2008 ACSA/AISC I ASSEMBLING HOUSING I STUDENT DESIGN COMPETITION Shamir Panchal



¹ Kibera houses and alleys

In most societies, it is taken for granted that members of a population have the basic human right of shelter. This right is not and should not be a matter of great legal or political debate, as it is a fundamental necessity for the survival of individuals, families, and cities. The commonly used term for shelter, "house" or "home", has become synonymous with the idea of dwelling, belonging, and safety, and for many of us, this is exactly what it provides. The house becomes not only a place to eat and sleep, but asserts itself as a vehicle for life, fully engrained in our psychology and wellbeing. Essential to the home is a sense of ownership and permanence, and the security of knowing that our property cannot suddenly be taken from us. This is not the case in Kibera, Nairobi.

With an estimated population of a million people, nearly half of them children, packed into less than one square mile, Kibera is clearly an extreme urban condition.¹ Lying on the outskirts of Nairobi, the slum is surrounded by areas of affluence and a city that has often been at the forefront of East Africa. However, the paved streets and tall buildings of the city centre lie in strict contrast to the mud huts and sewage filled alleys. A picture of intense squalor is presented. The people in Kibera often have no choice but to live there as their work is located in the city or in the slum itself, and there are few other options that they can afford. The slum is comprised largely of mud bricks homes, clad in corrugated metal recycled from barrels. They appear to line up like army barracks, ordered and planned, but in reality, they are built haphazardly and out of necessity, filling up every available inch of land. The houses themselves are small and yet often contain as many as eight people per room.²



² Sewage and waste are discarded in local rivers.

In a dense urban area such as Kibera, individual homes cannot be considered singularly and must be situated within the environment and systems within which they work. These houses exist within a city, and a city, as an organism, has certain attributes which make it liveable. These include systems required for the survival of a population, such as proper sewage treatment, water, electricity, garbage management, healthcare and other fundamental services. Urban homes and their occupants often cannot exist without some sort of acknowledgement of these necessities. However, the semi-illegal status of Kibera releases the slumlords and government of any responsibility to provide these services, however basic they may be.³ Water is scarce and requires a great amount of effort and money to acquire. In most cases, residents have to travel to either one of two water sources, provided by NGOs, and pay by the litre. Electricity is beginning to arrive, but only where it is essential such as healthcare buildings and schools. Latrines have to be shared by hundreds of residents and often the waste is carried to the local river and dumped. Garbage meets the same fate. The result of this neglect is high levels of infant mortality, disease, unemployment, and crime.⁴ The riots and fires of 2007 exposed to the world the vulnerability of places such as Kibera, as segments of the city were instantaneously destroyed. Clearly there is no motivation for the slumlords to change the status quo, as no greater profit can be achieved through further investment. It will take generations for the efforts made by NGOs and other organizations to have a lasting impact on the area.

The question arises as to why people are forced to live in such a way when much of the world has found more successful housing solutions. If a million people live in such a place, is there nothing they can do to improve their conditions? Kibera is in many ways a unique slum, trapped in political and economic powers, which are often beyond the abilities of the residents to affect. At the core of



³ Rooftops: Orderly at first site.

the problem are the rights to the ownership of the land and buildings that compose Kibera. The Nairobi government in no way recognizes the slums as a legitimate settlement of people. Its only interest in the site and its population is a result of the immense profits that are to be made through property rent. A segment of the government called the Provincial Administration has the authority to grant licenses to wealthy landowners who wish to build on the site. However, the structures must remain temporary, as it is government land that they are being built on. The owners of the buildings, often government officials themselves, then rent the temporary structures to the residents for uncontrollable and unreasonable prices. "Kibera is not a mud hut city because of its people. It remains mired in the muck because the system denies the residents control over their future. Corruption and profiteering keep it this way."⁵ Essentially, the people who are actually living in the slums do not own the land they live on or the houses they live in, and have no right to build better, more permanent houses for fear of reprisal from slumlords and government officials.

Any proposal made to improve the situation in Kibera and the thousands of other slums around the world must address the above issues concerning the relationship of the house to the city. The question of property ownership is fundamental to the future of these slums as it is only through solving this that the people will be in control of their homes and city. A potential solution lies in the application of a different type of relationship, one in which the individual home is not wholly dependant on the conditions of a particular city but rather can be accommodated and function in a number of different ways. If individuals and families are able to maintain possession of their home and belongings without being forced to live in a certain location, then a new freedom is gained. Cities begin to be composed, not of static entities, fixed to a place and time, but of transient units, free to move. Just as a person travels from one place to another depending on external conditions,



Railway through Kibera



⁵ Potential of shipping containers

so too could an entire home, or neighbourhood. In times of conflict, settlements could relocate without the trauma associated with the loss of home and large masses of refugees could be easily housed.

Currently, shipping containers are ideal for such a system of housing a population. First and foremost, the surplus of containers around the world provides a cheap and readily accessible supply of shelter material upon which to build. Their global standardization creates the opportunity for the rapid configuring of settlements without the need for excess material. Due to their robust steel construction, they can easily be adapted to suite the needs of various populations and functions. Specifically, shipping containers are easily transported on railways such as those in Kibera, where it plays a key role in the transport of people and goods.⁶ Numerous architects and engineers are currently exploring the opportunities of shipping containers as buildings but rarely do they consider them in their original function: as devices for transport. Services, such as water and electricity could be standardized and could grow in sync with the rising communities. To provide the people of Kibera with mobile housing, which not only functions well but is in little harm of being destroyed, could potentially create a more liveable and less exploited city.

ENDNOTES

^[1] <http://affordablehousinginstitute.org/blogs/us/2005/07/kibera_africas.html>

^[2] Tibaijuka, Anna Kajumulo. "Divided Cities" http://hq.unhabitat.org/downloads/docs/mcgill.pdf

^[3] <http://affordablehousinginstitute.org/blogs/us/2005/07/kibera_africas.html>

^[4] Tibaijuka, Anna Kajumulo. "Divided Cities" http://hq.unhabitat.org/downloads/docs/mcgill.pdf>

^[5] Neuwirth, Robert. Shadow Cities. New York: Routledge, 2006. Pg. 98

^[6] Neuwirth, Robert. Shadow Cities. New York: Routledge, 2006. Pg. 78

IMAGES

^[1] <http://affordablehousinginstitute.org/blogs/us/2005/07/kibera_africas.html>

^[2] <http://www.flickr.com>

^[3] <http://affordablehousinginstitute.org/blogs/us/2005/07/kibera_africas.html>

^[4] <http://affordablehousinginstitute.org/blogs/us/2005/07/kibera_africas.html>
^[5] By Author

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Neuwirth, Robert. Shadow Cities. New York: Routledge, 2006.

Kramer, Mark. Dispossessed: Life In Our World's Urban Slums. London: Alban Books, 2006.

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"Kibera"

<http://www.kibera.org.uk/Facts.html>