Market streets in South Africa's informal settlements

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The African market street is unquestionably one of the most contested spaces in the built environment. It is a busy, crowded place shared by traders, pedestrians and vehicles, mostly minibus taxis. This phenomenon is inevitable in a region where the formal sector cannot provide enough jobs. At big transport hubs hawkers often earn a respectable income, but for the very poor trapped in informal settlements, small-scale informal trading is an essential and often desperate initiative just to survive. The focus is on trading in a shantytown in Mamelodi, outside Pretoria. Demographics and the intrinsic problems related to economic activities are briefly reviewed, followed by a search for relevant solutions. **Key words:** Informal settlement, informal trading facilities, informal economic processes

Markstrate in Suid Afrika se informele nedersettings

Die Afrika markstraat is ongetwyfeld een van die mees bestrede ruimtes in die bou omgewing. Dit is 'n besige, wemelende plek wat deur handelaars, voetgangers en voertuie, meestal minibus huurmotors, gedeel word. Die verskynsel is onvermeidelik in 'n streek waar die formele sektor nie genoeg werk kan voorsien nie. By groot vervoerpunte verdien straatverkopers dikwels 'n redelike inkomste, maar vir die uiterste arm mense in informele nedersettings is kleinskaalse handeldryf 'n noodsaaklike en dikwels 'n desperate onderneming net om te kan oorleef. Die fokus is op handel in 'n informele nedersetting in Mamelodi, buite Pretoria. Demografiese aspekte en intrinsieke probleme wat verband hou met ekonomiese aktiwiteite word kortliks behandel, gevolg deur 'n soeke na toepaslike oplossings. **Sleutelwoorde:** Informele nedersetting, informele handelsfasiliteite, informele ekonomiese prosesse

hen contemplating a topic for the theme 'Spaces and Places'. There was a serious considerationwriting about Serlio's Comic Scene, one of three urban settings illustrated on woodcuts in ca. 1537 (figure 1). It shows a disorderly, disparate medieval marketplace, shaped by the inhabitants, complete with a brothel and a ruined church in the background. Not only is it a contested space because of all the competing interests involved, but it is also a contradiction of the Renaissance ideal of order and elegance through planning and control (the Noble Scene). I then realised that we have a much more relevant and robust case to study right in our midst: the market street. But one certainly does not associate the African market street with the term 'comic' in the colloquial sense. In fact, especially in townships and informal settlements the desperate efforts of hawkers to make a living are rather tragic.

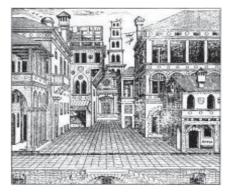


Figure 1 Serlio's Comic Scene of ca. 1537 (Shane 2005: 21).

An African market street is a terribly contested space, with vendors occupying a major portion of the sidewalk, often forcing customers and passers-by to share the street with taxis – weaving, racing (so it seems at least) and stopping indiscriminately. And of course, crowds

of people, impulsively crossing the busy street, and variously rushing, strolling, loitering or socialising (figure 2).

Our formal economy is, like everywhere in sub-Saharan Africa, unable to cope with the alarming rate of urbanisation and population growth. The result is that a significant percentage of the labour market is unemployed and nearly 30 per cent of the population lives below the poverty line (Brown & Fölscher 2004: 53, 74). As in the rest of sub-Saharan Africa, the livelihood of many people depends on an informal economy – hawkers and small traders in small sidewalk shops, and artisans and technicians in home industries (Burton 2002: 25). Informal trading is essentially an economic exigency and the market streets of sub-Saharan Africa is clear evidence how Africans can adapt and shape an urban area in their innovative quest for self-sufficiency and, in some cases, survival (figure 3).



Figure 2
Hawkers, pedestrians and taxis competing for space at the Dennebooom Shopping Centre (author's photo).



Figure 3
A market street in the village of Watamu, Kenya (author's photo).

The market street is obviously not a uniquely African phenomenon. Their first urban manifestation was in the first cities of the Middle East, where the *suq*, or bazaar street, has survived intact for more than 8,000 years. With the Muslim conquests the typology spread and the historic cores of the Islamic cities of North Africa (like Marrakesh, Fez, Tangier, Algiers and Tunis) all still have these (figure 4). Notwithstanding trade with the Maghreb, Afro-Arab cities like Timbuktu, Jenne and Lamu originally did not have market streets, such as most of the West Africa's cities like Oyo, Zaria and Kumasi. The trading street of sub-Saharan Africa, typically that of the Asante, unquestionably first emerge in the West African Forest Zone as a result of

trade with neighbouring villages and with travellers to the larger urban centres. It is, like the Arab *suq*, is a significant typology and organiser of urban space. Oliver (1987: 46) classified it as a distinct pattern with buildings facing a "communication route", often 30 metres or more wide, to benefit from passing trade.

This is a typology that prevails to this day, as evident in the Ndebele village outside Pretoria. In European villages the market square and street mostly co-existed, with the former mostly used on scheduled days, whereas home business located on the street served the local community with daily commodities and services. In South Africa towns of European origin were either based on the bastide-type grid or on the linear concept of 'main street'.

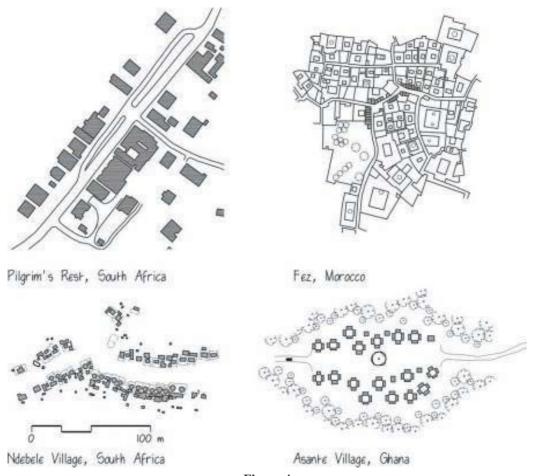


Figure 4 African pre-industrial market streets (author's drawing).

About one third of South Africa's economically active population relies on the informal economy — a sector "likely to grow in importance in the future" (Forgey et al. 1999: 269) — which officially includes domestic workers, gardeners and piece-workers. The percentages involved as small traders and the proportion of those confined to shantytowns are not known. Traders at busy hubs can earn a reasonable living. Seven years ago, in a remarkable piece of research, Richard Dobson (2001: 6) estimated the annual turnover within the informal economy in Durban's Warwick Junction at one billion Rands. Bovine head cooks earned a respectable R6 500 per month. This is patently not the case in shantytowns. Here trading is simply a response to crushing poverty ... because so many of the rural migrants and illegal immigrants are unskilled there are very few options. In spite of that some do survive on child benefit and other grants, and wait patiently to be allocated a subsidized house. They will always be poor. The government's housing policy is of course perpetuating this wholly unsustainable situation by allowing a culture of entitlement to become entrenched in many communities.

Theoretical framework

This study focuses on the plight and achievements of residents of squatter communities who are determined to make a living without handouts, in spite of severe obstacles, including the contested nature of both their living and working environments. Most inner city regeneration projects recognize and make provision for informal trading. Many of South Africa's most celebrated architects and urban designers have been commissioned to design for informal trading and their decisions are obviously informed by substantial in-house research. Little research exists on similar activities in shantytowns, however, probably because they are officially considered 'temporary'. In fact, in the Gauteng province of South Africa – probably the powerhouse of sub-Saharan economic activity – the Gauteng Department of Housing intends to eradicate all informal settlements by building 200 000 medium density, low-cost houses (2004: 6-7). This policy is of course fundamentally flawed; informal settlements will remain for many the preferred option and for others the only option (Dewar 2007). Poverty, not housing, is Africa's major social problem. As Anna Kajumulo Tibaijuka, Executive Director, UN Centre for Human Settlements, puts it: "Homelessness does not mean that there are no homes. It exists because people don't have employment to have access to homes" (quoted in Harsch 2001).

Informal settlements are here to stay. The purpose of this study is to examine a squatter site to learn more about the dynamic of production and the process of making a living. From this it is hoped to discover the most severe problems and conceptual solutions are then searched for by looking at some precedents. Since only a single case study is analysed, the findings might indicate broad trends but cannot be accepted as representative. I am confident, however, that the speculative solution could conceptually benefit most informal settlements.

Literature on buildings and spaces for informal trading is sparse. Katherine Ewing submitted a fascinating master's in architecture comparing the market streets of Harare, Isfahan, and Jaipur in 2000, while Anindita Gosh did an in-depth thesis entitled "The use of domestic space for income generation in a low-income housing settlement" in Calcutta, India, submitted in 1994. Davidson and Payne (2000) apply lessons learned in Egypt in their guide to preparing upgrading and new development projects for low income groups, and that might prove immensely useful for working with a South African community.

Mamelodi in perspective

The area investigated must be one of the most extreme examples of a disputed territory imaginable.² It is a six hectare illegal informal settlement in Mamelodi East, which originated when migrants started to invade land reserved for a major arterial road around 1997. There are two small grocery stores selling basic consumables in the immediate vicinity, but the closest mall, at Denneboom Station, is a 45-minute walk away. It takes about 15 minutes to walk to the nearest train station and the area is well serviced with minibus taxis. Mamelodi East has no formal businesses, and the biggest employers in the vicinity are situated about 14 kilometres from the site at the industrial areas of Silverton and Watloo, adjacent to the older and established Mamelodi West. In view of this remoteness, how do people get about? Architectural students and lecturers from the Tshwane University of Technology and the Hogeschool van Utrecht tried to discover that by interviewing seventy people, which we estimate to be about 15 per cent of the adult population. Of these, 30 were male and 40 were women, with slightly more than half of the latter being single mothers. Eighty-two per cent of them came from rural and 18 per cent from urban areas. Very few residents own cars. Most residents rely on walking (35%). Other modes are trains (14%), public buses (13%) and the ubiquitous minibus taxis (27%).

Sixty-five per cent claimed to earn less than the official poverty threshold of about R1500 per month, but interestingly, 84 per cent declared that their situation was better than where

they had previously lived, while 87 per cent enjoyed the community spirit. Unemployment was estimated at around 60 per cent, probably due to the large number of unskilled, rural migrants, and child benefit grants were a major source of income for single mothers. Because of the absence of elderly people, there were no pension payouts that could have sustained an extended family as in more established townships. Slightly more than ten per cent were housewives and students. In spite of the 'statistical' evidence of poverty, everybody was mostly well-dressed and all appeared healthy and well-fed. So, considering the very low level of formal employment, the crucial question then is how do these people make a living?

Nearly eleven per cent of our interviewees were self-employed, but those were essentially only those active inside the settlement. Here we found a crèche, a tuck shop, several shebeens (unlicensed drinking places), beer brewing, sewing, crocheting, an artist, subsistence agriculture, and some prostitutes.



Figure 5
Spaza shops on Hector Peterson Drive (author's photo).



Figure 6 Socialising on Hector Peterson Drive (author's photo).

While the atmosphere inside the settlement during the daytime (when we conducted our surveys) was very relaxed and quiet, at the edge – on the pavement along a busy road forming one boundary – things were hectic (figure 5). Spaza shops (makeshift kiosks) selling fresh produce, sweets and tobacco, mobile phone kiosks, barbers and hair braiders, stalls selling cooked mealies, shack factories,³ a spot for washing minibus taxis; all seemed to be doing brisk

business. There was also a shop selling snacks and beverages, which was heavily frequented for socialising (figure 6). These traders were friendly but reluctant to be interviewed, and we could only assume that they are also residents of the squatter settlement right behind them.

While many residents took considerable pride in their neat shacks and small gardens, the trading stalls on the sidewalk were truly makeshift and improvised, with no aesthetic concern. This could be because materials in good condition would be quickly stolen at night. For the same reason all vendors stressed that they have absolutely no desire to live behind or above his/her shop; then burglars from outside the area would know where to break in and steal their merchandise (figure 7)!



Figure 7
A hawker selling offal in Mamelodi (author's photo).

There were conspicuously more spaza shops, shebeens (unlicensed bars) and urban agriculture in and around the squatter settlement, than in a subsidised housing scheme across the road, clearly pointing to efforts to achieve higher levels of self-sufficiency. Informal efforts to make money were in the Reconstruction and Development Programme (RDP) scheme mostly restricted to backyard shacks for rent, and little else.



Figure 8
A broad lane inside the settlement (author's photo).

Interestingly, these backyard shacks were constructed in the same technology as that used in the informal settlement. All buildings have timber frames clad with flat or corrugated iron sheeting, and sometimes wooden boarding. Houses range from about 12 square meters, with an average of 33 square meters. The largest is 62. The settlement has a low coverage of 17% and

a medium density of 50 units per hectare (figure 8). The population density is estimated at 250 persons per hectare. What is surprising is that space is available for more building, but the rate of occupation seems to have stabilised (figure 9).



Figure 9 A typical shack, showing the generous open space (author's photo).

There are clearly three interlinked economic processes at work here. First is the internal, or local, economy that serves mainly the community, like the crèche and shebeens (although some of the latter may be visited by people living nearby). Second is the external economy, which consists of residents working elsewhere (domestic servants, gardeners, etc.), as well as those producing things inside the settlement but selling them somewhere else (artists and the lady making crocheted tablecloths). Third is the edge, or in-between, economy; the pavement vendors whose clients include their own community, people from nearby neighbourhoods and passers-by. Money for food, and basic necessities and services remain in the community, and we suspect that bartering takes place.

This informal settlement demonstrates that the housing component is but part of a pervasive economic survival system; one in which the individual house plays a relatively subservient role, not only to the concept of community, but even to those rickety shelters from which the hawkers ply their wares. Without the latter two, survival – and a place to call 'home' – would be impossible.

In search of solutions

It has been suggested that South Africa's informal sector is much smaller than in other developing countries, due to underdevelopment of entrepreneurial skills, inadequate access to credit, and lack of social networks and of infrastructure in townships (Brown & Fölscher 2004: 60). Informal settlements, however, presently seem to rely on social networks and it is clear that mutual support, communal responsibilities and collective political power could greatly enhance the well-being of a community, even when faced with harsh conditions. In addition, as David Dewar (2005) says: since informal settlements tend to create the population density necessary to allow small businesses to flourish, we must "embrace" that informality. For many, this is their only means of survival – and according to the evidence, many seem to cope admirably and to lead a reasonably dignified existence without government handouts.

Providing infrastructure is problematic. Not only is the informal spread too rapid and too massive for local authorities to keep up with amenities, private enterprises are reluctant to invest in facilities because of perceived instability and crime. And because of government's illadvised intention to eradicate shantytowns there is simply not much support for traders in those settlements. The term 'infrastructure' in this context means much more than simply providing potable water and shelters for vendors. It essentially means that the strategy for responding to informal settlement demands a fundamental and revolutionary revision.

Our search for a suitable model should unquestionably focus on paradigms where economic, communal and domestic activities are fully integrated. It seems meaningful to first look at a particularly resilient situation, namely Malindi in Kenya. Here colonial intervention inadvertently created the conditions for a coherent community to retain and enhance its selfsufficiency. This is followed by a very brief overview of proposals by modern architects to achieve such integration.

Malindi

Malindi offers so many lessons! The British demarcated the two original neighbourhoods of Old Malindi with a ring road and expanded the town with a typical zoned Garden City master plan. It has a radial or fan-shaped form with Old Malindi located roughly where the main streets converge, while the edge is frayed, blending gradually with the evenly dispersed rural villages surrounding it. While overall densities are generally low, in the Muslim Quarter of Old Malindi it is about 35 dwelling units per hectare (du/ha), with a population density of between 270 and 330 people per hectare (p/ha) due to the prevalence of extended families of three and sometimes four generations per household.

In spite of being rebuilt in 1861 by the Omanis, who ruled from Zanzibar, Old Malindi displays none of the Arab qualities that gave Stone Town in Zanzibar City its distinctive character. In fact, typologically and in terms of land use it is remarkably similar to the typical linear Asante towns of Ghana, with their wide public plazas demarcated by courtyard homesteads, a pre-colonial tradition (Oliver 1987: 198). Rather than becoming a dense, aggregated urban entity like Zanzibar or Lamu, it became an urban village (figure 10).

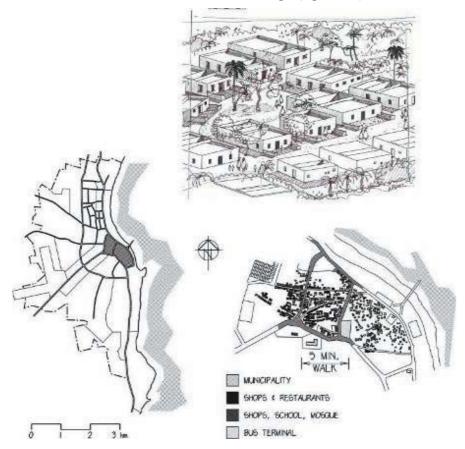


Figure 10

Malindi, Kenya (author's plans from survey and information supplied by the municipality, perspective view by André Roodt for the author).

While Old Malindi has no market square within its perimeter, the ring road forms lively shopping streets, which serve the broader community and tourists with shops, street cafes and accommodation (figure 11). It also defines the neighbourhood and is directly opposite a large bus and *mutatu* park. A *mutatu* is a minibus taxi, the ubiquitous and flexible system of public transport throughout sub-Saharan Africa.

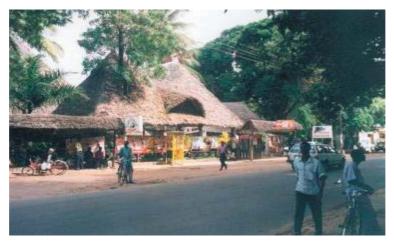


Figure 11 Commercial facilities on the edge (author's photo).

Since the ring road is paved while the lanes inside the block are irregular, mostly unpaved and shared by vehicles, bicycles and pedestrians, traversing the block is simply not a practical option for motorists not travelling specifically to the neighbourhood. It is, consequently, largely relieved of through-traffic (figure 12).



Figure 12 A lane in Old Malindi (author's photo).

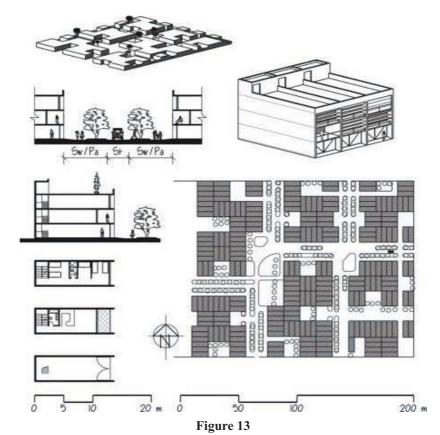
In the Muslim neighbourhood there are mosques, a madrasa, some essential public facilities, and a small number of Omani houses (similar to the type prevalent in Stone Town), but the fabric is dominated by the single-storey so-called Malindi or Swahili houses. While houses in Stone Town and Lamu are tightly aggregated, Malindi houses are clustered to define lanes about eight metres wide and rough squares.

Contrary to the blank walls of the Lamu houses, Malindi houses have street windows and the main entrance, usually in the centre of the street façade, leads through a short passage to a courtyard. This is a private cooking area and a space for women. A front room is often used for home industry and others are for rent. Here are tailors, coffee shops, cobblers, scribes; in fact a whole range of small enterprises serving the local community. Many houses in Malindi,

Swahili as well as Omani, have a stone bench adjacent to the entrance door on the street (baraza in Swahili), which actually forms an outdoor room and allows easy socialising along the street. The neighbourhood is totally permeable to pedestrians, and although outsiders are not prohibited in any way, the internal streets are clearly semi-public community spaces.

Modern schemes

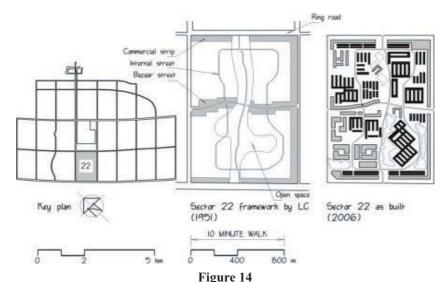
From 1929 to 1942 Le Corbusier, the famous Swiss-French architect, visited Algeria a number of times and became very impressed with the local vernacular. His first manifestation of Arab inspiration is the design of an urban quarter in Barcelona (1933). The street layout has the same hierarchical circulation pattern, including cul-de-sacs, as many of the Maghrebi towns. Houses are tightly bunched around semi-private courtyards and are designed with a vertical privacy gradient, adjustable louvres and roof gardens. Significantly, the ground floor accommodates home industries in the work below, living above typology that lines many market streets (figure 13). Le Corbusier (1960: 110) writes that each house should have a tree in front: "The quarter would then become a delightful oasis of refreshing greenery".



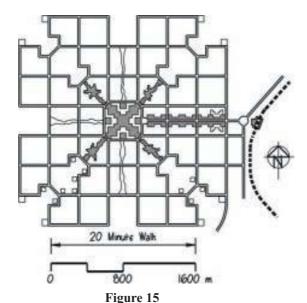
Le Corbusier's 1933 proposal for a workers' quarter in Barcelona (author's drawing).

In 1951 le Corbusier commenced design of Chandigarh, the new capital of the Punjab Province in India. Phase 1 (figure 14) was intended to accommodate 150,000 people. A radical departure from the Contemporary City (19220 and the Radiant City (1930), he used the supergrid in a more relaxed geometry, with major streets defining 'sectors' measuring 1 200 x 800 metres (1958: 210). Most sectors were bisected by a bazaar street in one direction and a pedestrian and cycle pathway in a strip of parkland in the other – clearly an example of what Kevin Lynch calls an "alternating net" configuration in his *A theory of good city form* (1981: 286). The bazaar street is explicitly conceived to fulfil the traditional social functions of the street and to create an urban setting of great variety (Besset 1992: 169).

Commencing in 1985 Charles Correa designed New Bagalkot to accommodate 100,000 people displaced because of a new dam. Basing his layout on the sacred diagramme of the mandala and getting his cues from traditional small Indian towns, he claims he focussed on "traffic and spatial organisation", rather than architecture (2000: 126-129). Here four bazaar streets converge on the bazaar sector in the centre, which is also linked to the station by a traders' route connection the station to the centre (figure 15).



Sector 22 in Chandigarh. As Le Corbusier planned it, and as built (author's drawing).



Charles Correa's 1985 design for New Bagalkot (author's drawing).

Towards a future strategy in South Africa

While the form of cities cannot eradicate poverty, it can contribute to improving the potential for earning more (and spending less) by integrating cities and allowing poor people to settle near opportunities of employment, by ensuring sufficiently dense occupation to support informal local economies, by planning towns and cities that are compact enough for walkability and affordable public transport, by liberating building regulations to encourage small local contractors, and households themselves, to produce buildings on serviced sites, rather than rely on institutional delivery. Currently very few African towns and cities can boast these attributes.

I sincerely believe that the future South African urban structure should, like Malindi and Chandigarh, be based on the superblock. Only that model would allow communities to grow democratically, organically and typologically diverse within a predefined space (figure 16). As in Malindi, it seems meaningful to encourage market streets as some of the superblock boundaries in association with public transport, other nodes and civic amenities that would conceivably be shared with adjacent neighbourhoods. The market street – as interface between two neighbourhoods – then effectively becomes a shared main street, whether pedestrianised or not ... a true community core or 'downtown' (figure 17).

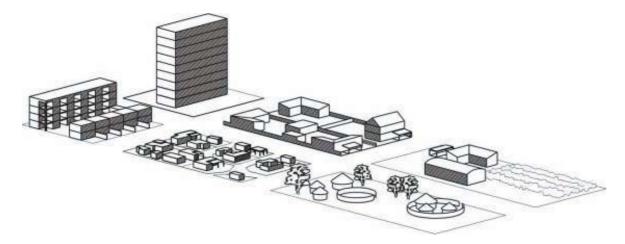


Figure 16
The complexity of South African building morphologies (author's drawing).

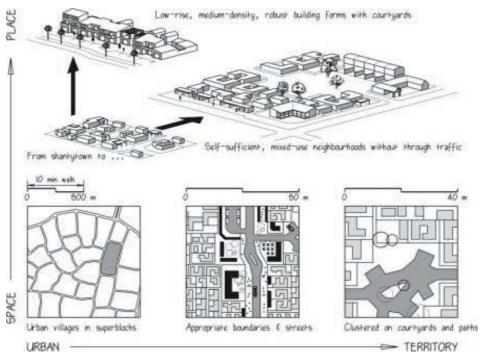


Figure 17 In search of territory (author's concept and drawing).

To understand the spatial needs within a shantytown, one must study the atmosphere and activities – the alleys, small courts (for playing ball), spaza shops and shebeens are the true social spaces. It, therefore, seems logical to reduce the inevitable contestation created at the periphery by drawing people off the market street and into the neighbourhood itself, where good quality public spaces must be provided. Non-hazardous home industries should be allowed throughout the neighbourhood. Urban agriculture is generally an important factor

in self-sufficiency. Vehicular through-traffic should be avoided with interior circulation that should consist of narrow streets (like the Dutch *woonerf*), lanes and footpaths, connected by squares and courtyards. Rather than relocating people to desolate RDP schemes, Government should recognize a fundamental condition: for many households a shack is 'home', and that small kiosk enables them to have one. Once that principle is established, details can be worked out. And for that we can draw on a huge body of knowledge, both foreign and local.

Interventions by design

In 1968 Correa conceived one of the first interventions to accommodate hawkers and pavement-sleeping (figure 18). His argument was simply that there was "little relation between the form of our streets and how we use them" (1997: 32). He recognised that sidewalks are crowded with hawkers who force pedestrians into the vehicular lanes. His answer: widen the sidewalks and narrow the street.

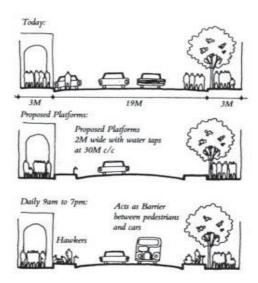


Figure 18 Charles Correa's 1968 proposal to modify the streets of Bombay (Correa 2000: 130).

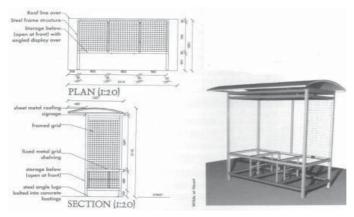


Figure 19 A mass-manufactured trading stall for pavement vendors (Darroll 2004: 34).

Townships and informal settlements are major tourist attractions these days and that fascination must be exploited. A standardised range of prefabricated stalls for pavement traders, similar to those developed by Johannesburg's Economic Development Unit (Darroll 2004: 34-37) could contribute dramatically towards making the squatters' market street more attractive (figure 19). Some activities rely on preparation and needs energy, potable water and drainage.

In Durban, on Lorne Street, Barbara van Zyl designed a facility for mealie cooking facility to provide better hygiene and safety for the 130-140 cooks who (in 2001) had a turnover of R1m/week (figure 20). And for bovine head cooking architects Lees and Short design a functional and attractive facility which can be linearly expanded (figure 21).

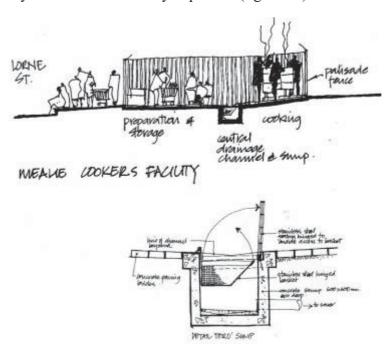


Figure 20 Facility for mealie cooking, Durban. Architect Barbara van Zyl (KZ-NIA Journal, Issue 3/2001: 13).

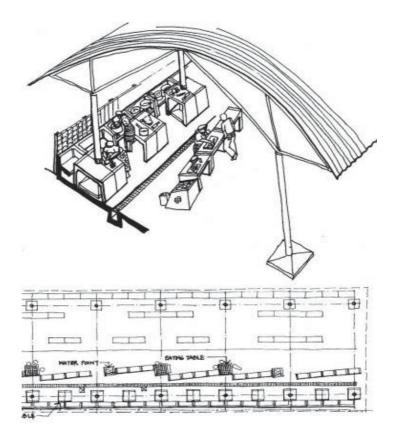


Figure 21 Facility for bovine head cooking. Architects Lees & Short (KZ-NIA Journal, Issue 3/2001: 12).

The future

Considering the schemes coming from our schools of architecture it is quite clear that the most curricula do have a prominent Afrocentric dimension. At competitions, exhibitions and design examinations architectural students (black and white) generally demonstrate sensitivity and considerable understanding of conditions in poorer neighbourhoods (figures 22 and 23). It is also evident that their design decisions are informed by site visits and not mere speculation. Locally we see substantial pragmatism combined with technological realism.

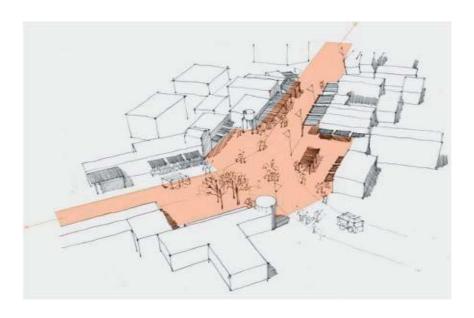


Figure 22 Bouwer Serfontein (2005).



Figure 23 Kayalethu Qwalela (2007).

Western schools of architecture and planning instruct students to design "an inspiring, humane and sustainable living environment" for Africa's poor. ("Architecture and the sustainability challenge", 2002. http://archnet.org/calender). Such well-intentioned projects are

obviously appreciated in local academe, but tend to establish a romantic, aesthetic vision of African urban and economic issues in literature.

Market streets are crucial elements in informal settlements. Their function and typology not only impact on spatial organisation, but also on the way they are used as social spaces and to create places for activities that are intrinsic to the coherence of the community. Since slums are never going to disappear, we must now devise a strategy for their sustainable future in environmental, social, and especially political and economic terms. There is considerable expertise available locally. But political will is essential to recognise shantytowns as an asset – and their concomitant market streets as vital for income generation – before professionals and communities can start to collaborate on finding ways to transform the contested space in a convivial, supportive place.

The imperative now is for architects, activists, planners and politicians to come to terms with reality, accept the informality that David Dewar is so passionate about, and work with communities. If properly handled it could form the basis for prosperity and provide pleasant public spaces. Is there an alternative?

Notes

- 1. The third is the Satyric Scene is of a village in a forest.
- 2. Mamelodi forms part of an ongoing study on settlement patterns in Tshwane. Teams from the Tshwane University of Technology (TUT) and the Hogeschool van Utrecht (HU) have been investigating the area since 2003.

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