3.0. Changing Trends, Changing Roles

This chapter presents a literature review of two themes relevant to my study, the shift in architectural paradigms from conventional to community-based architecture and the redefined roles of architects responding to this shift. The main focus of the previous chapter was the clarity of the concept of community participation whereas this chapter gives a review of the circumstances that compelled theorists to initiate a dialogue in favor of a community-based approach in architecture, as opposed to the conventional and paternalistic architectural practice. The literary works of three main pioneers of the participatory approach, such as, John F.C. Turner, N.J. Habraken and Christopher Alexander, are reviewed in this chapter. These theorists challenged the merits of the existing architectural practices of their times, which according to their experiences had failed in benefiting the target audience. It is essential in the case of this research report dealing with the practice of Community Architecture, to first study the various relevant theories that exist on the subject. This chapter will address questions such as how, when and why did the need for community participation in architecture emerge and most importantly, what are the most significant theories present on the subject? Also following closely this discussion is the redefinition of the roles of the architects and planners respecting this new shift in architectural practice.

3.1. Changing Trends in Architecture

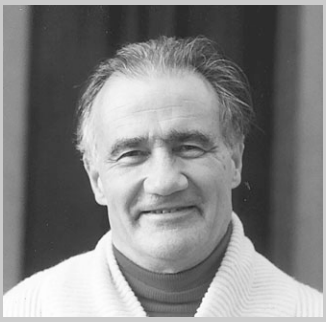
> When a man designs an office for himself, he takes these extra, subtle needs into account as a matter of course, because he can feel them. But when he has to explain these needs to an architect, the only ones which get across are the ones which he can state in words.
> Christopher Alexander in The Oregon Experiment (45).

Community decision-making was mostly part of a centralized process up until the mid-1950s, with planners and government officials in full control of the system (Burke 26). However, there was a shift in this approach to involve community in urban development projects, following the failures of several government-initiated low-cost housing programs around the world (Moser, Community 91). In a number of studies on urban redevelopment projects carried out in early 1950s, Edmund M. Burke found that these programs could not keep pace with the fast growing number of new squatter settlements (A Participatory 67). For example, the slum clearance activities of both Baltimore and Chicago redevelopment programs between 1950 and 1955 failed due to the simultaneous increase in the quantity of deteriorating housing (Burke 67). The pioneering works of theorists such as John F.C. Turner started a debate in 1960s, on the direct involvement of communities in housing programs. In his book Housing by People: Towards Autonomy in Building Environments, Turner's thesis is that satisfactory goods and services, including housing, can only be produced locally through network structures and decentralizing techniques, which are crucial

for the stability of our planet (5-6). Turner approaches his thesis by comparing examples of government-initiated low-cost housing projects like Pruitt Igoe, with people initiated low-cost housing solutions like slums and squatter settlements. Pruitt Igoe (1954-1976) was an award winning low-cost housing project in St. Louis, which had to be completely demolished after a span of only two decades, due to its rapid physical and social deterioration. Turner argues that against such high budgeted failures, there exists a highly organized parallel system based on the ability of the people to house themselves in the form of squatter settlements and slums. Turner found that some of the materially poor dwellings were socially the best while some of the high standard dwellings were socially oppressive as seen in the case of Pruitt Igoe. Turner suggests a change in the government's approach towards housing; to stop building and managing houses, which it does "badly or uneconomically," instead should provide access to resources which the communities and people cannot provide for themselves (Turner, Housing xiv).

John F.C. Turner in his book refers to Simon Nicholson's Theory of Loose Parts which presents the

Box 4. John F.C. Turner



John F. Charlewood Turner was born in 1927 in London and received his Diploma in Architecture from the Architectural Association School of Architecture, London in 1954. An ardent believer of self-help in housing, Turner worked for eight years in Peru developing community action programs in urban and rural settings. In addition to consultation works around the world, he also held many teaching and research positions at MIT and Harvard in the US and at AA School and UCL in UK. His books Freedom to Build: Dweller Control of the Housing Process (with Robert Fichter, 1972) and Housing by People: Towards Autonomy in Building Environments (1976) were at the forefront of discussions on user participation in housing decisions in the 1970s and enjoy the same status till today (Turner, Housing 170).

Photo from The World Bank, "Urban."

concept that our ability to do things freely according to our needs and habits is directly related to the availability of a fixed number of elements "that can be assembled in a maximum number of different ways" (qtd. in Turner, Housing 112)[3]. Turner concludes his study by applying the same theory to differentiate between two primary types of controls: 'Line' versus 'Limits', that is, control in the form of mapping out procedural lines which must be strictly adhered to, as opposed to setting limits to what may be done and giving the individual freedom to find his or her own way within those limits (Turner, Housing 158). The latter type of control supports user participation and provides room for making decisions and choices while respecting certain limits. This is the basis of Turner's theory that the people should be given freedom to make their own-decisions instead of having the governments make these decisions for them. The role of the government should be that of an enabler, by providing access to resources and identifying limits for the people to respect and by giving them freedom to choose whatever they want from the resources while staying within the set boundaries.

Another significant contributor to the idea of user control in architectural decisions is a Dutch architect, N.J. Habraken. Supports: An Alternative to Mass Housing, written by Habraken in 1972, discusses the example of mass housing that emerged as a solution to fight off the post-war housing shortage by professionals and governments in the Netherlands (1). Habraken found that there was a strong opposition against this standardization of plans and built structures by the very people

[3] Simon Nicholson, "The Theorgy of Loose Parts," Landscape Architecture (1971) qtd. in Turner, Housing 112.

for whom these were designed. The users considered the mass housing undesirable and unacceptable, according to their perception, "this kind of housing turns one into a herd-animal, a serf, a dependent" (Habraken, Supports 2). As a result of this conflict between what the professionals thought as appropriate for the users and the resistance of the users against it, Habraken states his thesis question, "Could it be that the housing shortage, or rather its apparent insolubility, is caused by the antithesis between man and method?" (Supports 2-3). He addresses the shortcomings of the 'method' by identifying the inherent problem of mass housing, that is, its uniform appearance, which is generally attributed to its factory production. However, in Habraken's opinion, this is in fact a result of the "disruption of the natural relationship" (Supports 21). The removal of human element and individualism results in the uniformity of the product. Habraken concludes that it is not the presence of machine in housing production but the absence of man from the process that results in the uniformity of structures. In short, according to Habraken, the problem lies with the concept of mass housing and not with modern construction technology, which would have had the same appearance whether carried out with primitive methods or modern techniques of construction.

Having identified the problem with mass housing, N.J. Habraken presents his concept of "support structures" as an alternative to mass housing, using prefabricated modern construction techniques. The definition of a support structure is "a construction which allows the provision of dwellings which can be built, altered, and taken down, independently of the others" (Habraken, Supports 59-60). The concept of "Supports" was the outcome of the research at the Stichting Architecten Research

(SAR) in the Netherlands of which Habraken was the Director. SAR was founded in 1964 as "a foundation for architectural research to investigate better ways to deal with the problems of design and construction of mass housing" (Habraken, Variations 7). Habraken further explains in his book, Variations: The Systematic Design of Supports that the idea of "supports" is based on user participation and control in decision-making. In a housing system based on these "supports," the dwelling is not viewed as a product but as a process, which allows the end-users to make decisions according to their individual needs while respecting the larger structure of communal services and infrastructure (Habraken, Variations 10). These structures provide users the choice of making their dwellings according to their needs and requirements. Habraken concludes by advocating the appropriateness of these 'support structures' as both a means of restoring the natural relationship of user participation in the built environment while fully utilizing the factory

Box 5. N. John Habraken

N. John Habraken was born in Indonesia in 1928. He graduated in architecture in 1955 from the Delft Technical University in the Netherlands. Habraken was the director SAR (Stichting Architecten Research) in the Netherlands for ten years and taught architecture there at the Eindhoven Technical University and at MIT in the US. He has authored several books and articles on adaptability and user-individuality of the built environment such as, Three R's for Housing (1970), Supports: An Alternative to Mass Housing (1972) and Variations: The Systematic Design of Supports (et al. 1976), among many others, which also have been translated in several languages. Habraken currently resides in Apeldoorn, the Netherlands and his latest book entitled Palladio's Children is due shortly, in which he discusses the architect's role in the changing times (Habraken, Home page).

Photo from N.J. Habraken, Home page.

produced pre-fabrication techniques.

The concept of community involvement in housing has its definite roots in the pioneering works of John F.C. Turner and N.J. Habraken. Despite the similarities between their ideologies of people's involvement in the housing process, there are some obvious differences in their approaches, which could be attributed to the different contexts that each architect worked in. John F.C. Turner worked for 8 years on community development projects in urban and rural areas of a developing country like Peru while N. J. Habraken's work revolved around addressing the Post-War housing crisis in the Netherlands. Nabeel Hamdi in his book Housing without Houses: Participation, Flexibility, Enablement, illustrates the major differences between Turner's and Habraken's approaches. In his approach, Turner is more concerned with the structure of housing politics, government policies and the new roles of professionals. Habraken, on the other hand, firmly believed in the ability of architecture to combat the housing crisis and was more interested in the structure of the built environment. Hamdi also points out that while Turner promotes the principles of 'self-help, self-management and self-build,' Habraken searches ways to incorporate the industrial production of housing and seeks to organize the industrial and government institutes to serve the interests of industrialists, officials and users alike (Hamdi, Housing 44-45). Habraken believes that modern technology is not necessarily a bad thing and if used correctly, can have positive effects on the overall results.

However, both John F. C. Turner and N.J. Habraken received criticism for their ideas. Habraken was criticized for the use of industrial production in housing

and for promoting the overall control of professionals and governments in the decision making process affecting the people and their built environment (Hamdi, Housing 45-46). Turner on the other hand was criticized for the manipulation of people in the garb of his concept of self-help in housing. But a close study of their criticisms reveals that their theories propagated the principles of 'flexibility, participation and enablement' as pointed out by Hamdi (Housing 46), which is the reason why their work is considered the basis of research in community participation even today. Habraken's proposal of developing 'supporting structures' is an effective alternative to mass housing and an innovative way to develop new towns while respecting the user's individualism in each dwelling, however, Turner's approach of user participation in decision making has proved to be practically more successful.

Although both the approaches are quite different for an equal comparison, Habraken's proposal can only be useful in situations where

Box 6. Christopher Alexander

Born in Austria in 1936, Christopher Alexander went to Cambridge University in the UK where he received a Master's Degree in Mathematics and a Bachelors Degree in Architecture and later to Harvard, US where he received a PhD in Architecture. Alexander's brilliance and creativity extend beyond the realm of architecture to computer science where his Pattern Language Movement has found the basis for several software programs. He has designed numerous buildings around the world and invented many structural systems. Important architectural projects include Student Housing for the University of Oregon (1991-3) and The Mexicali Project, Mexico (1976). Alexander has worked as a consultant for various organizations and governments worldwide and has co-authored many books including, The Oregon Experiment (1975), A Pattern Language: Towns, Buildings, Construction (et al. 1977), The Timeless Way of Building (1979), The Production of Houses (et al. 1985). Alexander currently resides in Berkeley, California ("Christopher").

there is an opportunity for new development and high capital investment. It is definitely an effective and economical alternative to the government based development projects, mostly involving inflexible and expensive mass housing, but cannot be applied in other situations where similar opportunities are not available. In this respect, Turner's concept of giving control to people in decisions affecting their lives and the built environment proves to be more substantial. His approach does not require heavy capital investment but calls for a change in the political approach and professional attitudes, which is humble and economical as compared to Habraken's 'supports'. This is probably the reason why grassroots and community based organizations, non-government organizations, governments and funding agencies around the world have recognized community participation in the decision-making process, as a standard project component (Moser, Community 91).

Another significant name advocating the concept of community decision-making in built environment is that of Christopher Alexander. Although similar in ideas to that of John F. C. Turner, Alexander's approach towards community participation has been unique. He has attempted to decipher the act of building in order to unveil all its components for the easy understanding of the end-user. This understanding of the process is necessary to enable the user to create an environment based on his or her individual needs and requirements. His ideas were further developed in his book A Pattern Language, which essentially presents a language of various patterns or steps involved in the design process of projects of various kinds, for the user or builder to choose from and to make his or her design decisions upon. Alexander argues that only users have the best knowledge about their needs and

requirements and hence should be directly involved in the planning process (Oregon 38). This concept forms the basis of a user friendly attitude, which opposes the commonly held paternalistic view of professionals who consider them to know what is best for the people based on their formal education.

Christopher Alexander in his book, The Oregon Experiment further elaborates his ideas by presenting the planning process adopted in preparing the master plan for the University of Oregon in early 1970s. Even though the book describes the planning process adopted at the university, Alexander presents a process that can be applied anywhere in the world. This is the essence of Christopher Alexander's work, which differentiates him from John F.C. Turner. While Turner argues that the people should have the final say in decisions concerning their lives and built environment, it is Alexander who takes the concept a step further by presenting ways and methods of making these decisions. Alexander's work aims towards simplifying and decoding the design process, which due to its complication has been the realm of professional architects and planners only. In the Oregon experiment, he takes an extreme position where the design was conceived by the users and the architect was brought in at a later stage to help implement and construct the design (40) and had to accept the decisions made by the people (63). However, it is not to say that the people produced the designs entirely on their own and were provided guidance where needed but the final decision was only theirs to make.

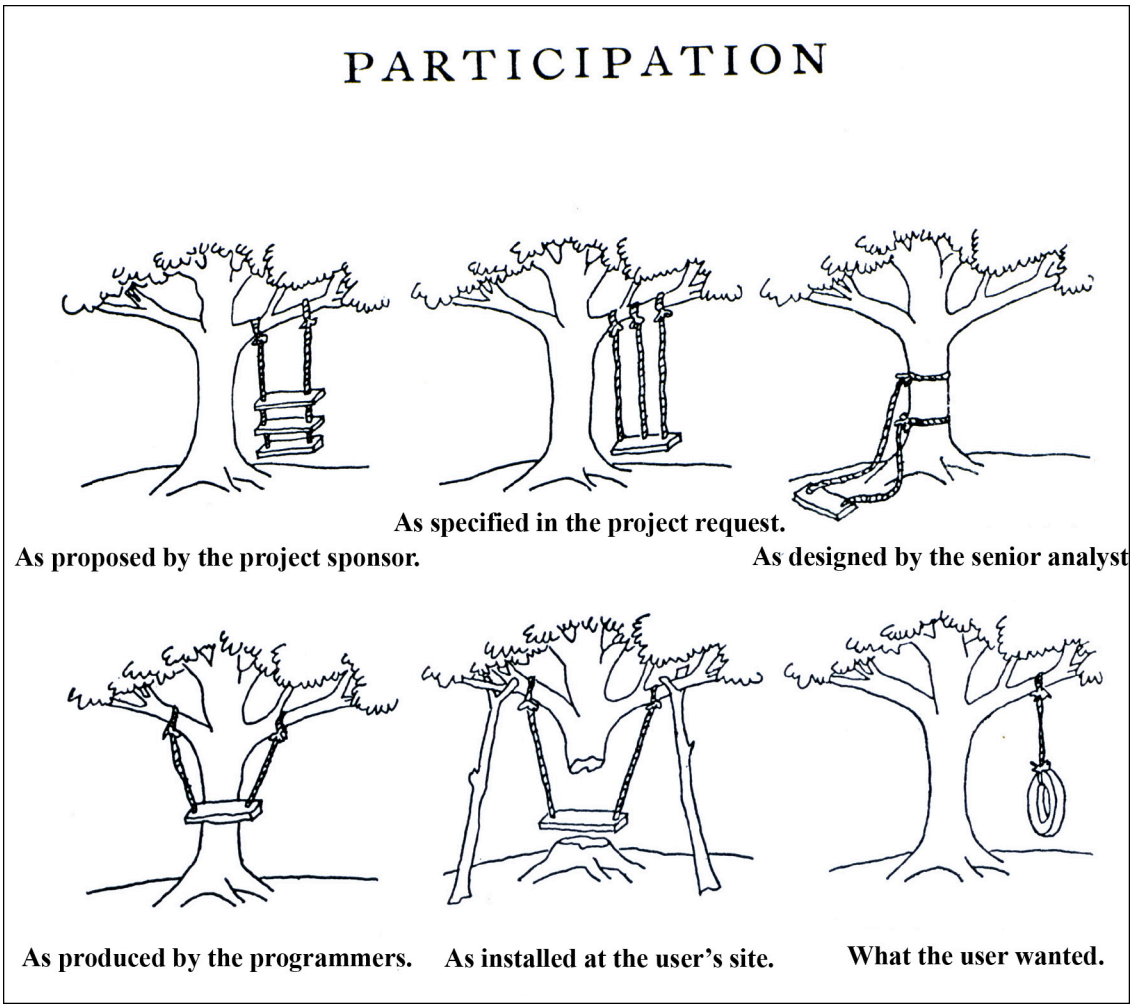


Fig. 3.1. Participation from Christopher Alexander, 1975: 44.

3.2. Changing Roles of Architects

The certified professional makes a fool of himself, and often does a great deal of harm to other people, by assuming that he knows more than the "uneducated" by virtue of his schooling. All that second- and third-hand information and intellectual exercising does for him, however, is to reduce his ability to listen and learn about situations

> significantly different from his own social and economic experience- with consequences which can be tragic when he has the power to impose his solutions on those who are not strong enough to resist. John F.C. Turner in Freedom to Build (147).

Due to the specialization of various professions like architecture and planning in the case of built environment, it is generally believed that architects and planners know what is best for other people on account of their professional education (Alexander, Oregon 45). Christopher Alexander argues that laymen have made great built environments of the past for thousands of years (Oregon 45). Like Alexander, Nabeel Hamdi points out in his book, Housing Without Houses: Participation, Flexibility, Enablement, that it is evident from history that the housing process was under the full control of people for years in both the developing and developed world, long before professional intervention (Hamdi, Housing 20, 169). In fact even after the professionals and authorities intervened, it was an insufficient contribution in the overall supply of housing stock (Hamdi, Housing 169). Hamdi acknowledges the involvement of people in the production of about "80 percent of the world's built residential environment" (Hamdi, Housing xi). Architects for most part, in the past and even today, have been consumed with great buildings and monumental architecture to be concerned with the real housing needs of the working class (Hamdi, Housing 169). Small builders and homeowners usually took up this task without the intervention of formal architects, a trend that is somewhat prevalent even today (Hamdi, Housing 169-170). Hence people's participation in housing is not a new

concept but one that has been around for ages. It is the realization on the part of the professionals and authorities, of people's ability to house them far more effectively, is what needs to be addressed.

N.J. Habraken in an article published in Design Studies entitled "Towards a New Professional Role," presents a interesting argument to the entire participatory discussion. He also argues that the involvement of professionals like architects, engineers, bureaucrats, etc. in mass housing process is a relatively recent phenomenon of the modern times. Habraken points out in his article, "it is us who must participate. Humanity has done without us for a long time and would, we can be sure, survive and continue to build if we were to disappear overnight" ("Towards" 140). He argues that it is the professional class that is participating in the age-old process of housing people and not the other way around.

However, if the argument that people have the ability and knowledge to house them is accepted then where does that leave the architects and planners in the entire scheme of things? Some people argue that in the case of community participation, giving full control to the people undermines the role of professionals trained in design and planning (Hamdi, Housing xi). N.J. Habraken believes that the role of the architect in such a situation can be determined by focusing on areas in which he or she can best benefit the project and by contributing in ways that no one else is capable of doing ("Towards" 140). In Habraken's opinion, it is not the architect who is allowing people to participate in housing process, something that they have been doing for ages. However, he is also quick to point out that the input of the architect cannot be completely ignored in today's world of great possibilities. There are many

ways that a project can benefit from the knowledge of a professional ("Towards" 140). Habraken describes the new professional with an open-minded and selfless attitude rooted in everyday life concerns and looking far beyond the traditional boundaries of architecture. According to Habraken, "The professional is perhaps not to be made entirely redundant but must learn to adopt a new, less arrogant role" ("Towards" 139). The new practitioner is more concerned in enriching daily life experiences than merely adding monumental accomplishments to his or her credit ("Towards" 141).

Nabeel Hamdi similarly argues that, "Community participation is no substitute for professional or governmental interventions or for formal planning or design, but an intrinsic part of both processes" (Hamdi, Housing 86). What is desirable is that architects with their wealth of knowledge about design and planning need to form some sort of an alliance with the people who know more about their personal needs. In addition to the fact, as argued by Christopher Alexander, that people know their needs far better than the professionals, Hamdi points out that participation in housing is also necessary due to the small number of architects for a large population (Hamdi, Housing 7). He argues that in such a situation of unreasonable architect-client ratio, it is not humanly possible for the architects to make informed decisions concerning the needs and requirements of their massive clientele (Hamdi, Housing 7). And without this understanding of the problems faced by a common man, it is virtually impossible to solve the housing situation by continuing with the traditional architectural approach where the architect is the sole creator and decision-maker of the built environment. It is not to say that all the design and planning knowledge that a

professional has can be substituted completely by user control and participation in housing, but to work in partnership with the people in making decisions about issues affecting their lives and that are most familiar to them. This give rise to another question as to what is then expected of the architect or planner in the new situation involving user participation in the projects, that were the previously the sole domains of the professionals?

Edmund M. Burke quotes in his book, A Participatory Approach to Urban Planning, that "Planning no longer is the exclusive domain of technical experts" (14). He believes that the role of a planner is more complex and constantly changing and requires input in a wide variety of areas. Burke lists the new roles of the planner, which include deciding the functions of different actors in the planning process and developing a process to involve all the different actors as a part of the planning method. He argues that with the additional roles of the planners today, there is need for acquiring new skills especially in the social aspect of planning.

Nabeel Hamdi also presents the dilemma faced by professionally trained architects when they work with communities in participatory projects (Hamdi, Housing 177). They face situations dealing with issues other than architecture, related to social science and management. This calls for a change in the traditional training of architects in schools by introducing additional managerial and social science skills along with practical experience gained by working with practitioners or in field-based projects. This approach will help students understand the dynamics of a real project, dealing with real clients and on-site problems. For the architects and planners working with communities, Hamdi proposes a role similar to that of a teacher, an

enabler, who guides his students (the community, in this case) in finding ways to enable them to develop their abilities and find solutions to their problems (Hamdi, Housing 177-179).

N.J. Habraken also presents specific definition of the role of the architects in his book Supports: An Alternative to Mass Housing, where the new tasks of the architect include the design of the support structures and dwellings to be produced by the industry along with the design of the individual dwelling unit. With the new construction system and need for mass housing, there is a change in the approach where architects instead of designing for individual clients are involved in the design of new structural building components to be manufactured industrially. Habraken compares the new architect with 'an industrial designer' who is responsible for designing the factory produced building elements, keeping the practicality and overall aesthetics in consideration (Supports 89). Habraken recognizes that this new position of the architect will eventually mean an end to his or her "independent artistic personality" but at the same time will form "a basis for architecture rooted in society" (Supports 90-91). Besides, designing housing for industrial production will result in fighting off the housing shortage by employing technology in a more positive fashion.

It is a reasonable argument that the acceptance and realization of community participation in the decision-making process call for a change in the traditional roles of the architects and planners alike. Edmund M. Burke and Nabeel Hamdi, propose that the architect should acquire social science skills in addition to the traditional technical skills, in order to perform his or her new tasks related to community organization and enablement. In this case the architect is no longer the sole creator of

the building, as in the traditional sense, but is in fact more of an ‘organizer’ and a ‘teacher’, defining the different roles of the actors in planning and guiding the people how to achieve their goals in the process. The point of departure for Habraken from the concept of an architect as presented by Burke and Hamdi is in the role of an architect continuing as a designer in the new system as compared to venturing in social and managerial domains of community development. Irrespective of all the variations in the roles, it is logical to accept the need for architect and planners to acquire new roles with the changing demands of their professions.

The literary works of various theorists, however different and diverse in nature, have together helped propagate community participation in architecture from a mere concept to a practical reality. They have given academic credibility to the idea of user participation in architecture that has been in practice for a long time but needed acknowledgement. They also presented their theories on what participatory architecture should be like to better serve the end-users. User involvement and participation in decisions concerning their built environment was not presented as a fancy idealized theory, but it rooted from the serious shortcomings of the conventional architectural approach. These theorists rightly argued the need for a more integrated, participatory approach to benefit the intended audience. Having discussed the various theories on community participation in architecture, the next step relevant to this study is to look at the practical evolution of community-based architecture. This advocacy in favor of community participation in architecture that started in theory in the 1960s was coupled simultaneously with successful practical examples of community-based projects from all over the world. While this chapter

discussed various theories on community participation in architecture, the next chapter looks at landmark projects in the history of Community Architecture that helped shape it to its present state.