

# Reconsidering the Meaning of Home in the Rehabilitation -Towards a Sustainable Historical Town

## *Reconsiderando el significado de Hogar en la Rehabilitación: hacia una ciudad histórica sostenible*

S. Qasem Awad<sup>(\*)</sup>, H. Hohmann<sup>(\*\*)</sup>

### SUMMARY

Despite the significant literature about the meaning of home and the scholars' research concerning the home environment, the concept of home didn't filter into the rehabilitation process. The conservation theory and the rehabilitation methodology are still concentrating on the material aspects of the built environment and ignoring the immaterial aspects and meanings.

In view of that the dwellings are not only artifacts but they are a livable example of the social structure and behavioral patterns. Understanding the dwellers relationship with their dwellings will be helpful in establishing a connection between the rehabilitation of the historical domestic architecture and the concept of home. This requires reconsidering the theoretical frame work of the rehabilitation process so as to be able to recognize the change in the historical house's spatial structure and order and to link them to the social structure and pattern of use.

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**Keywords:** Home; Rehabilitation; Conservation Theory; Immateriality, Sustainability.

### RESUMEN

*A pesar de la gran cantidad de literatura sobre el significado del hogar y las investigaciones hechas por académicos sobre el ambiente del hogar, el concepto de hogar no se filtró en el proceso de rehabilitación. La teoría de la conservación y la metodología de rehabilitación siguen concentrándose en los aspectos materiales del ambiente construido e ignoran los aspectos inmateriales.*

*Tomando en cuenta que las viviendas no son sólo objetos, sino ejemplos de estructuras sociales, y patrones de conducta, el entendimiento de la relación entre habitantes y sus viviendas será de utilidad para establecer una conexión entre la rehabilitación de la arquitectura doméstica histórica y el concepto del hogar. Para ello es necesario reconsiderar el marco de trabajo teórico del proceso de rehabilitación con el fin de ser capaz de reconocer el cambio en la estructura espacial del hogar histórico y el orden, y vincularlos a la estructura social.*

**Palabras clave:** Hogar, rehabilitación, teoría de la conservación, la inmaterialidad, la sostenibilidad.

(\*) Architectural Engineering Department - Birzeit University (Palestina)

(\*\*) Graz University of Technology (Austria)

Persona de contacto / Corresponding author: sqasem@birzeit.edu (S. Qasem Awad)

## INTRODUCTION

The housing sustainability implies "a better quality of life not just now but for future generations as well as, it should combine protection of the environment, sensible use of natural resources, economic growth and social progress"(1). Thus maintaining sustainability in the rehabilitation of historical domestic architecture requires a deep understanding of the inhabitants' needs, meanings and appropriation of their historical houses. Edgar Morin ascertained the importance of the inhabitant-house relationship, as he explained that "If, between the houses, the streets and the groups of its inhabitants, there were only to be an accidental relationship and one of short duration, men could destroy their home, their neighborhood, and their city and rebuild another, in the same place, following a different design; but should the stones let themselves be transported, it is not equally easy to modify the relations that are established between the stones and men"(2)(3).

The experience of home environments, the relation of this experience with identity, security, mobility, and place attachment received lately increased attention from scholars in different fields. In this paper the rehabilitation of the historic houses will be discussed and reconsidered in light of the notion of home meaning. This will be obtained by exploring the broad set of associations and meanings that are linked to the physical structure of house, and illustrating the challenges that are facing the conservation theory in order to cope up with the modern society needs. Furthermore, going through different approaches that tackle the inhabitant-house relationship and articulating the required means to implement the meanings of home in the rehabilitation of the historical houses.

## MEANINGS OF HOME

Revisions for home literature confirm that home is an indicator of cultural identity, a sign of social status and a catalyst for the expression of individual preferences since it represents functional and monetary values, as well as, aesthetic, symbolic and cultural values. Dovey stated that "the concept of home is of value as it uniquely encompasses the social, psychological and cultural aspects of domestic living including key processes and goal-making, which dwelling does not. Home is difficult to define as it has many attributes and levels of meaning, but at its centre is a 'highly complex system of ordered relations with place, an order that orientates us in space, in time, and in society' "(4).

Fox (5) tried to categorize the meanings that the home reflects by divided them to intangible and tangible meanings or values. Since

Home = House + x, x factor = the meanings associated with social, psychological, emotional and cultural attachments to home. Intangible meanings of home are concentrated in: home as territory, home as identity, home as a socio-cultural unit. And tangible meanings of home are concentrated in: home as a physical structure, home as a financial asset.

Conceptualizing intangible subject "home" is not simple. Kim Dovey as quoted by Fox suggested that "the most appropriate methodological response to these characteristics is to tailor the functions of home analysis, so that it seeks not to produce specific cause-effect relationships or explanations, it is rather to deepen our understanding of an intrinsically intangible phenomenon" (5)(4).

On the other hand it is essential to analyze the contextual and synthesis components of the home meanings as it is an unformulated phenomenon. As for Hillier the meaning is embodied in the physical structure, he explained that "Architects should beware of espousing a "natural" philosophy of basic human needs or shared norms and values and particularly in determining a spatial form for such nebulous concepts as those of "community and privacy"(6).

Recently the meaning of home is facing major challenges in surviving in an era of globalism and modernity. Heyen (7) wrote dwelling and modernity are opposed to each other, and confirmed that "Dwelling is in the first instance associated with tradition, security, and harmony, with a life situation that guarantees connectedness and meaningfulness". Moreover Dovey (4) illustrated the factors that eroded the sense of home as: rationalism and technology, commoditization, bureaucracy, scale and speed, the erosion of communal space and professionalism. In that regard dwelling in the proper sense is not easy to be reached. Thus this paper tackles the improvement of the rehabilitation theoretical and methodological frame work so as to maintain the meanings of home and to achieve sustainability in historic housing areas.

## CONSERVATION THEORY CHALLENGES

In any conservation process the need for change is an essential. This need become crucial for many reasons related to economy, legislations, industry, architectural style and taste. Usually, in conservation practice there are three main questions which require answers. These answers depend on basics founded in the conservation charters and originated from the conservation theory. The main questions that the conservation theory has to answer are (8):

- Who decided what to conserve?

- How is conservation carried out?
- And what are the nature, scale and direction of change?

In General, the conservation theory is facing a major burden to deal with these main issues due to certain gaps. These gaps are caused by different factors; some are power and politics related factors others are related to the lack of development and research. Following a summary of the main gaps that conservation theory needs to overcome:

- The gap between international conservation charters' aims and different social groups' values and meanings. According to Wells (9) the heritage doctrine is a telic system consisting of a complex mix of beliefs, biases and excluding meanings. The international charters are an example of power, for example Athens Charter represents a point of focus, and what comes into view is the antagonism between the West and the Soviet Union(9)(10). So these charters imbue the materiality of the object with truth as an absolute rather than the relative truths existing in the realm of cultural meanings and values. Actually these charters and recommendations satisfy the Western patient of Orient and the elite cultural taste. Thus, there is a serious need to discuss the readymade recipes for development and common good principle and set new recommendations that accept the social difference. Lately, the Burra Charter and the Nara document on Authenticity are trying to change the absolute truth and to involve the women and minorities in the cultural heritage conservation process.
- The gap between restoration theory that is funded by classical architectural theories and the contemporary architectural concepts. Thus, the restoration theories associated to the architectural object didn't observe certain cultural values impregnated within formal and spatial architectural dimension (11). This has its echo in the international conservation charters also, which still concentrating on the materiality of the object and ignoring the immaterial meanings. Lately a movement toward the relativization of materiality trend is obvious which transfers importance from materiality to immaterial aspects of heritage. A clear example of this trend is the move from the concept of monuments to the concept of places (12).
- The gap between international guidelines for the conservation of the historic cities and contemporary development. Since the UNESCO recommendations on urban sites was announced in 1976-more than thirty years ago, while these traditional views toward development and the link with contemporary architecture is in

need to be enhanced (13). In 2003 The World Heritage Committee called for the organization of a symposium in Paris to discuss how to properly regulate the needs for modernization of historic urban environments, while at the same time preserving their values. In response, the World Heritage Centre in cooperation with ICOMOS and the city of Vienna organized international conference, in May 2005, in which a first outline of principles and guidelines was adopted, the so called Vienna Memorandum, which promoted an integrated approach to contemporary architecture, urban development and integrity of the inherited landscape. But still a new or revised Recommendation on the conservation of historic urban landscape doesn't exist.

These gaps left its impacts on the practical execution of the theory, thus there is no recipe for a successful intervention. This paper proposes an enhancement of the rehabilitation theoretical framework and methodology in order to find out answers for the three main questions through considering the meanings of home and being more sensitive to the inhabitants' needs. Consequently it is important to understand the interaction between the inhabitants and their historical houses in order to find the balance between the conservation measurements and the inhabitants' needs and to maintain the development and sustainability requirements.

#### INHABITANT-HOUSE RELATIONSHIP

So the human –built environment relationship must be given much more importance to bear on the key problem of the twenty– first century city, that of sustainability. Actually there are three main theoretical streams that tackle this relationship: the Phenomenology, Structuralism and Post Structuralism. Following a description of these main approaches and their connections to the inhabitant-house relationship:

Heidegger argued that people cannot “be” without having some connection to a particular place, “The way in which you are and I am, the manner in which we humans are on the earth, is Buan, dwelling. To be a human being means to be on the earth as a mortal. It means to dwell, man in so far as he dwells” (14).

Heidegger's and Merleau-Ponty's approach of discussing human-built environment relationship is known as the existential phenomenology, from their point of view the human experience reflects the meanings in the world which is also built and embodied by this experience in absence of science and society.

Since according to Hillier (15) “the driving idea of phenomenology is that there exist connections between minds, bodies and worlds which are independent of the conceptual frame works imposed by society and by science, and which are in fact likely to be obscured by these frameworks”.

Inspired by the phenomenological theories, Dovey proposed the phenomenological approach of home design. He described the design process as a “cycle of lived space”, in this cycle the designer first must understand the clients’ everyday environmental needs or their lived-space. Then the designer should translate those needs to geometry, and finally this geometry will be transformed and constructed to a lived space again. As well to achieve successful translation from the experience or lived space to geometry, Dovey suggested changes in the design process that includes experiential simulation, through conducting piecemeal change and phenomenological evaluation of environments already built (16).

Furthermore, the literature on social structure and its relation to geography and place reveals important perspectives on the human-built environment relationship. After Ferdinand de Saussure significant works on structuralism, Giddens in 1984 introduced the theory of structuration in social science in his book “*The Constitution of Society: Outline of the Theory of Structuration*” his theory is based on establishing a dynamic perspective of how different elements of a society interact. Such a work is based on a critical understanding of people, organizations, agencies, and the power that each element of a society would have (17). The introduction of the theory of structuration generated an intensive debate on linking issues that pertain to relationship between the structure of society and the physical environment, namely the concept of place (18).

Allan Pred in his article titled: “*place as Historically Contingent Process: Structuration and the Time-Geography of Becoming Places*” introduced a framework that is based on an integration of time-geography (place) and the theory of structuration. He conceptualized place as a human product as well as a set of features visible on the landscape. In essence what is concerning in this regard is the term “human product” (19).

The Structuralism took an important role in architecture and urban planning starting from the 1960’s through the ideas of users’ participation in design or pluralistic architecture as a reaction against functionalism or rationalism. Consequently Amos Rapoport proposed the “Choice Model” and the “Filter Model”, his

theory stated that “depending on the meaning of “good” environment, the images which a people has about the good life and the appropriate setting for it, one would expect to find a variety of places designed always directed towards the making of better places through the application of sets of rules based on the definition of environment quality” (20).

The structuralist faced major criticisms for their deterministic approach that imposes the human behavior on the built environment and deals with the networks as a global locational system without consideration for the syntax. In the Habitus theory Bourdieu described the space as being at once both physical and social. The connections of habitus to architecture lie in the connection of habitus to habitat or in other world the ways in which space frames social practice (21).

Recent efforts to understand the relation between the human and the built environment started to concentrate on the need to deal with the building as a social space or lived space without separation between subject and object. So the space syntax theory was developed by Bill Hillier and Julienne Hanson in 1984, Hillier in his justification of the space syntax theory stated that “space syntax combine social physics and phenomenology into a single theoretical model”(15). Based on the space syntax theory Hanson and Hillier proposed the space decoding approach which was developed later to investigate the inhabitant–house relationship. In such an approach they are trying to connect the physical structure and the socio-cultural meanings. Hanson explained that the houses carry cultural information in their material form and space configuration and in the disposition of household artefacts within their domestic interior (22).

As well the Space syntax theory has a set of techniques and applications regarding the analysis of spatial configurations of all kinds. The main aim of these applications is to help the architects simulate the likely effects of their designs. The most significant application is the Depthmap software which was developed by Alasdair Turner from UCL.

Finally the previously mentioned theories are considered the most important approaches that tackle the inhabitant-house relationship. In view of that the rehabilitation theoretical framework and methodology has been reviewed in order to be reconsidered in light of a deep insight through the meaning of home and the different approaches to explore the inhabitant-house relationship.

## THOUGHTS ON THE REHABILITATION OF THE TRADITIONAL DOMESTIC ARCHITECTURE

According to Feilden and Jokilehto (23) the rehabilitation means: “the physical improvements that are necessary in order to provide an appropriate use to an empty or inappropriately utilized structure”. They added that the rehabilitation shall always involve a use as close as possible to the original function so as to ensure a minimum intervention and minimum loss of cultural values, this also makes sense economically. While in present day modern concern the rehabilitation for domestic reason was defined as: “improving the action of dwelling by seeking a point of balance between technical aspects, the preservation of heritage values and criteria of social justice, economic efficiency and preservation of the environment” (24). As showed here, it can be noticed the difference between the two definitions, the first definition is a pure technical definition, while the second is looking for balance between technical aspects and social aspects. This argument shows the main gaps in the rehabilitation practice, which will be discussed in details later.

In general the rehabilitation of traditional architecture has to be set in the framework of a process of revitalization and regeneration of the territory of which it forms part, whether an urban or a rural environment. It has to be understood as an intervention on both the physical environment and on the population it hosts, and the series of cultural, social and economic activities that define the “social environment”. Thus the rehabilitation process of any historical town or area includes planning measures side by side to design measures that can be categorized into four levels:

- The international charters and recommendations.
- The national planning and cultural heritage laws.
- The historical town master planning regulations and measures.
- The rehabilitation in the building level.

Accordingly the concentration on the immaterial aspects of the rehabilitation and the deep understanding for the inhabitants' needs require developing the theory, the international charters, the national regulations and the intervention methodology as well. Following an overview of the main aspects that are in need for reconsideration within the rehabilitation theoretical framework as well as the rehabilitation methodology:

## Reconsidering the rehabilitation theoretical framework

On the theoretical level, it is aiming to develop a theoretical frame work for the rehabilitation process which bridges the gaps that are caused by the international charters and conservation theory through considering the following aspects:

- Developing the public participation in the rehabilitation process and give them the opportunity to reflect their meanings and values side by side with the professionals. In order to assert the diverse meanings of the objects and include different social groups in the decision making process, aiming to reach social justice.
- Concentrating on the relation between the rehabilitation of architectural space and the social aspect of space. To parallel the development of modern theories of architecture that connected the architecture field to the social practice.
- Enhancing the rehabilitation process to include the modern notions of sustainability and development. By concentration on the concept of cultural sustainability. And impacts of cultural aspects on the environmental aspects of historical buildings.

Through the mentioned points, a new theoretical approach for the rehabilitation in general will help in setting up rehabilitation methodology for the historical houses, which will cope with the main challenges that the theory face. In this paper the rehabilitation of the historical houses is the main target, so the methodology of the rehabilitation in the building level will be explained and discussed to underline the main issues that must be reconsidered and improved.

## Reconsidering the rehabilitation methodology in the building level

Depending on the RehabiMed guide (24); the rehabilitation process includes five main stages, which are:

**Stage I: the knowledge** – this stage includes two main steps which are:

- Preliminary step includes the client's decision to take action. And followed by a visit by the architect to prepare preliminary report of the building
- Multi-disciplinary studies: includes detailed studies of the social, historical, architectural and construction aspects.

**Stage II: the diagnoses or analysis** – which focuses on using the results of the previous studies so as to grant the ability to explore problems and their causes, and produces an overview of the building's potentials and deficits

**Stage III: the reflection or project** – which includes proposing design that picks up the client's ideas for rehabilitation work and seeks to reconcile them with the reality of the building, its heritage values, economic possibilities for investment, etc. At this point the criteria of intervention must be guided by a solid professional ethic and the previously mentioned Charter on the Built Vernacular Heritage, which will decide the answer for three main questions:

- What to keep?
- What to get rid of?
- What to add?

And, finally, on the basis of sound criteria, the outcome of this stage is the drafting of the project document that enables the contracting, constructing and control of rehabilitation.

**Stage IV: the action** – this stage includes execution and site work of the project, in which there are two main principles to take care of:

- The material used
- The techniques of repair work

**Stage V: life span monitoring and maintenance** – this stage comprises minor cleaning work, repairs and renovations carried out according to a timeframe throughout the building's lifespan until future rehabilitation.

Thus, the implementation of the inhabitant-house relationship should be performed in different stages of rehabilitation methodology. There are main points that are in need to be reconsidered and enhanced, these main censure points are:

- The knowledge stage :  
In the preliminary diagnoses, the decision making process is excluded on the dialogue between the client and the architect (24), while there is a need for a participatory and pluralistic approach in the rehabilitation of domestic architecture considering different social groups (women, children, elderly, etc...). And to reassess the common good approach which minimize the options and control the decisions. As well, in the multi-disciplinary studies, the following points must be taken into consideration:

- a. The social studies are defined as: "sociological survey to detect family units and possible problem situations (overcrowding, marginalization, unemployment, abandonment, etc.)" Besides "Anthropological study that provide us of all the intangible aspects related to the community's perception of its architecture" (24). While it is important to study the social structure and social behavior starting from the relation between society and building, and how building envelops the social structure and behavior and to concentrate on the inhabitants' preferences and lifestyle.
- b. The architectural analysis defined the architectural values as "integration in the place, spatial configuration, singular structure, type of ornamentation, etc." (24). In that regard the architectural analysis concentrate on the building as an artifact object which reflects meanings from outside. There is a need to deal with building as an object with a space that includes meanings and values. So there must be no separation between the architectural analysis and the social content.
- c. The architectural analysis suggested investigating the building transformation with recourse to a historical study, in order to understand its present-day configuration (24). Although understanding the building transformation is not only related to combine the historical study but the most important is to combine the social study.

At last, the multi-disciplinary studies can be more sensitive towards the inhabitants' needs by including new methods and techniques, these are:

- a. Applying the phenomenological approaches of experiential evaluation of the built environment through performing participant and direct observations to investigate the behavioral patterns and lifestyle. And conducting interviews with key persons from local society and the inhabitants for a deep understanding of their perceptions of the historical houses.
- b. Applying the structuralist's approaches of investigating the environmental choices within the built environment through conducting field surveys and questionnaires to investigate the inhabitants' evaluation and preferences for their houses.
- c. Applying the post-structuralist's space syntax approaches by implementing the configurational analysis to define the historical houses spatial qualities.

- a. As well as using the UCL Depthmap software analysis to simulate the users' behaviors and pattern of use.
- The reflection stage still unclear and left to the designer ethics, although the RehabiMed method depends on the Charter on the Built Vernacular Heritage as a reference. While through enhancing the analysis phase more deep results will be attained so as the design phase will be more concrete. As well it is efficient to introduce new techniques and strategies in the design stage such as:
  - a. Applying Dovey's cyclic approach of design which depends on the inhabitants' perceptions of their lived spaces.
  - b. Using the Depthmap software to simulate the inhabitants' behaviors in the proposed designs.
- The execution stage is the main important phase in reality, since most of the time and efforts are concentrated on the execution which turned the rehabilitation to a technical process that focuses on the quality of construction works and materials used. While in this stage it is useful to follow the previously mentioned cyclic approach of design and include experiential simulation techniques as well through:
  - a. Conducting piecemeal change in the house's environment.
  - b. Applying the phenomenological evaluation techniques of the already built parts.
- The monitoring stage is concentrated on the physical maintenance and repairing while no mention for investigating the inhabitants and users satisfaction and preferences.

As a final point, it is important to consider applying this methodology based on the difference in the building's (house) architectural and historical values. Thus the different categories of historical houses including monuments, registered houses and ordinary houses should be recognized. In general the aim is common for all categories, which is to consider the inhabitant-house relationship in the rehabilitation process in order to maintain the main meanings of home (identity, territory, and socio-cultural unit, monetary and physical structure) and to reach housing sustainability in consequence. In particular the application of the recommended methodology must take into consideration the speciality of each category depending on the conservation international charters and recommendations.

For monuments it will not be proper and simple to conduct physical changes to apply the inhabitants' needs. Any change should be sensitive to protect the house's identity and values. Special solutions are in need to be innovated depending on the circumstances of each individual case; these solutions can be developed based on two main considerations:

- a. Applying semi-fixed, movable and flexible changes.
- b. Creating non-fixed changes such as new behavioral patterns.

Regarding the configurational properties such as visibility and permeability there will be a need to define what can be changed without affecting the house's cultural and architectural values.

For registered houses the physical changes is more flexible, while any change should be in light of the conservation measurements and regulations that control the proportions and the characteristics of changes. As well for the change in the configurational properties the limits of intervention is wider than in the case of monuments. The Architect should define the properties which are in need for change and those which should be protected based on the inhabitants' needs.

Regarding the ordinary houses the physical change is easier to be conducted as in the case of the registered buildings moreover in the case of the ordinary houses the additions and destruction process is more flexible. As well as, the configurational properties can be altered based on the inhabitants' needs and contemporary perceptions of their houses meanings.

## CONCLUSION

This paper gave the opportunity to review the rehabilitation process of the historic domestic architecture in light of the main meanings of home. It was clear through the previous discussion that understanding the inhabitant-house relationship is important to maintain the meanings of home and to reach sustainability. On the other hand it was found that the conservation theory has certain gaps that caused the rehabilitation to be more technical and materialistic. The paper presented several aspects and methods to enhance the historic houses rehabilitation theoretical framework and methodologies. Particularly major enhancements were outlined within the knowledge and analysis stage as well as the design and reflection phase.

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