7 | DESIGN CONCEPT & INFORMANTS

7.1 | CONCEPT: RESPONSE TO THEORY

7.1.1 | HOW CAN THE INFORMAL INFORM DEVELOPMENT

Where informality is so often seen as a mere strategy for survival, it in fact has the potential of prompting the path for development because it informs and alludes to the needs and opportunities of a place as well as to spatial appropriateness (Anderson & Jenkins, 2011).

This unconventional and informal approach to 'architecture' holds the very solutions to the shortcomings of formal development (Rudofsky, 1964) as it alludes towards a new 'vernacular' architecture that is able to define identity and characteristic of a place (by responding to its needs and opportunities)?

Anderson and Jenkins suggest that in all formal elements there is a level of informality that cannot be avoided. Formal and informal are not separate aspects of the environment, rather they co-exist in complex systems of interdependency (Anderson & Jenkins, 2001). The formal should not try to eradicate the informal but rather it should facilitate it. The informal needs to be considered as an inevitable and vital component of the formal by being aknowledged as significant informant in shaping the environment (Tovivich, 2009).

The activities on site range across a spectrum from formal to informal. The potency of the architecture therefore lies in understanding functionally and spatially successful examples in the existing urban conditions and how these prompt design and inform a new architectural language. The power of the architecture lies in allowing activities to latch onto and adapt structures according to their specific current needs.

Where formality remains static, informality maintains a high degree of self organisation.

Successful space has been defined by the informal in certain ways through adaptation and these examples of adaptability need to inform an appropriate architectural approach and the degree to which architectural intervention can facilitate development.
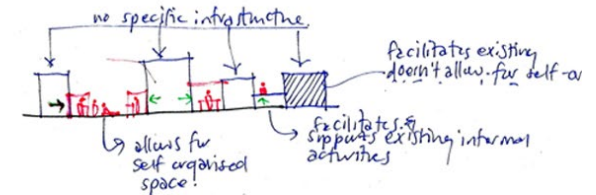

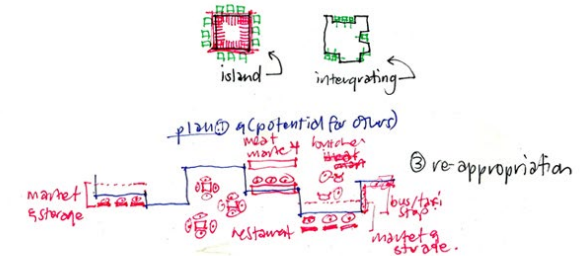*Figure 7.1. Informality attaches onto existing formality (Author, 2015)*

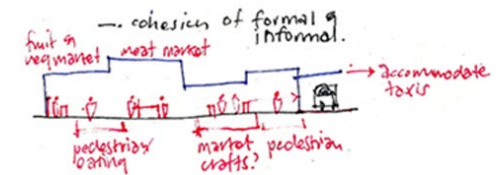*Figure 7.2. Formal development that facilitates informality (Author, 2015)*

Figure 7.3. Structural shell allows for informal self-organisation (Author, 2015)

7.1.2 | SELF-ORGANISATION: "SHADOW ARCHITECTURE"

The role of the architect is defined as follows: PEAS: Provide, Enable, Adapt, and Sustain Hamdi (2010).

Informal activity driven by socio-economic opportunities has resulted in numerous unconventional spatial solutions. Where the formal has not satisfied the informal, the informal has adapted the existing condition accordingly. Informality has shown an impressive ability to be adaptable and in doing so *"has solved the spatial shortcomings in the formal environment"* (Rudofsky, 1964). This adaptable, self – organising architecture has given rise to a new vernacular architecture which as able to respond quickly to environmental, social, economic, and physical change.

"A city however perfect in its initial shape will never be complete, never at rest" (Kostof, 1999: pp13).
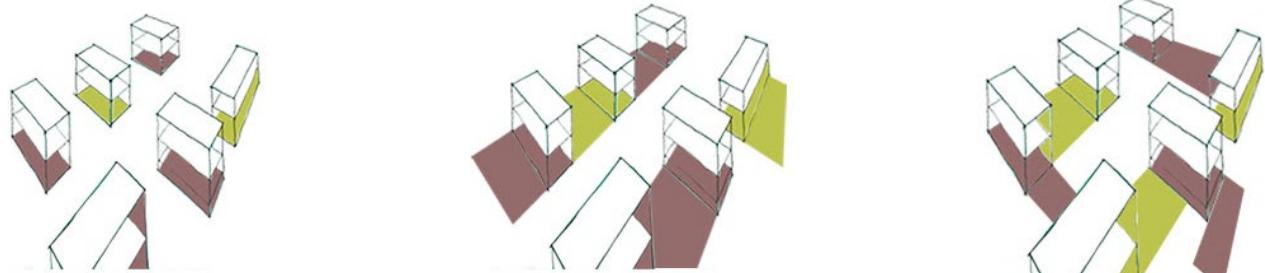
Buildings are often designed with a final product in mind. The success of the building, however can only truly be measured when the building is occupied and adaptations and re-appropriations of space take place (Mills, 2012).

It is therefore imperative for the architectural design intervention to leave room for a degree of self-organisation to enable adaptablitity.

Figure 7.4. Loose fit, fine grain allows for self-organisation (Author 2015)

Figure 7.5. Existing simple roof structure allowing self-organisation. (Author, 2015)
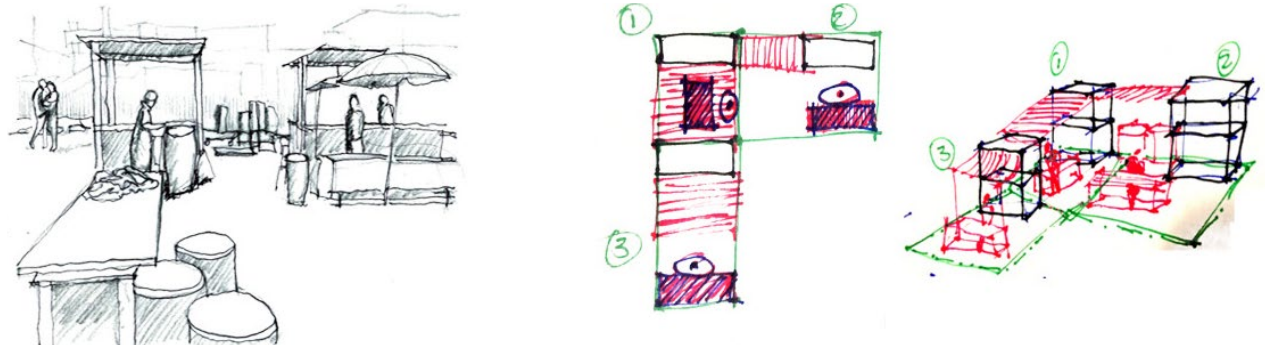
Figure 7.6. Re-appropriation of existing structures through self-organisation (Author 2015)

7.1.3 | REVEAL & CONCEAL

The programme consists of activities that should range in physical and visual accessibility and therefore the architecture aims to reveal or conceal activities accordingly. The bovine butchery, for instance, is not an activity that the user should involuntarily be exposed to and therefore the architecture will aim to conceal it while still acknowledging the importance of it. The informal restaurant space, on the other hand, should be revealed with the intention of encouraging social interaction by all users. The degree to which an activity is revealled or concealled is determined by the architecture and will vary according to the requirements of each activity.

The site also deals with different speeds of pedestrian movement throughout the day. In the morning the pedestrian movement from north to south through the site is faster than the reverse movement in the afternoon. Therefore the design and architecture will reveal the activities that support the faster pedestrian movement on the path out in the mornings, and reveal the activities that require slower movement in the afternoons. The architecture supports the needs of each type of activity and their economic opportunity within the programme.

"A tangible method implies an intangible message where layering of thresholds is applied to announce the privacy level of space". Newman (1973) suggests using a series of spatial territories that provide subtle thresholds to private spaces. Thresholds have the ability to reveal and conceal various elements of an activity. Thick, robust, solid structure vs. transparent, loose, adaptable, flexible and self organising structure.

Degrees of revealing and concealing will be explored through different levels of sensory exposure:
1. Physical [feel]
2. Visual [see]
3. Auditory [hear]
4. Olfactory [smell]
5. Gustatory [taste]

The implementation of this concept will be achieved through:
- appropriate material choice
- transparent vs. opaque.
- the method in which the materials are constructed.
- alluding to a certain way in which people move through the site.

Deciding what elements, activities and programmes should be revealed and concealed will determine the extend to which the user will be drawn into the matrix of layered space and the level of exposure the user experiences of the relavtive activity. These exposures refer to both human and non-human factors. Softening certain thresholds creates unexpected social interactions in spaces where interaction may never have occured.
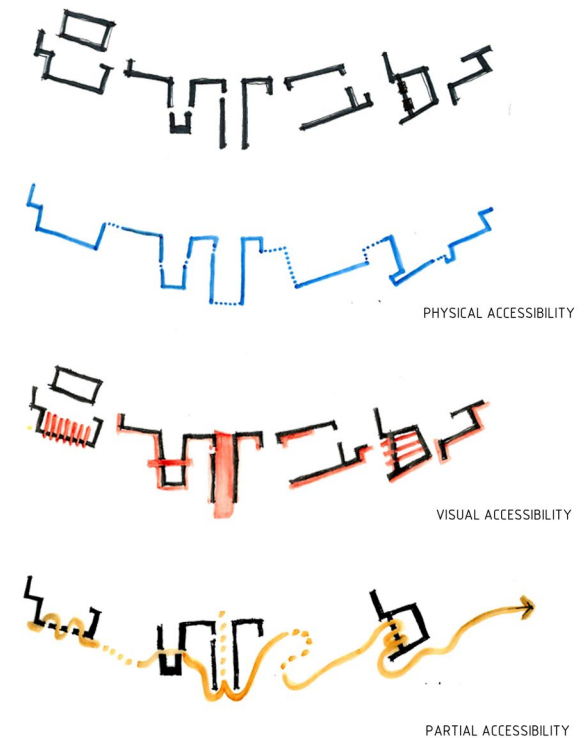

PHYSICAL ACCESSIBILITY

VISUAL ACCESSIBILITY

PARTIAL ACCESSIBILITY

Figure 7.7. Reveal and conceal concept (Author 2015)

BUTCHER

RESTAURANT

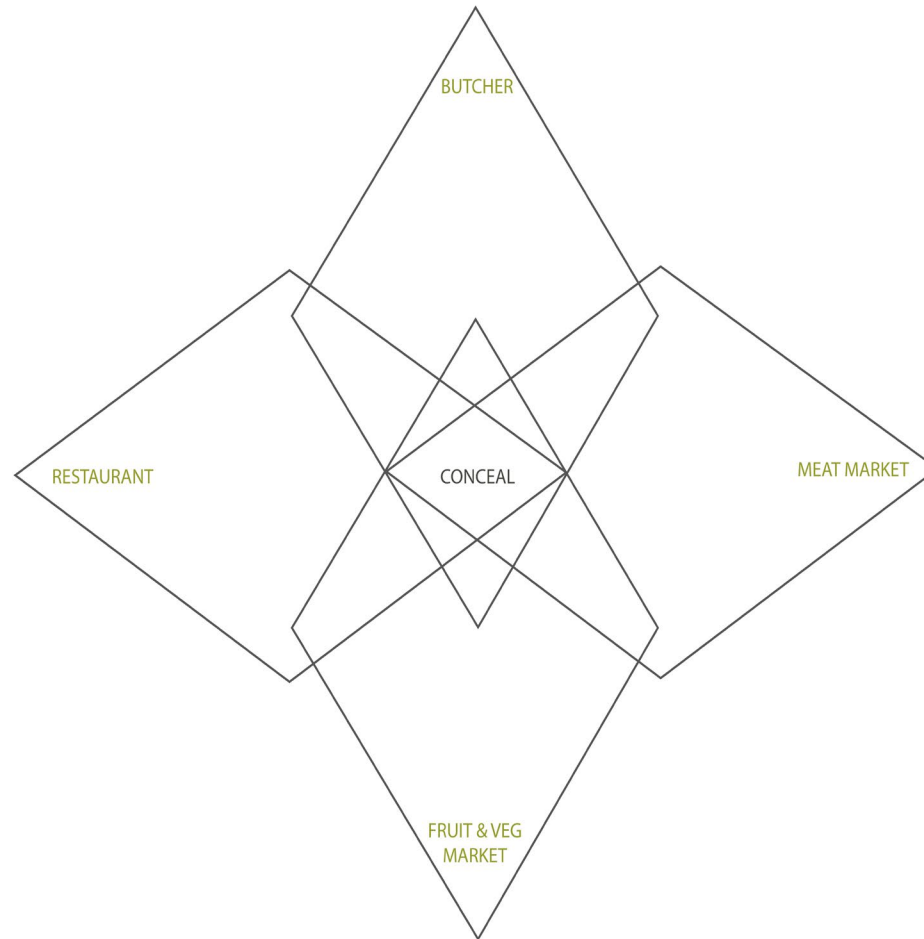CONCEAL

MEAT MARKET

FRUIT & VEG
MARKET

*Figure 7.8. Enclosure & exposure
(Author 2015)*

7.2 | PROGRAMME INFORMED

7.2.1 | ACTIVITIES INFORM PROGRAMME

"First life, then spaces, then buildings – the other way around never works" (Gehl, 2012)

Figure 7.9. Bovine butchery (Author 2015)

7.2.2 | PROGRAMMATIC REQUIREMENTS

7.1.2.1 | TABLE 1: SERVICE & INFRASTRUCTURAL NEEDS:
Structure, storage, water, ventilation, natural light, gas, fire, drainage, waste removal, electricity, security (lock up facilities)

Figure 7.10. Service & infrastructural needs (Author 2015)

7.1.2.2 | TABLE 2: SPATIAL REQUIREMENTS:
Spatial requirements: large or small volume, public or private, permeable or solid thresholds, fixed or flexible.

Figure 7.11. Spatial requirements (Author 2015)

7.2.3 | PROGRAMMATIC FLOW

This examines where programmes sit in relation to each other.
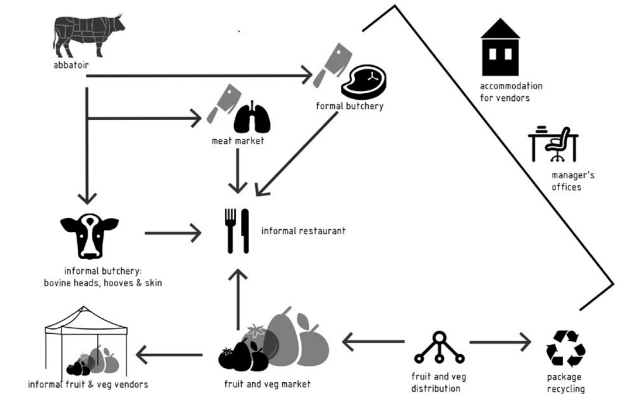

Figure 7.12. Programmatic flow (Author 2015)

CONCLUSION

Design informants are made up of programmatic informants as well as space making informants. Observation of how space is made will inform an appropriate architectural language with regards to what should be latched onto, what should be facilitated and improved and what should be replaced.

7.3 | SITE INFORMANTS

7.3.1 | FINE GRAIN, LARGE GRAIN

Due to the site's location the building will have to respond appropriately in integrating the fine grain of Marabastad and the large grain of Marabastad and the city. With the consideration that fine grain increases accessibility and large grain decreases legibility, programmes can respond according to the level of accessibility required for that programme.
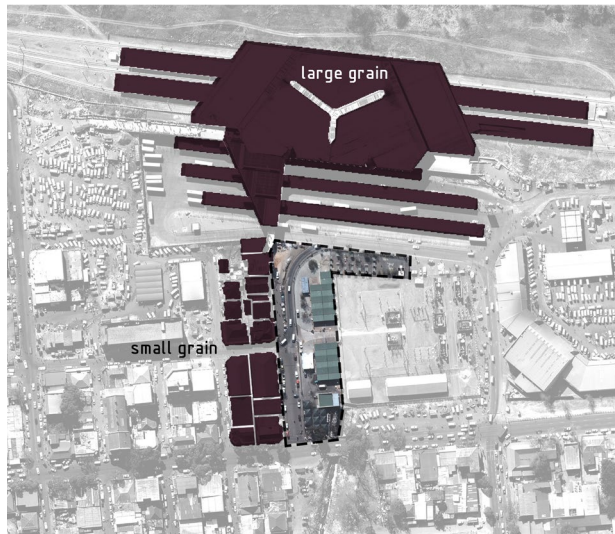
7.3.2 | STEREOTOMIC TO TECTONIC

There is a transition from stereotomic to tectonic on the site. The design intervention needs to mediate between the small scale stereotomic condition of Marabastad's fine grain and the large scale stereotomic condition of The Belle Ombre to the large scale tectonic condition of the power sub-station. The architectural language needs to respond to these different conditions and find solutions in integrating the three conditions successfully.
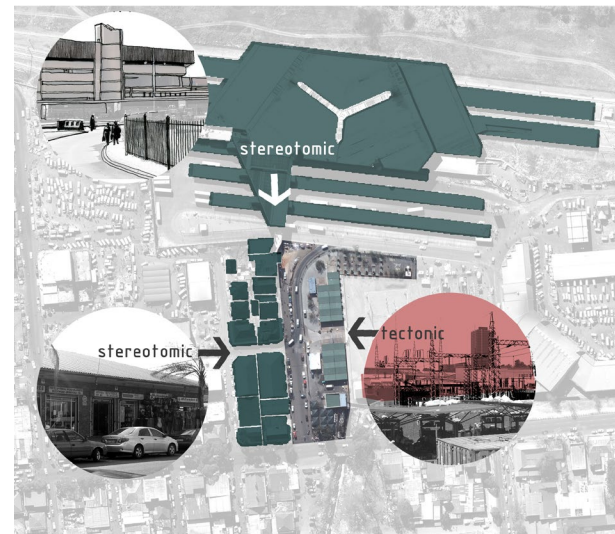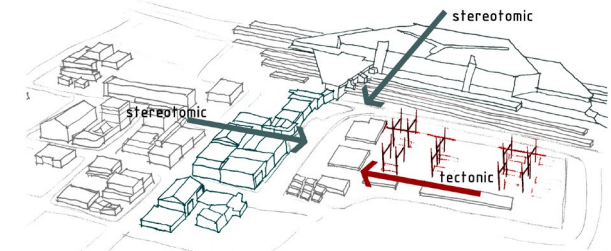

Figure 7.15. Transition from stereotomic to tectnic (Author 2015)

7.3.3 | SMALL SCALE, LARGE SCALE

The architectural design intervention will have to mediate between the small scale of Marabastad and the large scale of the Belle Ombre Station, the power sub-station and the city.
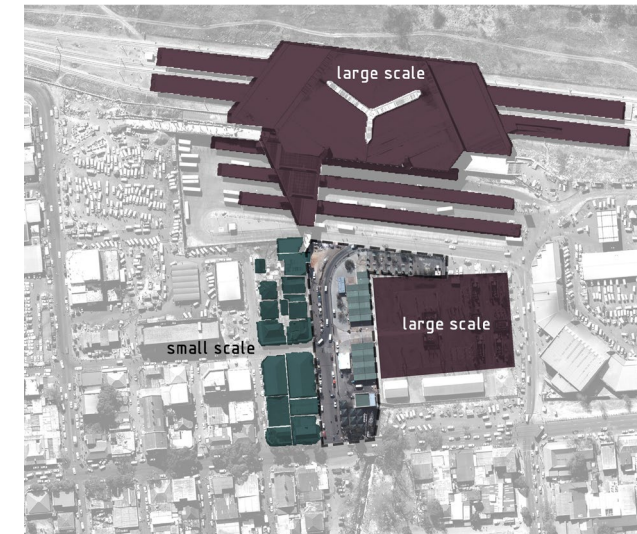

Figure 7.13. Small grain & large grain (Author 2015)

Figure 7.14. Stereotomic & tectonic (Author 2015)

Figure 7.16. Small scale & large scale (Author 2015)

7.3.4 | SITE CONDITIONS

7.3.4.1 ORIENTATION:
Buildings should face North to optimise natural sunlight, however, the site's longest axis is orientated along the north-south axis.

Habitable spaces should maximise on natural sunlight by facing north. Programmes that deal with raw meat require cooler temperatures and should therefore avoid western orientation. Buildings that optimise on northern light can also create southern shade.

7.3.4.2 | SLOPE:
Site slope defines where programmes sit in terms of accessibility.

Water run-off on-site is an important condsideration when considering placement of programmes onsite. Grey rainwater run-off should be seperated from black(bloody) water.
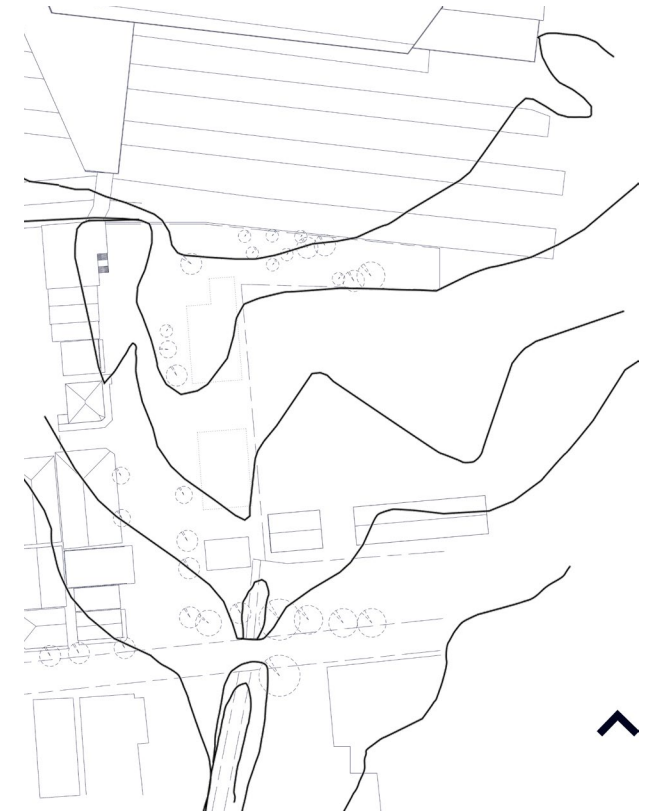

Figure 7.17. Northern orientation (Author 2015)

Figure 7.18. Site slope (Author 2015)

7.3.5 | MOVEMENT:

VEHICULAR: Thresholds and connections to Boom and 11th Streets

PEDESTRIAN: Pedestrian movement through the site: faster and slower public spaces. Current movement of pedestrians, predicted and intended future movement.
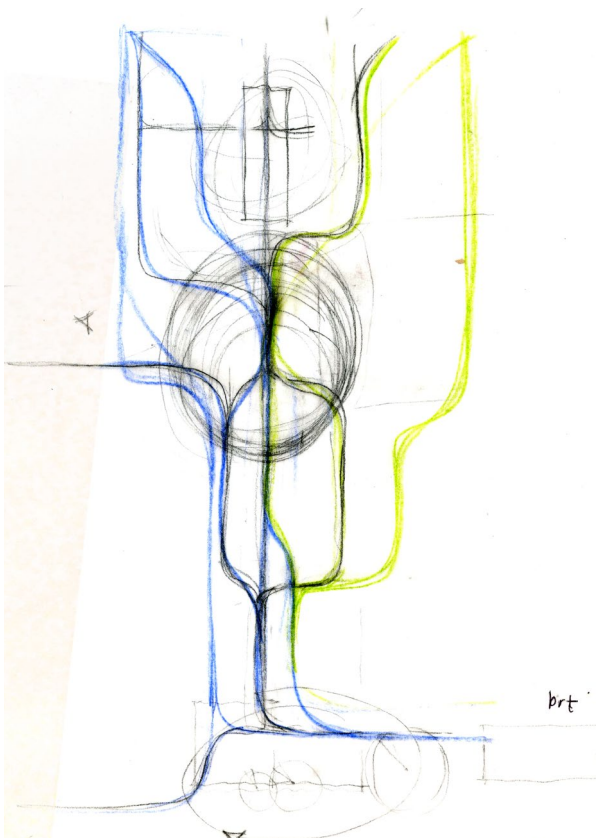

Figure 7.19. Fast (blue) & slow (yellow) pedestrian movemnet (Author 2015)

7.3.6 | PRIVATE VS. PUBLIC

Programmes with more private functions are stuated further from

Figure 7.20. Accessibility: private vs. public programmes (Author 2015)

7.3.7 | EXISTING ARCHITECURAL HERITAGE FABRIC

Responding to existing heritage fabric in terms of architectural style, material use and spatial definition.

7.3.8 | FRAMEWORK

Connections within Urban Framework and to Marc Degenaar and Marie Oberholzer.