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## ENSINO E PESQUISA EM PROJETO DE ARQUITETURA PARA COMUNIDADES CARENTES

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### RESUMO

Nos últimos cinquenta anos, a população urbana do terceiro mundo cresceu dramaticamente e continuará a crescer em ritmo semelhante nas próximas décadas. Com o aumento da população, o problema de abrigo para as populações pobres do meio urbano cresceu tanto em escala quanto em intensidade, e cerca da metade e, em alguns casos, percentuais ainda mais expressivos da população urbana vivem agora nos chamados assentamentos precários ou clandestinos e favelas. Os esforços das autoridades formais têm fracassado em resolver este problema. O ensino, a pesquisa e a prática da atuação profissional no campo da concepção projetual poderia desempenhar um papel vital no trato desta necessidade que é mundial, mas ela não tem correspondido a este desafio. A primeira geração de tentativas formais, posta em prática nos anos de 1950 e 1960 para lidar com as carências urbanas e de habitação no terceiro mundo, coincidiu com a difusão do Modernismo. No plano intelectual, havia a convergência de ideais socialistas, que representavam o pensamento arquitetônico predominante à época, e as concepções que guiavam os programas formais, tanto dos governos nacionais quanto das agências de fomento internacionais. Grandes criações de caráter modernista tais como Brasília no Brasil, Chandigarh na Índia, Ciudad Guayana na Venezuela e importantes projetos de habitação pública que eles inspiravam em todo o mundo em desenvolvimento exemplificam isso. Infelizmente, o projeto modernista fracassou de várias maneiras: sua visão urbana, seus pressupostos culturais, suas expressões tecnológicas, materiais e estilísticas estavam equivocadas. Nos anos 1970, quando o projeto modernista foi deixado de lado, com ele se foi igualmente o envolvimento ativo de uma atuação projetual de caráter profissional voltada para as grandes questões habitacionais no mundo. Houve razões estratégicas e lógicas para o declínio do ensino, da pesquisa e da atuação profissional do projeto arquitetônico em melhorar as condições materiais das comunidades carentes. Muitos destes obstáculos, discutidos neste *paper*, permanecem conosco. Contudo, o autor argumenta que os estabelecimentos educacionais e de pesquisa não somente são capazes de superar estas dificuldades, mas eles estão melhor situados para enfrentar o desafio sem precedentes do problema habitacional no mundo de hoje.

### Palavras-chaves

Habitação no terceiro mundo; setor informal e assentamentos precários.

## **ABSTRACT**

In last fifty years, the urban population of the Third World has grown dramatically and it will continue to grow at a similar pace in the coming decades. With the increase in the population the shelter problem of the urban poor have grown both in scale and in severity, and close to half and in some cases even greater percentage of the urban population is now living in so called squatter settlements and slums. Efforts of formal authorities have failed in solving this problem. Teaching, research and practice of the design profession could play a vital role in addressing this global need, but it has not lived up to its challenge. The first generation of formal attempts, put in practice in 1950s and 60s, to address the housing and urban needs of the Third World coincided with the spread of Modernism. On an intellectual plain there was a convergence of socialist ideals, the prevalent architectural thought of the time, and the thinking that guided the formal programs, both of national governments and international aid agencies. Great modernist creations such as Brasilia in Brazil, Chandigarh in India, Ciudad Guayana in Venezuela and major public housing projects that they inspired throughout the developing world exemplify this. Unfortunately, the modernist project was flawed in many ways: its urban vision, cultural moorings, technological, material and stylistic expressions were all off base. The stylistic abandonment of the modernism was one thing; in 1970s, when the modernist project was forsaken along with it also came an end of the design profession's active involvement in the global shelter arena. There were logical and strategic reasons for this decline of teaching, research and professional sides of the architectural project in improving the physical environment of the poor. Many of these impediments, which are discussed in this paper, are still with us. However, the author argues that our educational and research establishments are not only capable of overcoming these difficulties they are best situated to meet the unprecedented global shelter challenge that we are facing.

### **Keywords**

Third World Housing, the Informal Sector and Squatter Settlements

## **BACKGROUND**

In the 1950s only one-third of the world population was living in urban areas; in just fifty years, this proportion has risen to one-half and will continue to grow to two-thirds, or 6 billion people, by the year 2050 (UNCHS, 03). It is also estimated that 56% of the world's population will be concentrated in urban areas by the year 2022 and 94% of that global growth in urban population will occur in the cities of the developing world (Wallace, 03). On a comparative basis the rapid urbanization of the last two generations changed cities of the South more dramatically than the cities of the North. Take for example, the sheer speed and the scale of urbanization in the Third World: Between 1950 and 1995, the urban population of Africa, Asia, Latin America and the Caribbean grew more than fivefold - from 346 million to 1.8 billion. Just two centuries ago, there were only two cities with a million or more inhabitants: Beijing and London. By 1990 there were 293 and most in developing countries. Many have populations that grew more than ten-fold between 1950 and 1990 – including Abidjan, Bhopal, Curitiba, Dar es Salaam, Dhaka, Harare, Khartoum, Kinshasa, Lagos, Nairobi, Lusaka, Maputo and Seoul (Satterthwaite, 02).

Due to the rapid and extraordinary growth of cities the numbers of urban poor and their housing problems have increased in scale and in severity. This is because the formal

sector, a partial product of our design education, primarily addresses the needs of the well to do. Moreover, because the financial and human resources of the municipal authorities are very limited, they are not able to meet the enormous housing demands. It is left up to the informal sector to produce and manage its own housing. The situation is so desperate that most of the urban housing in the South is now produced by the so called informal sector. I would argue that there is nothing informal about this informal sector as it can be found in every less-developed country, and since it not only exists, but thrives outside the traditional economy. The informal sector has been very effective in generating large quantities of housing, because of its flexibility, decentralized nature of operations and small scale (Rybczynski, 90).

But there are a number of serious problems associated with this kind of low cost housing. Often the informal housing is built illegally; this unauthorized housing generally lacks clear title and is seldom built according to formal norms. As Alan Gilbert has observed, millions of families in the cities of the so-called Third World live in adequate accommodation and some even live in luxury. Unfortunately, the majority of households do not: Most of the poor tend to live in homes without adequate sanitation, with irregular electricity supply, built of flimsy materials and without adequate security (Gilbert, 02). We are also fortunate that barring large cities of Asia and Latin America, homelessness is not a major issue in the cities of the Third World. The major problem of shelter is not the lack of housing per se, but the quality of it.

Furthermore, the most alarming accompaniment to urbanization in this globalizing world, according to the UNCHS' Vision Statement, has been the deepening of urban poverty and the growth of slums that now envelop nearly one billion persons worldwide (UNCHS, 03). At the beginning of this new millennium, the United Nations, its member states and sister organizations launched a massive initiative to improve the lives of at least 100 million slum dwellers by the year 2020. Any business, offered an opportunity of serving 100 million clients with a potential pool of a billion plus future customers, should be jumping with joy; why aren't we architects and planners clamoring for these opportunities? One might assume that architecture and planning professions, and by extension education and research should be able to address this challenge. Sadly, we have been unsuccessful in this task.

## **CITIES WITHOUT SLUMS**

Following the UNCHS' Millennium Declaration, which includes initiatives such as "Cities without Slums," the United Nations and its sister institutions such as the World Bank and its parallel lending organs, have joined in this effort. There is a growing chorus of aid agencies, both multi and bi-lateral and national governments that has promised to join in this upgrading effort. Apparently, squatter regularization and slum upgrading are now seen as the ultimate answer to the shelter problem of the urban poor. I think architectural education, research and practice could contribute greatly in this effort. However, before we embrace upgrading as the most plausible shelter delivery solution, it is important to remember that upgrading became an acceptable - reasonable - housing option, because, to date, most housing policies of the Third World have failed, and consequently, it would serve us well to trace back the history of international housing efforts and to learn from our past efforts.

## **DIRECT INTERVENTION**

In fifties and sixties, it was assumed that direct involvement in the housing market by removing slums and building new housing was the right way to meet the housing challenge. It is also worth noting that the first generation of formal attempts to address the housing and urban needs of the Third World coincided with the spread of Modernism. I consider this to be the high point of our profession's involvement in the shelter problems of the Third World.

On an intellectual plain there was a convergence of socialist ideals, the prevalent architectural thought of the time, and the views that guided the formal programs, both of national governments and international aid agencies. This unique coming together of divergent forces produced projects which were charged with enthusiasm typical of the post-war period. These great projects were also predisposed to the idealism and euphoria of the post-colonial thinking prevalent in newly independent states such as India. The mega-modernist creations such as Brasilia in Brazil, Chandigarh in India, Ciudad Guayana in Venezuela and monumental public housing projects that they inspired throughout the developing world exemplify this trend. Most of these mammoth projects were well intentioned, but were also unrealistic and too expensive to build. They drained most of the formal resources sparing very few resources to solve the other pressing problems.

More than a decade and a half passed before international agencies and national housing authorities realized that they - their policies - were not up to the task. The magnitude of the problem was very large and their means were very limited, so it was not within their ability to meet existing housing needs, which has continued to grow in subsequent years. The option was to look for alternative solutions, which would stretch the limited resources and meet the housing needs of a very large number of poor clients.

## **PROGRESSIVE DEVELOPMENT**

A number of alternative approaches such as progressive housing, core housing, and sites-and-services, and finally, sites-and-no-services were adopted. This incremental approach relied on two premises: 1) Housing is not a mere product - a finite object - but a process - an activity - and therefore a house or a dwelling that could change and or expand - grow - over time should be considered a sensible solution; and 2) In this evolutionary housing process, if a starter house could begin as a small core and be built upon slowly over time while owners lived in it, their involvement in the future completion of the dwelling was not only welcome but desirable. Scholars and researchers like Abrams and Turner influenced this thinking (Abrams, 64; Turner, 76). This logically conceived approach also met with only a limited success. During this phase, many city-level metropolitan development projects were built. Often such development projects remained empty and unoccupied, as they were located well outside the city limits where there were few jobs and lack of proper transport. Many sites-and-services projects, already a generation old, are still waiting for their services! This phase also coincided with the obvious decline of Modernism in the West.

Progressive housing projects and large urban interventions were not limited to the cities of the Third World; the "urban renewal" projects in North America and Europe could be considered their Northern equivalents. And these projects made it abundantly clear that the modernist project was flawed in many ways: its urban visions; cultural moorings and technological, material and stylistic expressions were all off base.

The stylistic abandonment of Modernism in the West was one thing; when the modernist project was forsaken in the 1970s along with it also came an end of the design profession's active involvement in the global shelter arena. These are some of the philosophical and strategic reasons for the decline of teaching, research and professional sides of the architectural project in improving the physical environment of the poor.

Moreover, international aid agencies such as the World Bank also recognized that the formal agencies, used to serving the interests of the higher income clients never looked at the informal sector needs closely, rendering this strategically powerful approach only partially successful. As a result, while multi-lateral agencies have focused their efforts on institutional building to improve the performance, accountability and transparency of Third World bureaucracies, the cities of the Third World have continued to grow and along with them their squatter settlements.

### **ENABLING AND UPGRADING**

As Matthews Glen and Wolfe keenly observed, once again, attitudes towards housing policy in the developing world changed significantly during the last decade of the twentieth century. From the idea of the state-driven, international agency-abetted program of direct intervention, the change has been towards enabling strategies - initiatives directed at helping people to help themselves (Matthews Glen and Wolfe, forthcoming). The main components of this enabling housing policy are squatter regularization and slum upgrading. What is the range of complex issues surrounding what appears to be a fairly simple and straightforward approach? Can - will - the upgrading save the day? These open-ended questions are difficult to answer.

Nevertheless, as we have argued before elsewhere, on a cultural level there is no doubt that great diversity does and should continue to exist in the ways that different peoples and subcultures perceive and interpret daily life. But there is a stage at which, even in the Third World, the global culture ultimately takes roots, one that universally shares much of what is already taken for granted in the ways of the functioning of democratic institutions based on human rights and personal freedoms and expressions. Where then does the threshold between the unique and the universal lie and to which aspect of this reality should the architect apply his or her skills in the cause of development (Bhatt and Scriver, 90)?

I doubt if broadly defined policies and norms established in Nairobi or New York could really enable people in the process of upgrading local communities in diverse parts of the globe. What is needed is a grass-roots approach that recognizes local strengths and weaknesses, understands users' needs and desires, respects their diversity and builds with and for the community. How can the design profession be involved in developing and implementing such a grass-root approach? Here are some of my observations based on a number of projects that I have seen implemented in other parts of the world and some suggestions about how we as researchers, educators and professionals can proceed in responding to our challenges.

### **RESEARCH AND EDUCATION IN ARCHITECTURE FOR THE POOR**

Undoubtedly, architects can be engaged in domestic design projects; however, they can also be involved at several levels of development. The range of problems that they

could address is very big and could entail not only physical planning and design but also the economic, political and sociological sides of the development projects.

To work at the dwelling unit level or the micro-scale, the architect-builder is one good model of practice. For example, working on a hands-on project with a client or a client group could serve as a good example for the community. Such efforts if well structured can successfully transfer new skills and technologies to a core group which could have a wider community impact and can even serve as an example to other communities.

At the macro-scale, designers could assume the role of advocates or lobbyists, because local architects and planners are well trained to recognize, understand and articulate issues related to the present and future developmental pressures of the places in which they reside. Often established professionals are preoccupied and are busy with their daily practices for obvious economic and survival reasons. However, local educational institutions should assume a lead role in looking after the developmental interests of the city and regions in which they are situated. Charity begins at home; and hence, if we have to wait for an outside aid agency to tell us when and how to save or serve our community it is already too late. Typical curricula are not geared to this need and hence courses in professional practice, social survey methods, and so on need to be specially tailored to respond to this need. Community based outreach or practice activity that is made part of the curricula is a very effective model for this purpose.

As we have remarked earlier, in the human settlements field the issues of housing and development are too large and resources too limited for relevant and cost-effective efforts to be made at an intimate design level, and therefore, it is not in the design of conventional homes that the architect has much to contribute. The designer should look at housing in the broadest possible context of human settlements. The architect's ability to preconceive the complex set of relationships between the people and their physical environment, and the influential parameters of economics, cultural and tradition, is of great consequence (Bhatt and Scriver, 90). Studio and design exercises that respond to this challenge should be introduced at all levels of professional education.

A considerable amount of work and research has been done in the field of Appropriate Technology to meet the challenge of development in a cost-effective and labor-intensive manner. A good range of work has already been done in terms of developing alternative building materials and technologies that would reduce dependence on industrial production and encourage the exploitation of traditional and vernacular solutions. In terms of resource conservation and alternative servicing this field has also produced some useful solutions. Nevertheless, cultural and social acceptance of these methods of building and their long-term durability are the main questions related to this field.

To be effective the grassroots community based practices of architects, planners, economists, and activists have to function as multi-disciplinary action lobbies. They have to function as an interface between needy clients or client groups and formal institutions such as local municipal bodies that may be responsible for financing, implementing and managing developmental and infrastructural projects. In such projects architecture may become a subset of a number of wide-ranging social and infrastructure programs including many diverse activities such as community development, water supply and sanitation and shelter improvement. Traditional design practices are not best suited for this type of work; only large multi-disciplinary consortia and multinational engineering houses are geared to tackle such projects.

However, institutions of higher education with their programs in education, health, nutrition, social work, vocational guidance, and of course, architecture and planning are also well qualified to assume an important role in such projects. What is required is the willingness on the part of the educational establishment to network within and develop a concerted front in addressing community needs.

If run as a private business, the economic viability of such community-based multi-disciplinary groups would be precarious at best. To work directly for poor clients such groups will have to first identify problems and create project commissions, and since the clients do not have funds to pay for such projects they will have to go to the formal authorities to fund them. Both practically and ethically this is a difficult situation. Educational institutions if they could be engaged in teaching and research on a regular basis would not face this dilemma. Moreover, graduate students, if their research projects could be structured so that they would deal with critical community needs, would play an important role in this exercise by laying the foundation for developmental projects. Besides, most of the improvement schemes seldom have enough funds or time to conduct critical research. The involvement of graduate students in this regard, would overcome this difficult problem. No doubt, the intensifying veracity of the urban poor of the Third World is acknowledged by numerous institutions, both local and international. I think the time has come for academic institutions and in particular their design institutions to play a constructive role in addressing this formidable challenge.

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