

CHAPTER

01

*[introduction]*

urban decay as a result of neglected infrastructure

.

*The chapter seeks to ground the project in a clear understanding of both the conceptual and practical issues that frame the dissertation. The site is briefly discussed and leads up to a series of research questions and dissertation intentions.*

.





---

*Formal Structures of the City*

---

# PROBLEM STATEMENT

This dissertation is guided by the overarching issue of urban decay as a result of a periphery condition. The intention is to use neglected infrastructure as a framework for a regenerative design, which is aimed at addressing the resilience of decaying inner-city fabric.

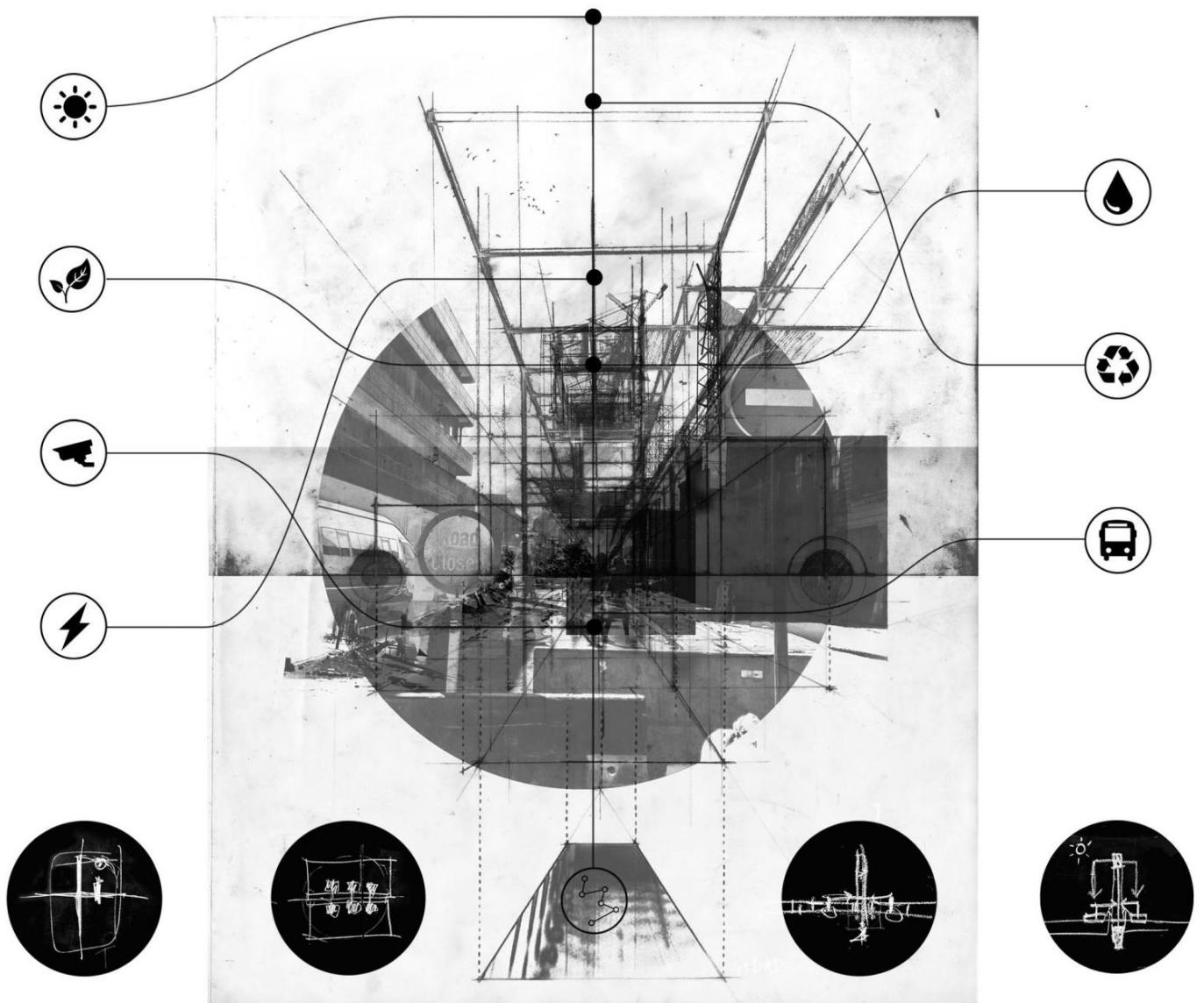


Figure 1.1 : Conceptual diagram of various infrastructural components to be contained within Urban [infra]Structure (Author, 2012).

## *[ general issue ]*

Today, urban decay is a common concern in cities. Resulting from a unique range of contributing factors, these parts of cities are generally non-contributive and are associated with degeneration not only of themselves but also of their context. This dual degeneration is highly visible in the specific block of Brown Street that this dissertation considers.

The city block of Brown Street is ideally located with close geographical and visual proximity to the Union Buildings. It also defines the large Soutpansberg gateway into the city and is a historical site associated with public assemblage. Since its association with crime in

the mid 00s, the block has become excluded from the urban structure of the city and left to decay. However, due to its latent infrastructural resource potential, harnessed by the proposed [infra]structure, the block of Brown Street will once again be included within the structure and workings of the city, positively contributing to its context, the city's propose framework, and toward the inevitable projected growth and development that Tshwane will experience in the near future.

Inner-city voids must be valued for what they can offer the city in a time of resource scarcity and environmental concerns.

## *[ urban issue ]*

The latent resource potential of the site offers opportunities for regeneration by enhancing existing site conditions to stimulate the creation of new social, economic and bio diverse infrastructures which can provide resources capable of meeting current and foreseeable demands of the immediate urban context.

Externally, the block is occupied by the city's marginal informal sector, creating a vibrant energy of commerce on the adjacent streets

which has, over time, stemmed from the presence of an informal transport HUB. However the inaccessible and hidden nature of the site has allowed the internal fabric to decay.

The intent of this dissertation on an urban level, is to design a solution which re-presents the site and establishes an awareness of infrastructures values and potentials in creating an urban environment conducive of re-investment and development.

## *[ architectural issue ]*

How can architecture address the degenerative nature of decaying inner city fabric and at the same time enable a process where the potential of existing infrastructure is understood and realized?

The ideal is to create a hybrid of architecture and infrastructure. By enhancing "existing systems and ways of knowing" (Woods, 2001: 13), one can re-establish a productive

environment where the collection and communication of resources create circumstances conducive to re-investment and development.

Awareness should also be raised on the latent potential of city infrastructure to not only sustain but also regenerate the surrounding area.

## *[ research question ]*

What research approaches can be utilized to determine the latent [infrastructural] potential of degenerative urban fabric in order to contribute to the resilience of these sites?

Is it possible to apply Regenerative principles to transform the site to that which mutually benefits its surrounding urban components?

Currently the urban fabric of Brown Street is disconnected from the proposed vision of the city of Tshwane 2055, a factor which primarily feeds the degeneration of the site. Therefore, can architecture, through spatial articulation, suggest the inclusion of Brown Street within the

proposed urban structure of the city to stimulate interaction between the informal and formal communities of the city?

The disconnected nature of Brown Street has resulted in a lack of the specific infrastructure necessary to promote its safe re-inhabitation. This begs the questions:

Can architecture be designed so as to include these neglected infrastructures and at the same time suggest regenerative possibilities of these infrastructures which will not only stimulate resilience of the site but also that Brown Street becomes regenerative in its context?

*[ dissertation question ]*

Can infrastructural architecture provide a spatial interface to not only transform the nature of Brown Street as an area of urban decay but also to illustrate the regenerative possibilities of such infrastructure?

Regeneration, in this context, is defined as an architectural approach not only concerned with re-formation of urban fabric but that within such process, the environment becomes an

equal stakeholder in the architecture. (definition should happen earlier)

Therefore, can a closed loop system be created where the processes relating to on-site industry and the natural environment be integrated into hybrid system where the product of the system is greater than the sum of its parts, having a positive existence?

*[ dissertation intention ]*

The intention of this dissertation is to serve as a illustrative documentation of an architecturally designed intervention. The project aims to unveil the latent potential of infrastructure in the process of regenerating decaying inner city fabric. Thus allowing infrastructure to contribute to the resilience and sustainability of the urban fabric of the city of Tshwane.

The initial goal is to identify the regenerative potential of the decaying urban fabric within the city of Tshwane. Theoretical principles of *Radical Reconstruction*, *Regeneration* and *Resilience* will be applied in order to reveal

potential from which ideal architecture can be designed. Site potential will be articulated by the architecture in order to create an interconnected closed loop infrastructural system. A system of neglected infrastructures which, architecturally designed, is articulated in such a way as to transform the visual concept of the site from one of degeneration to one of regeneration.

Visually the architecture intends to be informative, educating the viewers and users of the importance of architecture and regenerative infrastructure.

