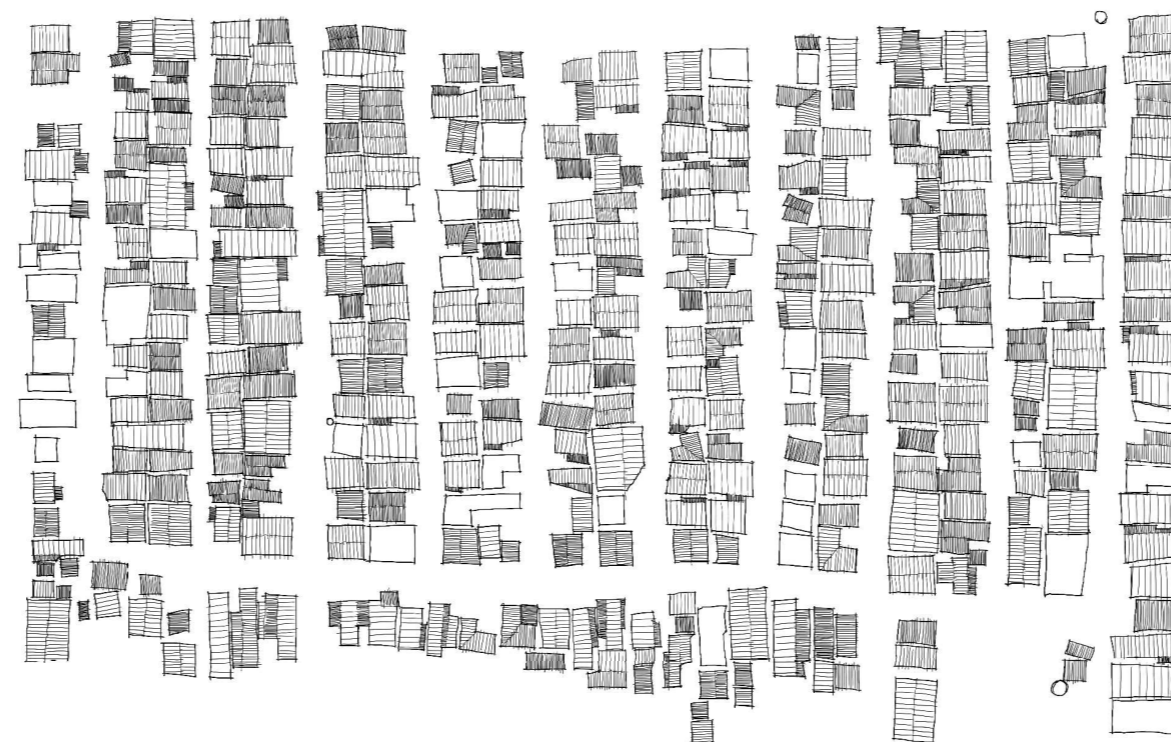


ANTICIPATED INFORMALITY

Nicholas Ramsey

The incremental development
of resilience in the marginalized
community of Plastic View



PROJECT SUMMARY

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Dissertation title	Anticipated informality: The incremental development of resilience in the marginalised community of Plastic View
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Study leader	Dr. Jan Hugo
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Year coordinator	Dr. Arthur Barker
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Client	Residents of Plastic View, Dept. of environment & agriculture management, Dept. of housing and human settlement, Private waste management sector
Theoretical premise	Urban resilience within informal settlements
Keywords	Resilience, informal settlement, Plastic View, infrastructure, adaptation, appropriation, vulnerability

DECLARATION

In accordance with regulation 4[e] of the general regulations [G.57] for dissertations and theses, I declare that this dissertation, which I hereby submit for the degree of Masters of Architecture (Professional) at the University of Pretoria, is my own work and has not previously been submitted by me for a degree at this or any other tertiary institution.

I further state that no part of my dissertation has already been, or is currently being, submitted for any such degree, diploma or other qualification.

I further declare that this dissertation is substantially my own work. Where reference is made to the works of other, the extent to which that work has been used is indicated and fully acknowledged in the text and list of references.

Nicholas Ramsey
2021

Submitted in partial fulfillment of the requirements for the degree of Master of Architecture (Professional) in the faculty of Engineering, Built Environment and Information Technology

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CHAPTER **00**

PREFACE

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ABSTRACT

The informal settlements of South Africa are commonly marginalised urban systems existing within larger formal urban landscapes. Due to their marginalisation, informal settlements often lack formal infrastructure, socio-economic opportunities and a sense of permanence, which in turn challenges their resilience. Focusing on the Plastic View informal settlement in Moreleta Park, the dissertation investigates architecture's ability to contribute towards the settlement's capacity to adapt or transform to desirable states when disturbed. The "safe-to-fail" system approach (Ahern 2011) is used to develop an architectural response that caters for continuous appropriation and adaptation by the local community. In order to understand and reinterpret Plastic View's innate socio-spatial organisation and construction

knowledge, a pattern language of the settlement is documented. This framework informs the design process from initial explorations through to technical and material resolution. The investigation into Plastic View's internal resilience and prevailing vulnerabilities leads to a multifunctional intervention along the settlement's emerging high street. The architecture addresses the settlement's critical infrastructural deficit, whilst proposing diverse responses to housing and public space demands. The various avenues discussed in the dissertation, including community engagement, transformative participation, incremental upgrading and anticipated settlement growth, collectively assist with the improvement of Plastic View's resilience and local living conditions.

GLOSSARY

Adaptive capacity	The extent to which a system can handle and respond to a shock after it occurs, either by avoiding shifting into an undesirable state or successfully shifting into an improved state (Walker & Salt 2012:213).	Sustainability	The state of a system in which its function and integrity can persist without the depletion of resources and ecological subsystems (Peres, du Plessis & Landman 2017:692).
Adaptive cycle	A framework that breaks down the continuous evolution of a social-ecological system into four phases of operation; rapid growth, conservation, release and reorganisation (Walker & Salt 2012:213).	Social-ecological system	Complex living structures comprising human beings and nature (Peres & du Plessis 2013:3).
High street	The communal hub of a neighbourhood (or settlement in this context) that fosters social interaction, pedestrian accessibility and small businesses, whilst often expressing the local identity of the community (Griffiths, Vaughan, Haklay and Jones 2008:1155).	Third space	The public area between the home and the workplace where people gather and interact (Oldenburg & Brissett 1982:269).
Open building	An economical, user-dependent approach to design and construction that separates the architecture into two levels; the 'support' level, consisting of the load-bearing structure; and the infill level, consisting of walls, services and fixtures (Habraken 1988:12).	Transformative participation	An approach to community engagement that recognises the imbalances of power and knowledge between architects (experts) and end-users (non-experts), and responds with transparency, inclusion and two-way knowledge sharing (Till 2005:4).
Resilience	The capacity of a system to maintain a quality of life and functional integrity in spite of disturbances, whether that is in a return to original condition or transformation to a new equilibrium (Peres, du Plessis & Landman 2017:692; Walker & Salt 2012:215).	Urban resilience	A branch of resilience that specifically addresses attributes of systems that make up cities, to improve the resilience of the city as a whole (Peres & du Plessis 2014:1).
		Vulnerability	The measure of a system's exposure, prevention and response capacity to cope with shocks and disturbances (Weichselgartner & Bertens 2000:6).