



Illus. 34: Photo: Lusaka City Market (Gantner, 2009: 3)

The following precedents are all markets, or market areas, and are intended to glean an understanding of the operation and organisation of the typical African Market.

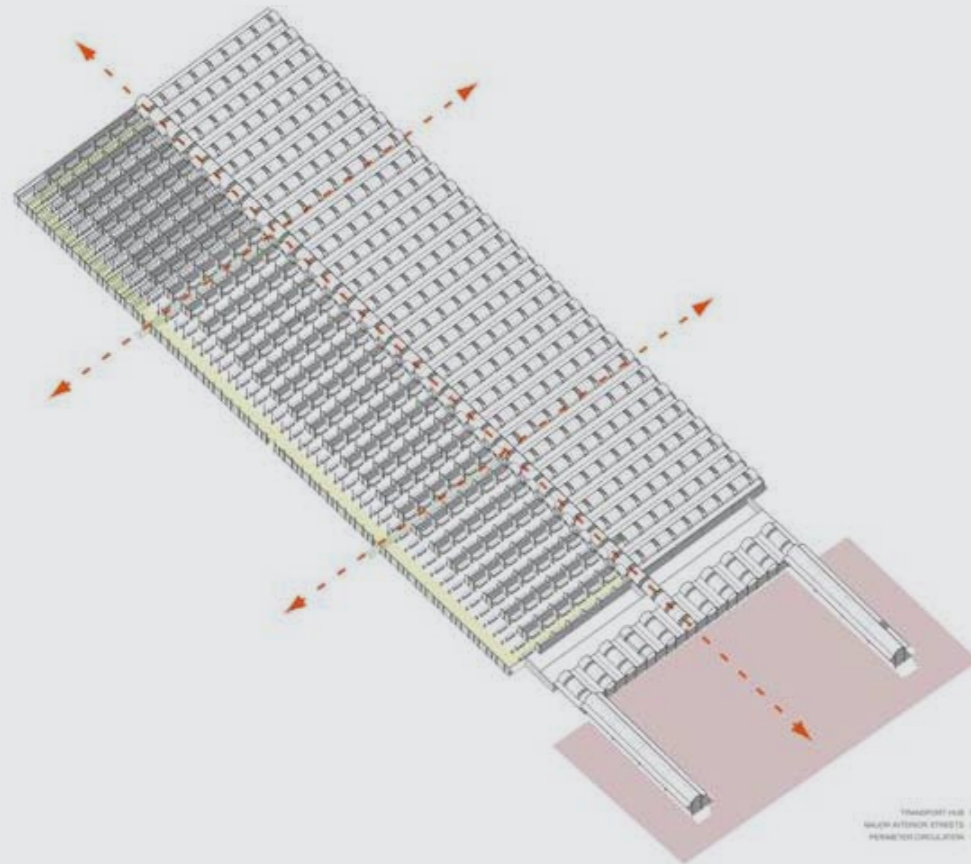
Spatial Use in an African Market: City Market, Lusaka, Zambia

Simply referred to as the “City Market”, the main market in the centre of Lusaka, Zambia (unknown architect) is a large architecturally utilitarian building, covering a full two city blocks. Built in an effort to formalize the previously peripheral market activities around the site, the building consists of a grid of uniform market stalls under a repeating domed profiled-sheeting roof.

The significance of the city market is however, not in the built architecture, but rather in the use of space that becomes clear when imposed over the neutral grid of stalls. With no formal allocation of stalls present, the vendors have been left to arrange themselves within this building as they please, paying the authorities a rental for the stalls that they occupy. This has resulted in the grouping of vendors with identical merchandise into distinctly identifiable areas according to social conventions (Gantner, 2009: 2). This allows vendors some social support and assistance, as well as the ability of self-regulation within these groups. In Lusaka this functional grouping occurs locally on an informal level and on a city scale at a formal level (ibid.).

These groupings may perhaps be referred to as sectors, and benefit the vendors in that they are able to:

- Self-regulate and form representative groups
- Work in mutually beneficial syndicates, co-operative, or buying-groups, and buy larger volumes
- Draw on a larger knowledge and experience base
- Create a known location and larger stock range; and consequently a larger customer draw



Illus. 33: Lusaka City Market layout, red indicates the transport hub (Gantner, 2009: 3)

According to architect Garret Gantner “this form of self-organization would not be possible in a building with more delineated programmatic areas...” (ibid.).

Vertical Spatial Use: Makola Market, Accra

The social grouping of vendors into sectors found in Lusaka also occurs in the “Makola Market”, immediately adjacent to the commercial centre of Accra, Ghana. (unknown architect) The commercial centre of Accra, Ussher Town, is denser in terms of human use than the centre of Lusaka. Small scale vendors in the streets arrange themselves so that the “... market participants begin to create spatial definitions that alter the normal form (and normal function) of the street, developing spaces that respond to their needs as vendors...” in a highly spatially sensitive and significant way (ibid.: 6). This layer then creates a threshold to the more established enterprises in the buildings and vertically to the second and sometimes fourth floors of buildings. This pattern reaches its peak immediately around the Makola Market building. The upper floors in these areas are often used for storage and wholesaling (ibid.: 6).

Significantly the local authorities do not persecute street vendors; this has allowed the Ussher Town area to become a large commercial centre infused with individual enterprise.

When the historic Makola Market building, built in the 1920s, burnt down in 1993, the authorities replaced it with a ‘modern’ market building with four storeys of retail. Formal shops were provided, with doors, walls, and air-conditioning. In the local context shops with closed doors due to air-conditioning lost business, since customers believed them to be closed. Walls limited the display area to the smaller windows, and the walled isolation of neighbouring shops negated the benefits of the existing market social system, weakening the benefits of sectorial grouping. Many traders opted to move out of the new building to trade in the streets, and in the open area planned for parking and public transport (ibid.: 11).

It is therefore apparent that the social sectorial grouping in the market is very important to its proper functioning, and that the tangible architecture should take this intangible architecture into consideration. Verticality within the market, particularly where density is high can be appropriate, and isolation of areas due to level change can be overcome through social understandings and changes in function and level of formality.



Illus. 35: Makola Market - Accra - Ghana: Transport Hub (Gantner, 2009: 11)

Market Relation to Transport: Metro Mall, Johannesburg

“Metro Mall”, nodal interchange for busses and taxis in Newtown, Johannesburg (2003 - 2005), was developed by Urban Solutions in consultation with the Mini-bus taxi associations and vendors who already used the site. Split into two blocks, Block-B for Lenasia bound transport, and Block-C for Soweto bound transport; the development includes holding bays, and terminal points for various types of mini-bus taxi and bus. Significantly the entry-points for each type of transport is on the street level, and so this is maintained as a pedestrian zone.

The significance of this building is the formal built recognition of the integral link between a transport node and retail, and pedestrian movement zones are flanked by vending areas.

Formal markets edging significant transport nodes include all precedents mentioned in this chapter. It is therefore clear that public access to and from a transport node is a key factor determining the positioning of a market. Goods are also often transported to the market by public transport, which is therefore essential to the market’s operation.

The Market as an Urban Generator: Kariakoo Market, Dar es Salaam

The presence of a market often results in increases in economic activity, social exchange, and organisation of the city. This is the case at in the Kariakoo area of Dar es Salaam (*ibid.*: 6). The initial market dating back to First World War, caused a “... substantial influx...” of traders into the area since the 1920s, with the neighbourhood being spontaneously planned around the market (*ibid.*). In the 1970s a new Kariakoo market building (1972-1974) -on the site of the



Illus. 36: Transport nodes around Kariakoo Market - Dar es Salaam (Gantner, 2009: 9)

existing building- was designed by Tanzanian architect Beda Amuli, this iconic structure has since become the “... definitive commercial centre of the city and has reinvigorated the former African quarter with socioeconomic life” (*ibid.*).

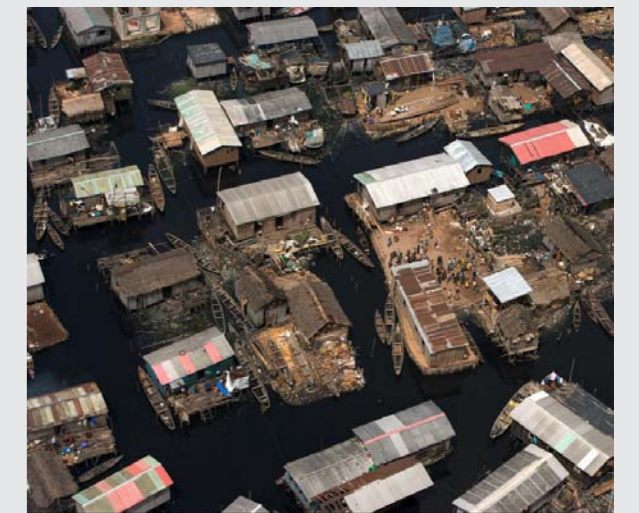
Market formalisation: Various Precedents

Formalisation of an what is seen as an ‘informal’ market is often seen as a method of regional upliftment. A market may not necessarily be supported by formal infrastructure, but the vast changes this ‘formalisation’ would entail become extremely disruptive of the formal social networks associated with micro-entrepreneurship. Social unrest and civil strife has resulted at many of the markets where this has been attempted, including at the proposed formalisation of the Marché Rood Woko in Ouagadougou, Burkina Faso in 1993 (Gantner, 2009: 10), and at the proposed construction of a shopping mall on the site of the Warwick Junction Early Morning Market, Durban, in 2009 (Skinner, 2009: 107).

Motivation for landowners to formalise markets into formal shops rather than regulate them goes against the fact that in Warwick junction, the rental charged by the eThekweni (Durban) Municipality per square meter of regulated street vending area is higher that the equivalent rental on the floor area of a formal shop (Interview, 11 July 2011).

Dealing with Waste: Makoko, Lagos, Nigeria

Ideally located close to the Lagos city centre, Nigeria, the informal area of Makoko, extends out into the Lagos Lagoon. Buildings are usually built on stilts, and inter-connected by a network of boat ways and bridges. There is however, some solid land in this area, reclaimed by the residents to build houses on. Rubbish is layered with sawdust to create small platforms, before a final layer of sand is added; this has created a high demand for rubbish in the area. The resulting economic value placed on rubbish means that despite being a net importer of rubbish the area is very clean (Welcome to Lagos, Ep.2.1: 01:00 to 08:05).



Illus. 37: Makoko Land Reclamation

Case Study

An African Market: Warwick Junction Market Precinct, Durban

Architect: Various co-ordinated by Asiye eTafuleni NGO

Date: 1997 to present

What

According to Caroline Skinner, the Warwick Avenue Junction was until recently “...widely recognised as a model of sensitive integration of street traders into urban plans...” (Challenging city imaginaries: Street traders’ struggles in Warwick Junction, 2009: 101). Also known as the Warwick Triangle, Warwick Junction is a mixed residential and commercial area, well served by health, religious, and educational facilities. Historically the scene of frequent and sometimes violent clashes between vendors and police, the area has since 1997, been the focus of the municipal Warwick Junction Urban Renewal Project. The focus of this being improving servicing, maintenance of health standards, regulation and self-regulation market vendors, and upliftment of the area by working with, and encouraging initiatives from existing vendors’ social organisations such as Informal Traders Management Board (ITMB), Traders Against Crime, Traditional Healers Umbrella Body and the Self Employed Women’s Union (SEWU). The regulatory “...strategy is to build a cooperative attitude between officials and traders to improve conditions on the street ...” (ibid.: 8 & 10).

The Warwick Junction Precinct is a conglomeration of various markets, or different groupings of market sectors, with each major sector being large enough to attract customers. The Warwick Junction area has been a centre of trade since the 1880s when the Early Morning Market came into being as a place to sell vegetables. The area has supports a wide variety of traders, currently including clothing, fruit, fish, meat, spice, vegetable, lime/ochre, cooked mielie (corn), iMphempo (incense herb), and bovine-head vendors. iziNynga (herbalists) sell muthi (traditional medicine), izangoma (spiritualists) can be consulted, and gold-tooth fitters. Each of these ‘sectors’ occupies a different zone or market within the Warwick Junction precinct. The market precinct includes the English Market, Early morning Market, Bovine head Market, Berea Station Market, Brook Street Market, Music Bridge Market, Lime Market, *Muthi* (traditional medicine) Market, and associated street markets among others.

Intervention Summary

Over ten years working with the traders organizations the renewal project included (Skinner, 2009):

- Relocation of the Brooke Street Squatters
- Protection of market areas from vehicular invasion through the use of bollards and the provision of alternate parking facilities for mini-bus taxis which where competing with vendors for pavement space
- Provision of water and sanitation facilities
- Muthi (traditional medicine) market, for approx. 1000 current vendors.
- Project Centre renovated
- Early morning Market refurbishment
- Five off-street Mini-bus taxi Ranks completed
- Herb Traders market (iMphempo) (1998) (designed by Design Workshop) (ibid.)
- Improving mielie cooking facilities
- Improved Bead selling facilities
- Infrastructure for Brooks Street vendors (designed by Architects Collaborative)
- Provision of facilities for bovine head cooking
- ‘Informal Economy Policy’ reviewed and amended
- An increased more accessible police presence.

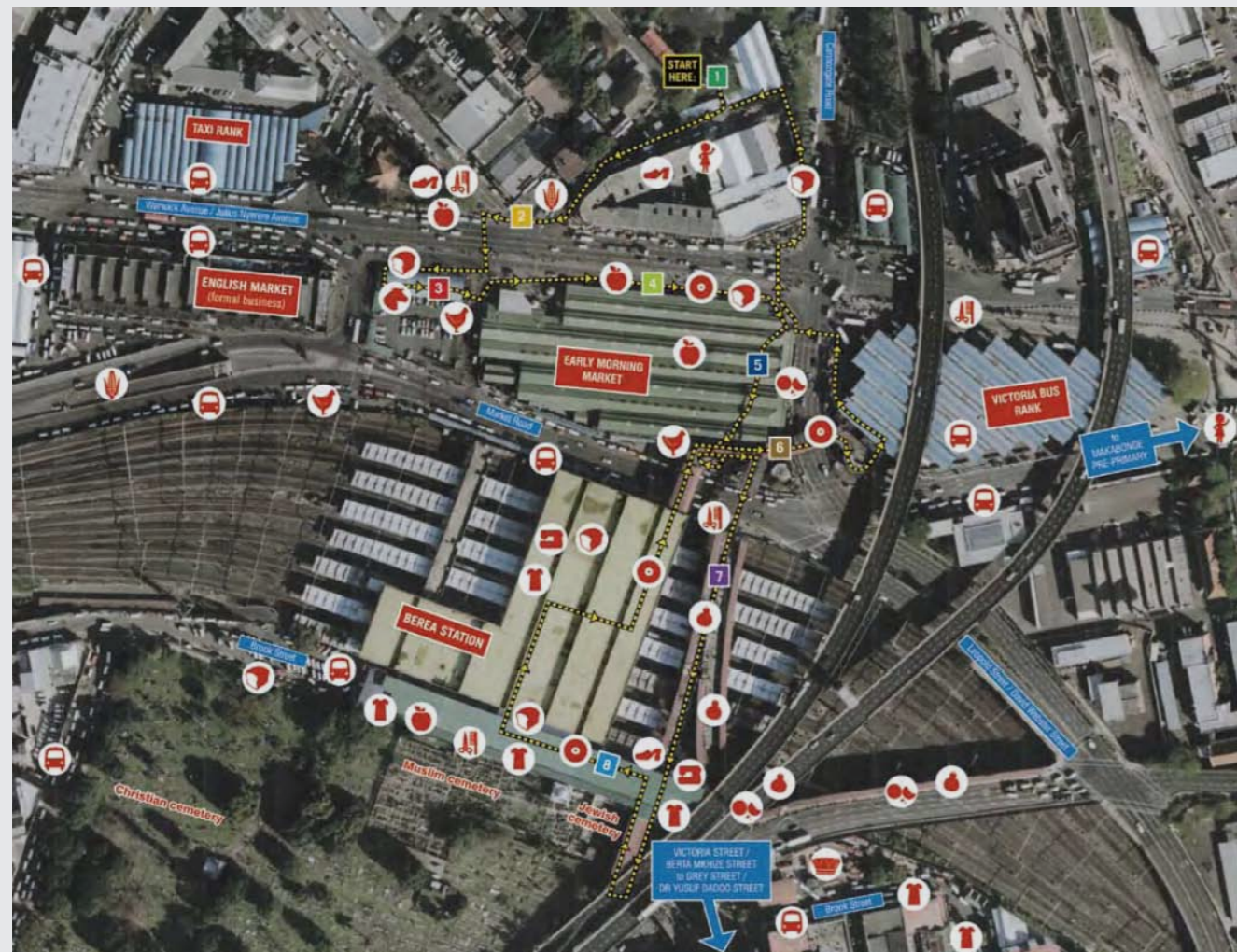
It is significant that the above interventions were conducted in consultation with the affected vendors.

Where

Located in what is known as the Warwick Triangle, the junction terminates the N3 highway, and serves as an entry point and primary transport node for some 460 000 commuters travelling by bus, mini-bus, or train into the Durban CBD. It is therefore a prime position for informal trade and supports the highest densities of vending in the eThekweni [Greater Durban] Metropolitan area (Unknown, s.a.: 3). Located in the city centre, the area facilitates 5 000 to 8 000 vendors (Skinner and Valodia, 2003: 436), with many of these sleeping overnight on the pavement next to their stock.



Illus. 38: Warwick Junction
- Mielies cooking over fire
(Dobson & Skinner, 2009:
76)



Illus. 39: Warwick Junction Markets Layout (Dobson & Skinner, 2009: 6)

- 1** The Project Centre
- 2** Fresh Produce
- 3** The Bovine Head Market
- 4** Mixed trading strip
- 5** The Early Morning Market
- 6** The Music Bridge
- 7** The Traditional Medicine Market
- 8** The Brook Street Market

- food
- barbering
- sewing
- clothing
- fresh produce
- clay
- cows' heads
- mealies
- music
- chickens
- shoe repairs
- traditional medicine
- beads
- taxis and buses

Relation to Public Transport

The Warwick Junction Markets occupy the area between and around the Warwick Avenue Mini-bus Taxi Rank, Victoria Bus Rank, and Berea Train Station. These form a movement triangle across the market area, resulting in volumes of pedestrian traffic across the market spaces.

Social Organisation

Social organization and internal co-operation among vendors in the Warwick triangle has shown itself to be strong among the different groups of vendors, with many sharing vending areas and taking turns to return to the rural areas where they re-stock raw materials and visit their families. Formalized social groups such as the SEWU often provide members with basic public education (ibid.: 13 & 18). SEWU even organised a group of women volunteers who clean the street for up to three hours a week because "...it is good for business and that they are proud of their city and concerned about its image" (Skinner, 2009: 105). Formal, governmental, and corporate bodies have been able to interact with the traders through consultation with these associations.



Illus. 40: Warwick Junction Transport Triangle



Illus. 41: Numbering of Market Stalls. From left to right: Warwick Junction (Dobson & Skinner, 2009: 82), Stone Town - Zanzibar (K Bakker), Bamako - Mali (K Bakker), Timbouctou - Mali (K Bakker), Temporary market - Maputo Central Market (author)

The Importance of an Address

One of the most significant aspects of the renewal is the formal recognition of the street as a legitimate market area through the demarcation of pavement spaces to individual vendors (Working in Warwick.: 10). This allows the vendors a measure of security, allowing entrepreneurs to buy larger volumes of stock, and create business plans in a more stable environment, while allowing regulation of health and safety standards through engagement of authorities with known communities, as is the case at Warwick Junction. Police are then able to provide market security, rather than fighting against the market participants. The demarcated spaces allow a movement corridor on the pavement where pedestrians are safe from passing



Illus. 42: Marked street stalls - Warwick Ave. - Warwick Junction (author)



Illus. 43: Warwick Junction - Brook Street Market. Badsha Peer Festival (Dobson & Skinner, 2009)



Illus. 44: Warwick Junction - Brook Street Market. Normal operation (Dobson & Skinner, 2009)

vehicular traffic, and should these corridors become unsafely congested the police would be able to legitimately clear them, a considered pavement layout is therefore important. Vendors pay rent on these spaces as they would with any market stall, they are therefore legally recognised and legitimised by formal structures.

Multiple Use: Brooke Street Market

The position of the Brooke Street Market adjacent to the cemetery containing the shrine of Muslim saint Badsha Peer is significant. For the last 60 years, vendors have moved out of this market for one day of the year, allowing 10 000 devotees of the Mazaar Society, followers of the Saint, to gather in the space. This is an understanding that has benefited both parties, with the shading roof over this market having been contributed to by the Mazaar Society, and the traders paying a lower rent on stands in this space (Dobson & Skinner, 2009: 89)

Goods Movement

Movement of goods around the area is particularly important to the smooth operation of various market functions. This occurs mostly by 'barrow' in Warwick junction, and barrow operators have been found to move in excess of 300kg in one load. Barrow operators are hired by vendors to deliver goods and to move stock to and from night time storage in and around the markets. This sector is organised, managed, and manned predominantly by a social grouping of young Pondo men.

Facilities for Trade

Traders in this area had the following requirements (Skinner, 2009: 15)

- Night time personal shelter from weather and secure goods storage
- Day time personal- and goods- shelter from rain and heat.
- Water and sanitation facilities
- Lighting allowing night time trade and security
- Access to electricity
- Security policing

Mielie Cooking Facilities Intervention

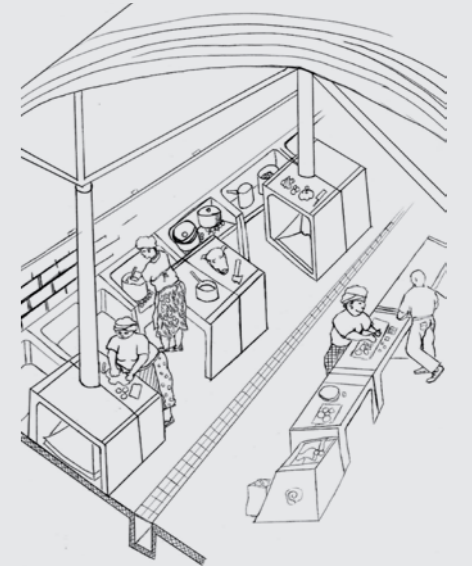
The municipality identified the mielie selling as a health hazard due to open fires and husks blocking drains, and the open fires also damaged the pavements. After extensive consultation with the mielie cookers they constructed a dedicated cooking facility in a safe location, still using the more heat effective open flame (Skinner, 2009: 084), which prompted a 350% increase in mielie vendors, and currently an estimated 26-28 tonnes of mielies are cooked there, with an estimated weekly street value of R1 million (Participatory Process: Intuitive Process(es) Towards Responsive Urban Architecture, s.a.). A similar consultative design process was followed regarding the herb traders, Brooke Street, and muthi markets, and with the cooking and selling of bovine heads. Improved hygienic facilities prompted an increase in trade, and a diversification of dishes offered (Skinner, 2009: 16)

Inhabitation: Layout Adaptation in the Bovine Head Market

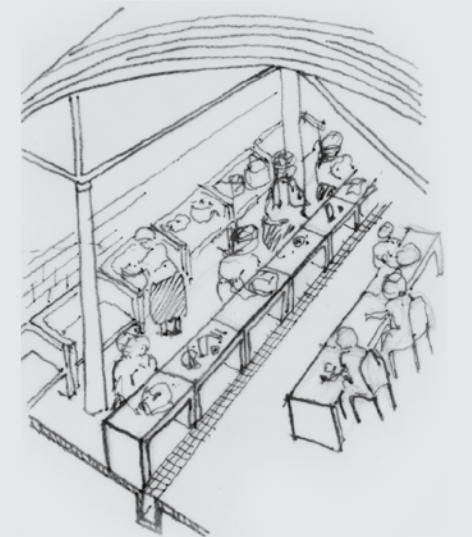
The Bovine Head Market serves as the 'food-court' of the market. A variety of food is available, but this area specializes in the Zulu delicacy of tender beef head meat. This sector has very specific requirements, and becomes a health risk if it operates in poor conditions. A specific design was proposed to meet these requirements, heavy concrete furniture was used, and the layouts of these have since been moved to meet the changing requirements of the customer. In an interview with the elected Bovine head Market representative, the author established that this was in order to best meet the customers requirements, since seating areas where customers could sit and enjoy their food were insufficient (interview 11 July 2011).

Inhabitation: The Muti Market Furniture Debacle

The Muti Market specialises in traditional medicine, and customers can consult with a traditional healer or purchase medicinal herbs in this linear market. At one stage an attempt was made to upgrade this market, moving it from the pavement to a specialist area. The provision of appropriate specialist furniture was envisaged; with the designers engaging with the vendors, and even building a series 1:1 full scale models to present to them. All of the proposed furniture was rejected, and only the shading, protective roof was built. A large proportion of the current furniture provided and built by the vendors is however, according to architect Richard Dobson, very similar to the designed suggestions, "...but in fine detail its completely different..." (Personal Correspondence, 11 July 2011). Individual market stalls differ as salesmen draw on individual experience, preference, and requirements to define their specific spatial requirements.



Illus. 45: Warwick Junction - Bovine Head Market - Original Design Sketch (Dobson & Skinner, 2009: 14)



Illus. 46: Warwick Junction - Bovine Head Market - Sketch of Existing (author)



Illus. 47: Warwick Junction - Municipal street cleaning (Dobson & Skinner, 2009: 114)



Illus. 48: Warwick Junction - Muthi Market, furniture variations (author)

Inhabitation: Furniture for Flux

Traditionally, heavy indestructible furniture is provided in public facilities such as markets. This however creates an environment that is difficult to clean, easy for criminals to hide in, and relatively inflexible to change. In consultation with the existing table carpenter of the Warwick Junction area, a more collapsible trestle table was designed in conjunction with the fixed street vendors in the area, and this design is currently in use by them. This allows vendors mobility, while leaving easily cleanable spaces which are cleaned occasionally by the municipality, and regularly by volunteer vendors. Open uncluttered pavements also allow a safer night time environment.

The Sanitation Sector

Provision of sanitation facilities was problematic, with high incidences of toilet blockages, and the running of these facilities by a market group was proposed as a solution (*ibid.*: 18). This means that sanitation facilities are used at a small fee, which supports an attendant responsible for the cleanliness, basic maintenance, and safety of the facilities, as well as the provision of proper toilet paper.

Physical Levels

At some points the markets within Warwick Junction are multi-levelled, and the level change often defines a change in formality, with the general rule being that higher levels attract businesses with a higher level of formality that are able to exert a higher draw on customers. Ground planes are generally open, with formality increasing with height. A level change may also be used to define a sectorial change as is the case with the stepped transition between the Brook Street Market and the Lime Market.

In relation to the Maputo Central Market

Although the Mercado Central de Maputo is smaller in scale than the Warwick Junction area, and probably closer in size and specific goods offered to the Early Morning Market. The Maputo central market is also located within a transport triangle, and operates in a very similar manner, with the greater market in the surrounding streets serving associated sectors. Topographically, climatically, and historically, Maputo and Durban are very similar, and relatively close geographically. Most significantly the organization and driving forces are have been found to be very similar.

Precedent Conclusions

Summary

The significance of the market as an urban element is not exclusively the built architectural fabric as an object, although this is not unimportant, the intangible “...social configuration and cultural influence [of the market] on the surrounding urban fabric” is significant (Gantner, 2009: 2). This is demonstrated at Warwick Junction by the emergence of vendors associations (and the formal recognition of these associations) markets are primarily controlled by their participants, and although they might be inherently chaotic it allows for a “...rapid, improvised change that is characteristic of modern societies...” without excluding lower-income participants from its gains (*ibid.*: 14). A market “... anchors the local culture and creates an irreproducible locality” (*ibid.*: 18), and in the case of the Maputo, the economic built and intangible culture is anchored and represented by the historic market.

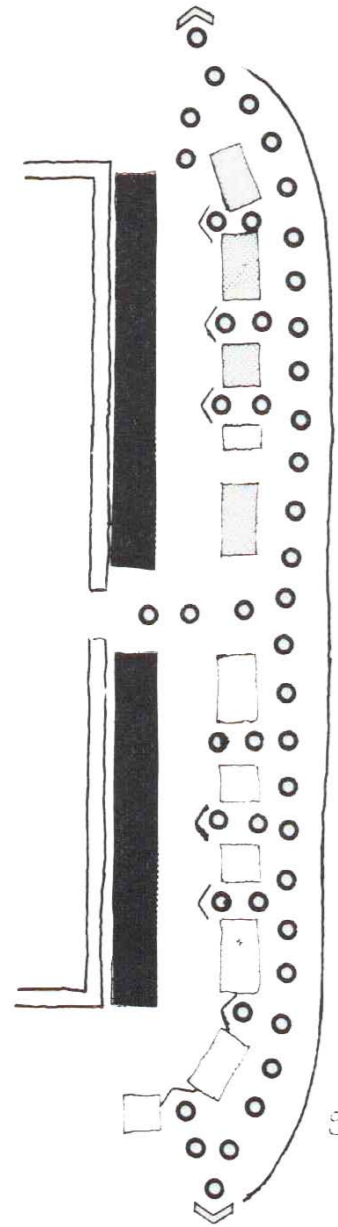
Regulated market stalls or pavement areas, not only within the formal market confines, but also in the streets surrounding the market (as is the case in Warwick Junction) is very important to the health and character of the urban environment surrounding the market. In most countries, including Mozambique, selling wares in the streets is illegal. This is however enforced to greater and lesser extents in various countries and cities, with the most lively market districts occurring where local police do not, cannot, or will not enforce anti-hawking laws, examples of these areas are the Kariakoo and Makola Market districts. Regulation of pavement and market spaces allows vendors to be formally and legally recognised through the payment of a small rental.

Spatial Character

Spaces within the market system seem to facilitate shifting functions. It therefore becomes important that space creation allows for, and facilitates this shifting flux of use at different levels and intensities.

Sectors

Vendors in all the analysed markets group together into market sectors, with the largest sector often acting in the same way as an anchor tenant would in a shopping centre. These groupings are often off the street, forcing prospective customers to move through a series of smaller sectors and individual stores before arriving at the anchor (Dewar & Watson, 1990: 42).



Illus. 49: Some stalls survive by 'intercepting' customers who are drawn to stalls behind them (Dewar & Watson, 1990: 42)

Market Levels

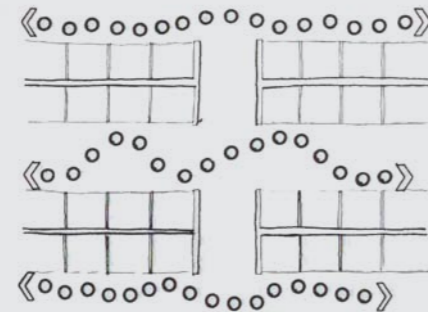
There are also different market levels within the sectors with vendors operating at different levels of formality, from the mobile pavement trader to the enclosed market shop. Vendors at lower levels may not want to change levels for business reasons (Personal Correspondence, 11 July 2011).

Equality in the Market

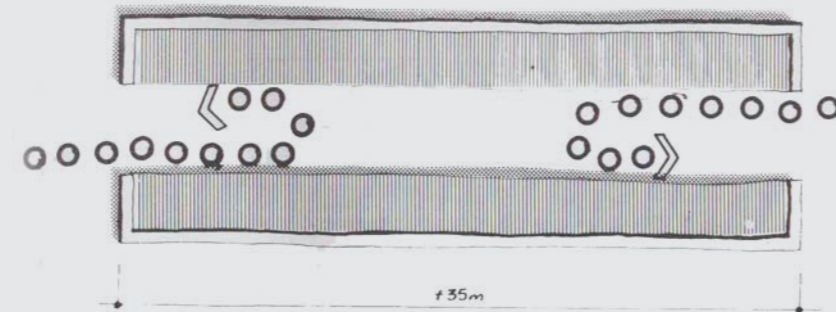
The self organization of market social structures means that these organizations are fairly democratic. Vendors stalls seem to be fairly uniformly sized and distributed where stalls of the same sector and level are grouped, with the main size change being across market levels. Smaller less formal stalls seem to be closer to faster moving pedestrian traffic.

Theoretical Guidelines

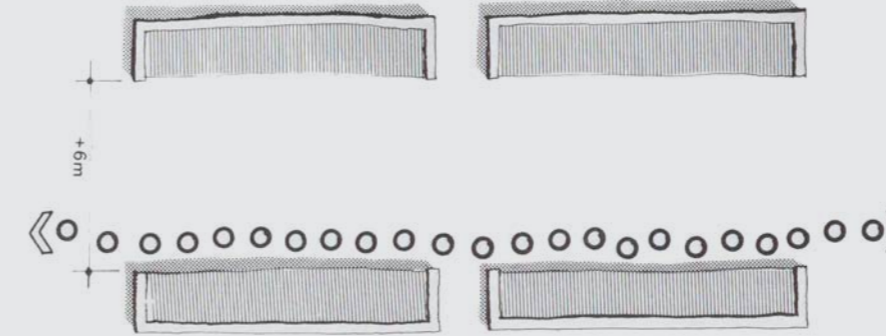
The following illustrations describe the general situations found in the studied markets, and confirmed by the research on African and International markets by Prof. David Dewar and Vanessa Watson (1990: 42-53)



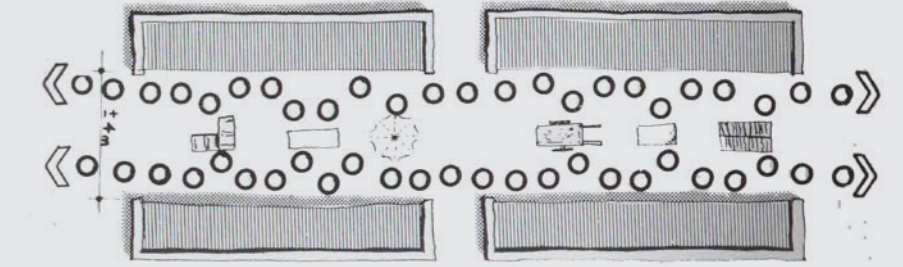
Illus. 50: Dead spots caused by end walls (Dewar & Watson, 1990: 49)



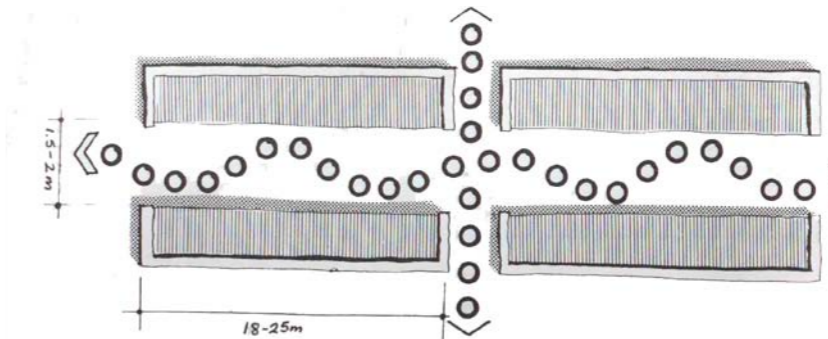
Illus. 51: Ineffective customer penetration, due to stall run being too long, ie. +35m (Dewar & Watson, 1990: 50)



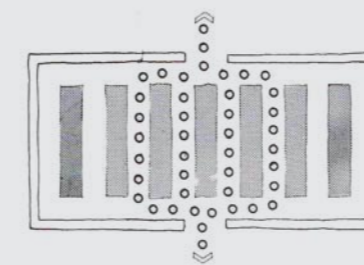
Illus. 52: A circulation space that is too wide (+6m) causes customers to favour one side (Dewar & Watson, 1990: 51)



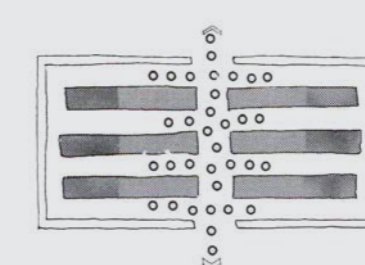
Illus. 53: Loose stalls in circulation spaces wider than 4m promotes cross movement (Dewar & Watson, 1990: 53)



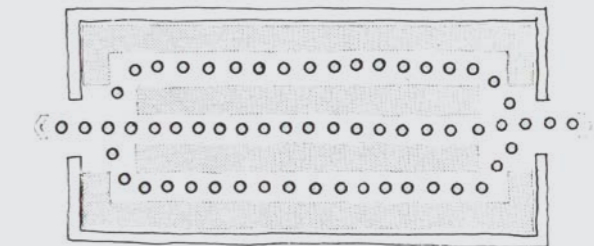
Illus. 54: More appropriate stall-run dimensions (Dewar & Watson, 1990: 50)



Illus. 55: Ineffective customer to stall exposure because of stall run layout (Dewar & Watson, 1990: 45)



Illus. 56: Ineffective customer to stall exposure because of stall run layout (Dewar & Watson, 1990: 45)



Illus. 57: Entrance position & grain of stall-runs working with customer flow (Dewar & Watson, 1990: 45)