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Ethics as Imperative for Design

Anbar Housing Project, Marrakech

"It is through my actions that I commit myself to values not through principles I accept or rules imposed upon me ..." (Robert Solomon, 1977)

Being "*ethical*" is more than the mere knowing of rules of developing and maintaining an ethical state of mind. It is linking values to human conduct, seeking to distinguish right from wrong, proper from improper, and good from bad. Ethics is concerned with how our applied thought, manifested conduct, and realized action affect others, directly or indirectly. This demands that we make a conscious effort to perceive, to assess, and to reconcile the many competing and often conflicting ideas or ways, through the reasoning and weighing of options, and through our belief that we are ultimately responsible for our deeds and decisions.

Ethics for Architecture: Foundation of Sustainable Thinking:

According to Aristotle, the relationship between soul and body is the same as is the case with a house. "*The rationale will be something like a covering preventative of destruction by wind, rain and sun. But while one philosopher will say that the house is composed of stones, bricks and beams, another will say a thing is known not by what it appears to be, but what it does and the response to its environment*". Accordingly, an architect's fundamental responsibility is to create environmentally responsive designs, creating connections between people and between people and aspects of place. Hence, his responsibility is to pursue balance in man's life by working for justice towards natural environment, for the good of all, with long term perspective. This demands a deep understanding of a set of perceptual and analytical abilities pertaining to ecological wisdom and practical means essential to create things that would fit a triplet system of social, economic and environmental attributes. Such understanding would thus nurture the values that would permit and promote new global architectural ethics.

The preceding ethics are foundation for sustainable thinking in design, a concept of "throughout lives" anticipated as a way of living and aimed at allowing others to meet their needs now and in the future. That is to say, valuing or placing the higher public interests ahead of one's own. Sustainability, therefore, is to achieve the greatest number and most far reaching and long lasting benefits from the decisions and recommendations made, while reducing or eliminating the negative impacts that might arise.

Throughout this article, we will be reviewing one of the projects that claim a sustainable approach: Anbar Project, Morocco, designed by Elie Mouyal. Situated in the heart of the city of Marrakech, the project had its own urban challenges and influences. Meanwhile, there were imperatives to be assimilated and dealt with.

Authenticity, Contemporaneity and the Question of Identity:

Today's Morocco is a composite of thousands of years of history beginning with the early settlers, to the Barbers, the Carthaginians, the Romans, the Arabs, the French, until its independence in 1956. Morocco's strategic location on the north-western edge of the African continent, its tie with Spain and southern Europe at the strait of Gibraltar makes it a spot for immigration, business and contemplation. As a result, Morocco enjoys a multiple heritage that is manifested in its architecture and urbanism, representing a fusion of all the preceding, and with a unique makeup of decorative stones, ceramic tiles, marble works, plaster and concrete.

Bearing in mind all the above, and based on the experiments described in Egypt by Hassan Fathy, the Hispano-Moresque architecture in Spain, traditional earth construction in Morocco itself, Elie Mouyal (born 1957) has continued exploration, research, and experimentation with lime clay and adobe for authentic architectural forms and contemporary building techniques. Joining in seminars, workshops, lectures and other global assemblies in all fields of architecture, interior decoration, furniture and object design, Mouyal has already become one of Morocco's famous architects. Also designer of the twin towers of Casa-Blanca, several houses and public buildings in Morocco and multiple projects in France, he has blended his own architectural identity that is manifested on both functional as well as formal levels of his works.

Anbar Project (1999): An Interpretation:

A social housing project in Marrakech of 560 apartments around a central urban center with a mosque and public garden. The standard apartment was to comprise three rooms, a central area, a kitchen, and a loggia connected to the kitchen. Standard construction techniques and cement blocks were to be used as dictated by the client- the Moroccan Ministry of Housing.

For Mouyal, it was necessary to begin by providing a common ground between requirements, challenges and imperatives. A shared value system so that the ramifications of any action are anticipated. Located in the midst of an already existing urban milieu, the layout was driven from the basic classical geometry, manipulated to the typical medieval alley-type cities of Morocco, along which the apartment blocks were to cover. A modular system of construction was then drawn indigenously heavily, adapted to contemporary functional features, dominated by Spanish and Mediterranean characteristics, yet encountered by vocabulary and treatments that gave the project its overall Arabian look.

In addition to cement blocks, raw stones were also used, cut into the traditional manners to tile contemporary compositions. Intimacy was then brought in by the Andalusian motifs, arches, tiled linings, warm color palette, variation of openings and wall dimensions, Mediterranean roof traces and north African verticalities (columns and mosque minaret).

Performance Criteria: The Principles:

"A thing may be called good in three ways: in itself, in some quality it has, or in some relationship it bears to something else" (Aristotle in Ethics, 1:6)

Concomitantly, the argument of sustainable design is centered on the idea that architecture is known not only by what it appears to be, but by what it does and the responses it makes to its environment. In their book, *Green Architecture: Design for Sustainable Future*, Brenda and Robert Vale have suggested six principles which can be adopted as "ethical reasoning" for the assessment of Anbar project from a sustainable point of view, these are: conserving energy; working with climate; minimizing new resources; respect for users; respect for site and finally holism.

Principle 1: Conserving Energy:

This principle suggests an analysis of existing environmental potentials, where people and nature can meet, in such a manner that the effect of human activities should remain within bounds, aiming at not destroying the diversity, complexity and function of the overall ecological life support system and well being.

In Anbar project, tackling such issue is claimed to have been considered since the early decision making phases of design. Prioritizing the environmental impacts and effects was compared with technical, financial and functional prerequisites and thus they were defined. Answering further evoked questions pertaining to adherence to environmental regulations and the framework of health and safety goes beyond the scope of this article.

Despite such fact, some objective cues can be witnessed. Window openings, as an exemplar, were designed to serve three functions, for which solutions were developed, these are: to let in direct and indirect sunlight; to let in air; and to provide a view. The size, form and location of each were determined by local climatic conditions. The reflectivity of the outer surface of the roof, and the thermal sensitivity of its material were also of primary concern. Another feature was reducing dependence on the automobile and providing more public space.

Principle 2: Working with Climate:

The traditional "meteorology" has successfully exemplified successful solutions to the problems of climate. For designing in arid Marrakech there are two main problems, to ensure protection against heat and to provide adequate cooling. The configuration and arrangement dependent on the court and the creation of the covered alleys has created a special microclimate for the huge site. The typically large courtyards serve as reservoir of cool, fresh air, just as dominated in the city plan. The narrow winding alleys perform the same function as the courtyards. They retain any cool air that may be deposited during the night from being swept away by the first puff of wind. In addition, there are other successful climatic treatments some of which are; thick walls, surface textures and the reflecting colors of exposed surfaces.

As for indoor microclimate -indebted to aerodynamics, care was given to the creation of air flows, wind in and out sucking, which was manipulated by the size and arrangement of openings in individual buildings. Other means of climatic control were the shading, the brise-soleil and the perforated window screens appropriately and sensitively employed according to each location and orientation in the site.

Principle 3: Minimizing New Resources (and forming the resources for new architecture):

The mere presence of a building, of course, results in a change in the physical surroundings for better or for worse. Changes have either qualitative or quantitative impacts. Changes are also considered as impacts of inputs and outputs in the lifecycle of a building. Sustaining original resources and minimizing new resources suggest considering all that is already consumed (inputs), as well as the expected to consume during project occupation (outputs). Some resources are non-renewable, and some renewable sources are –according to several factors- become a subject to destruction. In addition, minimizing new resources has also to do with sustaining indoor qualities, pertaining to thermal conditions, light, noise, and vibration, and ergonomics.

All preceding aspects are to be decided for during early planning and decision making phases while designing. For me, this was the most difficult part of my assessment of Anbar project, didn't appear visible at first sight, and for which I had no satisfactory answers.

Principle 4: Respect for Users:

"The primary social responsibility of the architect is towards those for whom the project is designed, to those who build or use the building, and even for those who are only incidentally involved" ... (Quoted from Paul-Alan Johnson, 1994)

In this regard, respect for users in Anbar project is achieved through a deep understanding and conception of human activity, what people do or want, how they might live, and through molding social profile, personal history with physical needs, behavior and emotions.

Respect for users is also regarded as the motivation and sense of belonging. In Anbar project, there proves to be a clear focus on fostering relationships with the neighborhood and the rest of community groups. The layout physical characteristics is meant to encourage residents to walk, increase sociability among neighbors, foster a distinctive community identity and maintain strong physically connective links to the surrounding context and city center. Disappointedly, the vast courtyards appear as bold and lack a humane sense which would have served as catalyst for social activation in the project.

Principle 5: Respect for Site (complementing the context):

"A building should relate to its existing context and to be respectful of that context. It should not make the adjacent buildings look ridiculous; it should not cast other buildings in its shadow. But it should also make a positive contribution, not only by its function, but by being something special on the street" (William J. Concklin in Diamonstein, 1985)

The beholder of the Anbar project can not but admires the project belonging to the site, exemplified in the harmony of heights, proportion, color-palette and overall imageability. The vertical modular rhythm has divided the huge project into smaller and more familiar attached blocks, matching those of the surrounding context. The location of the mosque ahead of the main entrance of the project and in the midst of the prime public space allows for interaction between outsider city dwellers and the project. The previous few –yet imperative- cues constitute an overall significant contribution that complements and adds to the site.

Principle 6: Holism:

This principle suggests that the preceding principles need to be embedded in a holistic ethical approach towards the users and the built environment. From a subjective point of view, I can identify some formal qualities ought to have second thought, these are: the rigid layout with respect to its large size within the city urban fabric, which has automatically resulted in a level of repetition and monotony. In addition, the boldness of open spaces, their lack of greenery and other landscape elements seem to result in their denial by users. Yet, it is worth reminding that design problems are described wicked and classified ill-defined, that have no ultimate solution, but most acceptable, most convenient, appropriately optimum to all. In view of that, it can be asserted

that the overall design experience in Anbar project has achieved success through integrating all three types of aesthetic qualities (Lang 1988): formal (concerning the appreciation of forms, shapes, rhythm, etc); sensory (concerning pleasurable stimuli and sensations) and; symbolic (concerning positive and negative attitudes by symbolic meanings and associations).

Regarding means, ends and the world of ought and should – in other words: ethical reasoning for sustainable design, holism in Anbar project presumes that there was some truthful answer to this question:

"How do you know that what this principle dictates is imperative to do?"

Clarence I. Lewis, 1969

A Final Word:

"If it is not worth doing, it is not worth doing well"

Louis Kahn, in Hugh Jacobsen's Diamonstien, 1985

Architecture, like any other professional field, can be defined in terms of ethics that are embedded in the habits of its practitioners as manifested in their works. Factually, ethical reasoning in architecture is the foundation of sustainable design. As previously mentioned in this article, it is a concept of "throughout lives" that targets a higher quality of mind and being, supports the relationships between nature, man and the resultant built environment. Such concept would undoubtedly result in a system that would safeguard life, individuals and cultures so that they –altogether, can continue, develop and flourish. That is to say: *"an architecture for all"*.

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