THE REFLECTIVE ARCHITECT

By Jordi Sanchez-Cuenca

We, architects, in almost every part of the world, are trained at universities to translate our interpretation of clients' needs into sophisticated abstract spatial compositions. We are also trained to convert ugly, messy environments into genius beautiful pieces of modern art. We are trained to communicate our spatial ideas and technical solutions through a sophisticated urban graphic design language. We are trained to believe that our designs have the potential to enhance our client's social status in the built and social environment where our masterpieces stand. We are trained to believe that by making our client stand out, we will also stand out, become a reference, admired by our competing colleagues. This is the power residing in our work. This is what the great majority of architects aspire to: to create artistically advanced projects for powerful clients with whom we can climb the social status ladder.

The reality that architects live seems to be blind to the fact that today one third of people living in cities worldwide live in slums. That is, they live on informally occupied land, in hazardous environments, without rights, basic services or security of tenure. Moreover, according to UN-HABITAT, 95% of urban growth in the world is taking place in the form of slums. There is a massive need of professionals, including architects and planners, to help city authorities and slum dwellers sort out this crisis. The question is: can we, architects, apply what we have been taught at architecture schools? If so, let's find out what may be the result of applying it.

ARCHITECTURE IN THE FACE OF POWER

The truth is that for several decades architects have been working hand in hand with city authorities in designing housing solutions for the urban poor. First, architects have been interpreting the needs of hundreds of thousands of poor households from offices in wealthy parts of the city through a mix of limited statistical information and a personal understanding of what slums and their inhabitants are. Then, architects have been translating such interpretation into standardized rationalist designs, some with and some without smart spatial solutions or aesthetically sophisticated façades. Architects have been also converting 'messy' slums or 'wild' environments into straight-lined urban spaces that are easy to dominate. All such ideas and 'solutions' have been communicated to the 'clients' through a sophisticated language that only those with higher education can understand and relate to reality, preventing any intrusive opinion from uneducated citizens. Architects have understood that city authorities are such clients, because they are the ones who regulate the design and subsidise the construction. In other words, architects have been supporting city authorities in dominating the environment and enhancing their social status and public recognition. In turn, many architects that have designed housing for the poor have also enhanced their social status and professional recognition through architecture magazines. Architects, spuriously enlightened and objective professionals, have traditionally believed that we, alone, are the ones to decide what and how to deliver houses for the poor. But, what about those who are to live in the buildings that we design?

VERTICAL SLUMS

We all have an image of what subsidised housing for the urban poor looks like. They are typically multi-storey apartment blocks built in peri-urban areas and are in many instances known as vertical slums. Most of such housing developments in both developed and developing countries are known for being socially and physically degraded, with rampant unemployment and security problems. There is generally a lack of sense of ownership and responsibility in regards to the houses and infrastructure provided, leading to poor maintenance and rapid degradation. Indeed, evidence suggests that conventional projects rarely address the causes of poverty, they do not respond to the real needs of the resettled population and they end up damaging much of the social networks and vulnerable livelihoods on which the urban poor depended to survive. In short, conventional professionally driven social housing does not alleviate urban poverty.

What are the failures in the process that led to such failure in the outcomes? The most typical documented failures show that the information and knowledge used to plan the resettlement process and design the buildings was largely irrelevant, inaccurate and insufficient. Typically, those to be resettled are understood as a homogeneous group of individuals and there is no due consideration towards the value of pre-existing social diversity, internal community dynamics, social networks or livelihoods.

In many instances city authorities are obliged to place the project plans and designs under public scrutiny: the architect's technical plans are shown or simply allowed to be seen for a limited period of time. However, the urban poor hardly manage to understand the architects' professional language. In some cases representatives of the urban poor are invited to give their opinion, but it is rarely binding and in many such cases community leaders work in an unaccountable style, co-opting the 'consultation' process for their own benefit in connivance with city authorities and professionals. In turn, the urban poor rarely have any opportunity to influence the architects' 'solutions', despite that they are the ones who will be using the buildings and infrastructure. In a significant number of cases there is no transparency or accountability to the affected communities, leading to corruption, inefficient use of resources and reduced quality in the project outcomes.

The result is that processes of resettlement are very often conflictive and difficult to manage due to the lack of cooperation from the urban poor. The responsibility for such difficulties is rarely attributed to city authorities or architects: the urban poor and their non-cooperation attitude are the ones to blame. However, city authorities and professionals rarely acknowledge that such attitude is caused by the very low sense of ownership and responsibility towards the project process and outcomes, which is in turn the result of the lack of the urban poor's involvement in the process. In many, if not most, instances, this ill relationship has entered into a vicious circle, of which the urban poor's involvement is the key element:
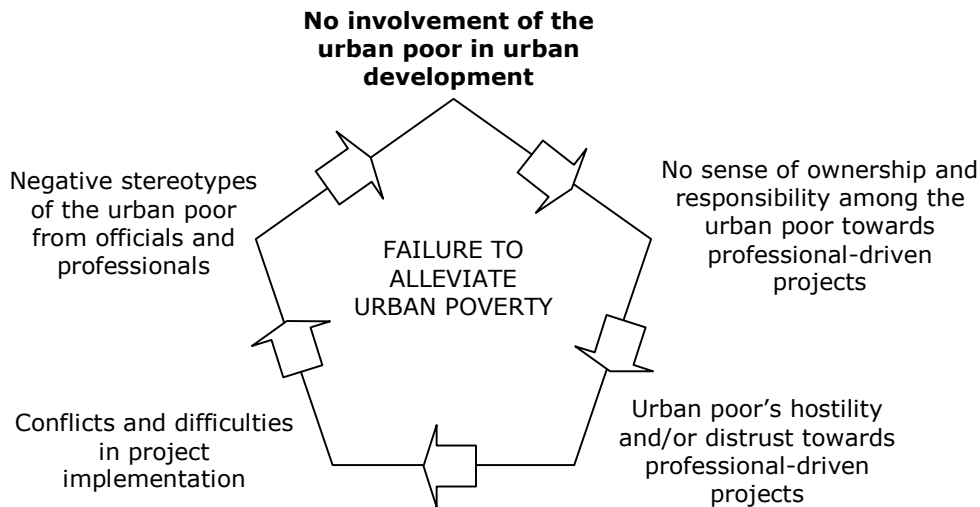
No involvement of the urban poor in urban development

Negative stereotypes of the urban poor from officials and professionals

No sense of ownership and responsibility among the urban poor towards professional-driven projects

FAILURE TO ALLEVIATE URBAN POVERTY

Conflicts and difficulties in project implementation

Urban poor's hostility and/or distrust towards professional-driven projects

Figure: the lack of the urban poor's fair involvement in project planning, design and implementation is a determining factor in the ill relationship between the urban poor, city authorities and professionals, and in the perpetuation of urban poverty.

Source: interviews of Pune's government officials and community members.

WHAT SHOULD BE THE ROLE OF ARCHITECTS?

FIRST STEP: UNDERSTANDING THE CONTEXT

In most developing countries there is a very common, if not dominant, understanding that the urban poor are recent migrants from rural areas that do not contribute to the cities' economies and that they do not have legitimate rights to public services and infrastructure. Moreover, it is widely assumed that government support to the urban poor leads to more immigration from rural areas into the slums and therefore governments should not invest in housing, infrastructure or services for the urban poor. Those living in formal housing often see slums as unacceptable encroachments that are a threat to the environment and to their quality of life. They see slum dwellers as "the others", not acknowledging that they are the maids they employ, the taxi drivers they need to move around, the construction workers that built their apartments, offices and shopping centres, the market sellers from which they get their daily food, factory workers that produce the items they buy in shopping centres, etc.

The anti-poor discourse is often appropriated by city authorities, those who we, architects, typically see as our clients in social housing projects. This discourse is often not explicit in government policy, especially in democratic countries. However, the bulk (if not all) of public investment is on infrastructure and services for the high-income economy and settlements. The discourse often incorporates the belief that by investing in the high-income economy there will be a 'trickle-down' effect that will reduce poverty. Another component in the dominant discourse is that by 'enabling' the formal market, the city economy will grow and wealth will be created for all to benefit. Meanwhile, slum dwellers survive without any government support, without benefiting from 'market-enabling' policies. Moreover, the majority of slum dwellers live in constant fear of eviction and other forms of random state-led violence. However, in spite of

such actions to prevent slums from growing, they still do so, at a speed that has never been experienced before.

In a desperate and impatient move, city authorities often conceive plans to resettle some thousands of slum dwellers into formal housing (usually a very small percentage of the entire slum population), envisioning and marketing their city as 'slum-free'. However, the commercial value of the land in the city centres that many slums occupy is too high to accommodate low-cost housing for the urban poor. It is widely understood that land in the city centres should be in the hands of 'world-class' businesses. It is also widely understood that most of government vacant land inside the cities has a strategic value and should not be unlocked for social housing. With these biases deeply embedded in their minds, city authorities typically identify land somewhere where its value matches that of the work and lives of the urban poor, usually far away in the periphery. Then they hire architects to design the place where the urban poor will live. And architects please their clients by producing beautifully crafted drawings representing efficiently distributed apartments in rationally planned settlements with more or less sophisticated façade designs.

SECOND STEP: REDEFINING ARCHITECTS' ROLE

Community-led housing in Pune, India

The city of Pune, the eighth largest city in India with more than 40% of its citizens living in slums, has provided architects with an example of what role we can play when working in projects for the urban poor. This example is a project within India's central government's Jawaharlal Neru National Urban Renewal Mission (JNNURM), more specifically within the Basic Services for the Urban Poor (BSUP) programme. This project mobilises funds from central (50%), state (30%) and local governments (10%) and urban poor families (10%) to upgrade the housing and infrastructure conditions of poor neighbourhoods. In addition to alleviating the dramatic situation for some thousands of slum dwellers, this project has become a precedent that can revolutionise traditional architect's role in pro-poor urban development.

Pune slums and their inhabitants

This is being possible thanks to the work of several NGOs and community leaders in building capacities among the urban poor, in setting precedents, negotiating and creating partnerships with the government. Indeed, such work has been determining in changing Pune's authorities mindsets towards the change in policy and attitude that this case represents. The result is that city authorities have agreed to use an important part of these funds in a way that will ensure that those who are intended to benefit actually do so. The city authorities, led by an internationally experienced and progressive Municipal Commissioner, have decided to establish a partnership with organisations of the urban poor and the NGOs that support them. This partnership involves communities in making decisions and taking the responsibility of gathering all the necessary information about the slums and their inhabitants, selecting the households eligible to access the subsidy, designing the houses and constructing them. Architects have an essential role in Pune's approach, not by designing new structures that will substitute the old 'messy' ones, but by providing professional support to the selected households, without damaging the social networks and livelihoods on which they depend to survive.

THE ALLIANCE AND COMMUNITY-LED HOUSING IN PUNE

Mahila Milan, a network of women's collectives from urban slums, the National Slum Dweller Federation and the NGO SPARC have a partnership known as "the Alliance". They have been working together to support community based organisations of the urban poor in several Indian cities since the 1980s. Pune is one of the cities with the longest presence of the Alliance, organising poor women through savings, enumerating the slum dwellers, mapping settlements, exchanging knowledge and undertaking sanitation and housing projects, among other activities. Since the creation of the JNNURM in 2005-06, the Alliance has been collaborating with the city, State and Union authorities to mobilise all required funds. In January 2009 the JNNURM approved the allotment funds for improving the lives of around 10600 slum households (nearly 60000 people altogether). Of these, around 6400 households are being resettled from some of the city slums on sensitive/dangerous land, land reserved for a public purpose or land for infrastructure projects into multi-storey apartment blocks in the periphery. The remaining 4000 households occupying municipal land will receive support for redeveloping their homes *in-situ* and their neighbourhoods will be de-notified officially as 'slums'. For the latter, which is the focus of this paper, the city authorities gathered the NGOs involved in urban development in the city's slums and distributed the tasks of undertaking detailed maps, surveys and lists of beneficiaries in these sites, providing also a scope for these NGOs to bid in the construction process. SPARC and Mahila Milan have been assigned a total of 1200 houses to be rehabilitated *in-situ* in seven different informal settlements.

Acknowledging the unprecedented opportunity represented in the support from Pune's Municipal Commissioner to the communities' involvement in the whole process, SPARC strengthened its professional capacity in order to provide an effective and efficient support to Mahila Milan in surveying and mapping settlements and designing the houses to be built. Just before the announcement of this scheme, SPARC suggested to a team of architects from Brazil, Portugal and Sweden to work with Pune MM to explore housing options. Within weeks of their joint exploration, the PMC sought NGO proposals to develop a participatory housing strategy for the seven assigned settlements. Once the strategy had been developed and approved by the affected communities, SPARC entered into another partnership with an experienced architect, urban designer and Director of one of Pune's Architecture Colleges, for the formalisation and

implementation of the strategy. For more than four months, these architects, together with Mahila Milan leaders, SPARC's engineer and social workers, have been undertaking a profound and comprehensive analysis of the situation of each settlement, undertaking numerous site visits every week, preparing designs and 3D models, meeting families, the Municipal Commissioner, its Chief Engineer, the Wards' Corporators and all other project stakeholders. Through all these meetings and constant reflective work, the architects have come out with an individual-vertical-housing solution that will allow the JNNURM to benefit the community in the most effective manner without damaging the social networks or livelihood on which they depend to survive.

THE DESIGN PROJECT

Around two thirds of the existing houses in the settlements are solid reinforced concrete structures (locally known as "pucca" houses), and the design allows reducing the intervention to only those plots where families live in weak, light homes made of recycled metal sheets, wood, plastic and cardboard (locally known as "kuccha" houses). The architects have responded to their demand to have space on the ground floor (to be able to sustain their livelihoods) and to have the possibility to increment the houses vertically. Moreover, the families can choose from three options of vertical expansion (see pictures below). The construction and incremental process has been formulated with the community in a manner that suits JNNURM requirement of 10% contribution by each benefiting household. The strategy includes the possibility to share walls in order to reduce costs, "pricing" the family's contribution in terms of what and how they would like to contribute to the structure and coming to a consensus to rearrange houses to increase ventilation, streets and open space. It has also been designed in a manner that allows the women from the community, represented by Mahila Milan, to manage most of the construction activities with SPARC's professional support. Essentially, the strategy developed by the architects is an accelerated replica of the natural process of consolidation of urban settlements.
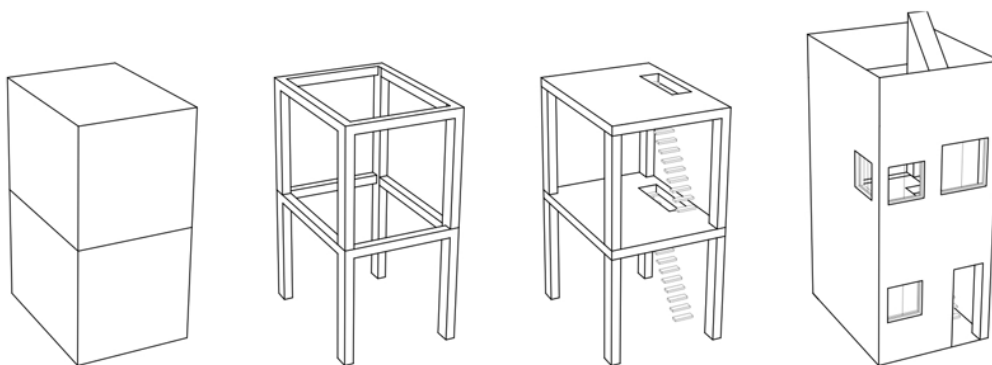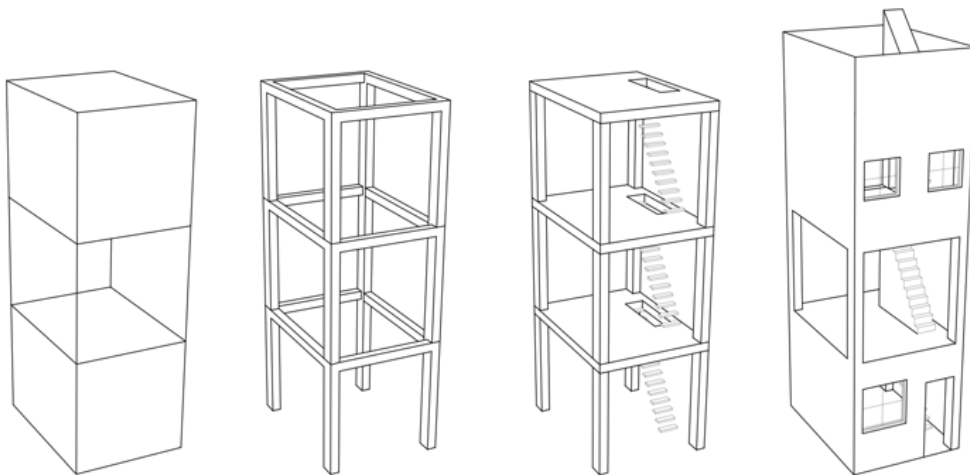

HOUSE OPTION A
Source: www.urbanouveau.com
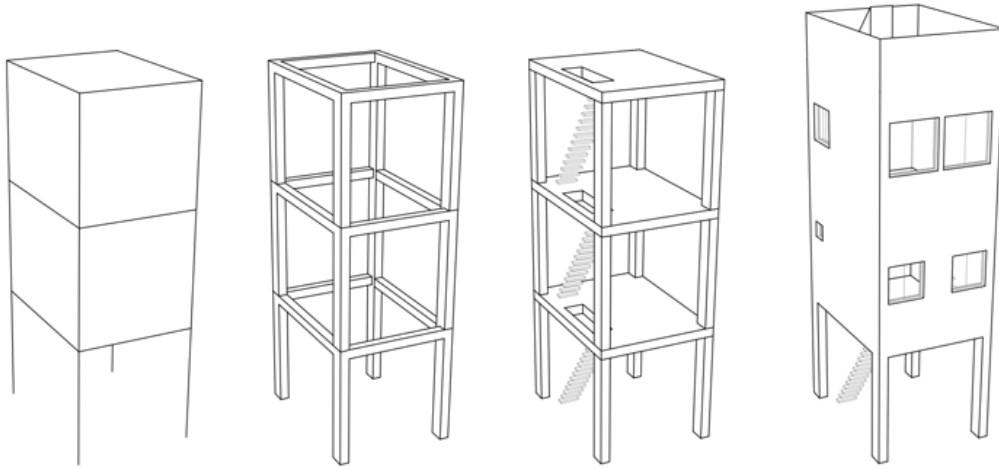
HOUSE OPTION B
Source: www.urbanouveau.com

HOUSE OPTION C
Source: www.urbanouveau.com

HYPOTHETICAL CLUSTER OF HOUSES
Source: www.urbanouveau.com

POSSIBLE SCENARIO: MIXED CLUSTERS
Source: www.urbanouveau.com

LESSONS FOR ARCHITECTS

The architectural approach that is represented in this case study can be called user-oriented architecture. It does not rely on sophisticated methods of design, but rather on an adequate attitude, which means that the poor are not treated differently from the middle or wealthy classes. It is an architecture that is capable of overcoming biases that are often deeply embedded in professionals' minds. In the same way that it is expected with better-off clients, this approach simply allows the poor to influence in every stage of the process (planning, design and construction) in order to include the features that can help them escape from poverty.

The advantages of adapted designs and participatory processes vs imposed standardised architecture are multiple: first, the urban poor are given the chance to live in a fair location (instead of being forcedly resettled), where they can keep their social networks, have access to economic opportunities and have convenient access to basic services; second, the urban poor have the possibility to change and increment their houses after the project is finished, allowing for further adaptation to needs and circumstances; third, the involvement of the urban poor in the process develops a sense of ownership and responsibility, which leads to better quality and maintenance of the outcomes; last but not least, participation is a learning process in which the urban poor's capacities as drivers of their own development and contributors to the city development are enhanced. Indeed, by focusing on participatory processes, rather that imposed outcomes, development becomes self-sustained because it builds the urban poor's capacity to replicate and improve development interventions in the future.

Following is a set of specific lessons (all interrelated) that can be drawn from the experience of architects working in community-led housing in Pune:

From talking to listening

The first lesson that can be drawn from this experience is that architects are not the talkers, but rather listeners. In this project architects have approached the urban poor with the aim of learning and transferring such learning into technical solutions and drawing plans. In order to do so, architects have questioned their aesthetic ego and have acknowledged that aesthetics are culture-related and subjective. Architects have responded to the needs and aspirations of the urban poor, even if this means creating architecture that stands against what they understand as 'beautiful'. In Pune architects accepted and learned from the 'messiness' of the slums where their designs will stand because such 'messy' space has the value of being the result and home of the social dynamics and livelihoods on which the urban poor depend to survive. Through listening architecture improves, not imposes, quality of life.

Communication

Another requirement in working with and learning from the poor is good communication. In the case study described above, the architects had to find a common architectural language for mutual understanding. Indeed, the urban poor have their own architectural language and they are often not prepared to relate conventional architects' language to their reality. The challenge lied, on the one hand, in being able to communicate their architectural ideas and technical solutions bearing in mind that most people are not prepared to translate scaled 2-dimensional plans into multi-dimensional reality, which includes social dynamics and livelihoods. On the other hand, as listeners and learners, they made the effort to understand the architectural

language of the urban poor, which reflects their priorities and aspirations. In Pune the architects realised that most people were not comfortable with their drawings so they explained their ideas and solutions on site, with words and gestures. In this exercise they also listened and made the effort to understand people's aspirations and priorities, and adapt their designs accordingly.

Collaborative architecture

Architects must learn to become part of a multidisciplinary multi-stakeholder team. Urban poverty cannot be addressed with success without the collaboration of multiple actors: the urban poor, government, private sector, other communities, other professionals, etc. Architects must learn to become mediators, seeking synergies from all actors (between the funders, implementers and the users), also seeking consensus but keeping in mind that the urban poor are their clients, because they are the ones that will be living and working within our architectural designs. Moreover, collaborative architecture has the power to deconstruct prejudices that have traditionally kept these actors apart, or that have generated inequality within the communities, notably between men and women. In Pune, plans and designs were the product of multidisciplinary teamwork, favouring women from the community as the main decision makers; such team also included social workers, engineers, external professionals and government officials.

Participatory design

In practical terms, the main difference between profit-oriented architecture and socially sensitive architecture is that in the latter clients are usually many and diverse in one single project. After overcoming our biases, this difference is perhaps the main challenge. Working with multiple clients in Pune's project required the creation of methodologies that allow the necessary level of customisation of the designs without entering into an excessively time-consuming design process. For such methodologies to work in Pune, designs had to be created in collaboration with female representatives of the urban poor (who demonstrated a stronger sense of responsibility than men) and of social workers. Such methodologies consist of a strategic mix of collective meetings, individual meetings and evolving design work. It is crucial that architects acknowledge (and plan accordingly) that designing for urban poor collectives requires more time than designing for individual clients.

Community oriented construction

User-oriented architecture does not stop in the design or spatial distribution. Construction is a very important component of architecture in any project, but it is more so in pro-poor urban development projects. Both the choice of technology and planning and management of construction works have determining implications in the process and outcomes. Construction costs need to match the economic limitations of the urban poor, especially because most poverty-alleviation oriented urban development projects include financial contributions from them. That should not mean that construction quality is poor, but rather that it is efficient. In the cases where construction costs are fixed by government guidelines, architects should make an effort in finding the most efficient way of maximising such costs, finding efficient technical solutions that allow larger spaces and better amenities and infrastructure. In order to be

efficient, construction must prevent corruption and wrong management, which implies transparency and accountability to the users. Transparency and accountability in turn imply involving the users in monitoring with binding powers throughout the construction process. The choice of the construction technology should also be validated by the community, as materials and technologies may have strong social meanings. In Pune, the construction solution arrived at in the collaborative design process is an improved version of what the urban poor have been using in the natural process of consolidation of their houses and neighbourhoods. Moreover, the construction system will allow the households to make their contribution in an incremental manner. Then, the construction contract of the houses will be given to the NGOs and women representatives of the urban poor. The construction works will benefit the urban poor in many ways: first, they will allow all benefits and profits to stay within the community, mainly in the hands of women (thus strengthening women's position within households); second, they will allow each household to monitor the construction process in an effective manner, making the process accountable, mainly because those responsible for the construction are community members themselves and are bound to the social networks on which they depend to survive; and third, many women from the community are learning to manage the complex enterprises of construction, from bidding in government contracts to managing large numbers of workers.

CONCLUSION

Architects have a very important role to play in alleviating poverty in urban areas. This paper is not a call for all architects to engage into pro-poor urban development, but a set of lessons from experience that can help architects who are involved in such task to make the most of their work. In order to do so, in order to help alleviate poverty effectively, without being counterproductive, architects need to question the education we got as well as many of the values that drive development in most cities. We need to change our attitude and allow for uneducated citizens to question our 'solutions', to influence our designs, to participate in the construction of 'our' buildings.

We, architects, can translate the learning generated through interaction with the urban poor into spaces that help them overcome poverty. We are also sufficiently trained to convert hazardous environments into safe and stimulating spaces. We can easily learn to communicate our spatial ideas and technical solutions through a language that is understood by all, including children, the elderly and uneducated adults. And our designs have the potential to enhance the social status of the urban poor, and of women within households. Improving the lives of the poor, more than that of the developers and politicians, can also make us become a reference, admired by our colleagues. This is indeed a power residing in our work, but that most of us have not let be. This is what many of us could and should be doing together: supporting one billion slum dwellers and making a difference in their lives.