Architecture schools are fundamental deposits of knowledge and abilities, which have contributed productively for a long time to the growth of studies on architecture and the city.

The aim of this book is to share the results of research work carried out under the patronage of EAAE and ARCC in the main European and American architecture schools on the issue of the city and its recent transformations. Through the comparison of different points of view, the goal is to highlight the need for a broad and open discussion, appropriate to the vastness and complexity of the problems faced.

The well-known sentence by Leon Battista Alberti, “The house is like a small city and the city is like a large house,” is a brief indication of the subjects of the volume: the widespread phenomenon of urbanization of large parts of the world, the problems of so-called shrinking cities and the severity of the effects of climate change and energy issues. Architectural and urban contents are also main themes in EU policy where the crucial role of architecture has been stressed in many documents concerning the development of European cities.

These arguments are developed in a thematic interweaving that goes from architecture and city’s analytical and design techniques to those connected with organization, construction, security, planning, conservation and practice of a profession whose role has taken on ever greater responsibility within the human destiny.
Cities in Transformation
Research & Design
Ideas, Methods, Techniques, Tools, Case Studies

edited by
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Challenging the Concept of “Informal” in Sub-Saharan African Cities.
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Jørgen Eskemose Andersen
The Royal Danish Academy of Fine Arts, Denmark

Introduction

Current definitions of urbanity lead to claims that a large proportion (75% according to UN Habitat) of Sub-Saharan Africa’s (SSA) urban population is housed in “informal” settlements with almost all new housing stock provided “informally” in contradiction to the “formal” that is defined as planned and regulated by the state. In most cases in SSA cities urban development has no professional assistance in the form of architects or engineers, and what is characterised as “disorder”, as is the case with informal urbanisation, is considered as undesirable, inappropriate, dangerous, unhealthy and un-modern (Folkers, 2009; Hardoy, 1990; Jenkins, 2011; Nielsen, 2008; Nguluma, 2003; Mitlin, 2004; Koolhaas, 2006).

In 2003 the UN adopted a new terminology for what over decades used to be labelled as “informal-”, “squatter-”, “illegal-”, “unplanned-”, “spontaneous” “shanty towns” with the term “slum” (UN habitat, 2003). However, defining what slum implies is complex and this author consider the term as

This paper draws on the research programme “Home Space Maputo”, funded by the Danish Research Council for Innovation 2009-2011, under the management of Jørgen Eskemose Andersen of the School of Architecture, Copenhagen. The programme is based on a conception and research design by Paul Jenkins of the School of the Built Environment, Heriot-Watt University / Edinburgh School of Architecture and Landscape Architecture. It is implemented in partnership between the above institutions (led by Andersen and Jenkins) and the Centre of African Studies at the ISCTE - Instituto Universitário de Lisboa (represented by Ana Bénard da Costa) and the centre for Development of Habitat Studies at the Faculdade de Arquitetura e Planeamento Físico, Universidade Eduardo Mondlane, Mozambique (represented by Júlio Carrilho and Carlos Trindade). The fieldwork was undertaken with participation of students of architecture and anthropology from Universidade Eduardo Mondlane, and had key involvement from architect Silje Evøy Sollien and Mozambican academics Adriano Biza and Judite Chipen- embe. Generous support from Mozambican Faculty Director Luís Lage, and time donated by Edinburgh and Lisbon institutions for their academics’ inputs have been a key aspect of the programme’s success.
prejudiced and not covering the diversity most informal settlements represents. Further the term stigmatises a remarkable share of any city population in SSA (Huchzermeyer, 2011; Davis, 2007; Harber, 2011; Garau, 2005).

The basis for classifying housing areas developed by poor people as “slums” is underpinned by a public health and safety agenda, but in the absence of government recognition and improvement of service provision categorising them as “slums” in essence shall make many informal settlements ripe for “re-development”, which is generally private sector driven. The outcome is often negative for the poor and lower income populations that are pushed out and/or are unable to capitalise on the rising property values (Jenkins, 2000; Jenkins, 2011). The urbanism and architecture this kind of development is producing is with limited reference to the context in SSA as most new middle- and upper class housing is as prestigious villa type or as gated communities (Adjaye, 2011; Andersen, 2011; Folkehrs, 2009; Lage, 2004).

This paper draws on in-depth longitudinal studies of the peri-urban settlements of Maputo and demonstrates that the “informal” process is producing self-improving urban form and housing (Jenkins, 2012). The paper refers to a current project that was aimed at upgrading an informal settlement in Maputo with infrastructure improvements accepting the right of the existing settlers to stay put. However the political reality has proven to take a different stand allowing the private sector a prominent role and a comprehensive redevelopment project has now substituted the upgrading project.

The paper argues for government recognition of informal urban areas as a valid and productive form of urbanism. This is, as seen by the author, unfortunately not what is happening currently in the case of Maputo and a new era of urban development in Mozambique is ostensibly emerging based on market principles leaving the urban poor in a vacuum with limited if any influence. The “disorder” such areas seem to represent and hence by international standards labelled as slums is in fact underpinned by social order and the current research evidences this in describing the living conditions and the emerging form of social architecture in such housing areas referring to the organisation of space i.e. plot organisation, the building technology and the architectural expression that this organisation represent (Andersen, 2012; Carrilho, 2005; Galicai, 2009; Jenkins, 2012; Lage, 2004).

Maxaquene A

Maxaquene A is located close to the city centre and represents a long-term unplanned occupation, originating back to the 1920s. Maxaquene is a classic “informal” settlement, developed organically and incrementally without a formal plan, but however with a system of plot allocation as the social order has structured the physical space with some rigour. Today approximately 25,000 inhabitants live in Maxaquene A.

The attractiveness of Maxaquene A is due to the proximity to employment centres, i.e. the central city, the international airport and three industrial areas.
The area represents a number of typical problems in such areas among which high density, few public amenities, poor access roads, poor drainage and rudimentary service provision. Furthermore the area suffers with severe environmental and public health problems linked to the topography as most of Maxaquene A is located in a depression with frequent floods (Municipio de Maputo, 2011b).

**Background**

The Portuguese colonial government excluded Africans from settling in the "recognised" area of Maputo, which was developed as a modern city for the white settlers. The black indigenous population working as servants and other manual labourers either lived as in-house servants or were settled just outside the cement city in precarious houses built with reeds (*caniço* in Portuguese; and hence these areas were referred to as “the caniço”).

The colonial government only accepted such type of housing as these would be easier to demolish when the long-awaited urbanization arrived. This development led to the proliferation of houses built with reeds which was harvested along the riverbeds in Marracuene district approximately km 25 from Maputo. This produced the most striking characteristic of the colonial city: an area called the cement city (*cidade de cimento*) where the white settler population lived and the suburban area called the reed city (*cidade de caniço*) where the indigenous population lived under temporary condition under strict control by the colonial administrators (UN Habitat, 2001).

**Informal Settlements in Mozambique and in Southern Africa**

The first generation of informal settlements in Maputo resembles developments in the first years after independence in other Capital cities like Lusaka, Dar es Salaam, Addis Adeba, Ouagadougou and Nairobi.

While in a many African cities, renting soon came to dominate also the informal areas with Kenya as the most extreme case, while Lusaka and Maputo maintained a predominance of home owner-occupiers, but mainly in the buildings nationalised after independence and hence the corresponding figure for the informal settlements is significant lower making rental accommodation in informal settlements in peri-urban Maputo a rare phenomenon still today. However this may be under transition as recent research has evidenced that renting out living spaces in the inner informal settlements in Maputo is on the rise (Jenkins, 2012).

**Low Income Housing**

Attempts were made in most of Sub-Saharan Africa after Independence to meet the demand for housing with publicly built so-called "decent" houses. However this only became showcases for politicians to demonstrate their willingness to care for the growing number of urban poor. The strategy failed throughout and the informal sector took over as the predominant supplier of housing,
Already in the 1950s, UN advocated for sites and services and other types of schemes combining state planning (land) and investment in infrastructure with self-help construction as the approach to solve the growing housing deficit (Abrams, 1966; Payne, 1977). Despite the obvious difficulties these strategies have faced the political system continues to promote plots and self-help construction as the solution to the shelter issue, e.g. the latest housing strategy in Mozambique (2001) reads...” approximately 300,000 plots and 100,000 houses will be distributed until 2014...” (Canalomz, 2001).

Strongly promoted by World Bank from the mid 1970s a number of sites and services schemes was implemented, e.g. in Zambia and Kenya, but the number of plots remained insignificant compared to demand. The strategy of delivering plots with minimal services was also used from the early 1980s in Maputo where the intervention has had some impact with more than 10,000 plots being developed which partly is targeted in the Home Space Research project (www.homespace.dk). As the Home Space Research project documents these site and service schemes are today considered as rather ideal housing areas for the emerging middle class in Maputo, however often complaining on the plot size which predominantly was in 12.5 x 25 (Jenkins, 2012; Hamdi, 1995).

However the burgeoning informal settlements were, by the time, often cleared as illegal. Such practices still continue in many countries albeit often at a modest scale with the 2005 internationally condemned Operation Murambatsvina in Harare as an exception. However Zimbabwe is a unique case and in most countries in the global South it is understood that demolitions do not contribute to solving the housing problem. “Upgrading” of existing living environments has become the recommended strategy, in most countries often adopted in housing policy documents (Galacai, 2009). This is however under threat in a number of countries including in Mozambique.

The historic Maxaquene Project 1976

In the eve of the colonial period, the government had plans to finally eradicate the problem of illegally constructed settlements: this implied construction of neighborhoods “perfectly integrated in Lourenço Marques City, by eliminating the reed houses; the re-accommodation of 50% of the current population; transfer the remaining 50% to transition areas where they would receive assistance for their social improvement”. This however never came into being. (UN-Habitat, 2001).

After Independence, “The National Directorate for Housing developed a major upgrading pilot project inbairro Maxaquene just north of the cement city (1977-1979)” (Pinsky, 1983: 7). In a participatory manner the Maxaquene project succeeded to relocate the surplus population that were to give way for roads and open spaces. This resettlement took place in nearby Polana Canico on land that at the time was relatively vacant as is was owned by a Portuguese land speculator awaiting the city to expand. Polana Canico is today a quite densely occupied area still undergoing transformation with signs of two storey buildings rising as the area is close to the city centre and pressure for well located land is high.
In fact Polana Canico is today considered as blocking the expansion of the cement city and recently the municipal authorities have launched an international tender for technical proposals for the re-development of the entire Polana Canico an area housing some 60,000 inhabitants.

The “Maxaquene Project” became a model for upgrading projects (UN Habitat 2001) and a “blueprint” for the future of the towns in Mozambique was issued in 1979 (Pinsky, 1983). In the period 1981-1987 planned subdivisions continued as a strategic attempt to plan ahead of the urban front and hence avoid the need for later expensive upgrading exercises. The City Authority planners took advantage of the political climate at the time with a pro-poor planning approach and the key issue with availability of land was relatively easily solved as land was nationalised in 1975 and hence the city authorities were in a position to identify appropriate land for urban development.

The city council planning staff focused on developing basic land layouts in expansion areas, especially areas that were likely to be occupied spontaneously, attempting to create a zone of planned residential land around the city in the most suitable areas, hence preempting spontaneous occupation this was called the “Basic Urbanization Programme. (Jenkins, 2011: 77)

The 1977 Maxaquene project was in line with the FRELIMO ideology at the time and popular participation was put into practice. The lay-out in blocks, public and open areas was possible due to intense meetings in locally established planning committees and aided by innovative, non-bureaucratic land registry and building permit systems (Pinsky, 1983). Plots were organized in blocks of 300 inhabitants each (70 to 80 families) per hectare (UN Habitat 2001). A major achievement was the improved pit latrines. This was followed up by the city wide

Sanitation Program in 1985 that was then transformed into a National Low cost Sanitation Program. This programme is still active today albeit at a much lower scale however over the years an unknown number of improved pit latrines have been built and the concept of an improved pit latrine is common knowledge in today’s Maputo informal areas. (Brandberg, 1985: 18)

According to Pinsky, in the late 1970s, only ten percent of the houses in areas like Maxaquene were built in cement blocks. As there was and is a high sense of security of tenure, improvements gradually changed Maxaquene and today very few houses are built in canico. Mozambican scholars have labelled this process the “cementification” of the canico highlighting the enormous investment this individual building process represents with no assistance from neither government nor the private sector (Carrilho, 2009).

To facilitate more comprehensive strategic urban development, “Maputo City Structure Plan” was approved in 2008. Key elements and objectives of the Plan include: The restructuring and re-development of 3750 ha of urban “slums” in the 2008-2018 period.

The structure plan hence established two main categories of urban development: already “urbanized” areas and areas to be “urbanized” – urbanisation here meaning an acceptable level of urban development in terms of land use planning and control, infrastructure and services provision. The plan indicated
that some 40% of the “areas to be urbanized” have formally marked plots “Areas to be urbanised” – otherwise known as “un-planned” areas – had no formal land demarcation and registry, generally deficient infrastructure and often relatively high density, and were estimated to cover about 47% of the total area of the city (Municipio de Maputo, a 2008).

Participation

According to a newly approved housing Policy and Strategy (Política e Strategia de Habitacao 2011) participation is still a key element when developing housing projects in Mozambique:

- Participation by various segments of society, such as, the public, private and civil society, to facilitate each family access to urban land and housing, environmentally sustainable, in order to enable the control of actions and transparency in decisions and procedures. (Política e Strategia de Habitacao, 2011: 7)

The case of Maxaquene A raises a number of issues related to participation:
- To which extent have the residents been involved in discussions concerning the first upgrading plan?
- Was the process allowing time enough for the residents to understand the project and the consequences for their individual lives?
- Have the conducted workshops had substantial numbers of active residents?
- Was the process guided and facilitated only by the local political structures informing the population on the plan?
- What expectations have been raised during the process?
- Have the residents been informed formerly to the change in municipal approach to the solution of the Maxaquene A problem?
- What is the reaction on part of the local political structure on the recent development and how are these structures approaching the local resident’s vis-à-vis the current situation?

Many of these issues are complex and interwoven into local power struggles and municipal ambitions to create the best conditions for the modern city to emerge with as limited as possible of public spending. Hence the private sector is expected to intervene and follow-up after the municipal planning has paved the way with local urban plans to be followed-up with bylaws enabling the private sector to buy out the residents at market conditions and subsequently develop the land. The draft bylaws do however envisage a certain percentage of social housing as a precondition when developers are intervening. Experiences from other African countries does however indicate that such social housing programmes rarely reach the poor and most often the middle class moves in and transform such areas into what by them is considered as proper and decent dwellings (Nkya, 2008).

This raises a number of legal issues as to what extent such developments are in accordance with the spirit of the law (Conceicao, 2004; Dinageca, 2001). According to an official document on land regulation, people are supposed to be included in the investigations: “The investigation on the occupants is carried out
on a continuous manner in the area of the plan by a technical team, which must also hear the representatives of the local community” (Mozambique land regulation 2006). A paper worked out for the Government by the Centre for Habitat Studies and Development, Eduardo Mondlane University emphasizes the role of participation:

The first and indispensable element in any planning strategy is participation. There are no formulas for the eradication of the slums. The key to success is participation, and participation is not obtained by interpreting and applying technical documents. It must be achieved and take shape in the field, with residents, through constant contact and relations. (UN Habitat, 2001: 26)

In the case of Maxaquene A, NGO’s have been active for some years assisting the residents in minor improvements such as better drainage and improved pit latrines. These NGO’s are operating as partnerships between local Mozambican NGO’s and international NGO’s and the activities are to a certain extent coordinated with the local structures and hence formerly coordinated with the relevant city authority departments. However in practice such NGO’s often works quite independently directly with the residents and at times with residents associations however in general the impact of these interventions are limited (Almansi, 2001).

Conclusion

The political interest in the re-development and modernisation of the city adjacent to the cement city is obvious as the pressure on well located land near the city centre is growing. The private sector in Maputo is more active than ever since independence and appropriate land is now a scarce resource as all land outside the formal city is occupied “informally”.

In attractive locations close to the sea this process has been taking place for some years with a number of gated communities being built and consequently residing informal settlers have been bought out. This process is now moving into other sites in the interface between the formal and the informal city giving way for condominium type of middle and upper class housing schemes. As Maxaquene A is located along the major road leading to the airport, politicians has for years seen the entrance to the city as an eyesore. Closer to the airport, which has recently been rebuilt by a Chinese consortium and hence represents modernity and progress, the municipal authorities, has fenced off the informal settlement with a high wall making the informal settlement invisible for visitors arriving in Maputo. By the local population this wall bears the name “the wall of shame” (“Muro de vergonha”). Time will tell which metaphor the local population shall invent as Maxaquene A over the coming years evolves: developing either as a people oriented process continuously providing space for the existing population or driven by market forces supported by the political and professional planning elite eventually eliminating and eradicating almost 50 years of informal urbanisation that has facilitated poor people with access to housing which both the state and the private sector has failed to support sufficiently.
1. The informal city is in a constant process of transformation. A canico house (reed house) being replaced by a cement block house.

2. A typical informal settlement in Maputo. Urban services are rudimentary and access roads few. However most houses have electricity and some have water have individual water connections. Selling water to households without connections is a widespread business. No houses are connected to a sewer system and hence either pit latrines or septic tanks is the norm.
This paper has pointed to contradictions in the urban planning system in the case of Maputo and highlighted the issue of access to housing for the urban poor. Former deliberately pro-poor approaches to housing in Maputo appear to be in a transition towards more market oriented approaches. The paper hence ends with the following question for reflection: Why was it that Maputo Municipality in the first run deliberately developed terms of reference based on participatory methods in the case of Maxaquene A, but after being presented to the project developed by the hired consultants the project was turned upside down and the plan elaborated by the consultants was abolished. An alternative re-development plan was developed which in turn paves the way for the private sector to intervene?

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