One at a Time

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The trend of mass urban migration is a relatively new virus that has quickly spread on a global scale. This dramatic increase in urban population ranges from manageable growth to an overwhelming, seemingly endless influx of people into already suffocating cities. One can identify numerous conceivable causes for this shift in settlement and the cultural and social impacts it has for those at the heart of the matter, living in dire squatter settlements for indefinite lengths of time. The question of how to deal with these growing slums is a loaded one, and a solution will likely not be reached in our lifetime. However in order to begin to answer these questions it is important to try to understand the reasons that people choose, or are forced to migrate to urban centers, and how others have began to address the tangible issues of housing and sustainability within these squatter settlements.

Urban migration has been a reality in North America since the industrial revolution and consequently has spread to developing countries, showing no signs of slowing down. It is in developing countries where we see the highest incidence of resulting slums and squatter settlements on the periphery of cities. Often people see these invasions as being a temporary solution until they are able to afford a better place in the city, however the reality is that most of these squatter towns end up being a permanent mark on the land. Davis estimates that there are more than 200,000 slums on earth, with populations of a few hundred to more than a million (Davies, 26). We have even begun to invent new terminology to describe these settlements: "megaslums" are the result of slums merging into one continuous ring of poverty surrounding a city (Davies, 26). Often the land that is squat on is undesirable publicly owned land located on floodplains or downwind of pollution. There is largely no infrastructure or services and governments, not knowing how to deal with these squatter towns tend to completely ignore their existence. While providing these huge unplanned communities with services is undoubtedly a daunting task, ignoring the problem is counterproductive.

While eliminating the existence of slums is unrealistic, municipal governments can effectively contribute to the alleviation of some of the major problems found within their cities slums while at the same time benefiting the city as a whole. The efforts that Curitiba mayor Jamie Lerner made toward fostering the needs and well-being of the city's slum dwellers is one such example. Curitiba, Brazil is a city of around 1.6 million people with about 9 percent of its population living in poverty. At one time a squatter settlement was established on a floodplain on the outskirts of the city. Each time the land flooded the squatter town would be wiped away and the waste would travel down the river into the city. Rather than ignoring the problem, Lerner built low-cost housing away from the floodplain and moved the squatters into these buildings. He then converted the previous squatter site to a municipal park. By doing this he not only benefited the members of the squatter community, he also eliminated the problem of waste polluting the city's river.

Lerner also actively set out to build social programs, city services and job opportunities that specifically benefited the poor. One of these programs, the Green Exchange, acts positively on many different levels. The idea is that people living in slums and squatter settlements can exchange their garbage for food, bus tickets, and other needed items. While improving the nutrition of the poor, this program also benefits local small farmers and keeps the streets in the squatter towns clean. Lerner's thoughtful solutions to numerous problems common to many cities in developing countries demonstrate that with relatively few resources, a government has the ability to improve slum conditions while simultaneously addressing other municipal issues.

Urban migration happens for many reasons and in all parts of the world, however we see the most dramatic cases in developing countries. By examining the causes of urban migration we can start to get a better picture of the circumstances of people living in squatter towns. In Third World countries the efforts of development are focused on the largest cities, promoting a shift away from low value added sectors such as agriculture and thereby directly affecting people living in rural areas. Schumacher suggests that without "regional development" (development in rural areas), people will be forced to abandon their unstable rural livings for even worse conditions in the city (Schumacher, 61). It is happening at an unprecedented rate, with people arriving at the urban periphery of some cities in the thousands each day. The life that awaits them in the squatter towns where many of them end up is not pretty, but many people feel they have no other option. Issues of development and modernization have uprooted local culture and tradition. Unless these traditions are respected and preserved, any growth that a developing country may experience is unnatural and therefore culturally unsustainable.

One way to protect cultural identity in slums and squatter settlements is through design. Design can be used as a tool to reinforce the depth and value of local traditions in a way that is appropriate to a community's current situation. The common misconception of squatter towns as temporary settlements often robs them of the merit for well designed and well built social spaces. Through careful study and observation of a culture an architect can begin to develop a building language particular to a group of people, and ultimately give those people the tools needed to prompt self-initiated development. In this way an architect is challenged to work in a selfless manner by letting the design unfold based on interactions with locals. This way of working raises opportunities for architects to use design to reestablish local craft and building tradition as a cornerstone of a culture.

The work of Teddy Cruz in the squatter settlements at the border between San Diego, California and Tijuana, Mexico is one approach to using design to improve the living conditions for people in these communities. His lengthy studies of the fabric that develops at this unique border condition has led him to conclusions about what kinds of built environments these communities have

established, and what resources could be provided to support these existing shelters. In his project entitled Manufactured Sites, Cruz is working with non-profit community center Casa Familiar to design pre-manufactured structures that can provide a framework for shelter in these squatter settlements. These structures are intended to act as a scaffold that can be added to with scrap materials that the squatters provide.

Although his attempt at improving these squatter towns is commendable, one questions the intentions and projected success of such a project, which has yet to be built. The framework, a two level steel "S" shaped structure, although intended to be flexible actually seems to be quite a singular design. For example, there is no provided means for getting up to the second level, so that people would have to waste precious materials to build some kind of stair or ladder system. If providing enough material for a roof and three walls, why only allow it to be used as two levels with one wall each? Cruz seems to be focused on the poetics of what these structures are intended to be, when in all likelihood many of the squatters will turn them on their side or dismantle them in order to serve their individual needs. Instead of using his studies to develop an understanding of the skills and resources of these people, Cruz seems to impose some kind of unlivable art on the landscape that he pictures developing in a particular way. When dealing with a community whose focus is largely on mere survival, the intent of a designed building must be locally sustainable. It must be rooted in culture and place and incorporate the skills and resources of the local people, regardless of the permanence of the community.

The design/build studio work of Sergio Palleroni, Steve Badanes and David Riley and students of the University of Texas School of Architecture is an example of an approach that successfully addresses these issues of cultural sustainability in relation to architecture. Entitled Basic Initiative, this studio strives to "confront poverty and urgent social problems one building at a time", an appropriate example of Rene Dubos' phrase "think globally, act locally". The students work with poverty stricken indigenous communities in northern USA, Mexico, India and other parts of the world to design and build particular buildings that address common issues across all of these locations. They focus on utilizing local resources to inform the design of social spaces that are often sparse in slums and squatter towns. By working with the local community the studio not only mobilizes local skills and resources but also renews a building spirit within these communities that carries on long after they leave their mark. By reinforcing the skills and resources that these communities already possess, these studios act to sustain a community's values and traditions.

The Center for Rehabilitation that the studio built in Xochitepec, Morelos, Mexico in 2003 is a particularly good example of how a designer (or designers) can work with a community. The site posed many physical challenges, as the program required a wheelchair accessible facility on a very uneven site. In addition, the students were to design three separate buildings but would only

have enough time to construct one, and as a result the community was to complete the Center once the students had left. The task of the students was to identify and use local materials and methods that could easily be translated by the locals once they left, and at the same time solve a difficult design obstacle to create a beautiful and functional building. In this case the building was the vehicle to stimulate self-initiated development and local values. As architects, we are always being challenged on a number of different levels to create spaces that address the social, cultural, environmental, economic, functional and aesthetic issues particular to a specific place. That is why the most successful and meaningful designs begin long before the physical building is conceived.

The issue of scale is an important concept to discuss in relation to design as a tool for reinforcing cultural sustainability in squatter towns and slums. Design is not a solution to the many problems surrounding these communities. We live in a developing world with a dual economy that revolves around the interests of 1/5 of the world's population. Urban migration and cultural homogenization are only a few of the resulting issues affecting the rest of the world; problems that are much too complex to fully comprehend. Our responsibility as individuals does not lie in finding solutions to these larger problems, rather to make small differences where we can. The power of the individual is astounding. By educating others about these critical global issues and using our personal education to make choices that are part of a solution and not part of the problem, we can each make a small but significant difference. If architects can use their skills to reinforce cultural identity one building at a time, then the positive effects of not only the act of building but also the community process that leads up to the physical building, will inevitably spread. Addressing globally common problems by reinforcing local tradition is the key to reversing some of the negative effects that development has had on culture.

Architects such as Samuel Mockbee, Laurie Baker and Hassan Fathy, to name a few, all emphasize the importance of local scale and culture to be the foundation of their work, even though it means they will likely never be the high profile architects that so many yearn to be. For them, architecture is a tool that has the power to nurture or destroy a culture, and they have chosen to combine their knowledge and skills with the history and traditions of local places in order to develop a design that is sustainable for the community. Architecture must move away from the glorification of one individual (the architect), back to focusing on the collective. Architects can be particularly helpful to facilitate the nurturing of culture through design in communities such as slums and squatter settlements that seem to have lost their sense of place. This can seem to be an overwhelming task, however the positive impact that one well designed, locally appropriate building can have for a small squatter community can spread as fast as the virus of urban migration itself, turning these "temporary" settlements into critical places that reinforce the value of culture and tradition.

References:

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University of Austin Texas - Basic Initiative studio: www.basicinitiative.org