
Figure20 ,Apartm an, Trabzon		A3 B2 C4	Figure21 ,İpekyol u İş Merkezi, Trabzon		A3 B4 C3
Figure22, Deniz Bilimleri Fakültesi, Sürmene		A2 B1 B2 C4	Figure23 ,Persone 1 Yemekh anesi, Trabzon		A1 A3 B2 C4

Table 3: The anlysis of circle's characteristics on the examples

Conclusion

In the space organization of the Akçaabat municipality building, the use of radiational scattering characteristic of the circle was done and a totalitarian, continuous space was obtained. At the exterior space a curved, continuous surface was provided. The resulting distinction from the other buildings at the nearby emphazises the power related to status and the monumentality. (Figure 12)

In the Farabi Ward for Eyes, by taking the advantage of the central characteristics of circle like collocation and distribution, the functions of the building was arranged. At the same moment by applying a visual distribution the view was controlled. All the spaces are covered by only one surface. The symmetric and stable pose of the building contributes to powerful outlook. (Figure 13)

At the Atapark, the definite central and focal appearance of the circular pool, does the task of collecting and distributing the people. And also, symbolizes the social equality between the individuals that came there for the same purpose; entertainment, recreation. (Figure 14)

The circular terraces at the tea garden at Boztepe not only serves as a meeting place for people but also makes the extreme use of the view by the help of their circular forms. (Figure 15)

The restaurant at the Boztepe; because of its location to capture the view most effectively, the curved and continuous surface of the circle was used and a uninterrupted visual distribution was provided. The building attains a monumental air due to its stable and distinct form from other buildings. (Figure 16)

The Arsenal at Boztepe has an exact circular shape. As it is required in such buildings, an organization that will enable to collect around a center and provide a distribution visually and functionally, the circle was prefered. And it is a monumental building with its stable and symmetric form. (Figure 17)

In the Cemil Usta restaurant in Akçaabat, an eliptic form, which has a curved surface and is a derivation of circle, was used to provide an uninterrupted visual sight. In the interior, this curved surface wraps both the space and the people, and also distributes the sight. The building attains a monumental effect with its pretentious look. (Figure 18)

The office center in Meydan, points a corner in the city center that is surrounded by streets. The two different facade are wraped with the continuous and curved surface provided by the circle and continues uninterruptedly. Beside this, circular form help functional and visual distribution in the building. (Figure 19)
At the apartment building in City Center, the front facade is circular. Benefiting from the curved surface of circle, a complete visual distribution is applied. And it has a monumental effect thanks to its distinct form. (Figure 20)

The lpekyolu office tower provides a smooth pass and continuity at the line of buildings on the street. The arty look enhances the power feeling. (Figure 21)

The Sea Science Faculty in Sürmene has a circular entrance facade. By taking advantage of circle being a central form, a functional collection and distribution was performed. The entrance, which is visually the most stressed part of the building, is circular and supported with columns which symbolizes the power. (Figure 22)

The KTU personnel cafeteria has a location which deserves a good visual organisation and this was done again by using a curved surface. The building symbolizes power with its symmetric and stable form. (Figure 23)

At the circular buildings investigated in the city scale of Trabzon, it is observed very clearly that the characteristics that are peculiar to circle are used in the buildings for both functional and semantic/symbolic purposes. Among these purposes most widely used application reasons are, physically; it has a curved and single surface, functionally; the radiational scattering property and symbolically; monumentality characteristic.

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- 6. Figure 6, Hotel Dieu, a. g. e. p:209

- 7. Figure 7, Chancellery building, a.g.e. p:74
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- 9. Figure 9, The Millenium dome, "Arradamento Architecture", 2000/3, p: 58
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Accessible public use for people in special needs

Elçin Tezel

University of Bahçeşehir, Turkey

Purpose of the architectural design is based on the idea of serving for the majority of the people. Throughout the history, 'majority' is misinterpreted as the people close to the average. It is obviously false that no one is average by means of body measurements. Albeit the awareness of diversity in human dimensions and abilities gain impetus after the Second World War, rapid urbanization and shortage of land resulted disregard of people in special needs. People who are significantly larger or smaller than average size and weight, including children; people weaker than average, including the elderly; and people experiencing either temporary or permanent physical disability are the ones who suffer from inappropriate design solutions.

A significant percentage of people fall into at least one of the special-need groups for some part of their life spans. Hence, meeting the needs of those people through barrier-free designs both in public use environments and in private spaces is a requirement. Designing accessible public spaces is quite critical for the participation of people to the social life. In response to provision of barrier-free design, the concept of universal design has emerged. Through the approach of universal design, the environment becomes serviceable to the total population including the disadvantaged people. Universal design refers to the idea that the environment and utilities are designed in a way to accommodate all people in a society. Though there are limits to the degree of success, the objective of the designers is the realization of optimum barrier-free service for those with special needs.

To make the public use spaces accessible and usable for everyone, adaptability projects can be applied. Adaptability projects indicate the allotment of specially designed space in public use, necessary arrangements and physical dimensions for full accessibility. This paper aims to examine general design considerations necessary to make the public spaces accessible to people in special needs. Dependently, accessibility, mobility, usability, visual and auditory requirements and safety factors for outdoor and indoor public spaces are examined for children, elderly and disabled people.

1. Introduction

As designers and architects, remaining sensitive to the needs of the whole society is the major responsibility when designing public buildings and sites. Throughout the history, the concept of 'whole society' has been misinterpreted as the average people or those close to the average. Since no one is average by means of body measurements everyone can be considered as disabled. Some of the qualities of the physical environment may even slow down the progression of people who are not disabled. Revolving doors and turnstiles, broken sidewalks and driveways, steep stairs and heavy doors are the obstacles, if not completely impeding the progress. But how does a person with a disability, or in special need cope with such obstacles? As architects develop their sensitivity to the needs of people with varying disabilities, it becomes easier to focus on potential barriers and eradicate them. When calling people in special needs, people who are significantly larger or smaller than average size and weight, including children; people weaker than average, including the elderly; and people experiencing either temporary or permanent physical disability are categorized in this group.

2. Principles of universal design

Rapid urbanization and shortage of land caused the loose of sensitivity to the needs of people with disabilities, with special needs and sometimes even the needs of abled people. People may have disabilities, either permanent or temporary, but do not necessarily handicapped by the environment. Built environment makes a crucial difference whether a person with limitations is capable of living in public environments. House of a person with limitations may be designed to meet his or her needs. However, the same person will be impeded when the streets, buses shops and offices present barriers at every turn. This handicapping effect of the built environment can be changed by the applications of universal design. Universal design refers to the idea that the environment and the utilities are designed in a way to accommodate all people in different ages and abilities in a society (Story, 2001). Principles of universal design, which was published by the Center for Universal Design (Version 2.0, April 1997), includes the following concepts:

Equitable use considers the useful and marketable designs to people with diverse abilities.

Flexibility in use refers to the designs that accommodate a wide range of individual preferences and abilities. Adaptability is one way to make designs universally usable and provide for multiple ways of doing things.

Simple and intuitive use considers easy-to-understand designs regardless of the user's experience, knowledge and language skills or current concentration level.

Perceptive information means the communication of necessary information to the user, regardless of ambient conditions or the user's sensory abilities.

Tolerance for error refers to minimization of hazards by design and prevention of injuries as the results of accidental or unintended actions.

Low physical effort refers to the design that can be used efficiently and comfortably with a minimized strain and overexertion.

Size and space for approach and use considers the designs that accommodate the easy approach, reach, manipulation and use regardless of user's body size, posture or mobility (Story, 2001).

Purpose of the Principles of the Universal Design is to guide the design process, evaluate the designs and improve consciousness by educating both designers and users about the characteristics of designs usable by the whole society. Applications of universal design for architecture include methods of creating clear wayfinding and building accessible environments for all. One way that the architects can develop this essential sensitivity is to continually evaluate the needs of the people with limitations and compare their needs with the existing physical environment. In order to gain a full understanding of contribution the architect can make to universal design, it is important to look at the population in special needs.

3. Types of limitations

Statistics reveal that a sizable percentage of people fall into at least one of the special-need groups for some portion of their life time. By discussing the possibilities of design adaptations of the physical public settings, a review is given to the types of applicable special needs.

3.1. Children

Everyone begins life as child and spend a period with smaller body measurements that are constantly changing. Childhood is the very basis for the type of life, quality of knowledge and experience found in later years. Hence a special attention is required for child-in-mind design arrangements (Sandhu, 2001). Particular considerations for children are related to safety and comfort issues. The issue in safety in public use centers on stairways, railings and gates where falls are a hazard to the children. Stairways with long uninterrupted runs, changes of level with just one or two steps are the problems to be avoided. Vertical glass and mirror surfaces in front of large and slippery floor are also dangerous. Any built environment that has any feature capable of being climbed, squeezed through, slid down or swung from should also be avoided. Railings on stairs require the attention not to catch the small heads between supports (Sinnott, 1977).

3.2. Elderly

In this context, it is important to understand the relationship between aging and disability. An elderly person is characterized by reduced strength, changes in body size, limited visual and auditory sensitivity, slowed reaction times and decreased mobility. An appropriate environment eases the ability of elderly to live effectively and happily. As some part of the life is occupied by childhood, experiencing the older ages at some point is a high probability (Coleman, 2001). Environmental obstacles include stairways and level changes of a few steps, details of floors and thresholds that can cause tripping and slippery floor surfaces. Public stairways, if not replaced with elevators and escalators, are safest when designed with a gradual slope. Short runs, intermediate landings, sturdy handrails and good lighting.

Ramps can be replaced with stairways and make wheelchair access possible. However, having a very gradual slope (no more than a rise of 1-12) makes the ramps excessively space consuming. Since climbing a full story height by ramp is extremely tiring, escalators are more practical in public places for wheelchair users and people with impaired mobility (Wilkoff and Abed, 1994).

3.3. People with disabilities

A high proportion of the population experiences some form of disability in their life either as temporary or permanently. Disabilities may be divided into four categories, namely mobility, dexterity, sensory and cognitive disabilities (Wilkoff and Abed, 1994).

Mobility-impairing disabilities may necessitate the use of wheelchairs. It should be noted that not all people using wheelchairs have completely lost their mobility. Some may be able to move around a little without their wheelchairs, or others, who are ambulatory, may use wheelchairs occasionally because of reduced body strength. Whatever the type, people in wheelchairs face a tremendous number of physical barriers in public life. The problems commonly faced by wheelchair users can be grouped as vertical level change problems and dimensionality problems. For the outdoor places, ramps and curb cuts are widely used as solutions to level change barriers. Gentle slopes are used in these elements as an important design consideration. Entrance passages and doorways must be wide enough to accommodate a wheelchair, including turning radius. Doorways in public spaces require certain considerations for wheelchair users. For the door opening toward the user, a sufficient space should be left on the latch side of the door not to hit the chair when opening. The required force to open the door is a critical for people using wheelchair, walker, cane and crutch. Especially exterior doors that require a lot of strength to open can be heavy even for ambulatory people with good strength in their arms. Automatic door openers can be used to solve the problem. Height of the controls such lighting switches, elevator call buttons, public telephones and as merchandise in stores can be deterring factor for wheelchair users. Hence, reach ranges for particular settings should be considered. Sound or proximity-activated elective switches may be the best solution for certain locations (Wilkoff and Abed, 1994; Grist et al., 1996).

A number of safety issues require special attention to the needs of mobility-impaired people. In parking lots, the access aisle must be connected to an accessible route to avoid the wheelchair user to move behind parked cars.

Dexterity problems are caused by certain motor difficulties such as arthritis, artificial hand or arm, complete or partial paralysis. People who have dexterity disabilities can have the troubles of grasping objects, such as handrails and operating controls such as knobs. Automatic controls can enhance the abilities people in this group (Wilkoff and Abed, 1994; Grist et al., 1996).

Sensory disabilities include visual and auditory disabilities. Visual disabilities; in their minor forms, are widespread. More severe impairments refer to blindness. Other than these, difficulties in depth perception, reduced visual field, a sensitivity to glare, problems in adjusting dark and light may be deterring. In public spaces, temporary and protruding objects can cause hazards for visually disabled people (Wilkoff and Abed, 1994; Grist et al., 1996).

Signage is also a major barrier for people with visual disabilities. Tactile and visual signs are used for people who are blind or visually impaired for their independence. Signage in raised letters or brailla numerals, tactile maps of buildings and facilities, consistency in location of signage allows the people in visual impairments to obtain information by themselves.

Textured or clearly demarcated pathways can also surpass the orientation problem of the visually impaired people in large, open spaces. Auditory signals and recorded messages guide the usually impaired people to identify entrances, exists, pathways and crossings.

Auditory impairments range from mild losses to profound deafness. Participations of these people to community life can be provided by signage

432

accompanied by good lighting that makes signage noticeable and easy to read (Wilkoff and Abed, 1994; Grist et al., 1996).

People with cognitive disabilities, the fourth category, are less impeded by architectural barriers. Since people with cognitive disabilities may be slow to perceive and understand the information, repetition of information in signage system as well as printing in large, easy-to-read letters and pictographs are beneficial requirements to ease the movement of people with cognitive disabilities in public spaces (Wilkoff and Abed, 1994; Grist et al., 1996).

All these considerations and arrangements may have little value to people without physical constraints but cause no inconvenience. These accommodations are expected to be available in outdoors spaces as well as in restaurants, theatres and other institutional facilities.

4. Conclusion

As important as adaptability projects and arrangements in physical environment, or perhaps more important, is the need for attitudinal change in society. The greatest expectation of individuals with limitations is respect from others instead of sympathy or charity. Besides, they do not wish to be segregated from the rest of society through inaccessible public spaces and building designs.

The more that people with limitations can emerge from their homes to make their way in the environment, the more they are able to participate independently in the mainstream of everyday life. Buildings are not the only structures that must be designed in an accessible manner but the exterior sites including sidewalks, parks, playgrounds, streets and transportation system must be barrier-free as well. Assuming that an individual with limitation is able transport himself, buildings and common public sites without accessible paths of travel are little or no use. In other words, the problem of accessibility must be considered throughout the entire exterior and interior circulation route (Grist et al., 1996).

Architects can provide motivation for an attitudinal change toward people with limitations. Adaptability projects add more expense to realize accessible spaces. Where new constructions are concerned, creating accessible design is no more expensive than creating inaccessible designs. If all the goals of universal design and accessibility cannot be carried out, architects can assist in prioritizing accessibility plans to achieve the greatest benefit allowable within the proposed budget. When making decisions, the attitude should be based on the idea that physical barriers are not integral parts of disability, but they are external to the person and therefore can be eliminated.

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The Transformation of Present Building Stocks in Historical Texture

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Ayça ARAZ USTAÖMEROĞLU Gürol USTAÖMEROĞLU KTÜ, Department of Architecture, Trabzon, Turkey

Abstract

In today's cities, there is a continual change based on the social, cultural, socio- economic factors. This change also affects the present identity of the city both positively and negatively. Developments due to population increase and population movement, and functional, economic necessities force the building limits within the city and close environment.

It is known that the cultural and socio- economic changes force buildings and building groups to change in terms of architecture. These changes sometimes occurs in the new elements or space to be added the building in the form of exceeding the flexibility limits and other times occurs in complete functional change of the building. In this case, these buildings are used to serve for different functions. For example some areas which are meant to be residential (house) areas originally turn into commercial (business) areas.

This particularly affects the historical-pattern of the cities which have long backround. Within the historical, cultural and traditional texture of the city, new housing sometimes becomes inevitable. Also for the same reasons, historical buildings are necessarily transformed into areas serving for other functions. Infact leaving those areas as they are for the sake of protecting history and culture may infact give harm to the protective attitude to be aimed at. Because the present historical buildings may be damaged physically when they are deprived of any function. Because, buildings may be protected, repaired only when functioning.

Any architecture product can meet the needs of user at the time it was constructed however, such products may inevitably undergo a functional change. The cultural continuity is possible through protecting physical forms and livable environment, and adopting it to the contemporary time. In this context, while physical form is protected within architectural product, functional change becomes inevitable.

In this paper, the city of Trabzon which has a rich historical backround will be studied and the functional transformation table of the historical housing pattern in today will be determined. Through observation and survey drawing, the housing pattern of the Pazarkapı quarter in Trabzon will be studied. On this housing pattern. The physical and functional changes will be highlighted. The functional changes in some houses today will be highlighted and suggestions will be put forward regarding the present housing pattern.

1. Introduction

There has been a continuous transformation in today's cities, depending on the technological, social and cultural factors. This process of transformation sometimes affects the present identity of the city negatively. The transformation in the historical cities and in the traditional texture in particular, and the re-construction activities threat to the sustainability in architecture and also prevent the transmission of the present values to the next generation.

As the cities have undergone modern transformation much efforts have to be given to the protection of their historical texture and construction elements in order to enable architectural sustainability.

All these indicators makes it inevitable to transform, revitalize and rehabilitate to continue sustainability and to transmit the present texture to the next generations in places where the historical texture fails to meet the necessities of the modern age functionally.

2. Reasons For The Transformation And Revitalization Of Historical Environment

Cities take their physical forms by the transformation of human life into sometimes color, enthusiasm and at other times into defiance (Erzen, 1997). Cities gain their color and become rich at points where the past and the present overlap. At the same time a city gains its identity from the historical backround. The continuity and the sustainability of historical progress is provided by combining the existing historical buildings with the modern buildings.

There are many reasons behind the necessity of protecting the existing historical texture that shapes identity and provides cultural continuity. The most important of these are the cultural-historical reasons, the physical and functional damage in historical environment, economic reasons, and environmental factors (Altinoluk, 1998).

Human being uses the natural and man –made environment he lives in and makes necessary alterations due to changing needs in time .The efforts to alter the environment are also shaped as the reflection of cultural properties. The environments, as an indication of a part of culture, reflect socio-cultural backround, economic statues and aesthetic tendencies of the users. In this context the need to transform the present environment can be attributed to change in the values stated above. When the functional and physical damages in the environment are added to the values the transformation becomes inevitable. Within the man and cultural environmental relations, the buildings which are products of humans formed by the reflection of his cultural values, have a longer life span in terms of physical properties than functions. And this makes it compulsory that these buildings need to be reorganized in relation to modern day and the future needs.

Considering the land rent, the design process and the construction process, the re –organization and re- evaluation of existing environment based on the desired function will be more economical and this shows the necessity of such transformations (Dağlı, 1999)

The growth and the development in the city in time, and the changing regional organizations caused by the functional transformations in the various settlements make the functional transformation in the existing spaces and also re arrangement of the environment necessary.

While the transformation, revitalization, rehabilitation and reorganization of historical environments become necessary in case not only all these factors are in force but also only a single one will be enough to show the necessity. Moreover, urban design, building design and interior design must be treated as a whole in the design process of the projects which are related to transforming the historical environment and re-use them.

3. The Introduction of The Projects For The Transformation And The Revival of The Pazarkapı, Trabzon

In order to comprehend man- made environment as a whole and to create the sense of perceptible definiteness in the design environment; the general design decisions should be made considering design elements (i.e. shape, measure, color, texture etc.) and the design principles (i.e. harmony, contrast, dominance, balance etc) (Ustaömeroğlu, 1998). Gesthalt psychology which is related to the perception of environment in relation to human reality and also visual order and comprehension of the world puts forward the necessity of design relations that ease the perception of design elements (Gür, 1996).Thus, by using design principles and Gesthalt principles together, it is possible to create good designs.

When old cities are considered, we see that they have large building stocks, which are old, and suffer physical and functional worn out, hence don't fit the modern times. On the other side, the users of the buildings tend to transform their buildings from housing to other uses, as the area changes functionally becoming a part of trade and/or touristic uses.

In this context, the Pazarkapı quarter of Trabzon which is close to traditional trade centre that sell local and authentic goods has been studied where the users started to transform the function of their buildings. These functional changes have been surveyed, basing on these some new transformation recommendations have been developed with seven students of the studio -the Architectural Project 5th term.

In the beginning of the Project, some analyses were made on site and it was observed that the houses were converted into offices or stores. The restoration of the building which was listed as 2.group was made by architect and re- designed as stores on the ground floor and as offices on the first floor. (Figure 1).



Figure 1. The restorated old houses in Pazarkapı quarter

Similarly, some other old houses in Pazarkapı quarter are also re- design adopting similar approach (Figure 2).



Figure 2. The restorated some other old houses in Pazarkapı quarter

In the North of the quarter there is northern site of the historical castle of Trabzon. In interior parts of the castle there are houses which are aproximetally 150 years old. In this area, there is also a old Turkish bath 'Eight Pillar Bath' which is newly restored. During the observations it was recorded that most of the historical houses suffered physical damages and some of them disappeared totally and some of them were replaced by new buildings. Also the stream passing through the residental area smell very bad, though it was covered with concreate slubs. The environment is very unhealthy, and physically suffered damages and ill-cared. (Figure 3) Just as the questionnaire hold in area revealed that residents are also suffering the unhealthy environment and said that they would support the transformation and rehabilitation project.



Figure 3. Present situation in Pazarkapı quarter

In the light of all these field studies, the theme of term Project was determined in studio that the Pazarkapı quarter will be revived and the old buildings will be restored and transformed into hotels, and the area, which will be cleared off these newly designed will be used for the activities such as restaurant, cafeteria ,souvenir shops. At the end of the street the bath named to "8 Pillars Bath" will remain untouched and serve for the hotel residents and thus Turkish Bath will be introduced to tourists. The cleaning and re-gaining the stream is among the objectives of the project. In the light of the aims, the method and possible results of the project were identified in the studio, then the students study freely to create suggestions for their designs.

In order to do revitalization and transformation project in the area, firstly the existing situation must be determined. For this reason students worked in groups in the four historical houses and historical bath. They determined the original design and state of houses and also conducted interview. Thus, the determination of the present situation the Pazarkapı quarter, which conveys to some extend its historical identity to present time, were determined through housing and openclosed space analyses. measurements. Basing on the general concept and data the each project began to form and developed in itself.

The students will both do the exterior space organization in the urban design scale and will transform functionally the interior of the buildings and solve the interior architecture. In this context, the relation between this projects and scale must be well balanced, and the urban design, building design and the interior space design should act as a whole. The students were instructed to consider Gestalt Principles and the basic design principles while doing their designs. They were also instructed to support their designs with materials, colors, textures. In the projects, designed in these directions, reflections of the conceptual discussions have been observed in exterior environment, building and interior space designs.

The design materials to be used in transformation projects will be treated as a whole in all scales. The new functions to be added to the environment and the buildings which will carry these new functions will also be part of a whole. In all of the studies the students were allowed to choose the historical texture principles of harmony and contrast. Nevertheless, no matter what method is employed the use of color, texture, material must serve for the unity and it was aimed that the human perception is to see the whole in all the details.

EXISTING SITUATION OF PAZARKAPI QUARTER

Existing situation Pazarkapı quarter is composed of four old houses, a historical bath, a stream which covered concreate and newly designed houses



The Introduction of Present Site And Proposal Projects

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Table 2. Proposal Project 1

442



Table 3. For posal Project 2

 This proposal project is designed both in harmony and sometimes in contract with existent historical textur in Pazarkapı quarter. Harmony is obtained with some of the basic design elements such as color, texture etc. Contrast is also obtained other basic design elements such as form, measure, direction etc. The main street serving hotels historical bath, café, restaurant is composed of the columns and the beams 	KADİR SOMUNCUOĞLU
FACADES GROUND FLOOR PLAN SITE PLAN	MODEL

Table 4. Proposal Project 3

444

GENERAL DESIGN DECISSIONS			PROPOSAL PROJECT 4
 This proposal project is designe in Pazarkapı quarter. Harmony is obtained with some Contrast is also obtained other b The student used two opposite a 	• AYDAN ÇORBACI		
FACADES	GROUND FLOOR PLAN	SITE PLAN	MODEL

445



446

Table 6. Proposal Project 5

5. Results

In this paper, named 'The Transformation of Present Building Stocks in Historical Texture, it has been emphasized the importance of the cultural continuity, by turning the physically and functionally damaged areas into functional units for the purpose of transmitting the cultural values to the next generations. With this study the projects developed to revitalize the Pazarkapı quarter, Trabzon, though for educational context. Through questionnaires conducted during the study it was seen that residents will support these kind of practices. By means of the final projects some certain functions were met, and both the creation of a perceptible whole and of a function that can be an economically viable were realized.

Considering the rich historical background of Turkey, such studies which aim at providing historical and cultural continuity should be emphasized in both education and practice. Such sensitivity is present in some areas of Turkey (such as Antalya Kaleiçi, Safranbolu, Amasya etc.) and the historical building stocks of the cities are transformed into places which have touristic attractions. The increase of the sensitivity, the protection of the present values in Turkey and transmitting them to the next generations are important.

This study aims students became conscious to protect these values through studio work created to solve scientifically the recent problems in cities. In the study, the solution to the defined problem is sought through studio work, which is considered as the problem solving method from the stand point of various people's views.

The proposal projects, designed in order to transform and revitalize the Pazarkapı quarter by 5th term students with aim of unifying the past and the present in terms of cultural continuity through the contribution of a group of students and residents.

It is expected that the run-down of historical sites irresponsibly with the increase in application of such studies, the demolition of the cultural values, and the formation of styless construction would be prevented. Thus, it may be possible that the unique and rich historical background can be transmitted next generations.

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