The problem
2 The problem

2.1 Problem statement:
Throughout the City of Tshwane and predominantly in the more economically unfavourable areas, discarded and sometimes growing mounds of waste can be seen. A characteristic prevalent of the society in which we live in, a society that is fast becoming dependent on the idea of disposability. It indicates that today, waste is becoming the social text on which a community’s logic or illogic can be assessed and analysed and a means through which we can identify the issues that plague that particular community.

2.2 Sub problems:

2.2.1 Sub problem 1
How does one disill the idea of recycling and limit it to specific types of waste and what makes these categories applicable within the Marabastad area, specifically the site chosen?

Building demolishing companies or building contractors have difficulty in dealing with building rubble on-site and needs to get it out of the way quickly and with least effort to take it to landfill sites. There is not enough time or floor space on building sites to sort the discarded building material into different material categories for recycling before removing it from site. Due to Marabastad’s slum-like nature, building companies and local people dump building rubble illegally on barren pieces of land in Marabastad to save themselves the trouble of driving to the landfill sites on the outskirts of the city. Locals in Marabastad however has started to see the potential of this illegal dumping problem as a chance to earn extra needed income by salvaging material that can still be used. Discarded bricks are cleaned from mortar and plaster and re-sold again to the public on pallets. Steel, metal and tin on the other hand are either collected and taken to depots for cash return or used for making artwork. Like the other informal trading in this area, this local recycling industry managed without any formal services and proper equipment.

To formalise these on site activities, would be to lose their essence: the informality and spontaneity of activities in the area. In an attempt to promote and enlarge these informal activities and to address the need for proper services and infrastructure of integrity, a building material recycling depot will be introduced. It will be located in the city context to be used by the building companies of the city and still provide a level of informality in order to enhance the local informal activities of Marabastad.

An image collage of existing buildings on the site
2.2.2 Sub problem 2

Why not use the idea of waste management [recycling] as way and means through which one can address some of the socio-cultural and economic issues in Marabastad?

Opportunities

- It is an ongoing process.
- The idea of recycling is currently being implemented on site and in and around Marabastad.
- As an economic activity, the cyclic repetition of events and or operations that predominantly govern recycling are not complex in their nature and would allow for even semi or unskilled persons to participate in this process.
- The cyclic nature of this process would imply a continued activity, that would then work as a formal structure from which small enterprises can start to base their growth, emergence and development.
- The nature of this process allows for it to be associated with other community based projects in primary areas such as health care, education and the arts. Giving a platform created flexibility, in the way that it can be used and adopted to suit the needs on the people within the community.
- Recycling is an activity that can encourage and promote the idea of “developmental facilitation”. Where the formality and rigidity of the rules that govern the chosen development strategy are not set with no real predictability. Allowing for this development to be appropriated by the same community within which it is being implemented.
- Sustainable urban growth emergence and development is contributed to with ideas that form part of the principles that govern recycling.
- Identity, respect and coherence are some of the effects that recycling can trigger within a community that carries this idea through into the activities that already exist within it.
- The short-term monetary benefits to the participants in the recycling process would also affect the economic situation within the community of Marabastad.

Drawbacks

- Resources.
- Facilitation in terms of systems that have to be put in place to ensure that recycling stay a viable economic activity.
- How does one incorporate the diverse varied socio-cultural and racial groupings into a system where together they can start to operate as a collective in an attempt to enhance the individual and his specific needs and problems?

A photograph of Eighth Street of the site
2.2.3 Sub problem 3

How does the idea of waste management [recycling] allow for the continuation of the informal activities already in place while at the same time providing a formal structure on which these informal activities can then play themselves out without adverse hindrance on their emergence and organic development?

Opportunities

- Different levels of formality/informality of the activities and their processes can be integrated within the formal structure to allow for mutual respect and insight in order to bring the community to a place of unity.
- To provide a formal structure or platform on an urban scale, accessible to informal activities, will secure the future of these activities once the whole of Marabastad develops further.
- The formal structure or platform created can adapt to different needs as the informal activities change, or change scope, to accommodate the emergence and organic development of the activities.
- Marabastad’s formal and informal activities should aspire to a symbiotic rather than an adversarial relationship because they are interdependent.

- To provide integrated functions of a more formal level within the development in order to generate attraction of people and companies, ensuring an income to support the development. This will ensure that the development will obtain a sense of dignity and purpose within its context aiding the value of the informal activities.
- The process of recycling will always be part of the city. Once a culture of recycling is established within Marabastad, the need to recycle will become part of everyday life. This process of recycling will always have its different levels of formality ensuring the future of unskilled people to generate income with access to proper skills development within the centre.

Drawbacks

- The constraints of the site in terms of size to accommodate natural emergence and organic development of all the existing activities already on site.
- Although the locals are easily adaptable to new circumstances, due to the informal nature of their activities, how will they react towards a new development of a more integrated level of formality and informality within the Marabastad context?
2.3 Hypothesis:

"In the affairs of man there always appears to be a need for at least two things simultaneously, which in the face of it seem to be incompatible and to exclude one another. We always need both freedom and order." (SCHUMACHER:2007:94) Order brought about by the use, reuse and manipulation of the available resources in terms of manpower, activities and ideas to allow for a platform that serves as the formal stage on which small and informal activities are allowed their freedom to emerge and develop. Borrowed from the school of thought that looks at emergence as the border between order and chaos. Where on the one hand one has structure, cohesiveness within and in between systems which give us order and stability, but on the other hand a spontaneity, adaptability and inherent ability to self-organise that allows the freedom for species, institutions and industries to evolve and survive based on experience, circumstance, status-quo and learning, empowering them within the communities that they emerge and survive within and pushing for their creativity, diversity and ability to respond to its needs. "This creativity and novelty comes forward when people's environment is disturbed and they are open for change. To begin with, there must be a certain openness, a willingness to be disturbed in order to set the process in motion; and there has to be an active network of communication [in order to] amplify the triggering event. The next stage is the point of instability, which may be experienced as tension, chaos or crisis. At this stage, the system may either break down or it may break through to a new stage of order, which is characterised by novelty". (CAPRA,F:2002)

Through novelty and creativity in response to change, emergence takes place. "New organisations form through emergence and this need to be designed. It is a cyclical, progressive and non-linear process. emerging exponentially" (HAMDAN:2006) The importance of the success lies within the relation between structures designed and those which are able to emerge. Human organisations always contain both designed and emergent structures. The designed structures are the formal structures of the organisation (city) the emergent structures are created by the organisations' informal networks and communities of practice. Designed structures provide stability. Emergent structures, on the other hand, provide novelty, creativity and flexibility. They are adaptive, capable of changing and evolving. The issue is not one of discarding designed structures in favour of emergent ones". (CAPRA,F:2002)

Rather the coexistence of both. This thesis attempts to put forward a platform on which both these ideals play themselves out without the one unconstruevably affecting the other. Finding that balance linking the structures designed and those that must emerge – not either/or. Through emergence new partnerships in the community are encouraged creating organisations that are connected to others from within its border to form a network from which they can all draw strength and together have an impact on their individual environments and those of the collective. Emergence enables people to develop skills, self-confidence, business experience and employability. These acts of association rebuild commitment to wider society and re-engage people as citizens strengthening the network and sense of community.

2.4 Delimitations:

- The recycling process will exclude the recycling of bio waste, garden refuse or any other organic waste.
- The training facility is not a public school.
- The public space in the development is not a taxi rank or formal market area.

2.5 Assumptions:

- This dissertation is based on and informed by the new Marabastad development proposal and that this brief will fit into the proposed upgrade of Marabastad.
- The proposed housing development according to the Marabastad framework will ensure that enough housing is provided to the locals working in Marabastad to want to live there.
- The Zion’s Church of Christ (ZCC) will stay a permanent programme on the existing site ensuring pedestrians movement across the site.
- The taxi-service yard will keep the existing activities on site regarding the mechanics in terms of tyre and exhaust replacement and fixing.
- Marabastad will develop to grow to a more urban scale ensuring an inflow of people apart from the commuters travelling daily.
- Marabastad will keep its sense of informal trading and activities.

2.6 Client profile

2.6.1 Non-placed based actors

- Council of the Municipality of Tshwane
- Department of Education

2.6.1 Placed based actors

- Council of the Zion's Church of Christ (hereafter referred to as the ZCC)
- The community
- Waste Group
- Building material removal companies