A Study About The Influences of Environmental Features on Individuals

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Abstract: The natural, artificial and socio-cultural communication of a person with his/her environment has features which affect his/her life style. For this very reason, as the environmental features or communication type of a person changes, systems such as his/her views of life, life style and spiritual conditions may, as well, be affected and altered. Depending on the basic physical and psychological needs of a person, his/her expectations from the environment are composed of a range of properties which vary greatly from person to person. Because of this, one may aim to prepare an environment that can satisfy a person or group only at an optimum level. The environment should indeed enable a person to realize his/her actions at an optimum level; moreover, it should satisfy a person emotionally and afford him/her peace and safety. Besides, the environment should so work on people that they think about and are influenced by it. Studies show that individuals are conscious of their environment and that they consider it important to use natural environmental features positively and construct new buildings and a new environment in accordance with existing local and historical ones. Moreover, the development of a socio-cultural environment should be the result of a certain process; and this development process should embrace a system which provides an environment for and enables the participation of the majority. As another result of research, those of the features which leave a lasting impression on the mind of an individual, as well as peaceful and relaxing features, come to the fore as a contrasting indication of discontentment and dissatisfaction at the interaction with highly populated cities and towns. Because of this, while planning urban areas, the task of estimating growth-flexibility should be treated with great care.

Key words: Artificial environment · Natural environment · Perceptual environment · Socio-cultural environment

INTRODUCTION

The communication type of an individual with the natural, artificial and socio-cultural environment determines his life style. Thus, as environmental properties and communication type change, it is possible that systems such as one's view of life, life style and psycho-spiritual state might be influenced or alter.

As a result of individual-environment communication, the individual interprets his environment and stores this kind of information in his short-middle-long term memory. The base of knowledge forming and the individual's experiential background date from his/her childhood and youth; and this knowledge plays a major role as a factor in his/her sensing, knowing and evaluating the environment. In addition to the individual's old and new experiences, his/her momentary mood, characteristics, culture, education, job, age and other such factors indispensably direct his/her communication with the environment.

An individual's expectations from the environment related to his/her physical and psychological needs consist of a wide range of features varying with individual differences. Therefore, one may aim to build an environment that satisfies individuals at the optimum level.

An environment should enable individuals to realize their actions at the optimum level while satisfying them

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sensually; to wit, it should arouse positive emotions and offer peace and safety. Apart from all this, an environment should influence individuals and induce them to think about themselves.

Environment System: Although environment is a word used in an ecologic meaning, it can also be interpreted as a system of all relations in life settings. In a sense, environment can be defined as a body of geographic, physical, technical, cultural, historical and human habitat items. In the widest sense, environment is a body of systems and processes where all systems are in a dialectical relationship.

It can be observed that Steele (1973) perceives environment as natural and artificial at the concrete level and as socio-cultural (social relations) at the abstract level [1]. While Brogden (1979) perceives environment as natural-artificial at the concrete level, as do others, at the abstract level his perception depends on the individual's relations in his/her inner world rather than with the society [2]. However, Rapoport (1977) approaches the environment system in quite a different way, as the individual's actions and thoughts in a place and the natural environment surrounding those places [3].

Within these frameworks, the environment system can be generalized as follows:

The natural environment is an environment system which consists of the universe and all formations, objects and creatures existing unaided;

The artificial environment is an environment system which includes all artificial products in the natural environment;

The socio-cultural environment is an environment system which includes psycho-social and cultural relations that appear as a result of an individual's or group's interaction with their natural-artificial environment;

The perceptual environment is an environment system which the individual constitutes in his/her mind after perceiving his environment and attributing to it a meaning.

Ittelson (1976) touches upon and classifies perceptual and semantic features of the environment as follows [4]:

- The environment is a place to be discovered,
- The environment is multidimensional,
- The environment has a wide scope,
- The environment offers more than it is supplied with,

- The perceivable features of environment lead to actions,
- The environment offers meanings and motivational messages which orient actions,
- The environment always offers distinguishing qualities or spirit.

While similar environments are formed, it is indispensable that every environment possess different associations, its own image-identity and meaning, since the environment reflects distinctive qualities or a different spirit; because, an environment's distinctive features contain not only an aesthetic and systematic relation but also certain socio-cultural activities.

Individual-environment Interaction: Although an individual's living environment, actions and goals vary, basic individual-environment relations do not change. These relations are biological, psychological, physical and social and they form a system in accordance with the individual's skills, capacity and limitations. The individual-environment interaction system embraces that individual's communication with the natural, artificial and socio-cultural environment and even the way this communication is reflected to his/her inner world.

The influence of the environment on the individual is so strong that it may cause him/her stress. The level of environmental stress is an indication of life quality and expresses an adaptation problem. The factors affecting the formation of environmental stress fall into three categories, to wit, environmental stimulus sources, factors related to living beings and cultural factors. The stimulus sources building up environmental stress are biochemical, physical, psychological and socio-cultural. The adaptation level determining environmental stress is assigned to the relation between the individual's capacity and environmental effect [5]. If environmental impact rises at the same rate as individual capacity, then we may speak of adaptation; otherwise, maladaptive behaviors may appear (Figure 1).

The approaches of the models concerning individual-environment interaction contain various points of view, some of them being as follows:

Gibson (1966) says that the individual's feelings and behaviors are influenced by natural-artificial and socio-cultural environmental factors and thus are limited.
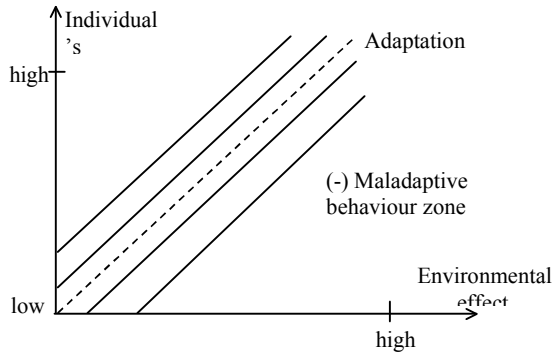
Fig. 1: Adaptation Level Between Environmental Effect and Individual's Capacity [6]

This model is based on the pattern of the individual, under the influence of environmental factors, obtaining information around him/her by using perceptual processes and changing this information into a mental schema and behavior. Additionally, the model asserts that the mental schema is formed under the influence of perceptual processes acting together with the individual's feelings, needs and experiences [7].

Banz (1970) suggests a model concerning the emotional, intellectual and functional connection between individuals and society. Claiming that in the relations between the individual and the environment these connections do not have the same value, he emphasizes the importance of emotional and intellectual connections in forming the environment. He also points to the positive and negative dimensions of emotional and intellectual connections [8].

Fitch (1970) studies the environment containing individuals and their products in terms of maintaining physical comfort. Pointing out that the individual is entirely subject to the factual environment, Fitch defines the environment using eight basic components, to wit, thermal, atmospheric, nutritional, optical, vocalic, organic and inorganic, spatial and gravitational. He defines the individual as being constituted by three basic mechanisms, i.e. metabolic, perceptual and structural [9].

Fisher *et al.,* (1984) developed a model describing the effects of the environment on the individual's behavior. An environment-behavior model is defined broadly to include the individual's predictive processes and perceptions, probable copying strategies, their evaluation and other effects resulting from copying, as well as stress sources (Figure 2) [10].

Knox (1984), assuming that structural environment has hindering, facilitating, encouraging, or modifying effects on individual or group behavior, suggests a model about how these are affected by social fragmentation in the structural environment, by ideological power and by political fractioning (Figure 3) [12].

Examining Individual-environment Interaction Through an Implementation Study: To examine and measure the features which the environment presents to individuals and the interest that individuals have in it, group implementation studies have been held in the districts of Oylat, Agva and Akcakoca.
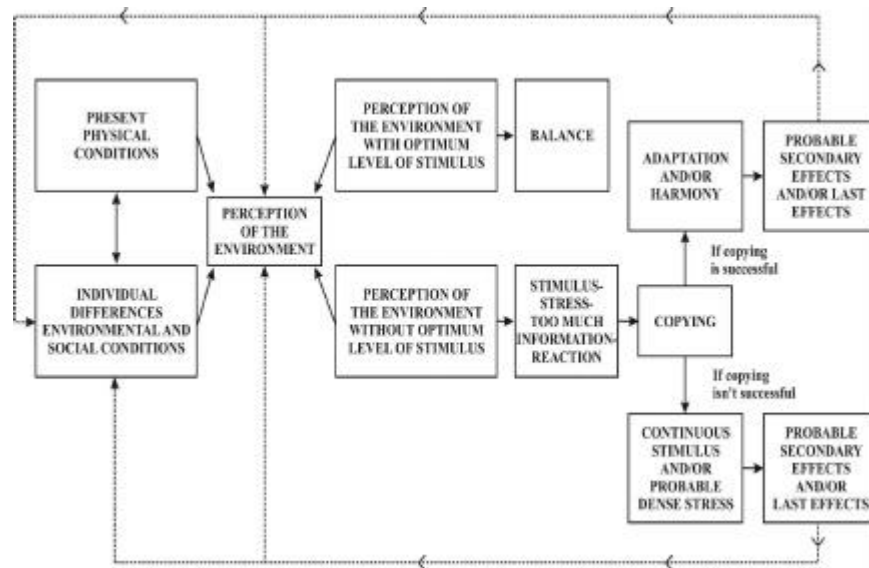

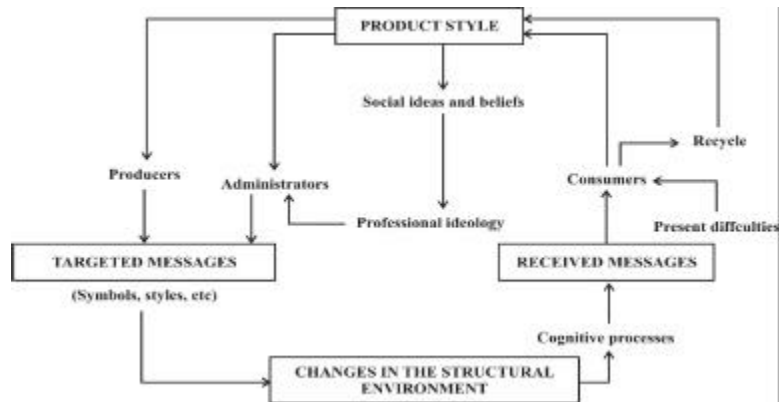Fig. 2: Environment and Individual Behavior Model [11]

Fig. 3: The System of The Interaction Between The Social Environment and Structural Environment [13]

Fig. 4: A View of The district of Oylat[1]

Oylat, Agva and Akcakoca possess certain common features in regard to their natural, artificial and socio-cultural environments. These features can be listed as clean air, wealth of natural beauty and the opportunity to observe local-traditional life. In addition, Agva and Akcakoca have the sea, while Oylat has salubrious thermal water for health problems.

The District of Oylat and User Evaluations
General Information about the Oylat District: Situated on the Bursa-Eskisehir highway 27 km from Inegol, the district of Oylat stands on a hill at the foot of Mount Uludag surrounded by green valleys. Fed by water which comes from melting snow on Mt. Uludag, Oylat Brook is graced by a waterfall. At an altitude of 840 m above sea level, the Oylat Thermal Spring Area possesses healing mountain and climatic properties. With its cool climate in

summer and snowy landscapes in winter, Oylat is a popular holiday resort (Figure 4)[1]. An abundance of natural beauty, the thermal spring water for the treatment of health problems, clean air, plus quiet, relaxing ambient conditions are some of Oylat district's distinctive characteristics.

User Evaluations of The Oylat District:
• The most important reasons people spend their holiday in this district are natural beauty, existence of thermal spring water for the treatment of health problems and the climate (Table 1).
• The image of Oylat district among users is firstly that it is quiet and relaxing; other features are health facilities thanks to the thermal spring water, benevolent climate and natural beauty (Table 2).

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[1]Anonymous, Oylat District, http://www.oylatkaplica.com, 2006

Table 1: The Reasons Why people Prefer Oylat District (August 2004)

The reasons why people prefer Oylat District	Degree of importance	Number of preferences in the 1st place	Number of preferences in the 2nd place	Number of preferences in the 3rd place	Number of preferences in the 4th place	Number of preferences in the 5th place	Number of preferences in the 6th place
Climate	3	8	3	6	1		1
Natural beauty	1	17	4	3			
Health services thanks to thermal spring water	2	14	5		1		
Possibility of seeing local-traditional life style	4		2	1	3	1	2
Touristic opportunities	4		2			5	2
Financial reasons	4	1	1		3	2	3

Table 2: The image of Oylat District Among Users (August 2004)

The image of Oylat District among users	Degree of importance	Number of preferences in the 1st place	Number of preferences in the 2nd place	Number of preferences in the 3rd place	Number of preferences in the 4th place	Number of preferences in the 5th place	Number of preferences in the 6th place
Environment	4	1	1	1	1	2	2
Natural beauty	3	5	4		4	2	
Health services thanks to thermal spring water	2	12	3	2	1	1	
Quiet, relaxing environment	1	23	3	1			
Climate	3	4	4	6		1	1
Socio-cultural environment	4	1	1	2	2	1	3

Fig. 5: A Panoramic View of The Agva District[2]

One may deduce that the reason why abundance of natural beauty and positive climate are the main criteria for preference of a locale is the fact that individuals living in cities benefit from these features less in their everyday lives. But it is observed that because of what specialists say and the users who benefit from them, the salubrious qualities offered by the Oylat Thermal Spring Water may be a reason for preferring the district even when other features are subtracted. The fact that people living in cities seek a quiet, relaxing ambiance may be influential in determining the image of this district among individuals.

The district of Agva And User Evaluations
General Information About The Agva District: Lying between the Goksu and Yesilcay rivers on the coast of the Black Sea, Agva is a tourist resort to the north of Istanbul. It is located on the delta formed in the past where the Goksu and Yesilcay rivers flow into the Black Sea. Besides offering a rich natural environment with its natural beach, healing sand, coves, isles and woods, the nearby surroundings of Agva have historic ruins from various ancient civilizations (Figure 5) [2]. The general features of Agva can be listed as an abundance of natural beauty, historic sites in the vicinity, clean air, sea and a quiet, relaxing ambiance.

User Evaluations of The Agva District:
- The most important reasons why people spend their holiday here are natural beauty, climate and shuttle service offered by the tourist facilities (Table 3).
- The main constituent of the image of Agva district among people is its quiet, relaxing ambiance; others are natural beauty, climate and historic sites (Table 4).

[2]Anonymous, Agva District, http://www.agvanet.com, 2006

Table 3: Reasons Why People Prefer The Agva District (August 2006)

Reasons why people prefer the Agva District	Degree of importance	Number of preferences in the 1st place	Number of preferences in the 2nd place	Number of preferences in the 3rd place	Number of preferences in the 4th place	Number of preferences in the 5th place	Number of preferences in the 6th place
Climate	2	5	6	2	3		
Natural beauty	1	20	3	1			
Health services thanks to thermal spring water	6		1		1	6	1
Possibility of seeing local-traditional life style	4	3	2	3	2		2
Opportunities and shuttle service offered by tourist facilities	3	1	6	7		1	
Financial reasons	5	1	1	1	2	1	4

Table 4: The Image of The Agva District Among Users (August 2006)

The image of the Agva District among users	Degree of importance	Number of preferences in the 1st place	Number of preferences in the 2nd place	Number of preferences in the 3rd place	Number of preferences in the 4th place	Number of preferences in the 5th place	Number of preferences in the 6th place
Environment	3	4	6	1	3	3	
Natural beauty	2	8	3	6	1		
Health services thanks to thermal spring water	5		1				8
Quiet, relaxing environment	1	17	3	3			
Climate	3	3	7	4	3		
Socio-cultural environment	4		1	1	3	5	

Fig. 6: A View of Akcakoca District[4]

Among the criteria of preference for the locale, the leading ones are natural beauty and positive climate. While the favoring of accommodation and shuttle service is directly related to the price of the establishment, shuttle service with certain, non-variant standards should be basic and obligatory for touristic establishments as a symbol of social development. Besides the district's quiet, relaxing ambiance, the fact that it affords the possibility of visiting historic ruins in the vicinity plays an important and effective role in the image of the Agva district.

The District of Akcakoca and User Evaluations
General Information About The Akcakoca District:
Akcakoca is on the Western Black Sea and the biggest county seat of Duzce province. The Akcakoca tableland rises from north to south and west to east and joins the highlands. East of the town lies hilly land. On the coast there are steep, high cliffs [4]. Akcakoca and its surroundings are a tourism resort with wide forestlands, plateaus, interesting waterfalls, lakes, streams, thermal water springs, long coast line and beaches and historic and natural monuments[5]. Among the general features of Akcakoca district, the natural and historic environment, clean air, sea and quiet, relaxing atmosphere come to mind (Figure 6).

User Evaluations of Akcakoca District:
• The most important reasons why people prefer to spend their holiday in this district are natural beauty, climate, the chance to observe a local-traditional life style and financial factors (Table 5).

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[4] Anonymous, Akcakoca District, http://www.akcakoca.org, 2006

Table 5: The Reasons Why People Prefer Akcakoca District (May 2006)

The reasons why people prefer Akcakoca District	Degree of importance	Number of preferences in the 1st place	Number of preferences in the 2nd place	Number of preferences in the 3rd place	Number of preferences in the 4th place	Number of preferences in the 5th place	Number of preferences in the 6th place
Climate	2	4	4	5	1		
Natural Beauty	1	15	1		1		
Health services thanks to thermal spring water	5		1			1	3
Chance to see local-traditional life style	3	1	5	1	1	1	
Opportunities and shuttle service offered by tourist facilities	4	1	1	2	1	2	
Financial reasons	3	1	3	3	2		1

Table 6: The Image of Akcakoca District Among Users (May 2006)

The image of Akcakoca District among users	Degree of importance	Number of preferences in the 1st place	Number of preferences in the 2nd place	Number of preferences in the 3rd place	Number of preferences in the 4th place	Number of preferences in the 5th place	Number of preferences in the 6th place
Environment	3	1	1	3	1	1	
Natural beauty	2	3	4	1	1		
Health services thanks to thermal water	4		1		1		1
Quiet, relaxing environment	1	16	4	1			
Climate	2	1	5	3	1		
Socio-cultural environment	2	2	4	2	1	1	1

• The main constituent of the image of Akcakoca district is its quiet, relaxing ambiance; others are the natural beauty of the environment, climate, plus the socio-cultural and historic environment (Table 6).

Besides seeking climatic features such as natural beauty and clean air, city dwellers would also like to see local-traditional life styles. Thus, keeping the past-present relation alive and providing an opportunity to observe it can be achieved only by preserving local characteristics and adding them, without alteration, to the daily life process. Climatic features such as quiet, relaxing ambient conditions and clean air and abundance of natural beauty, which are offered to a very limited extent in urban environments, form a user image as well as reflecting the need of individuals for circumstances contrasting with those offered in cities.

General Evaluation: The places researched here offer abundant natural opportunities, as well as artificial ones; as for individuals, they show an awareness of natural environmental opportunities. The reasons people prefer these places are predominantly natural environmental features (natural beauty, climate). The abundant physical environment features which urban settings offer reinforce factors for the interest in and quest for natural beauty. The hitches in the air system caused by extensive use of air in urban areas make the clean air criteria in climatic features prominent. This result proves that people are aware of the need to preserve the natural environment. And this underscores very well the need to emphasize the use and transformation of the natural environment.

Furthermore, the fact that the most salient effect in users' minds are the quiet, relaxing ambient conditions of these places shows that people are in search of contrasts to the crowds, noise, etc. of urban places and that for this reason they need different ambient features.

CONCLUSION

The environment should be able to offer every physical and visual quality to meet people's needs, be healthy, convenient, be designed appropriate to its goals, offer peace and quiet and develop creative thinking. Thus, places being newly formed should be designed conveniently to meet all needs of individuals, to wit, should be the product of a process putting the individual at the focal point.

An environment that meets the peripheral expectations of the individual should possess the opportunities and the conditions of comfort to meet the individual's physical needs at an optimum level and visual and spatial properties to meet his/her psychological needs, also at an optimum level. In addition, it should also offer an individual the opportunity to communicate with others. It should address the perceptual world of an individual and be such as to help an individual use his/her creative power.

The environment possesses hindering, facilitative, incentive-providing or commutative effects on the behaviors of individuals. Thus, in the planning phase of new environments, individual-group tendencies should be determined precisely.

Studies show that individuals are sensitive to natural, cultural and historic environments; and that they place emphasis on using natural environmental features positively and that newly constructed buildings and environments should be consonant with the existing local and historic environment. Moreover, the development of a socio-cultural environment should be the product of a certain process and this development process should embody a system that gives a chance and place for individuals and the majority to participate.

According to the present study, because the property of being quiet and relaxing is the feature that leaves the most sustaining effect in the minds of individuals, it can be concluded that individuals experience environmental stress stemming from factors such as crowds and noise in urban areas. Besides, the negativity and dissatisfaction reflected from the interaction of individuals with crowded urban areas prove yet again that in the planning phase of urban areas, urban development-growth-flexibility studies are insufficient and that timely intervention in the problem does not take place.

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