

Illus. 74: Market transaction, Market Square, Maputo Central Market (J Casson)



Chapter 6: Specific Site

“Compared with art, music and literature, which can be staged in different locations, architecture is rooted to the place of its setting.”

Tim Porter (2004: 134)

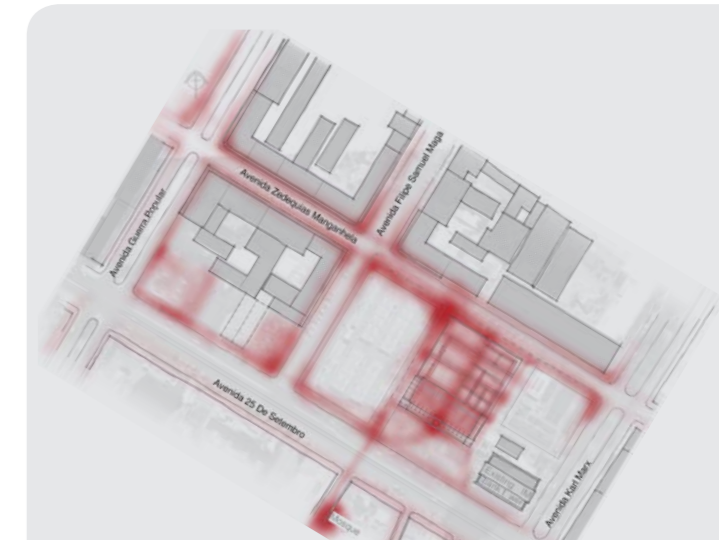
This chapter aims to show the specific built and non-built influences on the site, and to propose strategies to these at a theoretical level.

Site Hierarchy

Architectural academic Tom Porter, states that “Architecturally speaking, hierarchy is an ordering device that clearly arranges form, space, function, etc., according to a ranked degree of importance or capacity” (Porter, 2004: 76). Every city, street, building, or other situation where form, space, or function, are found consequently has some type of inherent hierarchy between various elements in these three categories. This is also true for ‘empty’ sites, or in the case of uniform parking lots, like those on the sites around the Maputo Central Market. External influences give different areas on this sites different levels of importance, depending on their own importance.



Illus. 75: Expanded Market boundary & Core Market Site (author)



Illus. 76: Existing hierarchy of space around the existing market (author)

To establish of new spaces on this site, the existing hierarchy needs to be understood before a new layer of spaces can be added. The most important influences on this site are those listed for attention in the urban framework; namely:

- The Ave. Zedequias Manganhela market street on the north.
- The termination of Rua do Mesquita on this market street.
- The location of the transport nodes, particularly the Ave Guerra Popular chappa mini-bus rank and the tuk-tuk rank, as these have the strongest inter-relation with the existing market.
- The location and direction of travel to the existing market building, and market square.



Illus. 78: Location of BIM Building (author)



Illus. 77: Millenium BIM Building, from Ave Karl Marx (author)

By reviewing the above influences, the existing spatial hierarchy over the proposed site was established. It is proposed that new built fabric and spaces takes note of this hierarchy by linking into it and developing onto it.

Significant Buildings

Architectural academic Tim Porter states that “Place is a geographical point that has its roots in history and in the future...” (2004: 111). This is certainly the case in Maputo, and has been increasingly recognised by the authorities, with the recent passing of laws protecting the built history of the country, particularly the heritage found in the Maputo Baixa, leading to a list of formally protected buildings within a generally protected heritage area centred around the Baixa. Apart from the buildings on this list, there are other buildings, and built characteristics around the site that can be considered significant for various reasons.

BIM Building

This seventeen storey building by Portuguese architect Joao Josè Tinoco, situated adjacent to the existing Central Market Building is significant as a land mark in the immediate vicinity due to its height, and also because of the appropriateness of the bank function in relation to the market function.



Illus. 79: Ave Filipe Samuel Magaia street edge collage (author)

Avenida Filipe Samuel Magaia Street-Edge

The street-edge on the opposite side of *Avenida Filipe Samuel Magaia (to the West of the market)* is made up of three predominant sections; a cleared site (box-and-rope market), a light double-storey arcaded building, and a heavy single storey arcaded building; each of these being significant.

The Box market is a significant sector of the market, relating directly to the long-distance bus rank. While the double-level arcading on the double level building is significant in that it is achieved through the use of prefabricated cast-iron columns and trellis-work commonly used in the late 1800s. The single storey building used cast-iron brackets to form corrugated iron arcade-type shading and is important in that it reflects the typology of the majority of the buildings of its time, allowing a particularly wide pavement with a shaded transitional space onto which the buildings activities spill.

It is proposed that built fabric addressing these buildings be sensitive to the low scale of these buildings, and recommended that as part of this intervention the two buildings be restored.

Avenida Zedequias Manganhela Arcading

This street, to the north of the market is important in terms of market function. It is the predominant market street leading between the Central Market and the *chappa* (mini-bus taxi) rank in *Ave. Guerra Popular*. It is proposed that this street be made friendly to pedestrians between *Ave. Guerra Popular* and



Illus. 80: Ave Zedequias Manganhela shadeing (E Willeumier)



Illus. 81: Rua do Mesquita Mosque, Maputo (author)



Illus. 82: Location of Rua do Mesquita Mosque (author)

the Botanical Gardens at an Urban Framework level. This is in an effort to create a direct link between these two points reinforcing pedestrian movement past the market. It is further proposed that vending activities be allowed and regulated in this area, linking the street markets to the north to the central market, and extending the market to meet the public transport as part of a greater 'informal economy strategy'. It is further proposed that due to the importance of shade to the vending in these areas that all new buildings on this section of the street should be required to have an arcaded street edge to allow for this.

Rua do Mesquita Mosque

This religious building is significant in the role that it plays in the flow of time in the Baixa, devotees are called to prayer at regular set times from the minaret of this building. This has a significant impact on the daily experience of the Baixa,

and of the Central Market, with a large proportion of market activities being halted for Friday prayers. Functions such as the pubs and clubs of *Rua do Bagomoyo* come to an abrupt end and are silent shortly before the morning call to prayers is sounded from the mosque.

Although this building falls within the zone of heritage protected buildings, it is recommended that the function of this building receive special protection, and that sight-lines to the minaret are protected along the length of *Rua do Mesquita* to the north and south of the mosque. This protection of sight-line has an effect on the proposed market site, since *Rua do Mesquita* crosses the site to meet with *Ave. Zedequias Manganhela*.

Original Mercado Central de Maputo Building

The Existing Market Building

The original Central Market building was built on reclaimed land in 1901, shortly after the completion of the Lourenço Marques (Maputo) to Johannesburg railway and first phase of swamp reclamation. Until the 1960s when the BIM building was built, this was the only building on the city block that it sits on, and it is likely that this block functioned as an extended market square. Currently, only the walled area immediately



Illus. 84: Historic photo, Maputo Central Market



Illus. 83: Market Hall collage, Maputo Central Market (author)



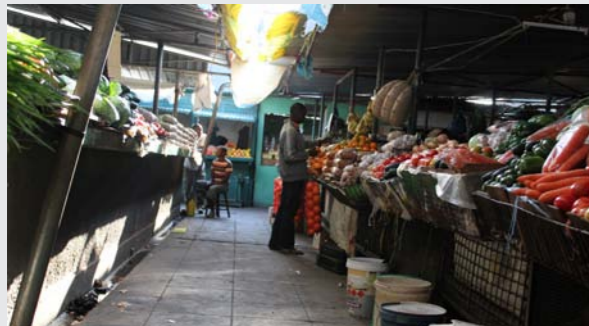
Illus. 86: Historic photo, Ave 25 de Setembro street facade, Maputo Central Market

behind the building forms part of the formal market.

The Existing Market: Heritage

The *Mercado Central* building has formed an important part of the enterprising culture present in the Maputo Baixa. It is perhaps the oldest continuously operating commercial institution in the historic Baixa area, with the nearest competitor being the Minerva Bookstore in Rua Consiglieri Pedrosso having been founded in 1910. No other institutions older than 100 years were found in the area during 2010 field research (Author, et al, 2010). The built fabric and function of the *Mercado Central* building are therefore significant in that they show the longevity and tenacity of the local enterprising spirit.

It is therefore proposed that in accordance with the recommendations of the *Australia ICOMOS Charter for the Conservation of Places of Cultural Significance* (Burra Charter), that the market function of the existing *Mercado Central* building be protected, and that the fabric of should be restored (International Council on Monuments and Sites (ICOMOS), 1999). The restoration should be to water-tight state, with all fire and water damage repaired to match the original specifications. During the restoration, additions, alterations, and customization that facilitate enterprise should not be removed; this includes the localised raising of internal floor levels as a strategy to protect goods from water damage during flooding. A management plan should also be drawn up in order to ensure the continued functioning of this space as a market, and to ensure continued maintenance consistent with the restoration.



Illus. 87: Market stalls in the Market Square behind the historic Maputo Central Market Building (author)



Illus. 85: Ave 25 de Setembro Street facade, Maputo Central Market, Maputo

This building is currently specially protected in Municipal and Mozambican legislation, requiring permission on a ministerial level before alterations or demolitions can take place. This is appropriate considering the significance of the building as a symbol of the initial generative forces and character of the City of Maputo, and a tribute to the entrepreneurial spirit that has driven the growth of the city. It is proposed that this building be restored.

The Existing Market: Tourism

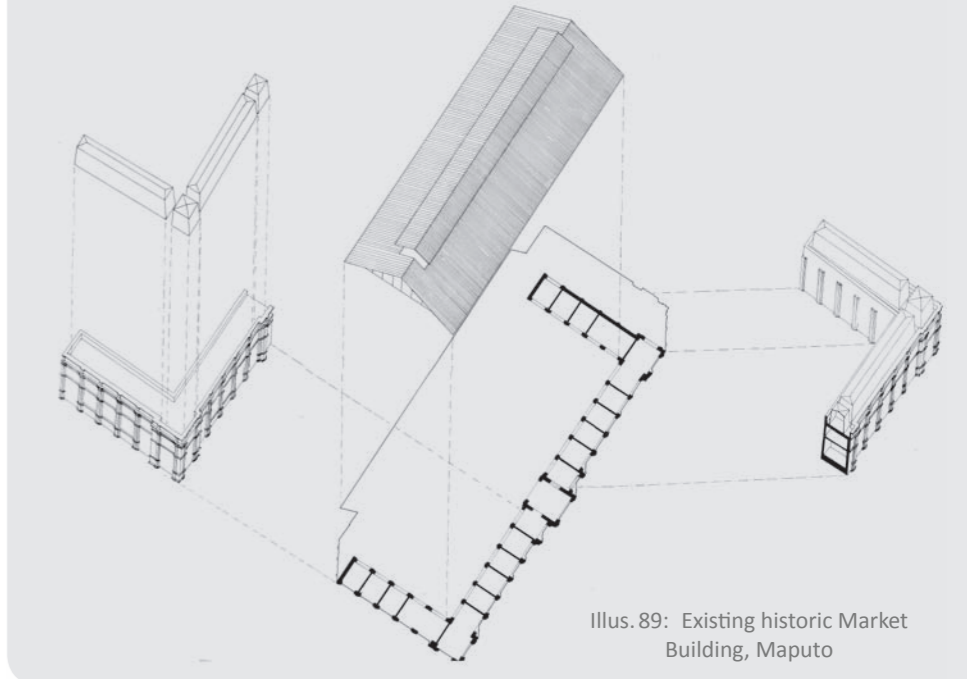
This building is also an important tourist destination, but this should not be a primary reason for its protection, since “In most cases the aesthetic meaning is the only meaning it needs...” in order to fulfil the tourists requirements (Bauman, 1993: 241). The facades and functional romanticism of the building are therefore important to tourism in Maputo.

It is therefore proposed that enough open space should be left in front of this building (Ave. 25 Setembro side) to allow for the viewing of the full front facade, and that changes may be made to the building provided that they optimise its operation and do not puncture the front facade.

Of much greater significance to an architectural intervention involving this building is the soft intangible fabric of the functioning and social organisation of the market.

The Existing Market: The Customer

The average customer at the market arrives at the market via all of the available transport methods in the Baixa (Train, Bus, Car, Chappa Mini-bus, Tuk-tuk, by foot, etc.). These are should be integrated where possible into the market. The shopping experience should also occur in a clean, shaded, comfortable environment, where the customer is at their leisure to browse through goods. Corridors should therefore be wide enough to accommodate the traffic, yet narrow enough to showcase goods. Spaces should be shaded, with resting and sitting areas, and surfaces should be smooth and regular.



Illus. 89: Existing historic Market Building, Maputo



Illus. 88: Flooding, Ave 25 de Setembro, in front of Maputo Central Market



Illus. 90: Fish Vendor, Maputo Central Market (J Casson)

The Existing Market Square

The walled and locking market square behind the market building is significant in the way that it has developed. Table stalls in this area are generally rented from the municipality on a four month lease, but some of the larger enclosed stalls are owned on a 99 year lease, the highest level of land ownership in Mozambique. This area has developed ad-hoc, as the market expanded, and the grain of the layout reflects movement patterns of people to and from important parts of the market. The fabric of the stalls in this square are mostly self-built, apart from a few areas of market tables, which have oversailing roofs provided. Each of these market stalls responds to the owners unique requirements and preferences.

Topography & Flooding

The physical topography of the site is fairly unusual. The site is located on what was a mangrove swamp surrounding the original trading island in what was then Delagoa Bay (Maputo Bay). The section of this that the market and its immediate surrounds are located on, was reclaimed before 1900 with fill probably brought in by rail during the construction of the railway.

This means that the site is almost perfectly flat. In a site survey by the author it was found that there is a 200mm fall over the 120 meters between Ave 25 de Setembro (on the south) and Ave Zedequias Manganhela (on the north), with a similar fall over the 200 meter width of the site.

This flatness does however, cause some problems, with basins formed at most intersections along Ave 25 de Setembro, this street is the epicentre of the flooding problem in the Baixa. A system of open surface drainage channels that allow for the fast drainage of this flood water has been proposed, and it is assumed that this will be effective in draining this area.

Investigation has showed that established stalls within the market are often raised 600 - 800mm above the surrounding level, as a flood defence. It may therefore be appropriate to raise certain levels of the market to promote drainage, and possibly as a flood defence.

Functioning of the Maputo Central Market

Functional Health

The functional health of the Maputo Central Municipal Market is good. It is an autonomous unit which runs fairly smoothly, and is regulated by a dedicated police force. This fabric, both built and un-built should therefore not be adversely affected by the new additions to this market, but rather, emulate it.

Market Sectors

The intangible structure of the market is very important to the healthy functioning of the market as demonstrated in the previous precedent studies. The Maputo Central Market underlying intangible structure, is a system where vendors form into groups to protect common interests. These may be small groups of two or three businesspeople working in syndicate, co-operatives, buying-groups, or larger groupings on sectorial lines. These groupings can be mutually beneficial through the ability of to buy larger volumes, draw on a larger knowledge and experience base, and create a known supply location and larger stock range; and consequently a larger customer draw.

As demonstrated by the Makola Market in Accra, Ghana, and by the Warwick Junction Markets in Durban, the successful facilitation of these sectors into new interventions is important.



Illus. 91: Box & Rope Market Cnr. Aves. 25 de Setembro & Filipe Samuel Magaia (author)



Illus. 92: Shoe sales (author)



Illus. 93: Curio vending at market entrance (J Casson)

Existing sectors within the Maputo Market currently operating inside the formal Market space and on the street pavements include:

- Alcohol
 - Bulk alcohol; Loose alcohol
- Beauty Products
 - Hair pieces & Hair products; Cologne & Perfume; Nail varnishes, make-up, etc.
- Boxes & Ropes
- Cage birds
- Car washing
- Clothing
 - Bags; Shoes & Cobblers; Clothing (cloth/*capulanas*, & clothing from piles, tables, or hangers); Seamstress & tailors
- Curios & Souvenirs
- Entertainment (foozball, board games, gambling)
- Food
 - Prepared on site; Prepackaged or precooked food, cold drinks & chilled beer
- Fresh Produce
 - Fish; Crustaceans & Shell-fish; Vegetables, Herbs, & Tubers; Fruit; Red Meat
- Household
 - General household goods & Home supplies; Household Appliances
- Mobile vendors
 - Snacks & Cigarettes; Miscellaneous; Nail-polish
- Music & DVDs
- Storage
- *Tshovas* (push-cart operators)
 - Fresh Fruit & Vegetables; Goods movement services
- Water
 - Iced drinking water

The alignment of vendors in each sector into certain areas is voluntary, and sometimes several pockets of vendors from a single sector are found in different areas, while some vendors choose to work alone. Each of the above sectors has unique requirements, with each sectors' sub-sectors having its own more specialised requirements, and each specific vendor having their own spatial requirements and preferences.

Anchor Sector

Each of these vending groupings, or sectors, exerts a certain draw on customers, in a similar manner that shops in a formal shopping centre exert a draw. In the Maputo Central Market, the primary sector is the Fresh Produce Sector, which specialises in fresh fruit, vegetables, herbs, nuts, and seafood. This sector is housed at the core of the existing market building and market square, and acts as an anchor sector, being the major attraction to potential customers, drawing them across smaller sectors and market stalls.



Illus. 97: Mobile vendor - Maputo (J Casson)

Illus. 94: Level 2 vendors - Maputo (J Casson)



Illus. 96: Level 3 vendors - Durban (author)



Illus. 95: Level 4 vendors - Maputo (author)



Illus. 98: Level 5 vendor - Durban (author)



Illus. 99: Level 6 vendor - Durban (M Teesen)

Vending Levels

There are also within these sectors different layers of vending, with some sectors predominantly at a certain level, and vendors choose to align themselves into various layers. In Maputo these can be roughly divided into the following groups:

1. Mobile Vendors
 - selling small quantities of goods by foot or *tshova* over a large area
 - sometimes co-operating with, or employed by formal shop owners
2. Street Vendors,
 - selling goods displayed on a mat on the pavement,
 - often in shaded arcades,
 - sometimes semi-mobile
 - daily set-up
3. Street Vendors with furniture,
 - selling goods often displayed on tables, or other less mobile furniture
 - often with an umbrella for shade when none is provided
 - daily set-up
4. Table Market vendors
 - selling from provided fixed furniture for which they pay rent
 - shade is provided
 - remote water and toilet facilities are provided
 - goods are left on the open tables overnight within a secured market space
5. Stall Market vendors
 - sales stands which are rented or owned on 99 year lease
 - remote water and toilet facilities are provided
 - stalls lock at night
6. Small shops
 - small shops with doors which customers pass through
 - rented or owned on 99 year lease
 - remote water and toilet facilities are provided
 - electricity

Many of the vendors operating at the various levels do so permanently, with some vendors having been found to have occupied the same spot for over a decade.

It is proposed that the architectural intervention should facilitate all of the above levels of trade.

Vending Against a Wall

In many cases vendors in the Baixa and around the market, where observed to position themselves with their backs against something, a wall building, hedge, fence, or open lot. This is probably because this is the side of least, or no traffic, and allows a maximum goods exposure.

Operating Hours

Unlike many other markets the Maputo Central Market only reaches full trade capacity at about 09h00 during week days, with core market activities ending just after sundown after customer levels drop. The rationale for this is that many of the street vendors begin the day selling in more lucrative locations where the morning traffic is greater, or buying stock. They arrive at their regular spots in and around the market at about 09h00 when customers begin to visit the Central Market. Many of the goods sold at the Central Market and surrounds are only bought by customers on the return trip to their houses in the afternoon or evening.

A large proportion of stalls close for Friday Prayers at the Mosque. The market also has reduced operating hours on Saturdays and is closed on Sundays, but many of the vendors, particularly those selling curios, cloth, or alcohol relocate to different sales locations over this time.

It is proposed that all facilities allow for trade after dark, within the market and in the surrounding streets, while night time storage facilities for street traders is also provided.



Illus. 100: Shading in the existing market square (J Casson)



Illus. 101: Vendors in shaded arcade (J Casson)

Shading

Shading is very important to market functions in Maputo due to the tropical climate. Vendors almost always sell from a shaded area, to the extent that shade almost becomes a spatial defining element. These shading elements are often street arcades, but also include trees, umbrellas and light roofing structures.



Illus. 103: Lettuce delivery (J Casson)

Delivery of Goods

Fresh produce such as fruit and vegetables is delivered to the market in bulk, by small open trucks which arrive at any time of the day. Vendors know when the truck will arrive and leave their stalls to buy produce. Other produce such as mangoes are transported by small scale farmers by *chappa* or other public transport to the market where they are sold. Fish, crustaceans, and shellfish are bought directly from artisan fishermen at the fish harbour, then transported to the market. Clothing and other products are often bought in bulk from importers locally, then sold in smaller quantities.

Vendors often organise themselves into co-operatives which buy larger bulk quantities which they divide among several vendors to sell.

The Tshovas (Push-Carts)

Often the bulk purchases, existing stock, or daily vending equipment, needs to be moved from their point of purchase or storage to their point of sale. This is often done by the *tshova* (push-cart), the operators of these move large amounts of goods throughout the market and often over large distances on behalf of their customers. These *tshovas* form an important sector of the market and are essential to the operation of the market.

It is proposed that all market areas be designed to be accessible to *tshovas* (push-carts) and that an area be dedicated for the receiving of bulk goods from which distribution takes place.



Illus. 102: Maputo - Tshova Push-Cart (J Casson)



Illus. 104: Market Push-Carts & Barrows. Left to Right: Kampala (K Bakker), Lamu (K Bakker), Bamako - Mali (K Bakker), Stone Town - Zanzibar (K Bakker), Stone Town - Zanzibar (K Bakker), Xindao (K Bakker)

Production

Many of the micro-enterprises in the market are based on the principle of 'one-step-further' production. Goods sold in bulk are often broken up 'one-step-further' to allow customers to buy single products; cloth can be bought by the meter instead of in 100 meter rolls, etc. This means that many business people in the market are often also occupied with production, refinement, preparation or packaging of goods. Seamstresses sew dresses, women cook chicken, and cashew-nut sales people spice their produce.

Enforcement & Security

The Central Market also includes an enforcement sector of dedicated Municipal security personnel, who are solely responsible for market functions. Street vending is technically illegal in Mozambique, but this is only enforced in the immediate surrounds of the walled Central Market space, in order to protect the business of rent paying vendors within the market area.

It is proposed that the official market is extended into the street, past the boundaries of dedicated market spaces in a similar manner to that used at Warwick Junction. That is that vending spots be demarcated in the streets and vendors who choose to sell in the streets can formally rent these spots. In this way these vendors are legitimised as part of the market. They would then contribute to, and be entitled to access facilities such as water and toilets. Street vendors can then enjoy the security of tenure enjoyed by vendors within the market, and conduct their business in an environment of greater security.

The Importance of the Intangible

At first glimpse the market seems to be a chaotic mass of individual vendors, but analysis shows a clear, but highly complex social structure and pattern of use, nurtured and built up over time. This intangible fabric is perhaps more important to the functioning of the market than the build fabric, and care must be taken not to damage this intangible market system. The complexity of this system is also staggering, and considering the stall requirements for various vending levels for different sectors, sub-sectors, and the varying individual experience and vending expertise, becomes a highly intricate task. Spaces in these circumstances become spaces of facilitation rather than of prescriptive spaces.