

# A Holistic Approach for Understanding the Housing Quality in Contemporary World

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## Abstract

There is a growing dissatisfaction with the housing environment concerning its quality in contemporary world. As a solution to this problem, a holistic research strategy based on understanding the reciprocal relations between objective attributes and subjective evaluations of housing quality is proposed. A new way of seeing and thinking is required in order to understand the reciprocal relations which are grounded on a holistic approach to housing quality having the superimposed layers of social, technological, cultural, perceptual and spatial dimensions. The evaluation criteria of quality thus takes its roots from the interwoven results of both actual, physical properties of setting and perceived, experienced phenomena. In other words, the deep meaning of quality can be understood by interlocking relations of subjectivity and objectivity. The aim of this paper is to introduce this holistic approach for understanding the housing quality and its possibilities for transforming housing environments through design. In this context, the research project [1] entitled “The Evaluation of Spatial Formations in Housing Environments” can be considered as an exemplary that is guided by a holistic approach to research strategy for understanding the housing quality. According to this approach, the user responses, the effects that causes these responses and their reflections to the physical world / housing environment and the affordances of the environment, all relates to each other within a pattern relations creating ambiguity and functions as an agency. Each agency shouldn't be researched independently for understanding housing quality since they represent an ontological experience having the real world constrains.

## 1 Introduction

In contemporary world, the housing environment is undergone a significant change in response to the transformations in needs of society resulting from growth of population, increased urbanization and improved technology. This unavoidable change primarily influences the life-style having contradictions between technological developments and socio-cultural requirements. Besides, the cultural transformations that define the life – style also effect the configurations of the housing environment. In order to understand the housing quality in relation to this two way interaction between the life – styles and housing configurations, we have to discover the reciprocal relations between the users and their home

environment. In fact, the reciprocal relations having both visible and invisible dimensions appear as a complicated web of relations between those various parts of a whole. A holistic approach to the man – environment issues may, therefore, facilitate to go far beyond the superficial measures of housing quality. A profound modification of social relations and the forms of social organization in housing environments will also broaden our perspective within a network and help us to see the current ideas about the complicated issues of housing quality. As Heisenberg [2] expresses it, “*the world appears as a complicated tissue of events, in which connections of different kinds alternate or overlap or combine and thereby determine the texture of the whole.*” In parallel to this argument Kuhn’s shifting paradigms explain how world changes follow perceptual changes, which supposedly, follow world changes [3]. In order to understand the housing quality in contemporary world we have to see the world from a different perspective; we have to transform our way of thinking from dualistic to holistic. Rejecting duality, in this study the emphasis is given to the tension of dialectics by which housing quality is reflected. These dialectics may give some clues for the answer to the question of “how do we create housing quality in a material world?”. Since the material solutions for housing quality in contemporary world consist of opposing concepts having complexity and contradiction, we have to give more attention to their deep and unavoidable interconnectedness.

In this paper housing quality is therefore examined according to a new way of seeing the world which is based on ontological experience. The ontological experience of researcher provides in-depth descriptions and analyses of architectural practice. And so research depends on thinking what is seen from an interwoven results of social, technological, cultural, global, political, anthropological dimensions. Besides the contemporary problems of housing environments can be understood through the holistic approach which is systemic, encompassing, integrated. In this respect, a holistic approach to the research on housing quality involves gaining an understanding of how people in real world situations “make sense” of their environment. It is achieved by means of the conceptual framework which generates data through the web of life. In fact, the environmental reality is represented by web of life which can only be conceived by holistic approach as a research strategy. And so it is possible to bridge an “applicability gap” between the research methods borrowed from social sciences and design practice. In transforming housing environment through design, research activity can be defined by propositional components: strategy, tactics, observations, open-ended interviews, written and visual documents which give rise to a generative design process versus analytical. Multiple research methods can be brought together to frame a generative model in which all the variables are also superimposed to figure out the attitudes, values, preferences, meanings, and accordingly to assess the reciprocal relations between physical and perceived properties of spatial organizations in housing environments. In this context, the reciprocal relations between the user and home environment reveal both the social articulations, psychological responses and physical attributes of the environment in the generative sense. In considering housing quality, research therefore should focus on how environment that people live in and the stimuli based on the physical, formal and semantic factors can be geared towards meeting social and psychological requirements.

Today, an increasing public concern for housing quality emphasizes the need to research on the qualitative values that imply the establishment of a meaningful relationship between people - user’s perceptions, preferences and satisfactions - and their housing environments. The level of satisfaction relates to both design features such as the durability of construction and materials, appearance of the housing and how it meets the expectations of people living there. In this paper, a research project entitled “The Evaluation of Spatial Formations in House and its Environment”[1] is introduced. This project gives some clues to help understanding the spatial formation of housing environments in Istanbul and contributes to their transformations through design. Housing quality is examined through a new way of seeing known as the holistic approach, which is based on experience. Since the experience is a phenomenon having ambiguous

considerations, a generative model as a qualitative research strategy instead of research methodology is required. The multi-dimensional methods concerning socially and culturally located phenomenon are represented by a paradigm shift. It is possible to measure both the physical properties of housing environments and experienced evaluations of users simultaneously by overlapping the multiple research techniques. Since the housing issues are ambiguous, relative and change according to the contextual conditions, the holistic way of thinking may facilitate to obtain the flexible solutions.

## 2 A Holistic Approach to Housing Quality

In generally speaking, the housing quality privileges the 'visual' that leads to a shallow, superficial level of perception. However the notion of housing quality necessitates the full ontological potential for human experience. Ontological experiences refer to spatial practices in housing areas through which the reciprocal relations between the user's perceptions, satisfactions, preferences and physical attributes of housing environment might be understood. Norberg – Schulz [4] discusses the ontological notion of 'dwelling' and mentions that the houses are more than shelters and to dwell in qualitative sense is a basic condition of humanity. He continues referring to Heidegger, "*when we identify dwelling with a place, we dedicate ourselves to a way of 'being-in-the-world'.*" Thus the ontological notion of dwelling emphasizes the essence of increased quality of life and housing in terms of what may be referred to as the creation of a sense of place. To speak of housing quality within this perspective, the notion is considered as the function of environmental perception of the inhabitants, of social dynamics, of the user preferences, their priorities and overall satisfaction with the spatial characteristics. In parallel to this experience, Gaston Bachelard [5] mentions that the house is one of the strongest powers of integration for the thoughts, the memories, and the dreams of men. Besides, the housing quality being a complex concept is relative, which means it depends on contextual issues and varies over time [6]. It has a series of components, all of which involve an interaction between social, psychological and physical factors. In this respect, the housing quality which can be defined by place experience and spatial strategies offers an opportunity for people to make the spaces they need and to occupy them comfortably.

In considering the reciprocal relations, the concept of housing quality is multi-dimensional; it includes both socio-cultural and physical components that consist of perceptual and spatial attributes. There has been considerable research about objective attributes and subjective evaluations of housing quality which is based on linear relations and dualistic research methodologies. But less attention has been given to their reciprocal relations which require network relations of holistic research strategies grounded on paradigmatic way of thinking. The reciprocal relations between person and the environment can be described as a system, which makes up a structure of ideas and behaviors reflecting physical attributes. In this context, a holistic approach facilitates understanding the varying problems, from the physical conditions to the psychological and social structures within this system view. In considering the reciprocal relations between users and their houses, a pattern language of relations within a flexible conceptual framework becomes more important rather than empirical rules in housing design. The paradigm shift from empirical researches to experiential approaches provides information about the essence of housing quality. In parallel to this shift, David Seamon [7] draws an attention to the mutual relations between the social context of spatial patterning and the spatial context of social patterning.

On the other hand, man - environment research studies in architecture discuss the housing quality having two interrelated sets of components: those economic, social and physical components of the residential environments; and perceived meanings, values and uses of these components [8]. In contrast to this classical dichotomy of quantity and quality, the reciprocal relations between all contradictory but

complementary poles of architecture both define and reflect each other, emphasizing their significance. David Seamon [9] suggests a phenomenological inquiry for such a qualitative alternative to the study of man-environment relations. Accordingly Lang [10] emphasizes that housing quality can be achieved through the analysis of behaviors, individual needs and the effects of the physical characteristics of environment on human conduct, their integrity, annoyance felt, and environmental satisfaction. Rapoport [11] states that the provision of housing entails are much more important than the provision of physical shelter. That is, a dwelling is not just a structure; it is an institution, a social and cultural unit of space created to support the way of life of people. Rapoport [12] conceptualizes the environmental quality in terms of the psychological and socio-cultural qualities of the environment in various scale of space; at small scale (i.e. rooms, streets), at mesa scale (i.e. housing and neighborhoods), and at macro scale (i.e. city, regions). The degree to which the home and its surrounding fit these user needs is therefore an important indicator of housing quality.

Investigations of such a “fit” between occupants and environment have been recently taking up ontological experience. David Seamon [13] describes the essential ontological foundations of the man-environment relation as follows: *“descriptions of what constitutes visual appeal in quantitative terms should be explored according to the phenomenological approach as the description of the space in perceptual terms has a phenomenological character”*. Ontological experience will allow predicting the consequences of physical form on behavior; and understanding the cultural origins and perceptual significance of image and symbol as communicated by physical form. The ontological experiences of spatial practices in home environment becomes crucial issue for housing quality which depends on reciprocal relations between the experience of user and physical attributes of housing environment. Thus, the notion of housing quality necessitates the full ontological potential for human experience. Taken for granted the ontological experience, dwelling is usually defined as having a roof one’s head and a certain number of square meters at disposal. That is, we understand the concept of dwelling in material and quantitative terms. However to dwell in the qualitative sense is a basic condition of humanity. According to Norberg-Schulz [14] concept of dwelling takes its roots from environmental aspects and human factors of an architectural space focusing on thinking, learning, remembering and feeling. It is a matter of both the actual, physical properties of setting and perceived, experienced phenomena. While we try to understand the housing quality through the holistic way of seeing, we have to be able to grasp the characteristics of *“lived-space”* in which a pattern / network relations has been completed.

A pattern / network relation which facilitates developing the flexible solutions for housing quality, actually exists in traditional settlements in which culture defines the way of life and the house form plays an important role in configuration of values and believes. The power of geography / topography, a rich variety of cultures, value systems and life-styles define different configurations of the spatial character of traditional settlements. It is possible to experience the housing quality in these settlements because of their site-specific, contextual and dialectical relations. However culture in industrial society has created the value system based on production; all the values defined by the production - consumption relations have become the influential factor in the formation of architecture. Within the information society, different cultures and relational lifestyles come up to our homes through the various information technologies. This phenomenon draws an attention to the social structures and the value systems of the design world in which various meaning layers having complexities and contradictions exist. For this reason, information society represents an era wherein both the meaning and the power of image have profound importance. For Walter Benjamin the city is a labyrinth of dreams and wish-images; it captures the collective imagination with the power of the sublime. Today, new social relations are mediated on an urban stage where literal ‘performances’ achieve a provisional attachment to place. Neil Leach [15] defines the notion of ‘belongingness’ as a productive way of understanding a flexible sense of

attachment to place. These concepts and relations will facilitate to develop a more sophisticated understanding of housing quality in contemporary world although it relates to both design features such as the durability of construction and materials, appearance of the housing and how it meets the expectations of people living there. In this paper, a contextual discussion therefore addresses to the different dimensions of “well-being” linked to the characteristics of housing quality have been touched in terms of interrelatedness of provision of shelter and enhancement of quality of life within humane settlements. In considering the essence of the reciprocal relations having asymmetrical dialectics, spatial quality which contributes to the enhancement of quality of life becomes crucial for understanding the housing quality.

### **3 A Generative Model Proposed for Understanding the Housing Quality**

This paper focuses on a holistic approach to housing quality having various aspects of the reciprocal relations which can be discovered through qualitative description and interpretation. The description of human experience and meaning as they are lived has been investigated through the research project on housing. In this project, the intuitive insight of the researchers directed to the housing quality has been the main vehicle for investigating the reciprocal relationship between the users and their home environment. The context and method has been inseparable in seeking quality, which relates to other qualities such as life, wholeness, comfort, freedom, clarity, selflessness and eternity. Intuitive insight has been used to identify and describe various housing qualities, which sustain humane environments. It gives rise to other modes of expression and understanding, particularly affective and symbolic languages of various spatial characters.

In this context, a generative model is proposed in this research project for understanding the comprehensive meaning of housing quality. This model explores the housing quality as an interpretive study of human experience having a dynamic relation between process and product which is open to change. It is based on not linear way of thinking; instead, it depends on network relations of whole dimensions concerning the problem. The problem has been focused on how the underlying spatial order and human response of a particular socio-cultural structure are related; how the different research methods can be superimposed to bring together all the dimensions of housing quality. The starting point of the research has been the lived world of immediate experience, and then looked for to clarify in a rigorous way by careful observation and description. Activity of data collection itself has been formed by an interactive, cyclical process. It has involved an open ended and in-depth interviews, observation notes, written and visual documents, photographs, graphic sketches. Research proceeds from ordinary “empirical phenomena” to expositions of steps along the way to ontological observation through which one can rise to a higher awareness by varying conditions. This paradigm shift can be considered as a holistic research strategy in which the essential preconditions for housing quality and its intuitive judgment become obvious in-between the opposing poles.

Since the housing quality is introduced according to various aspects of the reciprocal relations of man and environment that can be explored through qualitative description and interpretation, this paper focuses on a description of human experience and meaning as they are lived with hidden dimensions. The intuitive insight directed to the housing quality, therefore, has been the main vehicle for investigating the reciprocal relations between the users and their home environment. The context and method have been inseparable issues in seeking quality, which relates to other qualities such as life, wholeness, comfort, freedom, clarity, selflessness and eternity emerging in-between the opposing poles. Intuitive insight has been used to identify and describe various housing qualities, which sustain humane environments. It gives rise to experiment with other modes of expression and understanding, particularly affective and symbolic languages of various spatial characters.

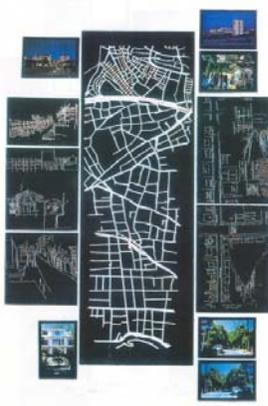


Figure 1 Pattern of the housing area at Erenkoy



Figure 2. Data sources displayed for housing quality for all regions

In parallel to this theoretical base, the research project entitled “The Evaluation of Spatial Formations in House and its Environment” offers a new way for looking at the housing quality and for identifying and understanding its complex, multi-dimensional structure at Istanbul. It describes the essential nature of the housing quality as it has presence and meaning in the concrete lives and experiences of human beings.

Qualitative research is therefore multi-method in focus, involving an interpretive approach to housing environment. In trying to understand the meaning of the house, events, meanings, and experiences are examined and clarified since they spontaneously occur in the course of daily life. The pattern of social, psychological, cultural, spatial, geographical and political factors effects the formation of the housing areas chosen at the Anatolian side of Istanbul (fig.1). This pattern / network is considered as a paradigm which explains the holistic approach to housing quality. According to this holistic approach, the process and the results of this research project proceed side by side being interwoven in each step. And at the beginning of the research the hypothesis was not well-defined; it was open ended; open to chance over time and confronting new inputs during the process. The method proposed in this research can be considered as a frame model in which the process of the research proceeds by completing the new inputs that are open to modifications and developments of each step. This creates paradigmatic pattern relations of the process that requires the participation of researchers in an active position having interpretations of each observed phenomena. This makes the method different from other research methodologies. Although each researcher maintains her personal perspective to the phenomena, the final evaluations also contribute to understand how spatial formations emerge in houses. The spatial formations in houses are considered as phenomena in which time and space relations becomes crucial that requires examining both the process and the results of this process simultaneously. This approach for understanding the housing quality requires an evaluation to be done within a multidisciplinary pattern of relations. Each observation resulted by the intuition and perception has given rise to a judgment which can be considered as a hypothesis at several levels of the research; and interviews were done by asking open ended questions, grasping the behavioral clues, and supported by visual and auditory records indicates the way to the results of the research which is shown as figure 2 representing the housing quality for each region.

Experiencing the housing quality in changing social structures and cultural transformations of the axis at Erenkoy which is positioned in Anatolian side of Istanbul gives a general idea of spatial formations of housing areas in Kadıkoy. In Kadıkoy, the axis from the seaside to the inner part of Erenkoy is chosen for

the case study having spatial - temporal transitions and social - cultural differences. On the axis which is perpendicular to the sea extending to Atasehir, the social change, cultural variety of each region, differences in land values and their transformations, housing policies, spatial formations are the part of the phenomena framed by the pattern relations (fig. 1). In this study the aim is to understand why places are important for people and how architecture and urban design can be a vehicle for place making; and accordingly the agencies that are fundamental for spatial formations of these places and their pattern relations in which the meaning becomes crucial. The meaning structures of housing quality supply some clues about the uncovered dimensions of reality of everyday life waiting to be discovered. Developing the generative model for understanding the reciprocal relations between the user and his / her house will stimulate architects and urban designers to be aware of the hidden dimensions of housing quality.



Figure 3 Coding of interview transcripts

#### 4 Conclusion:

As a consequence of reducing complex phenomena to basic building block we lost the big picture in searching the quality. Recently, the new way of seeing architecture concerning quality is based on awareness of the essential interrelatedness and interdependence of all phenomena. In developing a holistic approach to understand the housing quality the primary focus can be a description of human experience and meaning. It is possible to structure the meaning patterns in relation to contextual conditions, which are mutually defined by a range of cultural, social, and psychological dimensions. In this regard different dimensions of “well-being” linked to the characteristics of housing environment can be analyzed in terms of enhancement of quality of life within humane settlements. Thus, the research on the housing quality can be considered as an interpretive study of human experience which necessitates an evaluation of spatial reality. The concepts concerning with the spatial reality can be structured within a network that frames the pattern relationships of home environment. It requires intuitive, holistic seeing through which various underlying patterns, the essential nature of home environment and ontological experience can be described. Superimposing different research methods will bring together all the dimensions in order to assess the reciprocal relations between the physical and perceived properties of spatial organizations in housing environments. In order to understand the attitudes, values, preferences, meanings and conceptions of behavior, open-ended questions should be asked during the interviews (fig.3).

The results of this paper calls attention to the research on housing quality as follows:

1. Housing quality is multi-dimensional phenomenon involving interdependent physical, cultural, psychological and social aspects, which are interwoven within a network system.
2. Actually it refers to the meaning of home environment which takes its roots from everyday life; and should be experienced in accordance with the formation of a sense of place, of belonging, of

- concept of home environment, of the dialectics of outside and inside. This is an approach that moves from a quantitative, materialistic approach to things in nature and emphasizes the intimate, firsthand encounter between the user and his/ her home environment.
3. It can be connected to the systems of well-being based on life, living organism systems, self organizing systems that display dynamic, continual, multiple, and interdependent fluctuations. Flexibility of a system therefore, depends on how many of its variables are kept fluctuating within their tolerance limits. This kind of flexible systems view may allow to predict the consequences of physical form on behavior; and to understand the cultural origins and perceptual significance of image and symbol as communicated by physical form.
  4. Research on housing quality necessitates holistic way of thinking and seeing that begins with contextual observations of everyday life. Goethe [17] theorizes every day experiences as follows: “*every act of looking turns into observation, every act of observation into reflection, every act of reflection into the making of associations*”.
  5. Accordingly holistic research strategy based on experience, instead of empirical research methodologies is used as a paradigmatic method having network relations. Experience is constituted as spatial and temporal through which one can construct an “objective” science of the subjective experience.
  6. Experience is important phenomena to measure the housing quality in which the user evaluation is interpreted in accordance with the housing attributes. Since the experience has an ambiguous character having no certain criteria, research should be done by using multiple techniques.
  7. Using multiple research methods in experiencing the housing quality has been good at articulating the emotional experience. The various expressive modes have been considered to make deeper contact with less tangible housing quality. Both tangible and intangible qualities can be understood through their pattern relations having contradictions and complexities.

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