Evaluation and Re-evaluation:
Lessons in Architectural Practice and Pedagogy

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Abstract

The evaluation of architecture involves reproduction and reproduction is re-interpretation. This process follows a parallel course with the evolution of social values. The twentieth century is characterized by rapid changes of these values that have resulted in the propagation of diverse ways of architectural appraisal.

Changes in social values are facilitated by changes in social knowledge. Today's high tech information exchange is instrumental in breaking down barriers between cultures and between disciplines. This has a direct impact on architectural evaluation. What was once a domain of well known and well respected critics have become a common territory for many; causing a fundamental change in architectural discussions.

This paper postulates that at least four major 'waves' of architectural discussions have taken place in the twentieth century. These are (1) discussion of architecture as an instrument of social change, (2) its discussion in terms of formal issues and questions of meaning, (3) discussion from an expanded perspective that includes, among others, society, culture, history, ideology etc. and finally (4) evaluation of architecture as a democratic process. This paper introduces the first two and then moves on to architectural discussion from the points of view of ideology, history, avant-garde, experience and truth. It shows that in all cases evaluation had been the prerogative of a few. This article ends with discussions of the more democratic manners of assessment like Post Occupancy Evaluation. In this manner, the present disciplinary disjuncture of architecture and its evaluation is focused on and ways of creating a larger union for the meaningful reproduction for evaluation is discussed.

Introduction

Reproduction is an integral part of the production of architecture and also of its interpretation. Just as the builder reproduces the architect's drawings in materials; the evaluator, before commenting, reproduces the experience of the building in his/her mind, often relying on physical or digital images to reinforce the mental ones. Others evaluate from pictures only, and some consider drawings and models as representations of architecture.

Each interpretation involves a subtle interjection of subjective matter. This is a crucial problem of architectural evaluation. Coupled with that is the nature of the 'object' to be interpreted and the 'time' and 'setting' for it. For example, the Barcelona pavilion was virtually unknown for a long 31 years after it was built and taken down (Bonta 1975), yet today it is considered almost unanimously as a highly significant. Evaluation is time specific and dependant on social knowledge and social values.

The twentieth century has seen many rapid changes in social, political and economic life everywhere. Architectural discussions too, have had a parallel path. In this regard I propose that there had been at least four different approaches in architectural evaluation[1]. These are discussed in this paper.

Architectural discussion in the early part of the twentieth century

The critical attitude of the early part of this century was focused on 'hard core' Modern architecture's continued assertion of the nineteenth century belief that it could be effective in forming social conditions. This was a period of naive belief and optimism in which practitioners and early historians of the modern movement were eager to link forms with society and neglected to investigate the basis of their faith (McLeod 1985). They believed that technology could serve as an agent of social redemption and architecture from the machinist point of view could be instrumental in this. Le Corbusier's famous words "Architecture or revolution. Revolution can be avoided" (Le Corbusier 1960, pp. 269) expresses these ideas. Architectural evaluation at this time was issue-oriented and focused on independent concerns. The well-known slogan "Form follows function" is such an indication. However, publication of Jane Jacob's

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[1] Mary McLeod had earlier pointed out three periods of criticism. (McLeod 1985)

influential book (Jacobs 1961) and the public outcry against large housing projects like the Pruitt-Igoe of St. Louis were instrumental in attacking this idea.

The next phase saw architectural criticism being increasingly directed to formal issues and questions of meaning. Rigorous analysis of formal structures, (Rowe 1976), semiotic and structuralist approaches were being taken up in the discussions of architecture. The unifying element of these diverse attempts was that they all shared a synchronic viewpoint and considered architecture as a static artifact from which 'meaning' or 'value' could be extracted. The values of the creator or the evaluator was not thought to be important and neither was the criteria of evaluation seriously considered.

Architecture from the point of view of larger concerns

Later, architectural criticism became more pluralistic. It was more explicitly acknowledged that architecture was a product of many factors. Works by Lethaby (1956), Mumford (1961), Rudofsky (1965), Rapoport (1969) etc. were important because they served to place architectural evaluation in the larger sphere of culture and society. Not only that, criticism itself and its criteria was brought under scrutiny. Suddenly such issues like ideology, avant-garde, historiography, mentalitae, experience, truth etc. became important. I will briefly discuss some of them here.

Architecture and Ideology

In the 1970's the realization that architecture is the most connected of all the arts to economic and social conditions gradually became stronger. Therefore its evaluation from a broader system of beliefs and material processes which exist in relation to economic and social structures became a growing concern for a number of architectural evaluators.

Although the word 'ideology' has been used variously to denote ideas, ideals, beliefs, passion, values, religions, political philosophies, moral justifications and so on, the one sense in which it is widely understood is 'distorted reality' or 'false consciousness'. According to Llorens, "this distortion is different from ordinary error in as much as it is not accidental, but determined by the social situation" (Llorens 1981, pp. 90). To Ackerman, this is an "...unconsciously acquired structure, a pattern of thought and action ingrained in the individual by a culture; it is not a particular philosophy or faith

that one elects or rejects but rather a state of mind that has the social function of maintaining the overall structure of society by inducing men to *accept in their consciousness* the place and role assigned to them by the structure." (Ackerman 1980, pp. 16, My italics) Therefore, whereas 'ideology' is something that is infused within the society and exists at a level below that of awareness, yet it also suggests a result of some kind of continued influence.

Ideology as a larger social phenomenon and an important aspect in architectural production and evaluation probably has roots in the work of Manfredo Tafuri (Tafuri 1976). While he believed in the total reassessment of history for a renewed definition of the boundaries of architecture, he also advocated a study of economic rationality as the basis on which to evaluate it. As Llorens explains, "the history of architectural ideas as ideology can be traced down to the development of economic rationality" (Llorens 1981, pp. 85).

Examples like this make it clear that whereas it appeared that architecture was being debated, it was its production and the criteria of criticism which were in the limelight. Thus architecture, as such, became one step removed from these debates.

Architecture and the avant-garde

Avant-garde is the unorthodox, the unconventional, the new. In the realm of art, it refers to the pioneers of any progressive ideas or movement. Most of its investigations are born and developed in this realm and is carried over to architecture, probably as a second thought (Grassi, pp. 27). Also, as a cultural superstructure, it tends to be reactionary.

But how progressive can architecture be? In all its unorthodoxy, by its very nature, architecture is bound by its function. In this regard, there is a pro- and an anti-avant-garde stance depending on what aspects of architecture one considers important. As a history of forms with their constant connections with everyday life, architecture responds to immediate needs and only then becomes part of a collective desire to leave its marks for the future. In this way, architecture becomes both a collective work and a collective choice of society. From this point of view, it must be related to historic experience; it must return to those elements that define its specificity. These are its practical activity and its cultural specialization.

The avant-garde builds the world according to its own representation of it. The two Guggenheim museums in New York and Bilbao are considered avant-garde architecture of their time. Michael Webb, evaluating the museum at Bilbao said, "For two centuries, museums have taken their cues from classical temples and stately homes, providing grand, symmetrical forms for state art works. Artists, the heralds of change, have moved far beyond the Apollonian ideal, embracing electronic media, huge scale, elements of chance and disorder. Thus Gehry is merely playing catch-up in his Dionysian inventions and the disciplined chaos of his forms, expressing the mood of our times as we move uncertainly forward into a new millennium" (Webb 1998, pp. 132). According to another critic, "The computer has enabled Gehry to generate formal and spatial complexity that would have been inconceivable only a few years ago. The notion that uniqueness is now as economic and easy to achieve as repetition, challenges the simplifying assumption of Modernism and suggests the potential of a new, post industrial paradigm based on enhanced, creative capabilities of electronics rather than mechanics" (Slessor 1997, pp. 34). Both these quotes are illustrations of how being avant-garde (in the sense of subscribing to chance, disorder and using electronic tools) can be the criteria of architectural evaluation.

Architecture in relationship to History

Attitudes towards history and historiography have also been increasingly becoming important and this has a profound effect on how we consider architecture. In the early part of this century, when historians selected which designers of the past were worthy of discussion and what features of their work were to be emphasized, they were applying the value standards of their day and setting goals for the next. The design of history thus interacted with the design of environments. In other words, written history influences the way we conceive of and understand architecture.

When historians in the first half of this century had made a hero of the architect it shifted emphasis from the product to the producer. Not only that, the producer was made to be seen through a layer of respect and admiration which often served to distract from strict inquiry. According to Ackerman, this is 'designed' history. He points out that "the literature is sparse on the medieval or later towns that evolved organically out of communal functions and rich in treatments of ideal plans, ...our aesthetics have been based on the same philosophical idealism as those of the designers: we have made that same social contract, to voice the ideology of the dominant establishment," (Ackerman 1980, pp. 15) – This is undoubtedly a result of influential historians.

Subsequently we see two reactions. One is in the field of historiography, which critically looks at the writing of history itself. This considers social, economic and political conditions and tries to evaluate architecture as being relatively free from the previous 'engineered-in' values. The French Annale school is an important example in this regard (Stoianovich, 1976). The second is the conviction that there are no aesthetic absolutes, but that our liking and admiration for artistic achievements come from life experiences. In this approach the architecture of the past is interpreted, and that of the present is conceived, as an outgrowth of the structures that articulate societies and cultures. The challenge is to find a way of formulating a non-idealist definition of 'communal values' and the second is to find a definition of architectural criteria that does not fall back on the mysterious abstract values of the Renaissance tradition (Ackerman 1980, pp. 13), with their elitist implications and their isolation of the designer from his/her surroundings.

Architecture and Experience

That architecture can be fruitfully evaluated not by intellectual reflection on the visible aspects only, but by the use of other human senses was pointed out by Rasmussen (Rasmussen 1959). The theme which is carried evenly throughout his book is how lay experience can essentially be used to understand architecture. He also pointed to important elements of architecture and the required human sensibilities for experiencing it.

Discussion of human experience perhaps takes the matter beyond architecture and history into the discipline of psychology. This was not easily acceptable to many architectural critics. In this regard, we could recall Ackerman's proposal of a triadic system for accessing the experience of buildings and designed environments. This are, (1) personal experience, (2) experience of the environment and (3) experience of the culture. He shifts the role of the architect from a form giver, to a responsive agent who will not override human shortcomings but deal imaginatively with them. Creativity, instead of being a godlike realization of an abstract ideal, would become a sensitive shaping of the existing potentialities of society. In proposing such a methodology using human sensibilities, Ackerman was careful not to negate history. He said, "As historians, rather than focusing on the development of architectural style in the formal sense, we should trace the story of the response of buildings to individuals, environments, and cultures and their institutions in the past" (Ackerman 1980, pp. 18). Although he believed that designers can evoke communal values, this emphasis on lay

people shows the beginnings of a new kind of architectural evaluation that tends towards the human sciences.

In this regard we may also find some support from Zucker who brings out the conflict between abstract ideals and concrete experience (Zucker 1983). He deals with the issue of the relationship of architecture to the applied arts. He stresses the fact that architecture does not deal with artistic representations of buildings, but the buildings themselves. In art, even when experience is being considered, there is one fixed point from which to look at it. Renaissance perspective created a similar relationship in architecture which became part of the Renaissance baggage that came down even with the advent of modernism. In buildings however, "... one experiences it by being in it, living in it, being a part of its reality" (Zucker 1983, pp. 24)

Architecture as Truth

This idea of truth (and deception) as a way of evaluating architecture probably comes from Ruskin and his 'lamp of truth' (Ruskin 1956). To him, architectural deceits were of three kinds. (1) When there is a suggestion of a structure other than the 'true' one, (2) when surfaces are made to look like something else and (3) when machine made or cast ornamentation is used.

At the other end of this discussion is Nietzche, who's challenging opinion is relevant here. "It is absolutely unworthy of the philosopher to say that "the good and the beautiful are one"; if he should add " and also the true", he deserves to be thrashed. Truth is ugly. Art is with us in order that we may not perish through truth" (Nietzche 1964, para 822, pp. 264)

In this range, there can be many kinds of truth in architecture. These include truths of representation, essence, use, materials, style etc. Harries points to many of them that can be considered in architectural criticism (Harries 1984). However, no truth is permanent. The breakdown of the theocentric architecture of the middle ages and its replacement of an anthropocentric system of the Renaissance illustrates such change. Architecture has been conceived of as having many truths. Thus history "... invites us to relativise 'truth' and to replace 'essence' with 'ruling convention'" (Harries 1984, pp. 57).

Social Science Techniques of Architectural Evaluation

Although there had been discussions of lay experience, communal values and those of user groups, architectural evaluations still relied on the 'evaluator' -- either as well respected critics or as architectural historians. Therefore evaluation was subjective. However, some evaluators made more serious attempts than others to consider users. The evaluation process of the Aga Khan Award for Architecture is an important one in this regard. Representation of the users in an objective manner in architectural evaluation perhaps came with the advent of Post Occupancy Evaluation (POE). This is the practice of using systematic methods to evaluate successes and failures in architectural design (Zimring and Reizenstein 1981). They evaluate user needs in addition to other technical, functional and aesthetic considerations.

Systemic evaluation of architecture after its occupation and that which also takes the point of view of users can be seen to be a broad based approach to evaluation. "POE ranges in scope from brief studies ... to expensive longitudinal projects. They are performed by the social science consultants, designers, untrained tenants, academicians and others. With such a complex interweaving of backgrounds, goals, resources and expertise it is inevitable that no single criterion of success can emerge" (Zimring and Wener 1985, pp. 98). Nevertheless, this is presently the only evaluation method that may claim to be based on more than one subjective impression.

The evolution of computer systems that simplifies collection and dissemination of information is another factor for the increase of Post Occupancy Evaluation. Users are now more aware of their surroundings and can communicate quickly and efficiently about their needs and desires. These communications can be stored, evaluated, tested, compared and then used as a base for new design guidelines. The POE program of the US Department of State that is soon to install a computerized system called 'LessonBase' to generate user views of their embassy buildings is one of the first such attempts (Zimring, Haq et al. 1998). Additionally, the decision of the design-build team of Ciba Giegy's laboratory project in Tarrytown NJ, of keeping the last $295,000 of the fees contingent upon a favorable POE exemplifies that even architectural designers are now motivated more by objective evaluations as compared to subjective ones. (Krizan 1996)

Although POEs have had more than 30 years of existence, they remain to be widely accepted. Perhaps the information processing ease and capability that the next century

promises will be instrumental in its acceptance. Even if it does not, architectural evaluation by the few seems to be a thing of the past.

Conclusion

We have tried to trace the different 'waves' of architectural evaluation in the twentieth century. In the beginning, its criteria was singular. Gradually, that was questioned and this led to many factors being considered simultaneously. Even then, evaluation remained in the realm of critics and the historians and therefore was not free from subjectivity. In the later part of this century the techniques of social science were increasingly used to evaluate architecture. This was done more easily with the increasing availability of high tech computer tools. We have seen that both organizations and architects are gradually realizing its importance. How this fares when the 'age of information' in the next century arrives, remains to be seen.

For practitioners and educators of architecture, the lesson to note is not the evaluation and re-evaluations, or who does them, but rather, the significance of the criteria and methodology behind them. That should be similar in both design and criticism.

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