

School of Architecture & Planning
University of the Witwatersrand
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Urban Compounds:

Investigating aspects of rapid urbanisation and densification in Sub-Saharan
Africa and the effect on the physical morphology of selected suburbs in
Johannesburg

Kirsten Dörmann
Student Number 39758

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for the degree of Doctor of Philosophy.

Supervisor
Prof Paul Jenkins

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DECLARATION

I declare that this thesis is my own unaided work. It is being submitted to the Degree of Doctor of Philosophy at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination to any other University.

Signature

A handwritten signature in black ink, appearing to read 'Li Dörwald', followed by a period.

30th day of April 2024

ABSTRACT

This study examines the transformation of the South African version of the bungalow from a free-standing house into a courtyard form of building – seen as a bungalow ‘compound’ – due to the significant change in occupancy. It focuses on two lower-income inner-city neighbourhoods of Johannesburg, Yeoville and Rosettenville. Both were created at the beginning of the 20th century, on either side of the city’s mining belt. After the political changes in 1990, these neighbourhoods have been almost completely re-populated with immense socio-cultural changes – and intensely densified.

This radical change has, however, been kept hidden behind the boundary walls of the private properties. There has been little attention and very limited evidence concerning the alterations to the properties despite them being widespread. The research brings a new understanding of the ‘transformed house on the plot’ and its life forms as part of wider city-making processes. Although based on a typological approach to reading the change of the domestic spaces over time, this is analysed in-depth vis-à-vis social, economic, juridical, and political entanglements and highlights the need for transdisciplinary knowledge transfers.

The study examines the bungalow compounds through innovative design research, applied via a Case Study approach, to a particularly complex category of ‘as built’ documentation. It investigates the outcome as a form of re-description of a part of the transforming African city – rather than the standard sterile service instrument of spatial administration. In this context, the pattern book and the notion of type are revisited to develop an alternate catalogue of properties based on more than thirty detailed case studies.

Methodologically, the research considers the bungalow compound as an epistemic object that can manifest as a problem space across multiple themes, scales, and contexts. In doing so, the study addresses the misconception of architecture as a finished product and appropriates essential incompleteness as a device to locate relevant knowledge(s). It considers the inevitable lack of complete evidence as an opportunity to understand the documentation of these emerging dynamic ‘house worlds’ as readings of *what is* and *what could be*.

Meinen Eltern. They sent me into the world.

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The first credits go to the bungalow properties in Yeoville and Rosettenville and their people for sharing exclusive knowledges without asking for anything in return. They have been the most fascinating company to be in over the last few years. We owe them.

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Family. My mother, for reminding me of myself when I was about to forget. My sister, who might visit one day. My father. His patience and his curiosity. He taught me to see things that others don’t. This is in his memory. Always, Solam. He brought up ‘compounding’ the day we met. And Malwande. The promise he holds is a superpower.

GLOSSARY

As-Built – A key architectural instrument to document existing buildings. As-built drawings commonly show changes on-site to original construction plans using redline drawings. Measured drawings are prepared to represent the situation *as is*. Final record drawings “as-built” are typically prepared for submission to the council, incorporating the changes of the red line drawings.

Bungalow - A one storey separate or detached dwelling, usually with a verandah, generally designed for one household of family, more often than not as private property, placed on its own plot, often with a low angle pitched roof and slightly elevated from the ground. In South Africa it is also referred to as ‘Verandah House’, ‘Victorian and Edwardian Speculative House’, or ‘Cottage’, depending on size and positionality of the viewer.

Bungalow Compound – This term is coined in the study to refer, in the broadest sense, to communal accommodation in a transformed and re-used bungalow, mostly with additional structures – which can be seen as a form of “co-housing.” In all arrangements, the common denominator is the private yard as a shared communal space.

Courtyard House – Building forms organised around an open space (also called courtyard or ‘void’), an integral and organising dwelling structure. The shape and form of the open space differ from case to case and do not have to be in the centre of the layout.

Compound – A phenomenon of organically emerging housing forms - familiar in Johannesburg during affordable housing shortages. Historical references are Doornfontein’s Rooiyard in the 1930s, Sophiatown, and Alexandra until the 1960s, as well as government and mining hostels and compounds (built at the beginning of the 19th century) – these are a separate type of the form and not directly related to this research.

Flipping - A term used in property circles to describe a quick purchase and resale of a property for a considerable profit, often within trader networks. In the areas under investigation the bungalow properties have experienced several distinctive waves of speculative property developments in vastly different political and economic contexts, and at times peculiar trends in the exchange of ownership and funds.

Ground Samples – Ground samples are usually associated with soil and samples and used – for example – as context recordings in archaeological practice. As an analogy, the term *ground sample* (as a Case Study) is used in this study to emphasise the connection between the house and the land it stands on within a rapidly changing urban context.

Hole in the Wall – This refers to openings like windows and doors in a property/s boundary wall that serve as access to small retail (or service) spaces (usually attached to the inside of the wall). These retail spaces generally operate from within the property to serve customers on the sidewalk. They are standard non-formal business practices in Yeoville and Rosettenville, as in other racially desegregated neighbourhoods.

Involuted Compound – Compound spaces where formerly open courtyard space is being taken over by built form. See references across Sub-Saharan Africa in the text.

Non-Formal – The term is employed in this study instead of the term ‘informal’ to avoid carrying the often negative connotations of the latter. Non-formal describes some form of limitation of the application of ‘formal’ regulation but does not see this as negative, rather than the capacity to regulate is limited and is a non-binary condition (see references in text).

Pattern Book – These were printed and bound volumes that permitted architects, builders, and clients to share and distribute house designs. They gained popularity

in a rapidly urbanising world at the beginning of the 20th century, particularly in the English-speaking world in the Victorian / Edwardian Era.

Plot – A legally demarcated piece of land officially registered, also referred to in South Africa as an erf (erven) or a stand.

Suburb – While legally referred to as ‘townships,’ the term ‘suburb’ has been commonly used when referring to (formerly) ‘white’ neighbourhoods. Under apartheid, these were residential areas exclusively reserved for the white minority population to live, work, and own property.

Township is a legal term that describes any land laid out or divided into or developed sites for residential, business, or industrial purposes; however, in South Africa, the popular use of the term has a racial connotation. It often refers to residential areas allocated to the black and coloured population by the apartheid administration under the Group Areas Act.

Transformation – A term that describes the condition of change as central prerequisite for the study. The approach foregrounds material change of built form as citational ground and source of evidence for embedded knowledges that are of significant value to understand urban change across a multitude of layers, scales and time in a selected portion of a contemporary city of the South, Johannesburg.

Typicality – The principal difference between typology and typicality is that the former concentrates on the architectural object. In contrast, the latter integrates the experiences and local practices in the process of understanding an environment, in parallel with historical readings of context (see references in text).

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CHAPTER 1- INTRODUCTION AND OVERVIEW

“Arthur said his wife expected him to bring me home to dinner on that, my first night in Johannesburg. The Hollwards’ house was exactly that sort of house they would have had in England.”

A World of Strangers (Gordimer, 1958:39)

February 2018 was our first day somewhere on a street in Yeoville, Johannesburg. Yeoville is a residential area with the ‘sort of houses people would have had in England’ lining up along the sidewalk. However, these houses are different now. We will meet Donald [not his real name], who, through a half-open gate, will invite us into his property. His house is the first bungalow compound whose life we are privileged to encounter from the inside.¹

1.1 Background

1.1.1 What is the Overriding Research Problem?

This dissertation is, figuratively speaking, an investigation into the transformation of *the Hollwards’ house*, which now belongs to “Donald” (or actually, his father.) More generally, the study examines how, in two inner city suburbs of Johannesburg, the South African version of the Victorian/ Edwardian bungalow has been in organic transformation from a free-standing house into a courtyard building – coined in this study as a **bungalow compound**. Both suburbs have been nearly completely re-populated, with immense physical changes, and also intensely densified – starting with radical socio-cultural and economic changes following the initial political transition to democracy in 1990.²

¹ Note by the author concerning initial fieldwork in Yeoville. Before and during the research for this PhD, some of the fieldwork of this study was conducted with the involvement of students from the Honours Architecture programme at the School of Architecture & Planning, University of the Witwatersrand, as part of their research coursework 2018-2020. However, the author always led this; the primary research presented here is the author’s personal work - see Declaration.

² The study chooses 1990 as a signpost for the turning point of the legal transition from Apartheid to Democracy in South Africa. On 19 April 1990, President de Klerk announced repealing the Group Areas Act, which had barred Black, Coloured, and Indian populations free access to urban areas since 1950. The repeal of the 1913 Land Act was announced in early 1991 (SAHO, 2019). The act was a cornerstone of segregationist politics and racial discrimination. It prohibited Africans from buying or hiring land in 93% of South Africa (Plaatje, 1916). The repeal of both acts paved the way for the emergence of the bungalow compounds.

This enormous change has, however, been hidden behind the privacy of the boundary walls. Despite being a widespread phenomenon, there has been little attention to and limited evidence for these significant alterations on private property. Much is assumed about the changes, and few of these are considered ‘good’ or positive by the authorities, but in fact, too little is known or understood about how these bungalows and their plots are being transformed. The metanarrative of crisis and slums that Nuttall and Mbembe (2008) critiqued as dangerously one-sided definitely prevails here. Nevertheless, domestic residential private property continues to play a significant part in the urban context, as it has since the discovery of gold in 1886, albeit with a different intent at the time.

1.1.2 Where is the Problem Found?

Hidden behind walls of buildings made in another time and for different people, hundreds and thousands of beds accommodate Johannesburg’s post-1990, transitional, multinational population, many of them in rooms and bungalows from the Victorian/ Edwardian period. The bungalow was the first residential model used in speculative mass housing in South Africa for the middle and skilled working class after the discovery of gold in the last years of the 19th century (Hindson, 1987). Imported from India via colonial Britain, it is one of the most common, most repeated, and most adaptive formal dwelling structures in inner city suburbia adjacent to Johannesburg’s central business district. However, the ‘bungalow compound’ as the originally freestanding, middle class (white) suburban house that has transformed into a courtyard arrangement has neither been acknowledged nor researched as an entity – especially in terms of its re-defined role as a contemporary form of affordable co-housing. In fact, the post-1990 developments have considerable qualities when considered cultural transformations within socio-economic opportunities, yet they face several challenges.

The rule of law treats the mainly non-formal³ appropriation of the buildings, and more importantly, their yards (that is, the open space on the plot), as a spatial illegality. At the same time, the City continues to record the multi-unit room arrangements as single-family houses. It identifies them as inefficient in terms of density – and consequently requiring replacement vis-à-vis desired densification (City of Joburg, 2017). At the same time, the properties – if recorded ‘as they are built and inhabited’ (as in this study) – suggest a form of occupation (in density, income group, and diversity of functions) that the city is actually attempting to achieve in well-located areas. In addition, the properties are home to thousands of residents from within the country and the wider African region looking for affordable accommodation. They are also lucrative investments and incorporate multiple providers of other services. Mostly, but not entirely, operating “off the record,” the social networks that run through these spaces have created their own “infra-economy” of material life in the shadows⁴ (Braudel, 1981:24) as a form of the everyday that might be challenging to administer but will nonetheless, and most probably, continue to exist.

1.1.3 Yeoville and Rosettenville

The suburbs of Yeoville and Rosettenville are the two places in inner-city proximity that not only have been nearly fully racially re-populated (Frith, 2013) but also have the highest proportion of different African languages (Frith, 2017), evidence of wide social diversity. Everyday life in Yeoville and Rosettenville appears today vastly different from their origins as white working-class suburbs when they were located in the north and south of Johannesburg’s central district in the late 19th century. In the present day, both areas exemplify many of the issues and concerns faced by lower-income suburbs in Johannesburg – with quite transient populations, often with no consistent income or legal immigration status. At the same time, underneath what might appear as decaying surfaces, a new practice of desegregation has been detected with residents from many other parts

³ Non-formal implies some form of limitation of applying “regulation” – but does not automatically see this as negative – instead, the capacity to regulate is limited. (Jenkins 2013). Nagati describes this condition as non-binary, on a “spectrum of negotiation and contestation,” between not requiring but not negating formal structure (Nagati, 2016:33).

⁴ This term is further discussed in Chapter 3.2.

of the city, country or wider African region, who “have exercised agency in appropriating space [and developed] new forms of spatial loyalty’ (Harrison & Zack, 2014:16). Complex forms of associational life (Simone, 2001) support the transformation of the formerly mainly residential and culturally rather homogenous environments into overlapping layers of non-formal and formal spaces, with the bungalow and its numerous, and by now diverse multiplications, at the centre stage of this transformation.

While people have been transforming the areas under investigation from the ground up, both suburbs are also located within the reach of a city-wide planning project called the Transit Oriented Developments (TOD) by the City of Johannesburg (CoJ), formerly known as Corridors of Freedom (CoF). The conceptual framework for the densification of existing residential areas along main transport arteries is, in part, created around the development of multiple household dwelling structures (City of Joburg, 2017). While newly designed backyard adaptations are included in their Special Development Zones Framework (City of Joburg, 2017) they do not refer to, or include, the existing status quo in their densification strategy in any detail that addresses the complex construction of social life, other than built form.

This study’s accounting suggests a grey area – or rather a possible gap – between official recordings and lived realities, as do the planner’s maps with typological coding, for example, the Inner City Housing Implementation Plan (ICHIP), 2016 (City of Joburg *et al.*, 2016). This is despite the 2011 census already clearly picking up significant densification and sweeping demographic change. This research takes note of these discrepancies, identifies what appear as misconceptions, and highlights the need to explore the reasoning behind what does not seem to match reality. The focus, however, turns on the properties themselves, as emerging epitomes of house lives/home spaces (Heer, 2019; Jenkins, 2013) as knowledge sources and as developing citational grounds.

1.2 Research Objectives

1.2.1 Purpose

Rapid urbanization and continental migration have resulted in a geographical shift of cultures and an exceptional need for more affordable accommodation in the contemporary metropolises of the South, more so in Sub-Saharan Africa.

Furthermore, Johannesburg, a major urban centre of these macro-regions, contains contested spaces resulting from a misalignment between spatial practice and users' needs and aspirations. Within this broad context, and as a form of design research, the research addresses this important knowledge gap by empirically tracing and analysing the typological transformation of the bungalow compounds as it happens, plot-by-plot. Methodologically, the study argues for recognising the valuable knowledge embedded in the transforming architectures to reflect the urban environment's current condition of "*what is*" and "*what it could become*."

1.2.2 Aims

This study aims to render the, at times, contested spaces in Johannesburg, into valid forms of African city buildings. As a source of emerging possibilities for many, the bungalow compounds ultimately highlight the need for any 'solution' to consider an alternative understanding of what constitutes the 'problem.'

Although research and design work have been undertaken that focused on intricate multicultural conditions, including national proposals for intervention, it remains true that architectural engagement is often at the end of such urban processes. More so, architecture is expected to 'solve' a highly complex situation with a final product, which, in most cases, it cannot.

This study aimed to use architecture and its embedded forms of knowledge-working – and the role of design and designers – as an interrogation device to intervene in a specific but widely relevant situation. It uses the materialization of the artefact and the traditional language of the discipline – drawing and building – together with other means of visual representation to develop a design research approach that creates a new relation between theory and method in a specific

urban context. It aims to link the so-called ‘paper architecture’ (academically relevant designs with strong links to theory) to a form of actual praxis that follows economic necessities and socio-cultural values – to develop what Concrete Action (2016) calls “the fourth role for architects – after conservatism, academia, and revolution,” to facilitate open source, inclusive design processes (Concrete Action 2016:27).

1.2.3 The Research Question

A new understanding of ‘the transformed house on the plot’ and its lifeforms, as part of the city-making processes, is based on a typological reading of the change in the domestic spaces over time in line with social, cultural, economic, juridical, and political “entanglements” (Heer, 2019). By employing architectural knowledge as a research tool, the dissertation is structured around unfolding the main question:

How can the knowledge embedded in the transforming bungalow compound be revealed, evaluated, and appropriated in the design of low-cost accommodation?

1.3 The Approach

1.3.1 Methodology

The study develops a methodological approach that considers the physical transformation of the bungalow properties as a particularly complex category of the ‘as built’ (vis-à-vis documentation) to answer the research question. Rather than the sterile service instrument that such documentation is known for in the professional world of spatial administration, it looks at the material instead as a form of re-description of a part of the African city ‘as is, or as could be’ (Simone & Pieterse, 2017).

The initial medium that allowed the bungalow’s enormous reach and multiplication – the pattern book – is revisited as a trope to develop an alternative (research) catalogue of properties based on 30 or so case studies (listed in

Appendix A). This catalogue's make-up visually exacerbates the fleeting dominance of the bungalow as a freestanding building. It highlights the emergence of the yard as a central spatial element by de-constructing the structures, as-built within the perimeter of the boundary line, into different layers of change (Brand, 1994) that are element or component-driven. Theoretically, the study considers the bungalow compound as an epistemic object (Lury, 2021; Cetina Knorr, 2001; Rheinberger, 1997) that can develop as a problem space across multiple themes, scales, and contexts.

This dissertation addresses the misconception of architecture as a finished product. It appropriates its essential incompleteness and the ability to accommodate change as a detective device that is essentially forensic in its understanding of social and cultural inscriptions into material worlds (Weizman, 2010).

1.3.2 Research Methods

The qualitative, inductive approach utilised here situates itself in the field of design research and places the work in between three design research processes: research *about* design (1), research *for* design (2), and research *through* design (3) (Murray, 2013:96). The research '*about*' process examines existing settings to record, evaluate and improve them. It uses approaches linking to other fields, like technical research or social sciences, including qualitative analysis. The research '*for*' process can be translated as the analysis of applicable precedent studies for use in future design, and the research '*through*' process deals with developing actual design proposals as research iterations. While the extant literature describes the processes as clearly distinct, they merged in the process of this study and took different roles at different times. Research *about* design was certainly at the forefront of the documentation process of the case studies. Research *for* design played a lesser role but was applied to the analysis of principles of courtyard houses and wider continental references for this typology. The research *through* design process was methodologically reconfigured as the design of the emerging

compound through various means of representation as a contribution to making the bungalow compound visible and valid.

1.4 Research Structure

This part of the chapter structure lays out the overall argument in summary and breaks the main research question into sub-questions, one question leading each section. It situates the thesis structure within the larger discourse (Fig.1).

Chapter 1: The Problem

What is the problem? Where is the knowledge gap?

Chapter 1 introduces the transforming bungalow properties in Yeoville and Rosettenville as “problem spaces.” It offers two readings of this term and identifies a knowledge gap that relates the empirical to the methodological, framing the dissertation's positionality overall. Firstly, the properties are presented as domestic urban spaces that seem to neither comply with set norms and standards of how ‘one should live’ nor to make effective use of space in terms of projected urban densities (City of Joburg, 2017) – and are therefore seen as problem spaces. Secondly, problem space is introduced as a methodological approach, where the problem itself is not a given but is continuously ‘composed’ around transforming goals (Lury, 2021), rendering all of these relative to different perspectives. The fact that the authorities, who voice concerns about the private properties being literal problem spaces, seem to know very little about life in and on the bungalow compounds, presents the knowledge gap that connects the two readings. The study suggests that the actual problem rests in the fact of *not knowing*. It highlights the need for inductive research into the knowledge embedded within the ‘problem’ spaces themselves to initiate propositions for alternatives that work from the inside out instead of beginning the other way around.

Chapter 2: Contextualisation

What was the role of the bungalow typology in the larger urban context of Johannesburg over time, in particular, in Rosettenville and Yeoville?

Chapter 2 locates the bungalow properties within Johannesburg and draws knowledge from historical sources. The chapter positions the bungalow plots in Yeoville and Rosettenville within the historical subdivision and allocation of **land** as a colonial system of demarcation and racially dominated regime of ownership. These thus turned private property into a structuring paradigm of urban planning, then and now. This chapter examines the bungalow's role in this urbanisation process as an imported domestic pattern to subsequently interrogate the transformation of residential layouts in response to changing legislation, economic context, and socio-cultural values.

Chapter 3: Architectural Knowledge

How can architectural knowledge become a research tool in revealing embedded knowledge of the transforming properties in context?

Chapter 3 unpacks access to embedded knowledge methodologically. It introduces architectural knowledge as a research tool from three angles. Firstly, from a theoretical understanding of buildings as epistemic objects that hold knowledge in their materiality and are essentially incomplete through the changing social and cultural life they accommodate (Knorr, 2001; Lury, *et al.*, 2020; Rheinberger, 1997). This approach argues for understanding research methods as a practice or a discourse (Hirst, 1993) as opposed to a set of tools. This sort of practice is an important aspect of the second section of the chapter that focuses on the various kinds of design research (Murray, 2013) where access to embedded knowledge through forms of architectural practice is central. A third section deals with the extended Case Study approach. It begins to prepare for the methodological practice of “re-describing” (Simone & Pieterse, 2017) the selected bungalow properties as material forms – “as built” thematically across the juridical, economical, and socio-cultural (Chakravartty & Silva, 2013).

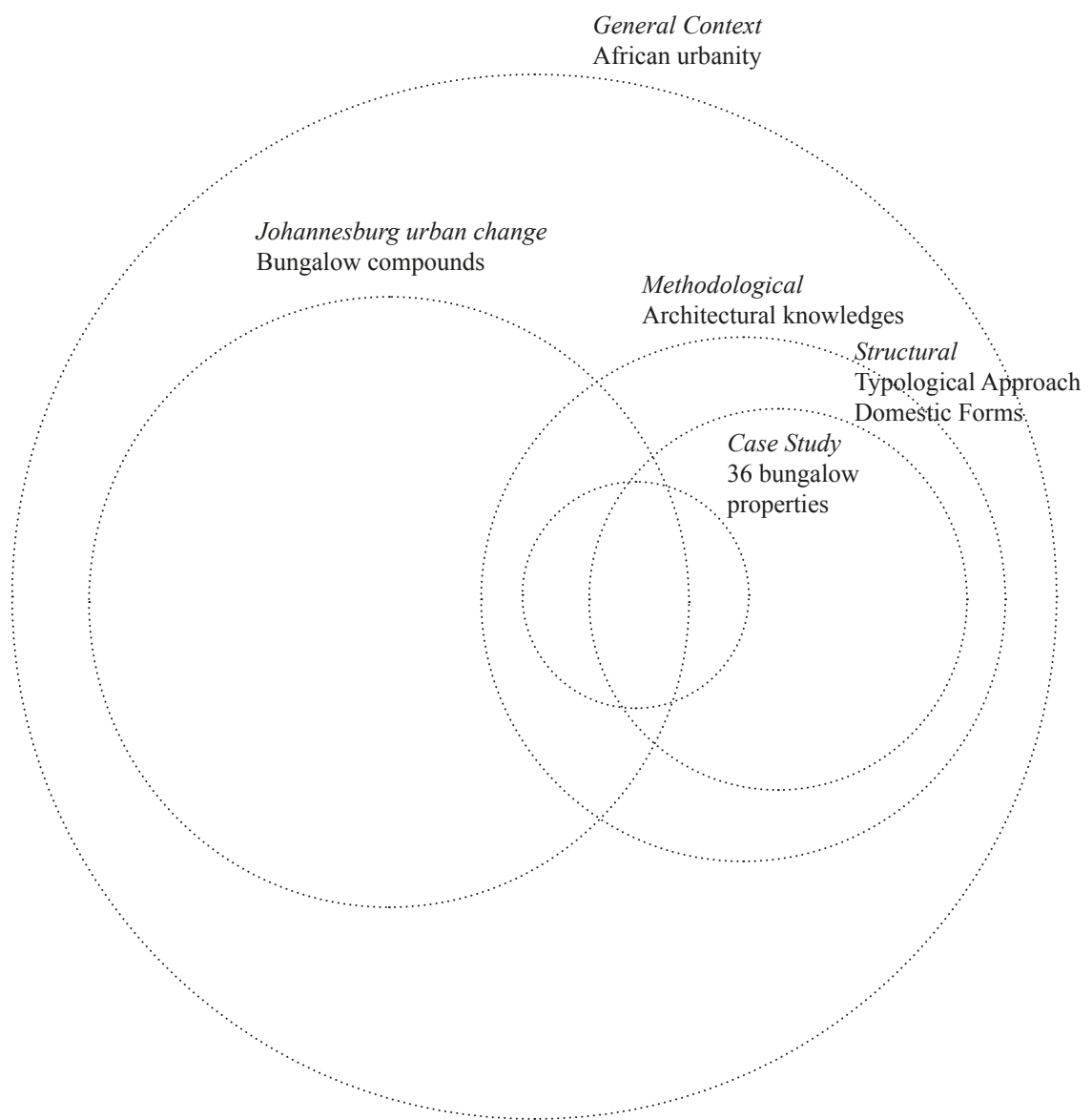


Figure 1: Graphic structure of research discourse (author's own, 2023)

Chapter 4: Understanding Key Issues

What are the frames of reference to evaluate the transforming properties analytically?

Chapter 4 takes a typological approach to understanding key issues surrounding the bungalow properties' transition from a freestanding single-family residence to a multi-unit courtyard arrangement. Ultimately, it maps out the significance of "small spaces" (Chattopadhyay, 2022:5) in the emerging compound geometries. The chapter interrogates the relationship between social life and physical form across scales through the role of the house and the yard in dwelling processes. The discourse draws from literature on architectural typology, anthropology, and building systems and uses selected compound precedents from across the continent. The void, as a confined but adaptable open form, here begins to play a key role in an understanding of the "production of [bungalow] locality" (Appadurai, 2003), introducing embedded notions of aspiration and contingency in the spatial configuration of the emerging type. A third section links back to the previous chapter's call for re-description and prepares the analytical format of the empirical work. It introduces the concept of the shearing layers of change (Brand, 1994; Duffy, 1990) that, in appropriation, will assist in deconstructing the bungalow plot turned compound house into components. This is with the intent to undermine the dominance of the built form in favour of the morphological workings – or re-describing the relationship between social life and physical form *as what can be, as what is* (Simone & Pieterse, 2017).

Chapter 5: Empirical Work

What are the methods of collecting and cataloguing the empirical work?

Chapter 5 puts the study's methodological and theoretical parts into action. The documentation of the extensive fieldwork addresses one of the main challenges of the current properties – that of being un-documented – and "draws" them into

existence. With reference to the professional category of ‘red line drawings,’ the study argues for the legitimacy of organically added structures on and within bungalow properties. In addition to reflecting on the agency and act of drawing, the research elaborates on the ‘exclusive’ nature of the relevant people’s knowledge (owners, residents, and other users); it also reflects on ethical considerations vis-à-vis the fieldwork process. The chapter outlines the various tools used in the complex documentation process of a purposive sample of thirty-six in-depth case studies, albeit with differing degrees of breadth and depth. The empirical part of the study interrogates the material footprint of the properties as the source of evidence and its performance over time through drawings (and other additional information) across three registers: as a transforming building type, deconstructed into layered architectural elements; as a composite of different forms of occupation, measured in programme, density, and infrastructure; and as a series of ground patterns translating the imprint of social, economic and legal conditions over time. The transformation of the properties over time was reconstructed through council drawings and satellite imagery. An additional desktop study collected information on ownership, transfers, and finances. The findings lead to five groupings based on the transforming properties’ dynamic operations: re-scaling, enfolding, merging, sleeping, and yarding.

Chapter 6: A Catalogue of Findings

What are the findings? Are there emerging categories and tendencies?

Chapter 6 presents the findings in the form of a catalogue of thirty-six case studies that mirror the operations of the properties plot-by-plot. The chapter is structured in two sections. Section one focuses on five key cases from the catalogue to represent each of the groupings.⁵ While the analysis draws from the whole catalogue, the descriptive text in this chapter is partly reconfigured, emphasising the characteristics of each example of a particular category.

⁵ Due to the volume of the fieldwork, this is documented in the Appendices – however each analysed categorisation as “research finding” also includes references to at least one (and usually more) case studies.*

Additional illustrations of the compounding process, over time and in context, supplement the assembly of the visual narrative. Section two deals with the series of case studies as a whole and reviews these through a *summary of tendencies*. The chapter aims to translate the sum of the single property descriptions into wider analytical findings. These are situated between singular specificity and over-reaching trends. This chapter also aims to permit the knowledge outcomes to begin the process of countering official assessments of ‘inefficiency’ by suggesting ‘versatility’ as an antonym and considering the catalogue as a collection of not just actualities but possibilities.

Chapter 7: Compound Applications

What have we learned? How can compound knowledge be appropriated?

This final chapter draws together the wide range of findings in the previous chapters of the thesis. It discusses the potential applications of these – that is, of bungalow compound knowings, doings, and formations as dynamic urban (design) resources in three sections: as property developments with the capacity to aspire; as speculative imaginary, transitioning from the empirical to the conceptual; and as unexpected collaborations and socio-cultural practice in particular in the project of the ‘void.’ Each section implies the adjustment of existing perceptions and proposes the need to consider re-descriptions of the ‘now’ as emerging strategies through appropriation.

1.5 Contribution to Knowledge

The dissertation fundamentally argues for the organically developing bungalow compound properties as a form of architectural design that needs recognition. Firstly, this is for the **revealed knowledge** these hold as material archives of activities and incidents traced on their surfaces. Those are, in parts, also aspirational maps and mirrors of socio-cultural construction. Secondly, there is a need for legal engagement and approval of sorts to minimise the pressure that non-documented life entails. Thirdly, there is design quality in what are mostly small spaces, transitions, thresholds, and yard arrangements that are worthy of

recommendation and provide lessons in adaptability and flexibility in the developing urban African type with a wider history on the continent.

To achieve this, the study also developed an original **methodology with a set of compositional methods** that address the above and demonstrate that documentation and visualisation of the, at times, contested spaces carries significant value. In addition, whilst inevitably limited in numbers, the Case Study work has produced a unique and rich database of knowledge about the properties, which presents them in new and different ways not commonly known. This material contributes to a field of study on African urbanity that ‘foregrounds’ the empirical detail of people’s lives and the knowledge it contains as the basis for a new analytical praxis – and can, therefore, assist in stimulating **new theoretical development**.

Declaration

Parts of the fieldwork of this study were conducted with the assistance of students from the Honours Architecture programme at the School of Architecture & Planning, University of the Witwatersrand, as part of their course work in ARPL4000A (Advanced Design Studio) from 2018 to 2020 – under the direct guidance and supervision of the dissertation author. Any material produced by individual students is referenced by name, and material produced as group work is referenced by course code and year. The bulk of the material presented in this dissertation is the direct responsibility of the author. The author has previously published some parts of the text as a peer-reviewed book chapter.⁶

⁶ Dormann, K, Urban Compounds: densifying bungalows in Johannesburg in *Densifying the City? Global cases and Johannesburg*, eds. Margot Rubin, Alison Todes, Philip Harrison, Alexandra Appelbaum, Edward Elgar Publishing, 2020:168-178.



Figure 2: Bungalow compound in Yeoville (Photo by Alistair James, 2012)

1.6 Key Definition

Bungalow compounds

In the context of the study, the term **bungalow** refers to a one-story separate or detached dwelling, usually with a verandah, generally designed for one household or family, placed on its own plot, and usually with a pitched roof and slightly elevated off the ground zone (King, 1984). It is a prominent residential type in South Africa, sometimes described as a late Victorian /Edwardian speculative dwelling or verandah house (Hindson, 1987).⁷

The term '**bungalow compound**' refers in the broadest sense to communal accommodation in a transformed and/or re-used bungalow, mostly with additional structures (Fig.2) – which can be seen as a form of 'co-housing.' It describes an enclosed space with a small-scale, low-rise, high-density residential structure on a

⁷ Local academic literature (Silverman et al., 2005; Hindson, 1987; Radford, 1982) makes distinctions between imported style from England – the verandah house – and cottages as “the white man’s house” (Radford, 1982:58) being the product of local practice. This really happens in areas where the ‘practitioners’ and the referenced traditions are equally of European origin. The study considers both building types as some form of import with local adaptations and thus employs the umbrella term suggested in a more international context (King, 1984).

privately owned plot surrounded by a wall with an average of ten to twelve units. The study shows that the unit sizes might differ significantly but are generally based on a single room, seldom with subdivisions and shared or single kitchen and bathroom. The number of occupants fluctuates, and the form of governance of the spaces varies. The layout and relationship of bungalows to outbuildings of each site differ.

The common denominator in all arrangements is the private yard as a shared communal space. It is associated with traditional African compounds such as larger family properties (Bourdier & Minh-ha, 1996) and other current, popular housing typologies on the continent (ETH Zurich MAS Urban Design, 2016; Jenkins, 2013; Osasona, 2007; Andersen et al., 2006) with similar layouts, programmes, economies, or building processes. The phenomenon of organically emerging compound-type forms is familiar to Johannesburg during affordable housing shortages. Historical references are Doornfontein's Rooiyard in the 1930s, Sophiatown, and Alexandra until the 1960s (Orso, 2003; Hart & Pirie, 1984; Hellmann, 1969, 1948). Other studies have explored similar typological transformations in state-funded, affordable housing development (Islanda Institute, 2022; Tipple, 2000). Similar to these examples, 'slum' narratives have been pictured when describing the recent living standards in Yeoville (MAS Urban Design, 2016; Jenkins, 2013); however, this is disputed in the analysis of the Case Study samples. The bungalow compound study is novel its focus on the transformation of private properties that were originally part of middle class, suburban housing developed for white population settling in Johannesburg after the discovery of gold.

As a summary of the introductory chapter and to preface the following chapters the below is a “snapshot” of the thesis structure with summaries of the principal content:

CHAPTER 1: THE PROBLEM

What is the problem, where is the knowledge gap?

Bungalow compounds exist, they are not ‘not efficient’ and we know little about them.

CHAPTER 2: CONTEXTUALISATION

What was the role of the bungalow typologies in the larger urban context of Johannesburg, over time, in particular in Rosettenville and Yeoville?

Scales, patterns, politics (of land)

What has been happening? What has transformed, how, ?

CHAPTER 3: ARCHITECTURAL KNOWLEDGE

3 How can architectural knowledge turn into a research tool for revealing the embedded “knowings” of the transforming properties in context?

(Unpacking (access to) embedded knowledge methodologically –

What does the bungalow property know?

CHAPTER 4: UNDERSTANDING KEY ISSUES

4 What are frames of reference to evaluate the transforming properties analytically?

Accommodating incompleteness typologically.

CHAPTER 5: EMPIRICAL WORK.

What are the methods of collecting and cataloguing the empirical work?

Methods of collecting and cataloguing the empirical.

CHAPTER 6: A CATALOGUE OF FINDINGS

What are the findings? Are there emerging categories and tendencies?

Forms of changes, a summary of tendencies. Compound doings.

CHAPTER 7: COMPOUND APPLICATIONS

What have we learned? How can compound knowledge be appropriated?

Findings discussed. Concluding.

CHAPTER 2 CONTEXTUALISATION

*“Between the 1850s [...] and the advent of the Native Land Act (No. 27) of 1913, **surveyors and cartographers** constructed the geographical base of the modern South African state. During that period, agents of the various colonial governments of the Sub-Saharan Africa region divided, labelled, mapped and enumerated most of the space within its present-day borders. [...] **The colonial system of territorial demarcation and imprinted geographical knowledge encoded the extent, ownership, use and sometimes meaning of land.** [...] **How did this landscape of plots and boundaries come into existence** and what did the acts of depicting and dividing land mean to the various people involved?”*
(Braun, 2015:1-2)

“Modern property law emerged with and through colonial modes of appropriation. [...] It operates as a set of both techniques and mechanisms encapsulated in legislation, legal judgements, and myriad everyday practices of ownership that have structured colonial capitalist modes of accumulation. [...] Property ownership can also be understood as complicit in fabricating racial difference and gender identities.”
(Bhandar, 2018:4-5)

2.1 Introduction

Chapter 2 locates the bungalow properties in Johannesburg. Placed within the historical subdivision and allocation of **land**, as a colonial system of demarcation and racially dominated regime of ownership, these top-down subdivisions, thus turned private property into a structuring paradigm of urban planning, a role they continue to play, albeit now from the bottom up. The chapter is structured in three sections. It begins by framing key details in the process of land division, allocation, occupation, and governance. The historical context starts in the wake of Johannesburg’s early and rapid urbanisation after the discovery of gold in 1889. The chapter then “zooms in” to the beginnings of the Yeoville and Rosettenville neighbourhoods, leading to the “as is” situation. The second section

introduces the bungalow as an imported domestic pattern and traces its role in the process of early urbanisation. The third section then interrogates the transforming residential layouts in response to changing legislation, economic context, and socio-cultural values. The chapter references historical sources that relate to the planning of the bungalow property in the past in order to trace that knowledge during the recording of the compounds in the present.

2.2 Johannesburg

2.2.1 Land

Johannesburg's history after the discovery of gold in 1886 – which led it to be the largest urban settlement on the Witwatersrand in the Transvaal region – has been widely recorded through the critical lens of politics and planning, socio-economics (Mabin, 2020; Van Onselen, 1982; Davenport, 1978), architectural styles (Chipkin, 1993) as well as a 'commemoration of achievements' in earlier times of its making (Shorten, 1970; Maud, 1938). It is the complex narrative of a city that had its beginnings built on mining capital and colonial socio-economic structures paired with "an unbridled desire for material wealth" (Beavon, 2004:23). While the valuable mineral resource, the "underneath" (Nuttall & Mbembe, 2008), is rightly considered the reason for the city's existence, this research is interested in the top layer, the ground that was measured and demarcated (Braun, 2018). This terrain was being subdivided, traded, and owned as the 'other' currency of the colonial system: land as private property (Bhandar, 2018).

Boundaries

South Africa's "landscape of plots and boundaries" (Braun, 2015:2) renders Johannesburg into a multi-scalar system of land demarcation and subdivisions, which is, in fact, a "formal, functional, and cultural figure" (Aureli, 2018:139) with political significance. Braun describes the system as one of demarcation that encodes amounts, ownership, use and meaning of land, with the surveyor as a cartographer shaping access to resources such as property, material wealth, and

social status. The study thus begins by understanding the cadastre that became the literal frame of reference for much of today's settlement forms along the key east-west mining belt of Johannesburg (Braun, 2015) – tracing the surveyor's construction of the geographical basis of what has become bungalow compounds (see Case Study areas in Figure 3).



Figure 3: General Plan of the Municipal Area of Johannesburg, 1910 (Cartographer G.S Burt Andrews, Printed Argus Co. Ltd, Johannesburg 1910; Image courtesy University of Cape Town Libraries, Special Collections: Maps scanned under the William and Yvonne Jacobson Digital Africana Program at UCT. <https://exhibits.stanford.edu/maps-of-africa/catalog/nc171mg6210>, accessed 19.12.2023)

Johannesburg's early layout and administrative arrangement have very strong colonial connotations, with the British Empire as a fixed point of reference but having an underlying Dutch presence.⁸ The above dual British-Dutch heritage is

⁸ In 1902, after South African Anglo-Boer war, the relatively recent independent Boer Transvaal Republic was transformed into the Transvaal Colony (1902-1910) under direct British rule and military occupation. This Colony became the Transvaal Province, as part of the Union of South Africa in 1910 – a self-governing Dominion of the British Empire. In 1934 the Status of the Union Act removed any power of the British parliament in terms of governance and in 1961 South Africa became a republic governed by the National Party. Since 1948 this party had translated Afrikaner nationalism into a form of white minority rule dominating the majority of the population through racial segregation linked to dispossession and other forms of discrimination summarized under the umbrella of Apartheid. Apartheid was internationally ruled as a crime against humanity in 1976 in the Apartheid convention (Dugard, 2008) despite its official practice continuing till 1990 in South Africa, and many of its manifestations remaining until today part of everyday life in South Africa.

reflected, amongst other things, in a mixed legal system as an interplay of the Roman-Dutch and English law (Bergh, 2012; Toit, 2014), which overwrote any African forms and practices of ownership and communal rights in the struggle for possession of land (Hamilton, 1987). In so doing, it assigned a form of customary law reflecting the traditions of South Africa's Bantu-speaking peoples for use only in issues arising between black people. The inherent process of dispossession and the legal underwriting of it started as early as the 17th century. It expanded rapidly in the late 18th century and reduced available land for black indigenous citizens to limited scheduled areas through the Black Land Act of 1913 (Davenport & Hunt, 1974). Given the desire for physical separation, some go as far as saying that the development of apartheid was "rooted in property law" (Hamilton, 1987:154). As a result, the property law of South Africa, in combination with other legal codes and forms of building regulations, is key to understanding the significance of having the right to own, and being excluded from, property.

Rights

The study refers here to Blomely's "property's bundle of rights [which] includes the power to exclude others, to use and to transfer" (Blomley, 2003:121), linking it intricately to the notion of law as an implicit form of violence when it enforces such rights (Blomley, 2003). The appropriation of access to land and its resources through legalistic forms of ownership, without actually having any historical attachment to the land, is considered an essentially colonial mode of operation (Bhandar, 2018). The fundamental colonial focus on improving the land's productivity as "the main ideological basis for exclusionary rights to own property" (Aureli, 2018:153) is seen as a particular approach of the English to justify colonisation. Settlement and cultivation of land for profit were based on the survey and sub-division of the existing landscape into particular land parcels (plots and boundaries) (Braun, 2018), rendering geometry "a crucial link between land and money" that turned into power (Aureli, 2018:149; Bhandar, 2018; Said, 1994). The house on the plot, in this case, the bungalow, translates this (politically

and economically loaded) geometry into a form of social and cultural authority over the practice of domesticity in its origin and transformation.

Plots

As a place, Johannesburg started with the acquisition of land for farms, then as claims on its mineral resources below ground (the mines), and the wider subdivision of land above ground for habitation/accommodation and other necessary services. The surveys of surrounding farmland had left out the *Randjeslaagte Triangle*, which was initially available for habitation (Meiring, 1986; Beavon, 2004). This was, in fact, a piece of state-owned land close to the Main Reef mining belt that was to become the beginning of Johannesburg, laid out in October 1886 by Jos De Villiers. What was planned as a village of 600 plots (stands) turned quickly into 748 and had to be increased to 986 nearly instantly (Shorten, 1970). The idea was to use the sale of stand leases on public auction for a period of five to ten years to serve as a revenue generator for the development of what was envisioned as “merely another diggers’ settlement” (Shorten, 1970:87). Pritchard’s commercial map of Johannesburg in 1896 shows a layout of Yeoville, with stands and numbers that still apply today in some of this study’s Case Studies.

The stand (South African term for plot)⁹ was a measuring unit to subdivide land in the city. It originated in the Amended Gold Law of 1885, “which permitted each digger who owned a claim on a farm to mark off a dwelling site of 50 feet by 50 feet (Shorten, 1970). To remain in occupation, the digger was required to pay a monthly stand licence (*standlicentie*) of 10 shillings – and to conform to the other provisions of the law. Legally, this was the origin of stand tenure, and was coined the survival system’ by the governing powers at the time (Transvaal Leasehold Townships Commission, 1912). What is important in the context of the bungalow compounds is, firstly, the concept of land rental or the right to claim occupation for a piece of land as a dwelling site in relation to labour. It renders labour an exchange value for a place to live. Secondly, the system was conceived to deal

⁹ While the study is using the word ‘plot,’ it does at times refer to the land unit as stand or erf.

with uncertainty (the possibility of unsuccessful mining) (Transvaal Leasehold Townships Commission, 1912). Thirdly, the size of these original dwellings (“site of 50 feet by 50 feet” (Shorten, 1970:87), measured in “Cape feet” is the equivalent of 15,7429 m x 15,7429 m, and would become the lowest common multiple of Johannesburg’s urban grid,¹⁰ both in the city centre and its surrounding suburbs. The current inner-city grid of Johannesburg’s CBD is ca 60 m x 60 m (Beavon, 2004), which is the equivalent of 16 ‘digger stands.’ The plots in surrounding suburbs vary in size depending on the purchasing power of the initial owners – with 50 feet by 100 feet / 15,7429 m x 31,4858 m (equal to two digger stands) being the typical size for stands of the middle or skilled working class that formed a major part of the residential morphology of the private townships all along the inner sides of the main mining belt (Transvaal Leasehold Townships Commission, 1912).

The resulting 495 square metre large plot (commonly known as the ‘495’ stand) became the unit size of the land parcel that accommodated the bungalow in its multiple variations of similar layouts, as the first large-scale speculative residential building project in the city, around the turn of the 20th century (Hindson, 1987). On these plots, Victorian / Edwardian buildings became home to the many first-generation newly arriving (white) residents (Chipkin, 1993). They had come to Johannesburg to find their material fortune without intending to return. Home became an abstract idea, a sort of longing, that translated into the import of aesthetics, values and aspirations projected onto their domestic spaces (Hindson, 1987; Meiring, 1986; Picton-Seymour, 1977; Collier, 1965).¹¹ That search for permanence was mixed with a strong sense of class division and racial discrimination. It soon turned the domestic landscape of the fastest-growing city

¹⁰ Sizing, counting, classifying as forms of colonial knowledge, were central to the Empire’s cultural practice of control (Cohn, 1996) and, even further, a key to “a colonial *imaginaire* [...] *enumerative strategies*” as Appadurai puts it (Appadurai, 2013). To see large parts of their city being, subdivided by the ‘digger stand,’ turning into a “miserable area [...] that cramped permanent buildings in an area only suitable for a hut, a tent, or at best, a shop” (Transvaal Leasehold Townships Commission, 1912) did not fit the image the ruling class had of their own residential developments. As the result, the ‘digger stand’ was used in multiplication of itself, 2,4,8 or more times as size of land of private residential plots.

¹¹ These authors wrote about the history of Johannesburg with a focus on historic buildings, including domestic architecture. They did write from within the political system in place at the time, rather celebrating the colonial architecture and not addressing or questioning the racist politics embedded in the built form. Hindson’s work is analytical, and researched in depth as an architectural dissertation, but not politically critical of the system either. His work is using mainly British sources as reference point, as very detailed accountings based on the SA Census.

of its time into a landscape of double standards that enabled the enactment of daily routines of the served and the serving (Bozzoli, 1983; Van Onselen, 1982).¹² This point will be further explored with the introduction of the bungalow in the next section.

2.2.2 People

Johannesburg's influx of population at the turn of the 19th century was unprecedented on the continent (Mabin, 2013; Beall et al., 2002; Shorten, 1970) and turned into what Beavon coins an "*instant city* with no former history" that was established on a site with none of the factors, not deliberately established on a site that was attractive or chosen for its aspect, or good supplies of water or desirable drainage [...] all those factors that are usually part and parcel of the urban history and geography in the world's great cities were missing" (Beavon, 2004:23). While the statement of "no former history" seems reductive, as there is plenty of history to account for before the discovery of gold (Davenport, 1978), the choice of *instant* seems apt. It holds connotations of urgency and immediacy, which translates the pressures and energy of the time, when a population of 3000 diggers (in 1896) rose to a quarter of a million in the following 18 years, covering a territory that rose from 5 to 82 square miles (13 km² to 212 km²) (Onselen, 1982). That, in fact, translated into an intense degree of densification, where urban-occupied land multiplied itself more than 16 times, but the population grew by 83 times (Maud, 1938).

As a relatively 'young' city that was built and inhabited nearly entirely by people from other parts of the country, continent, and the world, Johannesburg has, in principle, always been a place of arrival, migration and encounter of "otherness" (Judin, 2021; Nuttall & Mbembe, 2008). This arrival and encounter, however, was based on a clearly laid out set of binary categories with in-built internal consistency (Mbembe, 1992) and "cultural anxiety" (Judin, 2021:29) dominated by suppression of the many by the few, embedded in a value system that favoured

¹² Van Onselen describes the housewives who live on the bungalow properties as domestic ruling entity the "witches of suburbia" (Onselen, 1982:37).

white over black and the global North over the global South.¹³ One example where this dualist system played out is in **urban reform through housing and health controls**. This was deeply racialised and used to introduce planning principles of segregation, disguised as interventions for the greater good, but ultimately acting to produce more profit (Parnell, 1993).

Deeds

The landscape of plots and suburbs had been laid out quickly and changed ownership fast in the first two decades of the city, from syndicates and surveyors to individual private owners.¹⁴ The 1909¹⁵ South Africa Act and 1913¹⁶ Land Act (Terreblanche, 2010) had ensured that title deeds of private property in the urban areas of Johannesburg (and elsewhere) were reserved for whites mainly (Plaatje, 1916). The details of the deeds were drafted in the Report of the Transvaal Leasehold Township Commission (Transvaal Leasehold Townships Commission, 1912).¹⁷ The townships were all based on private leaseholds at the time, meaning they belonged to a person or a company and not the city. This report resembles early planning legislation and is very specific about stand size, use, building density, ethnicity of residents, approval process, and fence/boundary details. It is even more specific about exclusions and restrictions. Summarizing a combination of most of its aspects reads like this: one house plus outbuilding per 495 plot, no canteen, restaurant, or liquor outlet, no soil removal for brickmaking, no reed huts, no cattle kraals, no building before planning approval, all mineral rights belong to the township owner, neat and proper fences to be of wood, steel or good wire fence, building must be minimum 12 foot (3,77m) from the street boundary. While some suburbs have more restrictions, and others have fewer, they all share

¹³ This development started before but culminated in the Apartheid system of “separate racial development. A clearly laid out set of binary categories with in-built internal consistency, the multiple levels of segregation often continue to structure the conversation about “standard interpretations of domination” despite these being of little use in current times marked by pluralism (Mbembe, 1992:3).

¹⁴ This has been confirmed by the Case Study research. Council documentation showed numerous alterations on most properties, many of them with changing owner.

¹⁵ The 1909 South Africa act was extended. Britain’s colonial policy of ‘divide and rule’ and ‘elite collaboration to stabilise the Empire’ to South Africa. (Terreblanche, 2010) It was a British colonialist rule to keep ethnicities divided, also applies in India.

¹⁶ The 1913 Natives land aimed at regulating the acquisition of land act and limited African land ownership to 7% of arable land and left the more fertile land to whites.

¹⁷ The 1912 Report of the Transvaal Leasehold Township Commission addresses conditions of landownership and attempts to control land speculation.

one clause: no person of colour as owner or resident other than a domestic worker on the property (Transvaal Leasehold Townships Commission, 1912).

Health / Hygiene

The rapid increase in population and high demand for a manual workforce in the sole interest of capital profit – both domestic and on the mines (Onselen, 1982), led to pressure and stress in two particular areas: accommodation and health/hygiene (Parnell, 1993). In many ways, this was similar to issues in the then-industrialising cities in the Global North, such as London, Berlin, Paris, and New York (Ward, 1984) – yet different in terms of climate, infrastructure, socio-cultural settings and power structures.

The initial settlement in 1886 was controlled by a Health Committee, a central position that was built on and expanded in the 1919 Health Act when the first town planning clauses were incorporated. Issues of public health, densification, income, and race were bundled together here, in tandem with the 1920 Housing Act (Parnell, 1993; Duminy & Parnell, 2022). This was part of the beginning of legalisation that produced the blueprint for racial discrimination in urban form across state portfolios. The Health Act of 1919 was instrumental in planning the City of Johannesburg in ethnic terms through basic matters of organisation and manipulation of access, visibility, and opportunity (Mabin, 2020) – as it covered particular details of land use occupation. The first connotations of the African City as a ‘slum’ arose here, closely linked to the African dweller, as something and someone from whom the white settler needed to be protected (Parnell, 1993; Parnell, 2003). A series of virus outbreaks between 1893 and 1919, from a minor outbreak of smallpox to wider ones of measles, pneumonic plague, polio and then the global influenza epidemic (Harrison, 2020), were used to create stereotypes of “dirt” and “cleanliness” closely related to skin colours as well as financial status. This gave ammunition to what this study calls ‘the design of distance’ in terms of urban layout (zoning) and building regulations on individual plots. One image that was purposefully created was that of ‘clean whites’ and ‘dirty people of colour.’ Another one was based on the seeming inability of “the urban poor of even

passable cleanliness” (Parnell, 1993:479). This was based on the faster spread of infection in residential areas with higher densities and was related more to a lack of infrastructure, such as access to water and waste removal, than income generation *per se*.

Slums

However, this “sanitation planning” approach helped to make way for the basic exclusion of blacks (and also poor whites) from urban areas (Maud, 1938). This approach pushed the agenda for the general pursuit of low densities (Hindson, 1987) as well as the introduction of slum control and public health regulations. It was done through legislative powers anchored in the municipality (Mabin, 2020). Sanitised cities, safe for consumption and economic production, were a major aim of this early attempt at population separation (Van Onselen, 1982). As a result, the bungalow with a presentable front garden and a backyard, standing alone on its plot, was an ideal building type to put this idea into practice. In the areas being studied, the previous positive perception, this “idealistic” public image, of the bungalow has changed (Benit-Gbaffou, *et al.*, 2019). However, the view of dense urban low-income settlements as potential ‘slums’ has persisted, particularly when the yard is perceived as an integral part of domestic activity (Nuttall & Mbembe, 2008). Yard-based domestic life had originally been mainly reserved for the fluctuating urban status of black Africans and the necessity to provide housing for them that did not seem permanent (Thomas, 2010). As such, questions concerning ‘inhabitability’ in the present are one of the challenges the bungalow compounds frequently continue to face, as discussed below (Rubin, *et al.*, 2023).

2.2.3 Yeoville and Rosettenville

Context

The neighbourhoods of Yeoville¹⁸ (north of the mining belt) and Rosettenville¹⁹ (south of the mining belt) were both areas in the early development of the city and part of the townships whose future was based on the Report of the Leasehold Township Commission (1912). These are the sites where the research case studies

¹⁸ The larger area of Yeoville covers the suburbs of Yeoville, Bellevue and Bellevue East.

¹⁹ The larger area of Rosettenville covers the suburbs of Rosettenville, Kenilworth, Turffontein and La Rochelle

are located. Both areas are part of Johannesburg's landscape of *land, plots and boundaries* (Braun, 2015) that quickly became widespread speculative property developments in the wake of the gold rush.

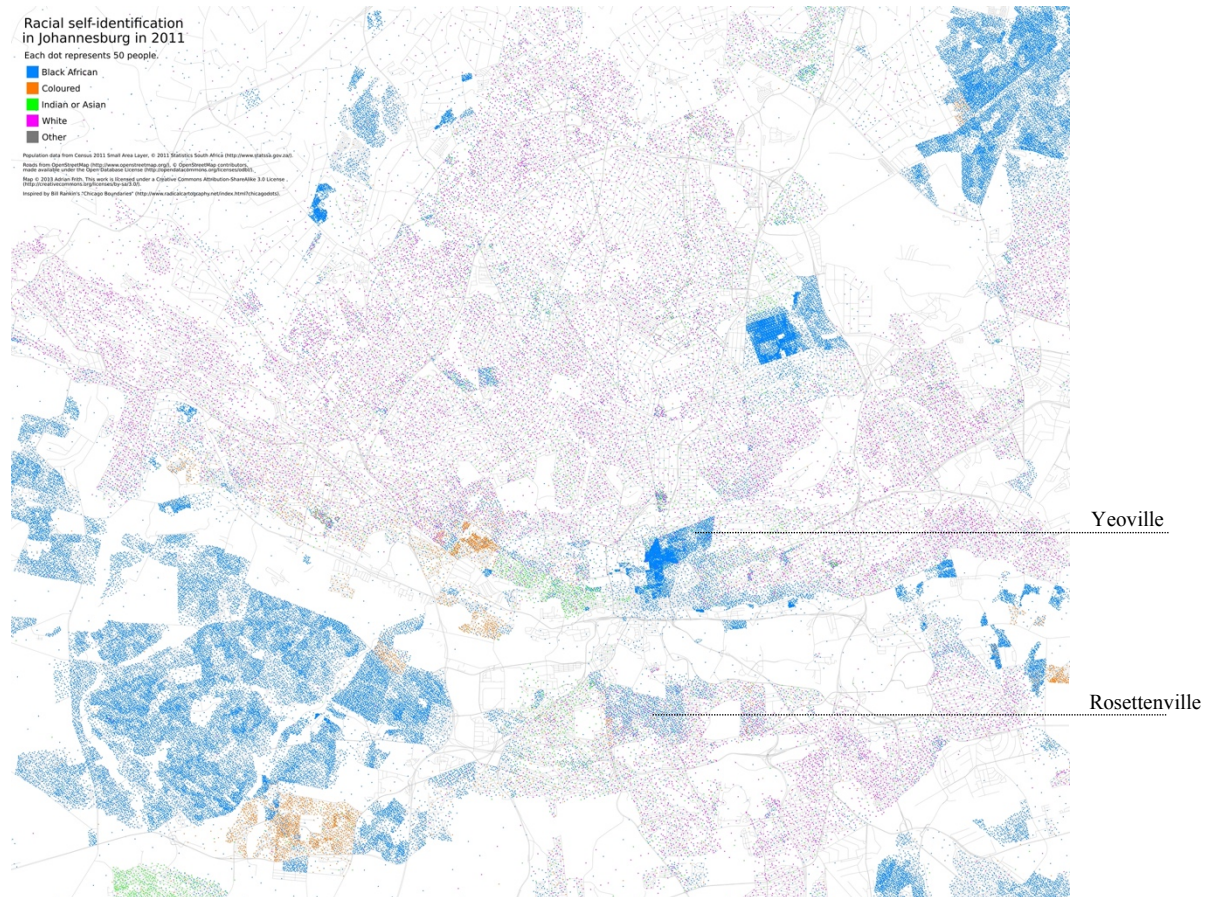


Figure 4: Racial Self Identification in Johannesburg in 2011 (Adrian Frith, 2013, <https://adrian.frith.dev/images/dotmaps/Joburg-2011.png> 8.9.2013, accessed 14.12.2023)

Land excised from farms was subdivided, surveyed, laid out in 495 plots, and sold to accommodate multiple private residences with the (then) dominant bungalow type. These two neighbourhoods are also two of the few places close to the inner city that have not only been nearly fully racially re-populated (Frith, 2013), as Figure 4 illustrates, but also have the highest proportion of different African languages, evidence of wide social diversity (Frith, 2017; Siziba, 2014). While many suburbs in similar neighbourhood contexts have changed surprisingly little, in the sites under investigation, bungalows, have often been transformed into rent-per-room type of accommodation (Charlton, 2019) with up to five times the

original occupational density and a variety of uses (Dormann et al., 2019).²⁰ This similarity between these two neighbourhoods allows the case studies to be considered as a developing series, and their differences prove that the emerging urban compound is not a phenomenon that occurs only in one particular place.

Beginnings

Every township that is part of early Johannesburg has its particular history. However, there are a series of basic similarities in terms of planned layout, plot size, urban morphology, and residential type across many of these areas (Mabin, 2013; Beavon, 2004; Chipkin, 1993; Shorten, 1970; Floyd, 1960; Transvaal Leasehold Townships Commission, 1912). The 495 plots were combined into saleable blocks of real estate “relatively easy to layout, survey and administer” (Chipkin, 1993:12) – and in which to control the social order (Van der Waal, 1986). The chosen sizes of proposed houses and plot sizes (as multiples of the 495 stand) in a wider urban expansion area manifested the desire and vision of individual speculators. The specific nature of each suburb’s fabric ‘was l[then] largely dependent on the resident’s social awareness and the degree to which the exclusion system of class and race had been implemented’ (Hindson, 1987:48).

Greater Yeoville is positioned on a portion of land from the Doornfontein farm that was proclaimed as public diggings after 1886. Within this, Yeoville was proclaimed a residential suburb in 1890 by Thomas Yeo Sherwell, a surveyor from Yeovil in England, and laid out in 1891, after Bellevue in 1889 and Bellevue East in 1896 (Meiring, 1986; Smith, 1971; Transvaal Leasehold Townships Commission, 1912). Initially planned as an upper-class area on the ridge above the dust and dirt of the mining town – and as one of the first suburbs north of the mining belt, it soon became home to skilled working-class families (Guinard, 2019), using the developing Central Business District as a kind of geographic

²⁰ The spatial contextualization of Yeoville and Rosettenville and a broader visual sample of the original bungalow typology is provided in the Catalogue of Properties, Appendix H. The extensive visual material is not included in the report to permit the focus on the developing argument, while the Catalogue is turning into a supporting, yet independent archive.

datum²¹ for urban development. In 1912, the land belonged to two different investment corporations, with mostly leasehold property and few freehold stands in their portfolio (Transvaal Leasehold Townships Commission, 1912).

Greater Rosettenville is on a portion of land from the Turffontein farm, which was listed as one of the original twenty settler farms on the Witwatersrand. The housing neighbourhood of Rosettenville (named after Leo Rosettenstein, who surveyed and sold the stands in the area) endured a similar fate as Yeoville, this time in the south of the gold mining belt. Established in 1889, together with Turffontein, just after La Rochelle, 1895, and followed by Kenilworth, 1907, (Smith, 1971), and larger than Yeoville, it was also initially intended as a wealthy neighbourhood (Transvaal Leasehold Townships Commission, 1912). However, the proximity to the mines, their growing spoil dumps, and the related noise and dust did not attract the desired target group. So, the area soon became home to Afrikaans and English-speaking working-class families, generally from other parts of South Africa. In 1912, the land belonged to two different finance corporations and some private individuals with exclusively leasehold property in their portfolio (Union of South Africa, 1912).

Developing Morphology

Like most townships²² close to Johannesburg's city centre that were set up before 1920, the layout of Yeoville and Rosettenville followed a traditional grid plan adapted organically to the site's topography required (JDA, 2014). The main concern of the speculative developer was, obviously, for the purposes of profit, to cover the ground with the maximum possible number of dwelling units (Hindson, 1987). The dwelling unit types were a choice of the detached or semi-detached house, the terraced house and the corner shop/ house combination. Many could be in a series of bungalow variations, with the detached version being the dominant

²¹ "A geographic datum is the adopted position in latitude and longitude of a single point to which the charted features of a region are referred."

https://www.nauticalcharts.noaa.gov/hsd/docs/CSE_library_shalowitz_v2p2ch2.pdf

²² This refers to the legal meaning of the term 'township' in South Africa, where 'township' means any land laid out or divided into or developed as sites for residential, business, or industrial purposes or similar purposes' (Town planning and Township Ordinance no 15, 1986). In South Africa the popular use of 'township' has racial connotations. It refers often to the formerly black and coloured group areas, whereas 'suburb' has been used when referring to white neighbourhoods.

choice due to “relative independence and therefore inherent flexibility” (Hindson, 1987:40). The government clearly supported this at the time. It represents the early beginning of low-density suburban sprawl (Parnell, 1995) that challenges current urban design and management:

“It must not be forgotten that in Johannesburg, with the exception of the central district within a radius of (say) one mile from the centre of the town, nearly every house or at any rate every two houses, stand on their own ground. In a new country like the Transvaal, the natural desire to be self contained, and not to be immediately adjacent to your next door neighbour, is not one, in our opinion, to be depreciated, especially when it is remembered that enormous areas of unoccupied ground surround the town.” Report of the Johannesburg Housing Commission (Lane Sansom, Chair, 1903:10)

The grid system typically used before 1900 – as noted above – was based on 495 stands or multiples thereof (Van der Waal, 1986; Hindson, 1987), which were aligned in blocks of two parallel rows of different lengths: an average of ten plots in Yeoville/ Bellevue (Dormann, 2020) and eight to twelve plots in the greater Rosettenville/ La Rochelle/ Kenilworth area. At times, the property rows within one block were divided with an alley system in the middle that allowed direct access to the backyard – another imported aspect that was quickly racialised. As one of Johannesburg’s local translations of garden cities (Parnell, 1995), the low-density layout of bungalows was also complemented by some blocks of flats, which were mainly erected between the 1920s and 1950s (Chipkin, 1993), usually four-story walk-ups with servant quarters as rooftop accommodation, and mixed-use structures with shops and apartments that lined the activity streets and main arteries of each area.

According to mapping by Meyer, 62% of the plots in Yeoville are occupied by residential buildings – predominantly bungalows – and 38% by blocks of flats (Meyer, 2002). Base maps of Rosettenville (ARPL4000A, 2018-2020; ARPL3012A, 2014; ARPL2000A, 2010) confirm a similar approximate 7:3 ratio in the area: that is, 70% bungalows and 30% residential and mixed-use multi-story structures. From the outside, the core original building structures have remained largely intact over the last century and are still recognizable as major original built

elements, as the research will demonstrate. What has changed radically, however, are political circumstances, the nature of the rule of law, and the population inhabiting the buildings - in terms of numbers, origin, culture, customs, and race (Benit-Gbaffou *et al.*, 2019). This, in turn, has altered the architecture, context, design processes, occupation, nature of domesticity, and forms of spatial agency – essentially changing from the inside out.

More and Different Residents

The population in both areas has significantly increased due to rapid urbanization and different forms of migration (Todes et al., 2020), resulting in a geographical shift of cultures and an exceptional need for more affordable accommodation, a demand supplied by transforming the bungalow plots.

Yeoville has been characterized by rapid residential transition and had experienced an increase in population early in the 19th century – and then again post-1994 (Dormann, 2020). The first influx of people occurred around 1920 due to limited options for accommodation in the inner city. From the late 1940s, through the Apartheid policy and under the Group Areas Act (1950), influx was racially controlled (Juergens et al., 2003). Then, in the period of the 1976 uprisings,²³ the area began to gain a reputation for nightlife entertainment, artistic media production and eventually vibrant political dynamics that officially challenged the laws of racial segregation. With a rising number of (officially illegal) black tenants in the white-zoned area, it became one of the first so-called 'grey areas' in South Africa (Guinard, 2019). Racial mixing became part of daily life when it was still strictly forbidden by the ruling powers. The authorities tended to turn a 'blind eye' to this in Yeoville. Although collectively highly mobilized against the apartheid system, Yeovillites, amongst them Barney Simon, founder of the Market Theatre, participated not as one entity but rather as a large number of activists with diverse agendas and groupings in wide socio-political

²³ On 16 June 1976, black students protested in Soweto against the imposition of Afrikaans as the only language used for education in their schools. A 12-year-old scholar, Hector Pieterse, was killed during the protests. Riots broke out nationwide, which continued with regular states of emergency in the 1980s. This level of violence did not remain unnoticed by the rest of the world and resulted in apartheid becoming more contested.

debate and action (Williams *et al.*, 2008). Subsequently, numerous ANC activists and apartheid regime critics (such as Sankie Mthembi, Joe Slovo and Albie Sachs) returned from exile to reside temporarily in the area and political and economic changes then triggered a dramatic shift in Yeoville's residential composition: it de-racialised, densified and experienced white capital flight. In the decade from 1989 to 1998, the black population increased from 3.4% to 84.1% of the population (Beall *et al.*, 2002: 118), see Table 1.

Greater Yeoville										Greater Rosettenville			
Population%	1951	1970	1980	1985	1991	1996	1998	2001	2011	Population%	1951	2001	2011
Black	23	13,25	9,78	10,65	15,06	62,5	76,1	86,06	95,63	Black	18,93	50,76	81,43
White	76,1	86,56	89,73	88,44	79,38	29,77	15,9	8	1,75	White	78,6	36,40	9,68
Coloured	0,03	0,16	0,17	0,34	3,4	5,34	5,6	3,8	1,6	Coloured	1,07	9,30	6,06
Asian	0,03	0,01	0,3	0,56	2,15	2,38	2,4	2,14	0,49	Asian	1,34	3,52	1,89
Other	0,47								0,53	Other	0	0,00	0,91
Total population	17161	11231	10043	8242	8210	10893	15767	28289	36739	Total population	34072	29479	47339
Households								10534	10934	Households		3951	5631

Table 1: Population change by race and increasing density in Yeoville and Rosettenville, as per census, Sources: The population of Johannesburg by Township, according to the 1951 Census Figures 1952 (CoJ 1954), Juergens et al. (2003), and Frith (2013); Statistics South Africa, <https://www.statssa.gov>

Another wave of in-migration began in the mid-1990s, with the influx of foreign nationals from other African countries, often without substantial start-up capital, formal employment, or legal work permits (Dormann & Mkhabela, 2019). By 2011, the census identified 96% of the population in Yeoville/ Bellevue as black, doubling the total population since 1991 in the same area. As the study will show, not only did the population demographics change radically, but the ownership of private properties has also changed post-1990. These drastic demographic and economic changes resulted in enormous pressures on the existing building stock. They triggered substantial physical transformations within the neighbourhood, many behind closed doors, within walled plots /stands.

Rosettenville

Although the “Old South,” including Rosettenville, was initially predominantly white, there was always a black African presence in the backyards (Harrison & Zack, 2014), usually male workers. This changed with the government’s recommendation in 1913 – the same year as the Natives Land Act – to replace them with female workers for reasons of personal security. They continued to be

mostly black Africans, and by the end of World War I, they had to stay in generally low-quality outbuildings at the back of the property (Ginsburg, 2011). As part of the ‘local geography of the white working class’ (Harrison & Zack, 2014), Rosettenville has a particular ethnic history as a result of four waves of migration as well as from localised socio-spatial hierarchies.

As stated earlier, the area’s position on ‘the other side of the goldmines’ meant the mining belt separated it from the business district. This location and harsh climate did not make it attractive to the middle class with social ambitions. However, The area was close enough to the city centre to attract English-speaking white workers and their families, who remained the majority until the 1990s (Rubin, 2016). By the 1930s, they were joined by Afrikaans speaking South Africans, mainly ‘poor whites’ (Kankonde & Nunez, 2016). Soon after, the area became home to an estimated 50,000 white Portuguese migrants in the late 1940s, who were initially from Madeira, then from the Portugal mainland, and finally in the 1970s followed by a wave of Mozambican and Angolan arrivals, when the white colonial rule in those countries was crumbling.

New migrants from Southern African Development Community (SADAC) countries subsequently arrived after the first democratic election of 1994, which marked the end of Apartheid’s racist laws. Rosettenville kept its largely ‘white’ demographic profile for much of its history (Rubin, 2016), with a 78% white majority in 1952 and 64% in 1996. However, by 2011 the census showed a reversed count in the areas under investigation with 10% white residents in an overall population, which had nearly doubled – and hence had undergone a similar transition to Yeoville.

These basic numbers and percentages do not necessarily reflect the way in which current residents occupy the spaces in which they live and how they are personalized. The population ratios do not determine what is shared, how spatial sub-division is managed to accommodate current needs, and ultimately, what quality of life the place offers in the neighbourhood as a whole, as opposed to

available alternatives. Academic studies have shown a clear demand for small-sized rental accommodation at various income levels (Rubin, 2016), but especially at the lowest end of the market for people earning very low wages. At the time of data collection, the range of low-income options available in the neighbourhood rarely exceeded R1200 to R1700 per month for shared rental options and R2000 to R2600 per month for rental of better quality, less densely occupied housing (Dormann, *et al.*, 2019).

Today's everyday life in Yeoville and Rosettenville appears vastly different from the neighbourhoods' origins as white working-class suburbs located north and south of Johannesburg's central district in the 19th century (Dormann *et al.*, 2023). At the time of writing, both areas exemplify many of the issues and concerns faced by low-income suburbs in Johannesburg, with transient populations, often with no consistent income or legal immigration status. At the same time, underneath the decaying surfaces, a new practice of desegregation has been detected 'as low-income migrants have exercised agency in appropriating space [and develop] new forms of spatial loyalty' (Harrison & Zack, 2014:16). Complex forms of associational life (Simone, 2001) support the transformation of the formerly, mainly residential and culturally rather homogenous environments, into overlapping layers of formal and non-formal spaces, with the bungalow and its numerous – and by now diverse – multiplications at the centre stage of this transformation.

Corridors of Freedom

In recent urban developments, the '495 plots' continue to play their role as a planning paradigm. In 2013, the mayor of Johannesburg, Mpho Parks Tau, introduced a programme that was meant to transform the socio-spatial structure of Johannesburg on a large scale (City of Johannesburg, 2013). The Corridors of Freedom (CoF), now called Transport Orientated Development (TOD) Corridors,²⁴ are a strategic series of transport arteries that link mixed-use

²⁴ Mayor Tau lost the elections in 2016 and the CoF continue in a reduced form as Transport Orientated Development Corridors. (Harrison, *et al.*, 2007)

development nodes with higher-density accommodation. Major parts of **Rosettenville and Yeoville were earmarked as ‘appropriate areas’ for future residential densification** to become part of a spatial economy that encourages investment (City of Johannesburg, 2016).

The current bungalow compound study focuses on the residential densification of the large-scale initiative, where almost all development is conceptualised as **private investment** (Harrison *et al.*, 2019). The incremental development of the single dwelling unit (the bungalow plot) is part of the overall strategy (see Fig. 5), albeit at the lowest end and with some contradictory information about their current performance (City of Johannesburg, 2016). In brief, the city presented three angles to approach densification in the areas: the regeneration of run-down ‘slum’ housing facilities, the change of land use and rezoning, and finally, the densification of the **freehold single-storey housing unit (the bungalow property)** (City of Johannesburg, 2016:43).

Although considering additional dwelling units and the change of “non-residential buildings or parts thereof to residential buildings,” (City of Johannesburg, 2016:55), such as garages, as an option to densify, the initial strategic proposition is to assess the existing “**freehold for replacement**,” because it “**is not the most effective use of space**” (City of Johannesburg, 2016:43). However, what is suggested later as an incremental process (adding on, converting garages) has already taken place on the ‘ineffective properties’ and reached the numbers, in terms of occupation, the city is aiming at²⁵. The current morphology shows many of the current bungalow properties with what the City names as ‘second’ (and at times third) dwellings (Fig. 5), with higher densities developing than officially recorded. As a result, the divergence between official numeric assessments and life on the ground seems significant.

²⁵ In the CoF framework the city’s density evaluation of the properties currently counts one household per house (City of Johannesburg, 2016:58), also see Appendix F. The CoF framework suggested to replace the bungalow properties with 60 unit low rise housing developments, on four to six existing properties that are between 500 and 1000 square metres. 3000-4000 sqm of land translate into 6 to 8 bungalow properties, which, as the study will show, may well offer 60 residential units *as is*. In the Johannesburg Inner City Housing Strategy & Implementation Plan 2014-2021, the ICHIP report (CoJ, 2016), the occupational density of more than 70% of Yeoville’s houses reflects as between one and three household members. In addition, it does not link the backyard structure to the properties, but lists them separately (Appendix E).

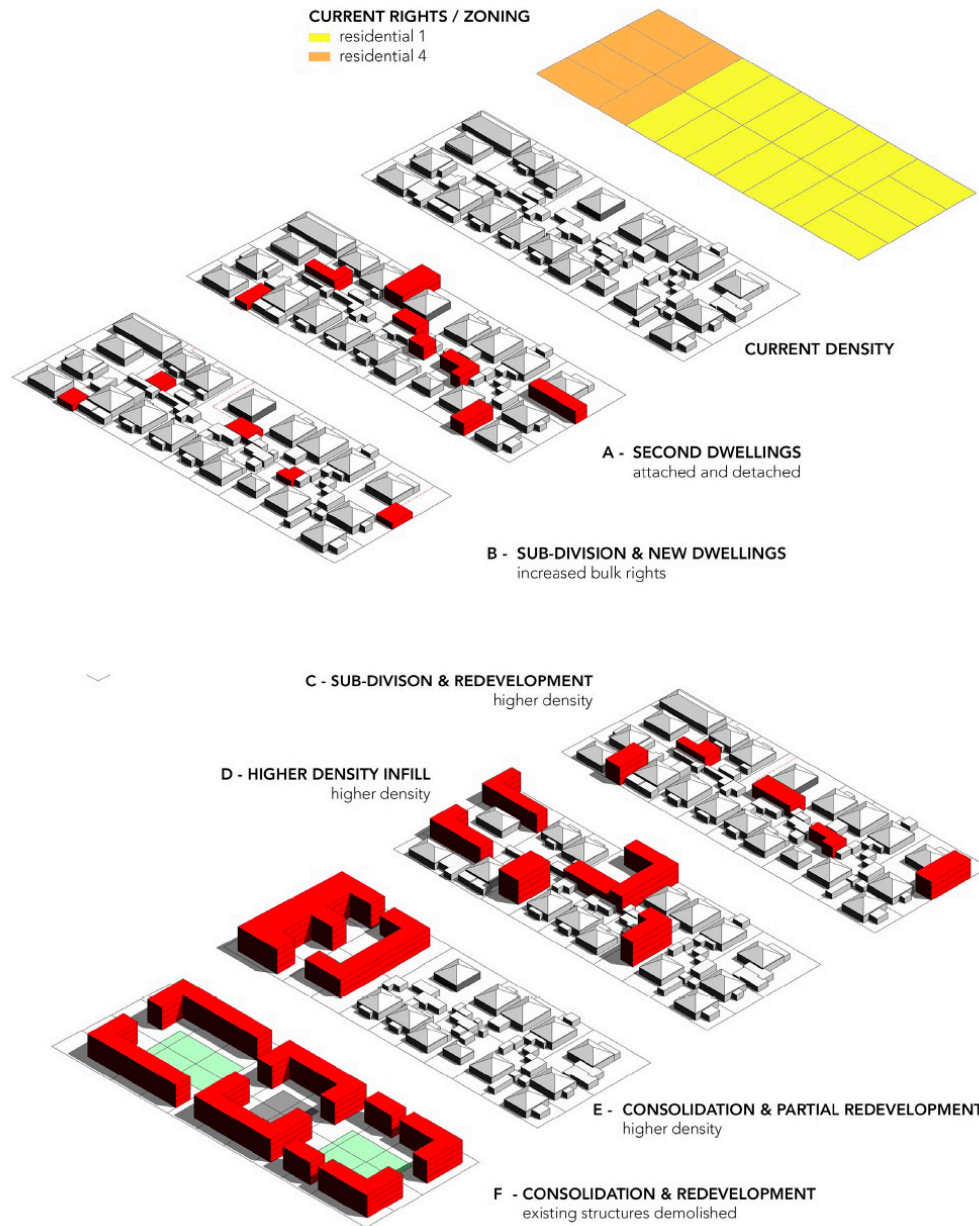


Figure 5: Approach to densification, stages and options, Strategic Area Framework, Corridors of Freedom, 2016. (City of Johannesburg, 2016. Louis Botha Avenue Development Corridor, Strategic Area Framework, p 56, City Hall, Johannesburg, available from https://drive.google.com/drive/folders/0B2v6abwVoMI3ckR1enBMb3RURUU?%3Busp=sharing&resourcekey=0-HtxWz65tSZ_-SyeHnscBFA, [accessed 14.8.2020], link now deactivated)

The need for affordable accommodation in the inner city and surroundings is increasingly high and continues to require urgent attention (Zack & Charlton, 2023). Current approaches of the city to provide housing along the corridors

through private investment²⁶ seem to operate ‘in bulk’ (Harrison et al., 2007) and not ‘plot by plot’ (Karaman et al., 2020) like the bungalow compounds. The private plot as a planning paradigm for the small-scale investor, the new landowners like Donald and his father who fill in where affordable housing is missing (Karaman et al., 2020), produces localised wealth and provides access for lower-income groups. This approach might have an unexpected cumulative effect if assessed through a different lens. Such an approach requires a better understanding of *what is*, beginning with the bungalow as a constant (in transformation) on the plot over the last hundred years.

2.3 The Bungalow: Imported Domesticity

2.3.1 Colonial Aspirations

‘The term “bungalow” ...is strictly only applicable to a house with no floor above the ground floor but I gather it is used in your Lordship’s despatch to include any house built for European occupation’ (Colonial Office, 1909)

Governor of Lagos, W. Egerton, writing to the Secretary of State for the Colonies, Lord Elgin, 1906 (King, 1984:195).

General History

The bungalow is a building type that fits a variety of descriptions in different contexts and continents. The different structures, however, bear a strong physical resemblance across the world: a one-storey separate or detached dwelling, usually with a verandah, generally designed for one household or family, placed on its own plot, often with a pitched roof and slightly elevated off the ground zone (King, 1984). The differences are generated through context and time. In other words, the conditions in which it was produced relating to social, political, cultural, economic, climatic, and material contexts. This, in turn, renders the bungalow a rich source, or source ‘material’ (Chattopadhyay, *et al.*, 2021), of

²⁶ According to recent assessments the City instructed its own agency, the Johannesburg Property Company, to purchase properties, whose management however seemed conflictual, dealing with off the record financial transactions and (Harrison, et al., 2019), and got some real estate developers interested. So there is some but not significant development.

embedded knowledge to investigate and understand complex issues of the built environment and its relation to culture and societies. The bungalow is seen to go back to the transformation of the original farmer's hut in Bengal, India, in the 17th century into the 'Anglo-Indian bungalow' (Phillips, 1920) that accommodated European visitors on the Asian continent from as early as 1783 and was, as such, 'explicitly racial and cultural, and implicitly political' in origin (King, 1984).

The South African chapter of bungalow history continued this narrative in its particular setting from the late 19th century onwards (Hindson, 1987). The ability of this specialised dwelling form to adapt in size and structure and its relative affordability as a vehicle to access finance - usually through individual ownership via mortgage systems by its inhabitant, makes it a building type in speculative housing that has played a significant role in 20th century urbanisation worldwide (King, 1984). Although this investigation does not focus on comparing the different manifestations of bungalows around the world, it is worth noting that bungalows are a global phenomenon and have specific profiles and programs in each particular context. These contexts range from holiday homes to suburban family residences, to small villas, and in the case studied here, mixed-use African compounds. The latter are a recent phenomenon in the contemporary southern African context and are the subject of this study.

The bungalow is a dwelling type that has, from early times, been linked to forms of migration and has been part of a capitalist system that has substantially affected the morphology of certain cities or parts thereof. It played a decisive role in speculative housing development at the turn of the 19th century (Hindson, 1987). For working- to middle-class accommodation in ultimately white-zoned suburbs, following the official end of the apartheid administration and the first free elections in 1994, a wave of inter-continental migration has multiplied the demand for inner-city low-cost accommodation. A main source of the bungalow's early distribution is the pattern book. A pattern book is a book of architectural designs, usually providing enough information for non-architects to build structures that are copies or are significant derivatives of major architect-designed

works. Publications played a vital role in constructing small to medium-sized Victorian houses, and in spreading imperial aesthetics, values, and ways of life across the colonies (Long, 2002). The aim was to build houses similar to those in England, as seen in the Hollwards' house mentioned earlier, which is now owned by Donald.

Colonial Import

The bungalow arrived in South Africa in the last years of the 19th century. According to King, "it was, in the first place, a technological device – a form of shelter for the British colonial officials providing protection against malaria and reducing the effects of tropical heat" (King, 1984:67). However, it played a different role in the rapidly urbanising Johannesburg. Less as the representation of the colony's officials and institutions, it was the first residential model used in speculative mass housing for the working and middle class, following trends elsewhere in the colonised countries. The late Victorian and Edwardian speculative bungalow in Johannesburg is the housing type developed on the private market as small mass housing provided for the middle class (Hindson, 1987) after the South African War. In his introduction, Hindson describes this as the beginning of "radically new ideas" and "radical aesthetic injection" (Hindson, 1987:3), resulting in wholly new patterns of accommodation.

The primary characteristics of Johannesburg's first suburban lower-income houses were thus a result of domestic practice and the impetus of foreign architectural sources, mainly from England (Chipkin, 1993). The bungalow reflected middle-class values: at worst, concerning what these were willing to tolerate, at best "by sharing the kind of environment that they wished to impose on the lower orders" (Van Onselen, 1982:269). The census of 1904 for the city displays an equal amount of houses with 2-5 rooms, which are the sum of bedrooms and living rooms excluding kitchens (Hindson, 1987). While the Anglo-Saxon style became the desired and celebrated appearance of the growing suburbs for white residents, the beginning of 'adding to' the bungalow began as

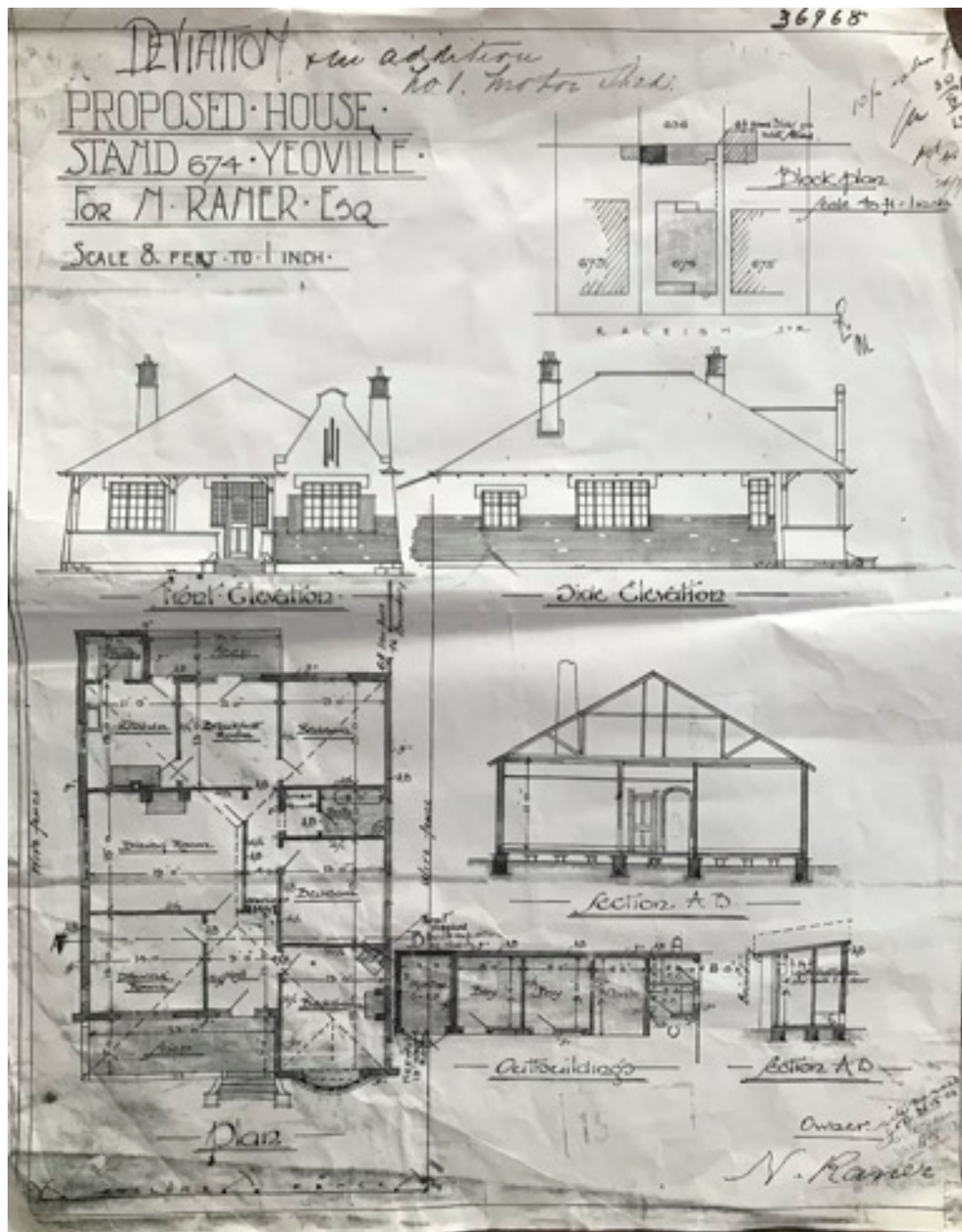


Figure 6: Council plan of Case Study #6 in Yeoville, approved 1913 (City of Johannesburg, Development Planning Department, Metro Centre Braamfontein, Archive, original plan from 1913, copy obtained 2018)

early as 1910, when “a special committee appointed to deal with African housing in Johannesburg could report that most middle-class households provided separate outside rooms for their African help” (Ginsburg, 2011). Figure 6 shows the original plan such typical family residence in Yeoville (Case Study #6), illustrating the preference of style and the accommodation of dual hierarchies, with a double back entrance and double corridor, plus outdoor rooms.

A Significant Part of Urbanisation

Since its arrival at the beginning of the 20th century, the bungalow played a vital role ‘in transforming the economic, social, cultural and political life of Africa...It was part of a physical and spatial urbanisation process, which incorporated modern Africa into a capitalist world economy.’ (King, 1984:195). Predominant forms of settlement in pre-colonial Africa were mostly rural, with an economy of peasant agriculture (Pellow, 2002), and the basic functional unit of society was the extended family.

Fundamental to understanding the economy is its relationship to land: the extended family was the unit that generally held use rights to the land, and its members related to this land based on values and rules sanctioned by their culture and society (Pellow, 2002). The kinship relation also determined the organisation of labour and residence. The residential forms to which this system of economy, technology and social organisation gave rise took the form of a compound comprising a number of individual huts or a continuous building of many rooms. Among different peoples and regions, an immense variety of dwelling forms and layouts existed across Sub-Saharan Africa, yet what they have in common is that they are all related to a not-dissimilar form of economic activity and its associated social organisation (Denyer, 1978; Hull, 1976; Oliver, 1970,1975 - cited by Pellow, 2002).

These residential forms changed with the development of urban areas under colonial governance. The bungalow was part of this change, from a rural economy with an extended family structure to an entrepreneurial one (Burnett, 1978) in an

urban environment, where nuclear forms of family co-existence became more common and in which the bungalow became one of the dominant forms of housing. Coming from Europe, it was designed initially to accommodate the social/cultural structures and values of that population on foreign territory and catered, in terms of room layout and programming, for the typical working and middle-class family of two parents and a limited number of children (Hindson, 1987).

Speculative Investment – Part of a Capitalist Structure

As Hindson points out, the main reason for the mass production of the bungalow in the Johannesburg context was the growth of population: fast expanding from a population of 3000 to a quarter of a million from 1889 to 1914. There was a corresponding rapid growth of territory as boundaries were stretched to an eighty-two square mile area by 1903 (Beavon, 2004). Access to finance and capital is the third and arguably decisive component, as demonstrated in the speculative housing development in the United Kingdom in the 1930s, with a variation of the bungalow as the dominant model (Burnett, 1978). In the UK, this happened due to post-war subsidies and a ‘radical reform of the existing organisational and architectural regime providing working-class housing, replacing privately built tenements with state-built (or controlled) cottage garden suburbs’ (Glendinning, 2005:150). The 1930s were also the time when mortgages began to be used, and, together with falling land prices, a small middle class began to expand rapidly. In South Africa, similar financing processes were at work, but access to land and capital was mainly reserved for the white population.

The expansion of Johannesburg suburbs, and with that, the wide distribution of bungalows, was begun through the purchase of large land parcels by members of established families and their subsequent speculative development. The South African war was a turning point, from prior dominant leaseholds (typically from 15 to 99 years) to freehold development and from renting to owning (Transvaal Leasehold Townships Commission, 1912). Before the war, renting was the norm, but by 1921, this had decreased to 65%. All this reduced the risk for the initial

speculator, who developed and built the houses without a specific client. The designs used were a variation of a few models that were mirrored or slightly changed according to the number of rooms required (Hindson, 1987). The estate surveyor laid out the roads and land parcels. The plot size depended on the social status of the projected population – working class, managers, business and factory owners and mining magnates (Braun, 2015). This layout is still visible in today's suburban landscape throughout the city.

2.3.2 Grounded Pattern

Socio-Cultural Manifestations in Space.

The bungalow's internal layout and its location on the site have, from the beginning, responded to South Africa's particular social history of cultural separation and led to a double life: of served and serving spaces, white owners and black domestic labour, visible front gardens and invisible backyards (Ginsburg, 2011). The arrangement of back rooms was generally in sight lines of the main house for control purposes. In contrast, shared spaces were located to have minimal personal contact and maximal logistic efficiency. Kitchens were often regarded as 'enclosed cells of labour' (Ginsburg, 2011:63), where the domestic worker had to remain invisible to the white family members, and bathrooms were not shared. An outdoor toilet was often adjacent to the back room, and body and clothes had to be washed using buckets carried into the room or, if available, in an outdoor shower. Visitors were rarely permitted in the "serving" spaces or had to be introduced to the employer. Servants' children were mostly not allowed to stay with their mothers, who were domestic workers. These arrangements were clearly expressed in the layout, design and building of the house and backroom – material finishes were of different quality, and access to infrastructure like electricity and water was intentionally limited. This makes the study of arrangements of privacy, access to infrastructure like water (in bathrooms, kitchen, and the yard), and social practices over time, and in today's newly adapted arrangements, a promising lens to read socio-cultural needs and desires through drawing on the spatial documentation of existing realities.

Private Property - Speculative Investment

As the major dwelling typology of the first widespread speculative housing development in Johannesburg, the bungalow has always been based on the idea of private property of a single owner, with clearly demarcated edges (usually walled). Today, the plot is generally surrounded by a high wall that serves as security and restricts views to the inside (Dormann, 2020). These two factors – relative invisibility and private, localized management, together with the state’s common neglect of regulatory control, have enabled multiple unauthorized spatial changes on the inside (Charlton, 2019). These changes, although often illegal according to building regulations and processes, have created responses to people’s immediate needs, albeit with their own shortcomings and strengths. Graphic representation such as in plan, section and elevation (as the basis for regulatory control) “incorporates these constructions into the ‘formal’ city, in opposition to the official urban discourse, which considers them marginal.” (Malterre-Barthes, 2016:130) The different ways of using the space, different groups of lodgers, and different landlords lead to creative new adaptations and typologies that are, in fact, forms of urban morphology.

Different Types of Accommodation: Rooms

Across the city, the supply of living spaces embedded in the original urban fabric (that is, medium-priced apartments and individual, often bungalow, houses) did not meet the demands for affordable accommodation and the needs of most of the new residents during and after South Africa’s transition from the apartheid administration to a democratic Republic. As a result, existing flats and houses have increasingly been adapted through subdivision into single and shared rooms and spaces. This growing number of spatial ‘units’ emerged in the residential portfolio of Yeoville and Rosettenville, amongst other areas, have created a new urban form of supply of low-cost accommodation to meet the fast-growing demand and, *de facto*, manage to accommodate basic needs of current residents. Currently uncontrolled and unregulated, this new spatial supply is very flexible, yet at densities that exhaust existing infrastructures and can come at the price of

compromised living conditions in terms of hygiene, privacy, and safety (Dormann & Mkhabela, 2019).

During in-depth interviews with local residents in Yeoville about their housing histories in a workshop (Dormann et al., 2019), complemented by drawings of the spaces they lived in, many described the rooms they inhabited as 'sites of circulation' (Burzynski, 2012) as opposed to the notion of residence in an established 'home.' This lack of permanence has not prevented rooms, and the different ways of sharing them from becoming the lowest common denominator of rentable accommodation on the market, but it enables potential residents to access and afford urban living spaces. They are located close to work opportunities, transport systems, social networks, and infrastructure – some of which change rapidly. In exchange, the new typology increases urban densities, creates a culturally diverse neighbourhood and provides a highly adaptive rental system that can absorb changes in family structures, social relations and fluctuating income and expenditures (Dormann et al., 2019).

These emerging micro-categories of spatial subdivision are reflected in advertisements displayed on the 'renting walls' in the neighbourhoods researched. These are selected walls of buildings like popular supermarkets and along sidewalks, where people advertise available spaces through mostly handwritten notices. An inventory of the 'renting wall' in Yeoville (ARPL2000A, 2010) showed five different kinds of rentable spaces in bungalows or within their boundary wall. The various rentable spaces included shared beds, shared bedrooms, whole bedrooms, sitting rooms, other spaces and the outside cottage (previous "servants' quarters). The most common unit for rental was the bedroom, single and shared, equipped with cupboard or not, lockable or not. A similar exercise in Rosettenville, conducted four years later, found fewer shared space options from which to choose. Nevertheless, the offers differentiated between rooms, bedrooms, cottages and converted garages, and specified standards and infrastructure, such as sink-in-room, geyser, built-in cupboard, individual kitchen, and carpeted surfaces (ARPL2000A, 2010; ARPL4000A, 2018-2020). The

freestanding bungalow, with two to three bedrooms, living room, dining room, kitchen, bathroom, verandah and outbuilding, has thus expanded and metamorphosed into maybe a ten-room structure containing multiple and adaptable individual uses.

Integration of Work + Living

Given the lack of formal employment for many residents (Mavuso, 2014) – and the need for some kind of income on the one hand and affordable services on the other, small, often non-formal businesses have started to change the edge of the bungalow external boundary wall. It includes the open space around the wall, as well as existing outbuildings and even the space inside the main house (ARPL2000A, 2010; ARPL4000A, 2018-2020). As a result, these have re-introduced a new version of home-industry to the bungalow that was previously covered only by the corner shop type (Hindson, 1987). Thus, what used to be the socio-culturally representative front garden in the previous working / middle-class neighbourhood has often been transformed into a mixed-use and income generating zone, a gathering place and space with necessities for daily consumption. Essentially, the residential plot has been partly transformed into a socio-cultural productive space.

This transformation is a manifestation of the bungalow's important contribution to urban life, yet not without controversy. The illegality and ambiguous nature of certain businesses, such as un-regulated liquor outlets and sheebens,²⁷ (spaza shops that act as covers for drug dealing or selling of illegal cigarettes), are described as 'plaguing' the area in the local news.²⁸ They even mobilize concerned residents into violent action, like that reported in 2017 from Rosettenville/La Rochelle.²⁹ However, while being aware of the legal challenges to these changes, it remains a fact that the small businesses on the threshold of public and private spaces, as well as those on the side of the road, are firstly high in demand and

²⁷ In the South African context 'sheebens' were originally illicit bars in black townships where alcoholic beverages were sold without a license.

²⁸ <http://www.iol.co.za/the-star/law-protects-illegal-business-1.1404215>

²⁹ In January 2017, more than a dozen houses – bungalows mostly – were torched by residents in Rosettenville. They suspected they were being used as drug dens and brothels. <https://mg.co.za/article/2017-02-17-00-we-dont-burn-we-clean-brothels/>

often the only possible income generation options for (migrant) entrepreneurs (Pederby, 2010). In line with this argument, these work-live arrangements in and around existing bungalows have the potential to serve as exemplary models for more sustainable urban living in urban areas where formal and non-formal activities co-exist on the ground, and in possible dialogue with political structures seeking to accommodate multiple urban interests.

2.4 Designed to Distance: Legalities of Segregation

2.4.1 Distances, Subdivision

Domesticity is as personal as it is politically, socio-culturally, and economically rooted and legally defined. The house is a contested space in South Africa, as much as the land it stands on. The history of housing in South Africa has been politically driven, with the restriction of ownership to land and property in particular locations for particular racial groups being a major legal focus (The Native Land Act 1913, Housing Act 1920, Native Urban Areas Act 1923, Slum Act 1934, Rent Act 1942, Ghetto Act 1946, 1950; Group Areas Act 1950). The house is considered a ‘crucial commodity in the political economy’ on the one hand (Rakoff, 1977:88) and as a cultural artefact with meaning to people, ‘both privately experienced and collectively determined’ on the other (ibid). As such, the South African process has produced culturally manipulated domestic layouts, imprinted in the ground *that was measured, and marked... the ‘other’ currency of the colonial system, the land, as property* - as the study stated at the beginning of the text.

The final section of this chapter examines the notion of sub-division and allocation of land into and onto property. The planning principles embedded in the legislation around health and housing – and their intertwinement implicitly reflected the “regulation of living standards and racial ordering of residential opportunity” (Parnell, 1993:472). This study refers to this as the *designed to distance* nature of the ‘495 plot’ and across plots.

Since its inception, the application of basic rules and regulations on housing and residential areas has been anchored in various sets of legislation and regulations in Johannesburg. The properties as they appear today are, in large part, still blueprints of these rules and regulations and, as the case studies will show, make good use of the enforced duality as a possibility of separating and subdividing from within as a choice. Harrison and Zack (2014) talk about the city. However, the research proposes to apply this to the plot as a unit when they call this ‘the exquisite specificity of space within [the plot]’ and the process of finding out ‘the ways in which this specificity is configured by external [and interpersonal] process and influence.’ In order to understand the context, a number of historical policy documents are sourced to read bungalow morphologies as a knowledge base or as archival drawings over time. These documents enforce the role of the physical structure to insert division into domestic life on the plot and in the house.

The overlap between the two sections of governance, as discussed earlier, empowered the Minister of Public Health of the Union of South Africa in 1919 to make decisions regarding densities (occupation of space in terms of quantities),³⁰ structural fitness of buildings, and the quality of related infrastructure – plumbing, air and water-flow- down to the placement of airbricks in walls, details that are traditionally not part of a similar portfolio. It allowed the institution to define what is ‘habitable,’ knowing that certain spaces could not comply. For the other spaces, the private homes, the bungalows, and those they knew would and could comply, town planning schemes laid out the rules to keep their distances within their properties. These instructions have subsequently been traced on the layout of the case studies, as will be seen later.

The scheme from 1947, an early town planning scheme, was preceded by several ordinances³¹ (Oakenfull, 2021; Harrison et al., 2007) that started to move the

³⁰ A regulation stated it was the “Duty of the local authority to prevent the erection or occupation of unhealthy buildings, or structures on unhealthy sites, sites of insufficient extend, or overcrowding” (No 36, 1919, Act to make provision for the public health, Chapter 8 p39, 121).

³¹ Town planning law in South Africa ties closely to Britain, where the Town Planning and Housing Act had been introduced in 1909. Due to unresolved governing issues, South Africa begun much later to develop and implement legislation. After 1925 town planning was part of provincial functions who issued ordinances influenced by British town planning. After the 1931 Transvaal ordinance, the first town planning scheme came into being 1946 (Oakenfull, 2021).

outbuildings and the people inside them out of sight, stating in Part IV, Building Restrictions and Use of Land 15 (c):

No building for use or occupation by non-Europeans, other than buildings for occupation by Europeans' domestic servants, shall be erected in any use zone without the consent of Council. Provided that the buildings for occupation by non-European's domestic servants shall not be erected in any zone in a position which would likely to cause injury to the amenities of the neighbourhood.

Part III of the Town Planning Scheme of 1979 - Use of Land and Buildings - 25
Buildings for use by Domestic Servants - became more specific in

- 25 (1) *The building plan of a dwelling house in respect of which is intended to erect buildings for use by domestic servants must show-*
- (a) *That reasonable steps have been taken to **screen** such buildings from adjoining properties and form any street in the vicinity, and*
 - (b) *That a reasonable area is provided for **the exclusive use** of the domestic servants who will use such buildings.*
- (2) *Save with the consent of the City Council, **no building erected [...] for use or occupation by a domestic servant shall be less than 6m away from any door or window of any dwelling house,** dwelling unit or residential building on the adjoining property.*
- 3 *The **entrance and arrangement of windows** of a building erected for use or occupation by a domestic servant shall be designed so as to **prevent overlooking** of adjoining property.*

It continues:

Limitation on Number of Kitchens

26 *A dwelling unit shall **not**, without the consent of the City Council, contain **more than one kitchen.** [emphasis added in bold]*

(CoJ, 1979)

These stringent impositions on small-scale properties were designed to distance and separate while permitting sociality (related, for example, to sharing meals) only as one unit – the dominant family. These legal frames for the small space disconnect and designed distances have thus come to set the brief for recording these transformations of these layouts in forms of co-housing on the bungalow compounds- to record other boundaries made by people in emerging forms of everyday life. Figure 7 juxtaposes the intended design to distance and separate races embedded in the Town Planning Schemes (1948, 1979) and the current, organically grown morphologies, that have overwritten past regulations with new orders, showing a sample of blocks in Yeoville, 2018.

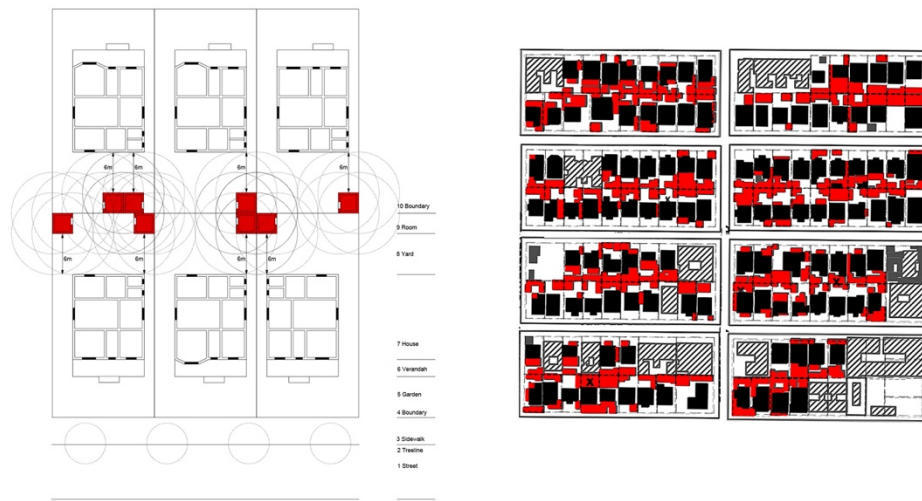


Figure 7: Design to distance and separate, diagram of rule 25 (2), 1979 Town Planning Scheme, versus current morphologies from sample blocks in Yeoville (author's own, 2020)

2.5 Summary

Chapter 2 has located the bungalow properties within Johannesburg in spatial, temporal, and other ways. Placed within the historical subdivision and allocation of **land** as a colonial system of demarcation and racially dominated regime of ownership, these then turned private property into a structuring paradigm of urban planning, a role the plot continues to play, albeit now from the bottom-up. The chapter was structured in three sections: framing key details in the process of land division, allocation, occupation, and governance; zooming into the beginnings of Yeoville and Rosettenville, leading to the situation of *as-is*; introducing the bungalow as an imported domestic pattern and tracing its role in the process of urbanisation; and interrogating the transforming residential layouts in response to changing legislation, economic context, and socio-cultural values.

In introducing the property in Johannesburg by focusing on the plot as a planning device and a form of agency through ownership of the bungalow, the chapter has demonstrated how legal instructions for the design of physical space are, in fact, socio-cultural constructions, in this case, constructions of exclusion and “designed distance.” This is in preparation for the analytical frame of the documentation of the case studies, which will become clear later in the thesis.

CHAPTER 3 ARCHITECTURAL KNOWLEDGE

Houses are unsettling hybrid structures. A house is, in all its figurings, always thing, domain, and meaning—home, dwelling, and property; shelter, lodging, and equity; roof, protection, and aspiration—oikos, that is, house, household, and home. A house is a juridical-economic-moral entity that, as property, has material (as an asset), political (as dominium), and symbolic (as shelter) value. Houses, as such, refer to the three main axes of modern thought: the economic, the juridical, and the ethical, which are, as one would expect, the registers of the modern subject. It is, in fact, impossible to exaggerate the significance of individual (private) property in representations of modernity.

(Chakravartty & Silva, 2013:2)

3.1 Introduction

Chapter 3 essentially unpacks access to embedded knowledge in a methodological sense. Importantly, it introduces architectural knowledge as a research tool from three approaches. Firstly, from a more philosophical understanding of buildings as epistemic objects that hold knowledge(s) in their materiality and are essentially incomplete through the changing social and cultural life they accommodate (Lury, 2021; Lury, et al., 2020; Cetina, 2001; Rheinberger, 1997). Secondly, the approach to architectural knowledge used here argues for the understanding of research methods as a practice or a discourse (Hirst, 1993) - as opposed to a set of tools (methods). This sort of practice is an important aspect of the second section of the chapter that focuses on the various kinds of **design research** (Murray, 2013) where access to embedded knowledge through forms of architectural practice is central. The third approach deals with the concept of extended Case Study and begins to prepare for the methodological practice of thematically ‘re-describing’ (Simone & Pieterse, 2017) the selected bungalow properties as material forms – ‘as built’ – across the juridical, economical, and socio-cultural (Chakravartty & Silva, 2013). This is to eventually suggest that the knowledge(s) embedded in the transforming bungalow compound properties form part of the re-

description of aspects of the African city – ‘as is, or as could be,’ as opposed to ‘as should be’ in any normative sense.

3.2 Knowledge Objects

3.2.1 Houses as Epistemic ‘things’ in Changing Context

The House Knows

A house is a basic architectural element that is a part of people's everyday lives and also a basic unit of urban morphologies. As private property, it plays a significant role in the planning paradigm of South Africa's historical urban development as described in the previous chapter. As argued, domesticity is as much personal as it is politically, socio-culturally, and economically rooted and legally laid out. The idea of the ‘house’ is a contested space in South Africa³², as much as the land it stands on (Braun, 2015) – and indeed, therefore, in terms of its architecture. Architectural practice here (as elsewhere) has long been complicit in the production and reinforcement of social bias and discriminating spatial arrangements (Bhandar, 2018; Aureli, 2012; Weizman & Carlo, 2010). Within this system of unequal distribution of resources, the profession has inevitably assisted to “craft and spatially define asymmetry” (Aureli & Tattara, 2013). Institutionalized and systematically organized, the domestic geometries thus created often appear as the translation of legislation laid out in the past yet retaining some shadow validity as a blueprint in the ground. Within all of this, the City continues to ask for the application of, at times, outdated building codes and regulations, drawing on architectural tropes. Additionally, it does not seem to be able to engage with the physical structures as they are – as built – and hence to accommodate the real-life changes which these cater.

Despite this basis in a form of architectural ‘blindness,’ some buildings/properties have managed to help themselves in certain ways – they have learned after they

³² The study refers to the ‘house’ as a form of domesticity that was envisioned and designed as a social construction in line with a clear cultural binary. Archival and legal documents (e.g. the Report of the Johannesburg Housing Commission (Chas. Lane Sansom, Chairman, 1903), Black Housing, The Key to a Stable Black Society (The National Development and Management Foundation, South Africa, 1978) Native Housing in South Africa (Calderwood, 1953) and the Minimum Standards of Housing Accommodation for Non-Europeans) display clearly separated strategies and predictions for housing requirements of black, white or coloured people.

have been built (Brand, 1994)³³ and make most of the opportunities for change. They have, one could say, “the capacity to aspire” (Appadurai, 2004:59; Appadurai, 2003), and their representations are, in many ways, aspirational maps. Here, the architectural structure, as built, turns into a blueprint of people’s visions of how they would like to live within the choices they are privileged to make, overwriting previously set times and boundaries.

The history of their transformation can be seen to be embedded in their physical form as traces of an ongoing negotiation between economical, juridical and socio-cultural dynamics (Chakravartty & Silva, 2013). The house thus turns into a knowledge object and a source when zooming out of the wider urban morphology and a socio-economic construct of material civilization across time³⁴ (Braudel, 1981) – even when zooming into the anatomy of its own materiality (Brand, 1994; Duffy, 1990). Both ends of the spectrum deal with change over time as a response to context on different scales, sometimes to the extent that it becomes a new form of context – as boundaries between house and context merge, and those relations also become a rich knowledge base.

Accessing such ‘inner’ architectural knowledge is not easy in the areas under investigation due to a high degree of non-formal activities, with a number of them potentially deemed illegal, and a general rise in lack of safety and security. Here we encounter Braudel’s material life (1981) at eye level, “a shadowy zone often hard to see for lack of adequate [...] documents,” something he calls the “infra economy, the informal other half of economic activity, the world of self-sufficiency and barter of goods and services within a very small radius” (Braudel,

³³ Brand discusses the knowledge of buildings from a material perspective and deconstructs the house made of components across six shearing ‘lifetime layers’ of change further explored in Chapter 4.

³⁴ Braudel’s (1981) material civilisation is the second layer of a triple division of economic realities. He introduces A) the market economy as “transparent, visible realities [...] and easily observed” in the centre, underneath which B) a “shadowy zone often hard to see for lack of adequate [...] documents” plays out “elementary basic activity that went on everywhere [...] a rich zone, like a layer covering the earth [...] called material life or material civilization” In lack for an appropriate word he calls it the “infra economy, the informal other half of economic activity, the world of self-sufficiency and barter of goods and services within a very small radius.” The third zone C) is placed above, and even more invisible than the below, and directed by “certain groups of privileged actors’ who “could manipulate exchange to their advantage and disturb the established order. In their desire to do so [...] they created anomalies, ‘zones of turbulence’ and conducted their affairs in a very individual way, [operating] from a distance.” (Braudel, 1981:23-25). At the time (15th – 18th century) it included the dealings of foreign exchange, linked to distant trade movement and complicated credit arrangements, was transnational and operated upon principles of monopoly (Braudel, 1981). In the bungalow compounds under investigation material life relates to the composite of formal and non-formal activities (and structures) that govern their everyday.

1981:24) People in the ‘shadowy zone’ are understandably cautious with whom they share what, and access to these intimate forms of knowledge is inevitably limited to some degree. This is more so when, legally, the private properties have the right to exclude. The governing structures do not seem to have resources or a feasible strategy of how to enter or, to look for, in these admittedly complex, dynamically changing territories (as introduced in Chapter 1). This increases the exclusivity, and (according to market rules) the value of the embedded knowledge – and, in fact, of the properties, likewise, as will be seen below.

From Artefact to Design Project to Discourse Object

The understanding, or reading, of architecture as an artefact – that is, the building in its environment (Meggett, 1993) – has a long history in the architectural field (Judin, 2021; Aureli, 2012; Chipkin, 1993; Frampton, 1983) and also in the interdisciplinary discourse of history, social science and anthropology (Brand, 1994; Rapoport, 1992; Braudel, 1981; Bourdieu, 1977) – the bungalow with its own biographies (Hindson, 1987; King, 1984; Phillips, 1926). Buildings, and their parts, have also been grouped as types (Koolhaas, 2018; Forty, 2000), with shared particularities across space and time, an approach that will be central to the development of the analytical framework in Chapter 4. Architecture as a structuring device for comprehensive knowledge of aspects of the physical world has primarily been dealing with what is considered formal buildings, often representing structures of power with public, religious, and royal values (Aureli, 2013).

This study, however, focuses on the *house* as a popular form of architecture, a building type that holds socio-cultural values as much as it is “a crucial commodity in the political economy” (Rakoff, 1977:88) and a significant element of people’s and a city’s everyday life. The house is personal — and it concerns the many. It has different formats of production. It is what is built, the physical artefact, and “a shared knowledge out of which every architectural project (and every building) is made” (Aureli, 2012:24). To frame the house, knowing the research looks into the bungalow compounds’ reconfiguration as a contemporary

composite of architectural *practice* and *project* (Aureli, 2012). This distinction references the initial nature of architectural knowledge as the *practice* of making the *building*, and also the turn that architectural knowledge has taken since the 15th century in the form of the *project*, that is, through drawings and other forms of representation – which means working on something that does not exist *yet* using various forms of representation.

The general current order of making a building is somewhat linear and goes from *project* (what is yet to come) to *practice* (of building), usually quite meticulously detailed on paper and, in this way, regulated by state and profession (Bizzell, 2002; CoJ, 2023; SACAP, 2023).³⁵ The emerging bungalow compound and the process of documenting its existence in this study somehow collapse/reverse this process by trying to record what has been built and analysing this as an indication of *what is, and might yet come*. This is less with the intention to highlight what does not fulfil current regulation, although major regulatory compliance concerning health and safety checked, but more to explore the non-compliance of regulatory domains with realities on the ground that are unlikely to change due to horizontal as opposed to vertical knowledge transfer (Eckert, 2012).³⁶ The study thus extends the understanding of the building as an artefact (physical object) by focusing on the house (the transformed bungalow compound) as a design project of *practice in process* that holds extended socio-cultural, economic and legal knowledge embedded in its material form, over time, past, present and future.

Going even further, the research considers this “reversed” design project as a *discourse object*. Within the given context, where working with and through the embedded knowledge is the primary interest. In contrast to critical or analytical discourse generally *about* buildings, the research refers to a concept that challenges the separation between the non-discursive object and knowledge about

³⁵ The author has explored the process of submitting plans to the council in current practice by participating in an accredited online course for professional development in order to understand potential challenges the property owners might be facing. Council plans were also produced for some of the case studies, but not submitted.

³⁶ Julia Eckert alerts us to the potential of the law to transform according to the situation as *rumours of rights*, opening up processes of normative change. She describes this as “processes of horizontal knowledge transfer [that] select legal knowledge about concrete situations, particular perceptions of problems and conflicts that differ from the often discussed top-down processes of legal dissemination” (Eckert, 2012).

it (Hirst, 1993; Foucault, 1972).³⁷ Here, discourse “refuses the obvious distinction between a brick and word” (Hirst, 1993:52) and assigns active roles to both. Chapter 5 will elaborate on methods of discourse in research application – observing and recording observations in and about the properties of empirical work in the field as forms of *objective* practice. This is ultimately to explore how the ‘house,’ as an architectural knowledge object, works in the field and in the re-description of house worlds at large (Weizman, 2016).

3.2.2 Incomplete Knowledge

*Definition: Incomplete / not complete: Unfinished or lacking a usually necessary part, element, or step*³⁸

Unfinished Objects

The previous section has expressed an interest in what the ‘house knows,’ and indicates a spectrum of relevant embedded knowledge fields as the basis to generate a discourse that is working with and through the bungalow compounds. However, due to the exclusive nature of the bungalow knowledge pointed to at the beginning of the chapter and the frequency of change on the actual plots, the enquiry is largely guided by making sense of *what we do not know*. ‘A lack of’ addresses our limited understanding of such complex situations, our (or anyone’s) capacity to assist in assessing the performance of the properties, and ultimately, ways to enhance or maintain life on the ground, as built, as lived. With a chosen focus on the physical structure as the starting point, the study thus follows a methodological approach from the social sciences that deals with *incompleteness* as a necessary quality for research (Lury, 2021; Julier, 2009; Knorr, 2001; Knorr, 1997; Rheinberger, 1997).

This approach calls for material things – epistemic objects – “in contrast to ideas or concepts – as driving forces in the process of knowledge acquisition” (Rheinberger, 2005:406, 1997). Such an approach argues for the consideration of

³⁷ The research is referring to the article of Hirst on Foucault (1993), as it deals specifically with a suggested application of principles to the architectural field / practice.

³⁸ <https://www.merriam-webster.com/dictionary/incomplete>

concepts as being embodied in material entities but that present themselves in a distinctive, intricate opaqueness (Rheinberger, 1997) and are, as a result, “epistemic by virtue of the preliminaryity, of **what we don’t know about them** [emphasis added]” (Rheinberger, 2005). Such objects of knowledge are characteristically open, question-generating, complex, and potentially conflictual topics. The notion of *lack* re-enforces their ability to address non-routine problems, to unfold as processes and projections, relating to an embedded “interlocking chain of wantings” (Cetina, 2001:187) – where the capacity to unfold suggests a degree of temporality and relationality. “Unfinished objects” exist in relation to something else, and their embedded knowledge is as much about themselves as it is about links within their relations.³⁹ Lury (2009:96) describes it as the “relationality of an object to its membership of a series, or a system of objects,” and the social life of (incomplete) things (Appadurai, 1986) is determined by the object world the object belongs to (Julier, 2009). Object worlds are, in the case of this research, house worlds.

It is in this light that the study considers the ‘house on the plot transformed over time’ as an *epistemic thing*⁴⁰ and as a case to study, albeit arguably different in scale and size to other ‘things’ referred to the above discussion. Methodologically, and partly because it is the situation at hand, this research looks into a form of object practice that considers a ‘lack of’ as an essential driver for the enquiry into the make-up of the bungalow compound set up. In the study, the bungalow compound is materially defined but is continually acquiring new properties, different qualities and amending existing ones. The properties’ ‘state of incompleteness’ is less preoccupied with something tangible, like structure, matter, or a particular building. By definition, a focus on such lack would indicate that there is – once the lack is addressed and the gap is filled – a final state of completion, which there is not, as manifested in reality. The study here addresses

³⁹ Lury in: (Julier, 2009:96).

⁴⁰ Definition by Hans-Joerg Rheinberger (2005):

“Scientific or *epistemic objects* are clearly material things. They function as scientific or epistemic objects by virtue of their opacity, their surplus, their material transcendence, if you like, which is what arouses interest in them and keeps them alive as targets of research. They are epistemic by virtue of their preliminaryity, of what we do not yet know about them, not by virtue of what we already know about them. They are epistemic because it has not yet been determined whether they will become obsolete as targets of research, or whether they will become transformed into stable, technical objects that may define the boundary conditions of further epistemic objects” (Rheinberger 2005:406).

a fundamental misconception of architecture, or the architectural object, as a finished product (Weizman, 2016; Brand, 1994; Duffy, 1990).

Source and Evidence

The incomplete knowledge about transforming properties is an essential driver of the enquiry that uses the bungalow compound as a *source of evidence*. It follows “the things themselves” (Appadurai, 1986:5) to decode the significance of physical elements as part of everyday life to explore spatial dimensions of social geographies. As mentioned previously, evidence about life on private bungalow properties is always limited and fragmented (Dormann, 2020; Charlton, 2019). As a result, their assessment as a commodity that circulates under different regimes of value (Appadurai, 1986) often remains ambiguous, depending on whose interest comes into play, on a spectrum from being seen as inefficient and in need of replacement (City of Johannesburg, 2016) to a form of lucrative investment, on or off the record and a convenient place to live, work and sometimes hide (Dormann & Mkhabela, 2019; Mayson & Charlton, 2015). The question about “what counts in making the facts, and who is counting?” (Kelly & McGoe, 2018) alerts one to a potential ‘crisis in expertise,’ that is, the risk involved in “truthmaking” and the power of value-holding inherent in that process. Can, or should, knowledge be dissociated from authoritarian judgement – or is the question rather: who holds authority over what?

The incompleteness of evidence as a notion of *lacking* is not limited to the current (bungalow compound) situation but goes back in time. Chattopadhyay, Wilson, and Christensen (2021) discuss the ambiguity of evidence as part of preconceived versions of history, questioning the choice and reliability of sources in dominant narratives. The concept of ‘unlearning sources’ deals with the practice of reading context differently (Simone & Pieterse, 2017) as a way to reconsider established forms of knowledge. This is with the aim of preventing further reiterations of existing structures (that do not work) and making space for other knowledge with more relevance to popular urban culture. Chattopadhyay (2021), Chattopadhyay *et al.* (2021), and Jenkins (2013), consider the city to be the primary source material

for unlearning prior understandings, a sort of “non-canonical store of knowledge” (Chattopadhyay et al., 2021) and develop a strategy of reading existing context. She summarizes in three key points as follows: “(1) Refusing the priority of imperial formations, (2) Shifting the vantage [*to everyday practices*] and (3) changing the scale of space and time [...] attending to small scales and short durations (Chattopadhyay et al., 2021). The anchoring of evidence in the existing context and re-configuring of its value and meaning through some form of re-description in this way means a re-evaluation of the meaning of ‘things,’ and this includes finding new terminologies, other than those set by (for example, state/professional/ educational) authorities – and putting “these terms to new descriptive tasks [...]this is to say, unlearning sources is not about finding a text or an object that no one has seen before, and plugging it into a narrative that is at its core rotten” (Chattopadhyay et al., 2021:4).

Similarly, referring to the understanding of history as a spectrum of ‘what happened’ and ‘what is said to have happened’ (Trouillot, 1995:3), Wilson examines ‘unlearning sources’ through understanding the archive as an unequal process of historical production. She distinguishes between fact creation (source making), fact assembly (archive making), fact retrieval (narrative making) and significant moments (history-making) (Chattopadhyay et al., 2021) as part of “a differential exercise of power that makes some narratives possible and silences others (Trouillot 1995:25).

If evidence is in fact ambiguous by nature, depending on which data counts and who measures what and for which purpose — what happens to the problem as the centre of any investigation that evidence is collected for? Can it be considered ambiguous as well? The Merriam-Webster Dictionary defines ‘ambiguous’ as “*uncertain especially from obscurity or indistinctness, inexplicable, or capable of being understood in two or more possible senses or ways.*”⁴¹ This means that the ambiguous problem is also, as such, potentially multi-faceted and not

⁴¹ <https://www.merriam-webster.com/dictionary/ambiguous>

necessarily contained or even fully known – a quality that links back to the notion of incompleteness.

3.2.3 Developing Problem Spaces

The ambiguity inherent in complex problems indicates the transition from problems to problem spaces (Lury, 2021). Celia Lury builds from Herbert Simon's (1996) approach to problem spaces and design as a problem-solving activity within a vast space of possible solutions – or rather, situations (Shields, 2021; Simon, 1996). The 'traditional' problem presents itself as a relation between three variables: givens, goals and operators. Givens are facts and figures used to describe the problem; goals talk about the state of the problem at the end of the investigation, "what the knower wants to know"; and operators are the activities to be executed to reach the projected goals (Shields, 2021).

Methodologically, these are mostly considered to have a stable relationship – a defined set of givens, with clear goals and suitable operational methods to identify, analyse and solve the problem in a sequence of steps – but this is only applicable if the problem is "known" from the beginning and does not change throughout the investigation. As Lury points out: "This is very often not the case: the problem is a problem, or becomes a problem, as it is investigated" (Lury, 2021:2). The problem itself is a process, "within and without," a situation (Lury, 2021) that is, that it is also relational.

Lury addresses the "problem of problematization" methodologically by composing the problem as relational and continuous, with the ability to circulate (Lury, 2021:202). She describes the approach as 'methodological double trouble,' supported by the assembly of more and different publics/collectivities in the process and a variety of modes of 'contexting.' The approach prepares the idea of activating different contexts/environments through multiple interventions to understand the composition of "problems" as a process of transformation that in itself holds epistemological values as knowledge infrastructure.

Rajan (2012) echoes the necessity to enquire into the nature of the problem, in particular the relation between theory and method, when he says, “The problem of theory today is not simply to “make sense” of things we see as empirical observers of the world through frameworks that are already given. It is, instead, to make sense of a problem when the very nature of the problem is at stake” (Rajan, 2012:29). Instead of, or rather as a basis for, relevant theories, he emphasizes the need for new or other forms of inquiry, referencing Fisher’s challenges for theory and practice in “Emergent Forms of Life” at a point in time when “life is outrunning the pedagogies in which we have been trained.” (Fischer, 1999). Fisher is referring to Jasanoff (2004), who has stressed the need in the social sciences to look for the co-production of (scientific) knowledge, (social) order and (political) power. Ways of knowing are inevitably linked to ways of how people organize and control knowledge in some collective manner. This, in turn, has ethical (and other) implications on the definition and selection of “information” and the production of “knowledge” as a source of decision-making.

This research borrows from the above discourse and proposes to read/treat the transformed bungalow compound as a problem space with methodological *potential*. Potential refers here to the ability to continuously transform the ‘problem’ across four knowledge layers previously introduced or, as Lury puts it:

to twist a problem repeatedly into a process of problematization across a problem space. It informs the compulsive composition of problems, the ways in which the problems transform and are transformed in the operation of limits with-in or out-with a problem space. More specifically, to accomplish epistemological values, compositional methodology engages the becoming of a problem in relation to continuity and connection while providing limit conditions for generalization (Lury, 2021:202, 203).

The research problem in this thesis is ‘composed’ as much as the methods of the investigation are ‘assembled.’ In the case of the bungalow compounds, the introduction has stated that limited attention, evidence, and understanding have been developed concerning the alterations of private bungalow properties in low-income suburbs along Johannesburg’s inner mining belt. In short, this means we do not know enough about what might be useful for a) investigating what exists at

the moment, based on b) understanding what happened in the past and c) imagining what could develop in the future. Nevertheless, the study begins what it sees as eventually needing some continued form of “co-production” of the relevant knowledge to define the “problem” if, in fact, this exists – and if so, what form will it take?

While the above first methodological approach underpinning the research has examined a more philosophical understanding of buildings as epistemic objects that hold knowledge(s) in their materiality (and are essentially incomplete through the changing social and cultural life they accommodate), the following second methodological approach is more specific to architectural knowledge and argues for the understanding of research methods as a practice and a discourse, that has more recently emerged as design-led research in different manifestations.

3.3 Design Research

3.3.1 Clarification of Concepts

Inductive Research

This investigation has from its inception, placed itself in the field of design-led research. This means it develops a research approach which echoes various of the preoccupations already mentioned above and acknowledges practice as

- “...an initiator of the research questions, which are usually complex and messy,
- providing context for the research,
- playing a part in the research methodology and in developing innovative and creative, but nonetheless rigorous research methods
- imaginatively making visible/ tangible the research findings....”
(Gray & Malins, 2004:16)

Practice is understood here as the practice of architectural design, with and without architectural professionals, in its broader physical context – that is, through socio-cultural and economical re-adaptation. The methodological aim is to use architectural knowledge eventually also as a broader (urban) research tool.

It is part of an approach that pursues what Peter Rowe explains as the concept of ‘actionable knowledge’ within the architecture profession as a hybrid form of knowing that is invariably situational, and hence “neither clearly analytic nor synthetic in orientation” (Rowe, 2002:25). Here defining the problem is a process as part the developing a ‘solution’, echoing Lury’s problem spaces (Lury, 2021). This kind of work is rooted in experience within context and makes use of empirical evidence, as a complex set of knowledges that do not always co-relate, and require, at times, divergent thinking, means “knowing includes guesswork, informed hunches, [based on] well tried practices” (Rowe, 2002:25).

In this context, the study frames the transformed bungalow compound as a ‘source’ (and as such as a knowledge object), holding empirical evidence across multiple scales. This is, firstly, as a *contemporary form of urban life* in an African city context (as a model to follow, as an operational tool, or a site). Secondly it considers the properties as a *historical ‘record’* of the spatial transformation of house worlds in Johannesburg over +/-125 years, and thirdly as a *material footprint* of social, economic and political patterns of private values with public interests.

Research about, for, through design

This places the work at the intersection of three design-research processes that deal with the extraction of embodied/embedded architectural knowledge: research *into or about* design (1), research *for* design (2) and research *through* (undertaking) design (3) (Murray, 2013:96). These distinctions were introduced by Frayling in his foundational paper on “Research in Art and Design” (Frayling, 1993), derived from Read’s categories on teaching through art (Read, 1955). The tripartite model looks from different angles at designing as a way of knowing, and the relationship between a design outcome and the process of knowledge production that is discursive (Borgdorff, 2006).

The research ‘*into or about*’ process examines existing settings to record and evaluate these and makes use of approaches that link to other fields like technical

research or the social sciences, including qualitative forms of analysis. While not as well established in architecture practices (except in history and theory research), this is increasingly seen as an important aspect of design processes. The research '*for*' process "enables design to occur" (Murray, 2013:95) and covers investigations with a design application in mind (Rendell, 2004). It can, for example, be translated as the analysis of applicable precedent studies for use in future design and is quite well established in the architectural design process. In contrast, the research '*through*' design process deals with developing actual design proposals, to which Murray relates as 'a form of dynamic knowledge' or 'embodied' knowledge in the designed object, that can be argued often exists intuitively in design but that needs a rigorous framework to support its fundamental value in an academic or disciplinary sense. Rendell refers to it as 'practice-led' research (Rendell, 2004).

This approach is different from the 'innovative architectural practice as research' approach of van Schaik (Blythe & Schaik, 2013)– at least initially - but the intent is to engage with that approach in the '*through*' design section. It also differs from and is yet closer to, the action design research approach that Grillner (2013) develops in the academic context. Although based on a similar classic differentiation of '*into*,' '*through*' and '*for*' design by Frayling (1993), this uses action and participation as part of the process "to transform the world" (Grillner, 2013:75) as opposed to a final product that is linked to the architectural object, focusing on the social and political value of design research. Rendell also coins research that questions context through the design of "problematic objects" applied within that context as a relevant contribution to "research '*through*' architecture [that then] takes the design process as research methodology" (Rendell, 2004:144). Placing questions at the fundamental *tenet* of the research, as opposed to problem-solving (or in tandem with), leads to the production of objects that "critically rethink the parameter of the problem itself" (Rendell, 2004:145), which brings us back to Lury's problem spaces and the notion of incompleteness as a research quality.

While the extant literature describes the above three research processes as quite distinct, they were merged in the process of this study and took different roles at different times. Research *about* design was certainly at the forefront in the documentation / representational process of developing and cataloguing the case studies. Research *for* design played a lesser role but was applied to the analysis of principles of courtyard houses and wider continental references for this typology. The research *through* design process was methodologically reconfigured as the design analysis of the emerging bungalow compounds through various means of representation, especially as a contribution to making the bungalow compound visible and valid, as will later be argued.

The “about, for and through” research design approach, as pursued in this study, is also context-led research with historical, socio-cultural, economical, and material readings of architecture as a multi-layered set of practices as expounded by Lucas (2016:15). The documentation ‘*about*’ serves as a re-description of type of what is now in parts considered as ‘uninhabitable’ living space, or non-compliant by assessing the structure ‘as built’ against current legislation and the value of its performance, as socio-cultural construct, and economically. Work in the ‘*for*’ section deepens the aspect of the appropriated-ness of bungalow compounds through reference within the context as a form of a wider urban Case Study (continent samples). The ‘*through*’ approach inherently considered ‘as built’ product as a form of active practice in need of redesigning as a process, considering the existing properties and their multiple ‘authorship,’ including the agency of a majority of so-called ‘non-professionals.’ Given the power structures at play here, the research aims to support their existence and possible new development through specific ‘compound applications.’

The inductive approach to research can be seen to use patterns, resemblances, and regularities as a premise to understand complex relationships (Bernard, 2006). Theory serves, while it develops, as a link to a more abstract reading of contextual issues across scales – that is not fixed *a priori*. ‘Across scales’ addresses the position of the bungalow compounds in relation to ‘scalability’ as a wider research aspect that it might only be able to deliver in fractions – that connect

issues/themes across the layers of analysis (and intervention) yet remain unpredictable in their overall development. This is purposefully so in order to literally “make space” for the diversity of urban life as opposed to being a mere “projection of our [controlled] fantasies” (Tsing, 2012:506) and to accommodate *what is* as opposed to *what should be*, in an African context (Jenkins, 2013; Simone & Pieterse, 2017). Scalability describes the “ability to make projects expand without changing their framing assumptions” (Tsing, 2015:38), or, to bring it back to Lury, to keep a relationship between givens, goals and operators (Lury, 2021) – and results in a problem that is not supposed to transform during the investigation. However, that might not work for the unsettling structure that is the bungalow compound when one considers its transformation as a solution to what others read as a problem.

3.3.2 Case Studies of ‘As Built’ as Objective Practice

The study’s methodological approach to document and record *what was/ is/ could become* relates directly to two principle formats of ‘*practicing the project*’ (Aureli, 2012): visual and textual material – i.e., plans, drawings, images, text, and explicit (as well as implicit) linkages between ‘building the drawing’ (Hill, 2002). The initial choice of representation remains purposefully traditional and refers to professional conventions and publicly available / used formats and material. This is based on the need to ‘test the present’ in its current set-up.

In his overview of ‘Design Research: The First 500 Years,’ Jonathan Hill (2013) differentiates between three main approaches to represent architectural design knowledge through drawings: firstly, “a narrative illustrated with pictorial representations” (Hill, 2013:16), related to a specific story; secondly ‘the analytical manifesto justified with examples and illustrated with orthogonal drawings’ which is about generic architectural solutions; and thirdly ‘the manual, which conveys practical knowledge and is illustrated with diagrams and calculations’ (Hill, 2013). A significant portion of the bungalow’s past in Johannesburg can be traced back through these forms of representation as a form of architectural production of the time: postcards and advertisements, imported

‘pattern books’ (Upton, 1984; Bicknell & Comstock, 1975) and ultimately council plans, all linked in one way or the other to the architectural profession / built environment, knowing what to communicate to whom and how.

In the last 100 years, however, few of the bungalows in the areas in question have seen an architect despite significant property changes. Despite new technologies and other recording devices, the drawing continues to be the official measure: if it is not drawn – it does not exist, reinforcing a fear of uncertainty (McVicar, 2019) running through the profession, and especially the official/ governmental administration of the built environment. This could be as drawings assist in describing/recording/reporting different built environment properties but predicting potential ‘problems’ or ‘unknowns’ – however these may be defined.

House Properties: Shape Shifting

Properties are *how things are*, how they appear, or behave. They describe qualities of things that can be attributed to them. Other terms to describe them are features, types, characteristics. “Thus, properties are often called predictables. Properties are also how things are, entities that exemplify or instantiate” (Orilia and Paoletti, 2022, para.1).

This means that properties are – to a certain extent – known particularities of the house. Why look at “predictables” if the objective is to look for what is embedded, unknown, unseen, and not understood? This is a) to understand how the ‘knowns’ operate in this specific context of ‘unknowns’ – and so maybe turn into ‘unknowns’ – and to highlight possible challenges and paradoxes and b) to establish a revisited set of relationships between the various elements and components of the house. That set of relations could be the basic structure for re-descriptive processes (Simone & Pieterse, 2017). Such an attempt to “re-describe” is supported by the seemingly binary nature of the bungalow compound, amongst others, on the spectrum between the formal and the non-formal. While this can lead to useful comparisons to understand differences and similarities, it can also ask for new or other categories that emerge through encounters in “contaminated

diversity” (Tsing, 2015:33) of urban form, something Chakravartty and da Silva (2012) call ‘figurings’ of the house. When figure turns shape, this study inevitably looks at ‘shapeshifting,’ which here describes a change in material form or footprint, indicating underlying transformation in usage, purpose, and value.

Key Knowledges/ Thematic Layers

The author intends to use the most immediate, most obviously accessible aspect – the materiality of the bungalow properties and the properties of its form to frame the investigation. One principle aspect of form is ‘shape’ – as a figure – at its most basic as a relation of solid and void. As a drawing, this is technically constructed as a series of lines that separate the inside and outside of different spatial entities through material boundaries (elements) like walls, floors, and roofs that carry additional, different, and multiple connotations, such as ‘legal,’ ‘economical’ and ‘socio-cultural’, linking the multiple knowledges embedded in the “unsettling hybrid object” (Chakravartty & Silva, 2013:2).

Material knowledge addresses physical properties: how the house has been made, where the materials come from, how much they cost, how long they last, what energy they use, what maintenance they require, and if they can be repaired or exchanged. The materiality of structures also talks about the role and hierarchy of particular spaces and elements that are part of the composition as a whole, like the relation of solid and void, patterns or spatial arrangements/layouts, and questions of order.

The juridical knowledge embedded in the bungalow house begins with the land it stands on, who has owned it over time, the purchase price, mortgage information, and other rights and restrictions recorded in the book of deeds since 1 January 1854 in the Transvaal (Feinberg, 1995; Plaatje, 1916/2007). This information, in the Johannesburg bungalow case studies, is based on deeply political and racially discriminating property laws (Hamilton, 1987), and these are accompanied by the regulating lines on the surveyor’s diagram of size and shape or layout of the site. On the actual property, these lines usually translate as boundary demarcations,

which have been legally required in Johannesburg since 1912 (Transvaal Leasehold Townships Commission, 1912).

In terms of the structure and its design, the approval of council submission and construction drawings carry a certain amount of legal authority involving the architect and the state or city administration in a particular form of mutual benefit: the architectural profession. Hill (2002) explores this relationship as a legally protected “defined area of knowledge, with precise contents and limits” (Hill, 2002:16) within which expertise can be proven. This traces the Western expert system of protected professions (architects being one of these) back to the capital interests of the state in building production and the management of its excesses (ibid). Such restricted status is in return for a probable monopoly in the field elimination of competition, including the risk of eliminating other legitimate knowledge, in particular when book knowledge supersedes performance in practice (Freidson, 1989).

These bungalow legal documents do, however, remain a promise or a possibility and are never more than a proposal until actually built (Leatherbarrow in McVicar, 2019). Amendments and deviations from the proposal to the ‘real life’ project are thus to be recorded in ‘as built’ documentation. These are in the areas studied – together with the original drawings – and, more often than not, they are non-existent. South African law automatically considers these structures as ‘properties with latent defects’ (VanZylKruger, 2017), which renders them less eligible for finance from a lender’s perspective. Although, after years of alleged redlining (Haferburg & Huchzermeyer, 2017; Juergens *et al.*, 2003; Beall, *et al.*, 2002) banks seem to negotiate the possibility of legal rectifications against income-generating rental income, as a risk-reducing measuring device (ARL4000A, 2022).

As an economic entity/ unit, the bungalow has cut across multiple paradigms throughout South African history: as a series of similar private properties, its original morphology maps the control of access to urban land as a counterpart to

territorial disposessions pre-1994 (Rolnik, 2019). As a small-scale real estate unit, it has expanded the role it played in financial capital from the first speculative housing project after the discovery of gold (Hindson, 1987) to later post-1994 “rent extraction, financial gain and wealth accumulation” (Rolnik, 2019). Interestingly though, and opposed to Rolnik’s valid evaluation of similar happenings in different contexts, the study considers this a positive change and a reversal of black, urban ‘placelessness’, perhaps because housing in South Africa was never “conceived as a common good that society [agreed] to share” (Rolnik, 2019) and the state remains weak in the provision of affordable accommodation in well located areas. The racially reversed ownership in the areas studied thus overturned previous planning structures of segregation and started to emancipate Victorian-age structures as new economic assets within small-scale African property portfolios, and amending the urban morphology with compounding interest as will be described below.

The socio-cultural knowledge embedded in the bungalow refers to how spaces were planned and how spaces have been used by different people over time. The bungalow and the current, transformed version of itself are quintessential “blueprints” in plan, section and elevation of the idea and the reality of home and imported domesticities over the last 100 years – these being extended by the Case Study recording. These translate socio-cultural values, needs and beliefs for what they were meant to be and then the meaning they developed over time with radically changing viewpoints. Initially assigned their lives by the architect and the authoritarian white minority-ruled state, the ‘user’ became the abstraction “of a [projected] lived experience in space” (Forty, 2000:312). One house, one plot, one servant room, one family (“a man or a woman or both, with or without their parents and with or without the children of one of the other or both of them, living together as one household” (City of Johannesburg, 1979).

With the passage of time – and especially the post-1994 changes – while layouts and service lines (infrastructure) remained in essence, similar politics, economies, and lives changed dramatically. Neither the “user” profile nor the user’s spatial

practices are fully known to the planner or architect due to the high fluidity in a largely privatised context (Simone & Pieterse, 2017), and the initial analysis of current morphologies has questioned existing categories (Dormann, 2020). This study, therefore, uses a typological lens to understand the socio-cultural properties of the bungalow and introduce a discussion around values, focusing on the use and exchange values of and within the property – more developed below.

This combines Appadurai's call to look at the connection of "the social history of things and their cultural biography [... as] complex relations between small- and large-scale trajectories and short- and long-term patterns" (Appadurai, 1986:36) with Evans' translation from plan to social narratives of architectural elements (Evans, 1997). What Appadurai calls "life histories" or "careers" of things/ commodities and related/ embedded knowledge (Appadurai, 2003) is carefully laid out in the reading of the architectural plan as a description of "the nature of human relationships" (Evans, 1997:56), with a particular focus on the corridor, windows, and doors. Tectonically, these elements are thresholds between rooms and the inside and outside of them. Socio-culturally, they orchestrate/ choreograph access/privacy on multiple scales and assign value to spaces through various categories – race, class, gender, public, private, serving and served space.

The re-purposing of these architectural elements in terms of use rearranges the value system, once imposed, into new categories of co-existence. It renders the socio-cultural adaptation of bungalow compound, spaced (from within) into an architecture of circulation, turning it simultaneously into a 'thing' and a relationship between 'things,' something Larkin defines as characteristics of 'unruly infrastructure' (Larkin, 2013).

The house 'knows' – and on several intersecting layers/scales. Material, juridical, economical, and socio-cultural knowledge merge in the making and re-making of the everyday house worlds/home spaces, of particular interest in specific parts of Johannesburg where radical transformation has taken place. The proposition has been to take the house on its plot and analyse this in-depth – and with it, the many

houses on their many plots, all different but similar – as a measuring device of change and a canvas of evidence for what we do not know. Deep down, we do not know how to evaluate what could become urban possibilities or assess their aspirational potential (Simone & Pieterse, 2017; Appadurai, 2003, 1986). This extends into explorations how to ‘lift off’ embedded knowledges and their application into (abstract + practical) translations, how to feed them back into a life that then differs to the one they came from and mitigate the relationship between values (or value systems) as part of the design process over time.

So, what started initially with the understanding of the bungalow as a ‘thing’, an object and a commodity, quickly established significant gaps in knowledge about current life on the properties, with the acknowledgement that these will most probably continue to exist in one or another way (Simone & Pieterse, 2017). As a result, it is important to deal with ‘object knowledge’ as incomplete and this incompleteness as a constant. This factor can and must turn into a conceptual frame regarding the methodological approach, as explained elsewhere in this chapter.

3.4 Extended Case Study Approach

3.4.1 Case Study Methodology

The overall framework of the investigation of urban compounds is entrenched in a multiple Case Study set as “an empirical inquiry that investigates a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident” (Yin, 2003:13).

This study is essentially an appropriated version of a descriptive Case Study (Yin, 2003), attempting to fill knowledge “gaps and holes” (Ridder, 2017). As a method, this includes the alternatives of purposefully sampling extreme, rarely observable phenomena to establish relationships of unknown matters, the study of common cases that lead to findings of relevance for a larger number of cases, and

multi-case studies that permit comparison (Ridder, 2017). The bungalow compound study is situated in a reality that is unstable and partially unknown and is investigated through a composite framework, where the gaps and holes can be accommodated as part of the findings. The study uses the Case Study of the bungalow compound ‘as built’ as a precedent for something still needing to be named, as a source that needs to be understood in that process (Chattopadhyay *et al.*, 2021). Such a Case Study typically asks “how” or “why” questions (Yin, 2003:1), and the bungalow compound study deals with a research question that asks ‘how’ as part of three different, interlinked processes. As established earlier, the initial premise is that the knowledge embedded in the transformed bungalow property is worth knowing and hence can be turned into a source, as an organically growing database and wider series of case studies, “describing” an emerging phenomenon in order to re-describe.

Here the study also turns to the extended Case Study approach of Burawoy (2009), who argues for a place in research for what seems ‘anormal’ as an indicator for incomplete models of thinking (Burawoy, 2009) and a need to pursue these knowledge gaps with curiosity that extends the work of the researcher into forms of reflexive understanding. While the bungalow compound in Yeoville and Rosettenville is anything but ‘anormal’ as a physical artefact when looking at the sheer number of replications, its origin, as well as the potential of the actual transformation can be considered as such – especially when we look at the way they are typically reported: often from the top down vis-à-vis wider Johannesburg as compared to the actual realities described from the bottom-up. From a distance, what appears ‘messy’ to some is actually highly regulated on the inside, something that becomes apparent the closer one looks. The bungalow properties are thus studied as participants under observation to attempt to document and re-address adverse assumptions.

Without going into a discussion of the complex relationship between subject and object but being aware of Latour’s *Parliament of Things* (Lash, 2007, 1999), the bungalows are thus considered as actual participants in both urban and private

life. Through the ability to physically translate and record the intentions, aspirations, and actions of the owner, the user, and the governing bodies (Weizman, 2022), the building on its plot reveals forms of evidence embedded in its adjusting envelope, footprint, and materiality, which can be traced across extant and new narratives. Its flexible and adaptable configuration enables certain activities to unfold and develop, thus holding a form of agency. Latour encourages us to track the object to discover the network of such agency (Latour, 1993), which Lash calls “shadowing” (Lash, 2007, 1999), and compares the process of understanding (whatever is sought) to the work of a detective, as opposed to that of a judge. The study of bungalow compounds has thus defined the process of tracking or shadowing as re-description in a threefold structure of revealing, evaluating, and appropriating.

In this case, however, the empirical is less about confirmation of something already known, often based on past values and even foreign settings, and about a possibility, proof of evidence for something that *could become* (Simon & Pieterse, 2017). This does not mean that ‘the process of becoming’ should be romanticised and kept as a nebulous promise on the one hand – or, on the other, be dissected to predict its development as version a), b) or c). This overall inductive approach aims to interrogate possibilities that accommodate change more appropriately by shifting the understanding of what the ‘problem’ may be for some to the solution it is for others, as argued in the first section of this chapter.

The re-description of the bungalow compound uses sampled case studies as what it calls *ground samples*. Ground samples are usually understood to be associated with soil samples. “A soil sample consists in the removal of soil from features or deposits, transportation to a laboratory to be processed for the retrieval of artefacts and ecofacts that increase our understanding of past societies” (Bailey & Walker,

2022). The concept of ground sample in this study⁴² is used as an almost archaeological reference within an urban context to strengthen the emphasis on the connection of the house and the land it stands on. Ground samples of bungalow compounds are private properties with typically 495 sqm plots of land and, initially, a free-standing bungalow house plus extensions along the extruded boundary line that have grown organically over a century. Their ‘make-up’ is recorded as a cartography of the present that tracks what we do not know in full and attempts to lay open / reveal traces of the past that have had repercussions on the present and possibly on the future.

Overall, therefore, the Case Study research approach embedded here operates on several levels of different scales (see Fig. 8) and modes as follows:

- **Location:** Johannesburg, although arguably rather atypical and a uniquely South African city, it is the world’s largest urban settlement that is not situated next to a natural water source but on the mineral-rich ridges of the Witwatersrand and is one of the three largest cities of Sub-Saharan Africa with one of the largest economies of any metropolitan region of the continent. However, it has similarities to other major African cities, and its development deals with issues of rapid urbanization, densification, high migration rates, foreign population inflow, low-cost accommodation, and conflicting relations between formal and informal. The thesis findings could contribute to knowledge of comparable situations elsewhere in South Africa and Sub-Saharan Africa.
- **Site:** Yeoville and Rosettenville, two of the oldest city suburbs, have been nearly completely re-occupied by a black African and multicultural population. This is an ‘extreme’ situation in the city, with socio-cultural implications that will be the basis for the analysis and understanding of

⁴² The idea of *ground sampling* started as an analogy to single context recordings (Harris, 1989; Museum of London Archeology Service, 1994). Single context recordings present an archaeological approach of ‘minimal invasion and maximum reconstruction’ with a degree of efficiency. It records excavated soil samples in-depth, layer by layer, as opposed to composite plans that document large surfaces, supposedly in their entirety. The information imbedded in single samples is also scrutinised to establish existing correlations. The material this research deals with is not soil samples or ruins on a single site. Still, buildings that have been erected as multiples on similar grounds (for example, plot sizes, neighbourhood design for example across Johannesburg’s early suburbs) have radically changed in terms of population, density, occupation, and programme.

quantitative and qualitative evidence that could be applicable in similar or less extreme circumstances, including in Johannesburg.

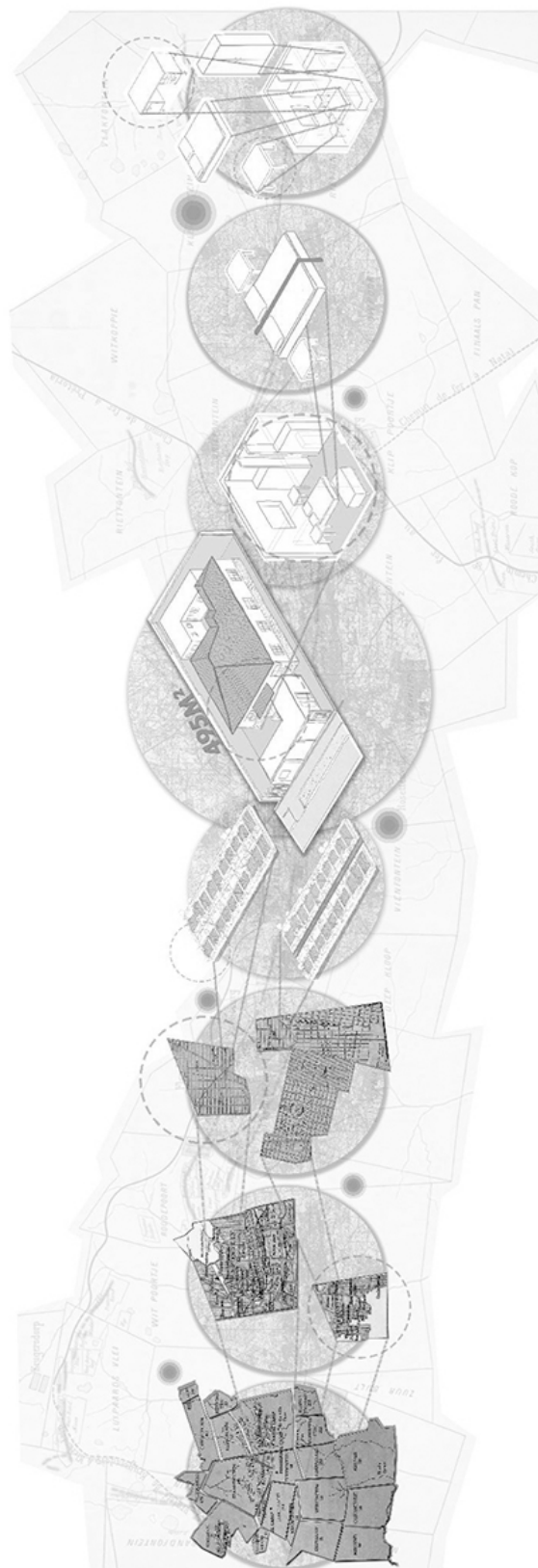
- **Building typology:** the study of the transformation of the colonial era bungalow as the dominant residential form in the older parts of the city and the country falls into the category of case studies that may give insight through surveys and interviews into the personal practice of dwelling of new urban compound residents – seen (initially) as practices of privacy, hygiene, food ways and sociability, of wider relevance for architectural study.
- **People's spatial practice:** the research places the entanglements of people's lives with physical space in the foreground (Heer, 2019) as an understanding of dynamic socio-cultural constructions reflected within the bungalow compound. People's experiences and aspirations are recorded through the traces they leave and the reflection of their habits, patterns, and values in physical space. These can be based on cultural beliefs, habits and values, shared patterns of knowing within a group, and the transfer of these values between generations. As sites that have been nearly completely repopulated, understanding of the amended use of space as forms of emerging cultural (and economic) practice might be of value for similar urban contexts accumulate.

With the aim of constructing validity around this emerging phenomenon, the work will move between the three categories: explorative, descriptive and explanatory, in this study coined '**the re-descriptive.**' The first "explores any phenomenon in the data which serves as a point of interest to the researcher...and raises general questions to open the door for further examination" (Zainal, 2007) – this helps to establish a coherent framework for the study, as a kind of 'testing the field' project. The second aims to describe the data as they occur, mostly in a narrative and visual format. The third looks at the data at a deeper level in order to explain the phenomenon in question. In the context where 'not knowing' is paramount, the explanation is coupled with possibility, not as evidence for what we know, but as a possibility for what it might entail, not as guess work, but informed by other

evidence, which picks up on some detail and extends the narrative. Simone and Pieterse (2017) have coined an expression for this process as *re-description* “as a way of extracting untapped potential from what already exists” (Simone & Pieterse, 2017:61).

3.5 Summary

The bungalow compound provides a multiple series of case studies examining the nature of this emerging type of urban property and its numerous multiplications as an in-depth examination of a house on a plot, within a block, in two particular neighbourhoods of the inner city of Johannesburg. The structural conditions of the bungalow compound properties are confronted with forms of agency exercised through architectural elements and their accompanying legal framework. In the empirical portion, the work remains largely observational (1) and descriptive (2), with longitudinal and cross-sectional aspects. The subsequent process of re-description (3) pursues the re-positioning of the problem as a variable, with the hope of participating in deeper discursive analysis. The bungalow is thus a non-random sample of a ‘building type,’ looked at in breadth, with several purposefully selected Case Study samples, which are then examined in different degrees of depth, with a flexible, adaptive set of methods (described in detail in Chapter 5). The breadth of the study covers the historical and urban scale for the contextual analysis. At the same time, the detail of focused samples allows the linking of accessible detail to the typological recordings – and presents the appropriated compound plots with personalized patterns. The correlations of the bungalow compounds are as much material as network based. The unfolding of these different areas of knowledge that are (so far) mostly unconnected constitutes the fundamental aim of the research, which has entailed a complex review of ideas of knowledge and methodology within philosophical, architectural, and social science regimes.



People's spatial practices

Building type: bungalow properties

Site: Yeoville and Rosettenville

Location: Johannesburg

Figure 8: Case Study, embedded compound scales (Advanced Design Studio, ARPL4000A, headed by author, 2023)

CHAPTER 4 UNDERSTANDING KEY ISSUES

This is not only a matter of imagination, fantasy or forward visualization. The task also entails re-describing existent conditions as components of a process that might be taking place right now, but which is opaque, occluded or rendered inoperative. It is rendered inoperative simply because we are seeing and engaging the realities examined in a particular way. So there is a doubleness here that involves a sense of aspiration, of making things different, but also seeing in what exists something other than what we think we are seeing.

(Simone & Pieterse, 2017:11)

4.1 Introduction

The previous chapter examined the methodological research sub-question: *How can architectural knowledge become a research tool in revealing embedded knowledge of the transforming properties in context?* This chapter builds on that as it investigates: *What are the frames of reference to evaluate the transforming properties analytically?*

This chapter draws from literature and discourses on architectural typology, anthropology and building systems and reviews a selection of housing compound precedents from across the continent. It takes a typological approach to understanding key issues surrounding the bungalow properties' transition from a freestanding single-family residence to a multi-unit courtyard arrangement. In particular, it directs attention to the void as a central element of spatial reconfiguration. The void, as confined but adaptable open form, here begins to play a key role in an understanding of the “production of [bungalow] locality” (Appadurai, 2003), introducing embedded notions of aspiration and contingency in the spatial configuration of the emerging type. Through interrogating the relationship of social life and physical form across scales, through the role of the house and the yard in the processes of dwelling, the chapter ultimately ends up mapping out the significance of ‘small spaces’ in the emerging compound geometries. Spaces like corridors, verandahs, fire escape routes, small in

dimension, or in size, and in rather supporting roles yet instrumental not only in serving, connecting, dividing plans and the organising of daily life, but also as collectives across all the houses of the neighbourhoods (Chattopadhyay, 2022). A third section links back to the previous chapter's call for re-description and prepares the analytical format of the empirical work. Here, it introduces the concept of the shearing layers of change (Brand, 1994; Duffy, 1990) that, in appropriation, will assist in deconstructing the bungalow plot turned compound house into components. This is with the intent of undermining the dominance of the built form in favour of morphological workings –hence, re-describing the relationship of social life and physical form *as what can be, as what is*. (Simone & Pieterse, 2017).

4.2 Typicalities in Johannesburg

4.2.1 Architecture and The City, From Type to Typicality

The study started from the premise that the bungalow, in parts of Johannesburg, has organically transformed from a free-standing house into a courtyard building, termed **bungalow compounds**. In general, architectural terms, type is commonly understood as a classification of buildings by use (for example, schools, churches, residential houses) or morphology (for example, buildings with a central corridor or buildings with courtyards) (Forty, 2000). This transformation could be a double switch in both the programme and organisation. The basic classification of type describes the artefact essentially as a member of a group of objects (Lathouri, 2011).

However, in confrontations with architecture and the city, the use of the term 'type' tends to hold morphological connotations rather than functional ones and focus on typical urban conditions as opposed to building types (Dovey & King, 2011). When the 'bungalow as a project' developed as a colonial export from the 18th century onwards, this architectural type was considered to reflect not only social development but be social development in itself, and as such, acts as an active agent in the creation of, in this case, the (new) dominant culture.

Architecture as a type was also understood as a human construction, literally as a physical model that could be copied and, more importantly, as an idea that replicated itself socially (Lavin, 1992).⁴³

The interdependence between building, physical context and social constructs has been widely discussed, quite prominently in discussions in the 1960s/70s, with the idea of history as a ‘skeleton’ whose actions have been imprinted in its *material* (Rossi, 1982). In Rossi’s understanding, the site of change (the *situation*) is the city as a whole, a man-made object, a collective artefact that has a before and an after. This whole is made of fragments or individual urban artefacts that are the architectural interventions. The fragments are divided into primary elements, the most significant ones being housing and monuments, and their design is based on logical principles, constants, typical elements or simply types.

In this view, as research components, history and type allow for the transformation of themselves, which are ‘pre-arranged but still unforeseeable’ (Eisenman, 1976). The individuality of each element is defined by its social content (Tricart, cited in Rossi 1989:48) and its actual site. The *situation* is linked to time, topography, morphology, economy, form, and, most importantly, events – and reflects the reality of human interaction, perceptions and feelings. The *Tendencia* movement in the 1960s defined the residential district as a social artefact, ‘a morphological and structural unit, characterized by a certain urban landscape, a certain social content and its function’ (Rossi, 1989:65). It is a tool to study and read the city, with the individual dwelling materially presenting insight into people’s lives and their culture.

⁴³ Rossi points out that studies in the early 19th century by Alexandre de Laborde and Quatremère de Quincy, who presented their studies of physical artefacts as architectural science, were actually ‘an introduction to urban problems and urban sciences’ (Rossi, 1989: 109). While the main focus of the theoreticians of that time was to establish general principles of architecture that then could be applied to buildings, they were actually ‘also concerned with places and events, situations and society’ (ibid), like Ledoux in his design for the Ideal City of Chaux or later on Viollet Le Duc, the French Revival Architect of the 19th century – often considered as the first theorist of modern architecture. His combined interest in restoration and construction, the old and the new, was the basis for the development of the building as a site of change and adaptation (Rossi, 1982).

In a (South) African context, typification must be used with caution, as it was a tool to promote segregation and exclusion through racist classification⁴⁴. In South Africa, urban residency still inevitably reflects the morphological blueprint of the Group Areas Act (1950-1991) that historically excluded black people from free access to the city and its accommodation other than to servant's quarters with a special permit. The racialised practice of 'backrooms' – introduced as early as 1910 – in turn created multiple landscapes with 'coexisting, sometimes competing modes of engagement with a single site' (Ginsburg, 2011), as introduced in Chapter 2. In most cases, these former 'backrooms' are still operational in the bungalow compounds and have been joined by numerous new ones and merged with the main house and the city in everyday practices.

Jenkins and Andersen propose to understand African urbanization (Andersen & Jenkins, 2012) as essential dwelling processes (both place and practice) where the arrangement of rooms around a yard, as a most basic sub/urban type, includes socio-political as well as cultural and economic parameters that overlap and create unique dynamics, the details of which largely lack comprehension amongst political/administrative decision-makers as well as researchers – and indeed professionals. Concerning the house and housing, this includes very specific forms of cohabitation that may range from extended families to language and nationality-based groupings – due to economic necessities (the cheapest place to stay), the need for invisibility, and often includes dynamic movement between places.

In the above context, this research follows Peter Carl's proposal (2011) to replace the terms 'type' and 'typology' with 'typical' and 'typicalities'. He argues that "The principal difference between typology and typicality is that the former concentrates upon [architectural] objects, the latter upon human situations" (Carl, 2011:40). This proposal includes integrating experiences and local practices in

⁴⁴ In South Africa, urban residence is a morphological blueprint of the Group Areas Act (1950-1991) that historically excluded black people from free access to the city and its accommodation other than to servant's quarters with a special permit. The racialised practice of 'backrooms' was introduced as early as 1910, which in turn created multiple landscapes with 'coexisting, sometimes competing modes of engagement with a single site' (Ginsburg, 2011) that may have changed since the transition into democracy yet continues to remain complex.

understanding an environment in parallel with wider historical and global or continental readings. New urban orders can be made in and absorbed by an architectural object with alternative systems of approval or value. Carl suggests that we need “to treat the knowledge or experience embodied in a well-formulated type somewhat like a rhetorical *topos* commonplace that operates like a question, soliciting debate and commitment to a theme or topic”. The distinction between type and typical – or typology and typicality– is thus a general understanding of the (architectural) object, in this case, the dwelling house, as a fragment of a context that is common to all – or a common ground where architecture is part of civic practice (Carl, 2017).

In the current South African urban context, which is largely non-formalised within the urban fabric (Simone, 2003), Carl’s claim of the rhetorical *topos* can be applied to the bungalow compound as a popular domestic manifestation in the city. In other words, it can be seen as a typicality with multiple, uncounted and undocumented mutations at the intersection of the materiality of tectonics, cultural values, socio-economic necessities and legal frameworks. Its organic re-design(ation) results from changing relationships and conflicts across those layers, documenting a continuing narrative of private lives as part of wider urban development. The fact that the bungalow compound as identified in this research does not ‘exist’ as such — in official descriptions, categories, tables, statistics, drawings- and the fact that it did not have a ‘name,’ despite multiplying itself daily, might make it one of the ‘wild’ attempts to make the city into something *that it is*” (Simone & Pieterse, 2017:61) on an oscillating spectrum of what *can be*, all under pressed Victorian ceilings and the sky of the yard.

Holding onto the idea of type, and making space for developing popular typicalities, the study refers back to the reading mentioned above of *architecture of the city* as “fragments [that] are divided into primary elements [...], and their design [that] is based on logical principals, constants, typical elements” (Rossi, 1982). Suppose this reading is applied to the plot and multiple divisions inscribed onto the property, as discussed at the end of Chapter 2, and the room is the new

basic unit or new scale of the home. Can the bungalow compound not be considered a form of urbanisation on private grounds, creating urban space inside and out? If so, what are the elements, the principles, the constants, and the groupings for analysis? The yard would certainly be a main element, which, along with the corridor, the verandah, and the boundary wall, are all central to operational transformation and the development of related social histories (Chattopadhyay, 2022). Yard life in Johannesburg has a specific history that needs to be considered when writing this new type, the bungalow compound, into existence.

4.2.2 Yard life in Johannesburg

The phenomenon of organically emerging compound-type residential forms is not new to Johannesburg – especially in times of affordable housing shortages. Historical references are Doornfontein’s Rooiyard in the 1930s, Sophiatown and Alexandra until the 1960s (Didier & Benit-Gbaffou, 2019; Orso, 2003; Hellmann, 1948, 1969) always related to arrangements around a ‘yard.’ The Rooiyard has been the subject of the ‘first ethnographic study of the social life of newly urbanized Africans (Celarent, 2012) written by Ellen Hellman in 1948, initially submitted for her Master’s degree at the University of the Witwatersrand in Johannesburg, and later published as a book. Importantly, for this research, Hellman introduced the idea of ‘rooming’ as a standard form of private accommodation for the urban working class – mostly for black labourers in South Africa at the time.

In Hellman’s study, 107 rooms were arranged in five rows and were home to 235 adults and 141 children. Most male residents were domestic workers, while the female residents looked after the children and engaged in the home-based business of (illegal) beer brewing. The rooms were reportedly around 11 feet square⁴⁵, which translates into 12 square metres. As a result, many possessions were kept in the yard. Cooking happened outside, and two water taps and six latrines served for ablution and washing of all people, clothes, food and other

⁴⁵ What was meant was 11 x 11 feet = 121 sq. ft – i.e. approximately 12 sq. m

items. The title of the monograph introduces the Rooiyard as an *urban slum yard*. This negative association has remained to the present for this type of accommodation when the words ‘rooms,’ ‘yard,’ and ‘inner city’ are used in one sentence (Simone, 2010; Roy, 2005; Parnell, 2003). Contemporary forces of ‘slummification’ were detected as a combination of ownership changes, growing complexities in management structures, overarching capital gain interests, precarious legalities, and outdated laws, together with high transport costs and rapid urban change.

However, Hellman went further than labelling or moral judgements. She countered standard negative beliefs and looked beyond poverty, the illegalities of beer, and prostitution. Amongst difficult living conditions, she found a thriving economic micro-enterprise that responded efficiently and without delay to demand through supply. The private rooms in the dense yard arrangement were well kept with bare minimum hygiene and infrastructure. They housed a multicultural group of residents who, despite disagreements in belief and internal power structures, developed a tight network of social relationships. These links are both within the yard and in relation to external governing structures. This successful merging of cultures is something that she described as the creation of ‘a new composite identity’ (Hellmann, 1969, 1948:115) with a strong underlying black consciousness.

The bungalow compounds continue a part of the Rooiyard history as they are dealing with a similar set of predetermined opinions from officials, city users and potential investors (Charlton, 2019). Hellman’s study was, to some extent, a precursor to this work, as it found rooms were a scale of the home, and they simultaneously created a network that often is the basis of a business. As Maliq Simone states, for many cities in the world, businesses and markets depend more on the management of social relationships than on the nature of the economic exchange of goods and services, in particular, in the non-formal life and work context (Simone, 2010). It is not only in Johannesburg that urban living conditions have created compounds as a typicality. This chapter draws attention to

the complex urban courtyard layouts that have been created since their mappings, being the ‘new urban geography’ of the African city (Dormann & Mkhabela, 2019) and the importance of the related social and other knowledge that is included “between the lines of the map – in the margins of the text” (Harely, 1989:3).

In examining the courtyard, a major factor is the understanding (and use) of the *back and front of the house*, the absorbing, or buffering quality of *in-between spaces* (they can have multiple purposes and accommodate different activities), and the newly integrated quality of *outside (and outdoor) rooms*, which, at best, are as valuable (and frequented) as roofed indoor spaces. As an initial form of typological reduction (Plowright, 2014), the study decides to read the current bungalow compound sequences as a series of **voids, solids and their perforations**. This is partly to overwrite the bungalow and its recognisable roof as a dominant structure in the centre, which it is not necessary anymore. A reversed morphology emerges when the plot becomes the ‘house’ and the boundary line the outer envelope, with an ability to shape-shift effortlessly in line with people’s needs and imagination. None seems exactly like the other, with potentially different values, norms, and aspirations than those previously inscribed by others. With a yard built within and otherwise used and appropriated as much as rooms and enclosed spaces, the bungalows turn into courtyard arrangements seen in this work as **bungalow compounds**. To develop these preliminary comments on spatial change and as the basis for the analytical work described below, the next section examines the courtyard as a type or typicality.

4.3 Accommodating Incompleteness, Looking Elsewhere and Otherwise

4.3.1 The Courtyard as a Concept

What is a courtyard as a type, or an urban typicality, that needs the boundary to define its existence? The compound as a type, as laid out above, is focussed on the element of essential enclosure around a cluster of buildings, often inhabited by a group of people that shares common interests or relations. The open space in-

between can be seen as the result of what is left over by enclosure, structures, and daily practices as opposed to an actively formed spatial element. The courtyard building initially seems a kind of reverse to this procedurally, with the courtyard actively being a design void, a deliberately created shared open space enclosed by walls or buildings.

As a typology, the courtyard and its thresholds along the surrounding space have played and continue to play a central role in social life in many cultures and communities in the Northern and Southern Hemisphere and the Middle and Far East. According to the different climatic conditions, it can regulate light and shade, determine thermal comfort through air flow, and align with cultural routines and requirements in providing protected space to work, meet, hang laundry, keep animals, look after children, pray, separate or connect. While Muslim culture has traditionally placed importance on privacy principles between male and female social spheres, which translated into a clear gender separation, including manifestation through courtyard space (Akcan, 2005). In contrast, traditional Chinese courtyards have been considered the centre of a whole extended family (Frampton, 2016). The courtyard plays a significant role in Vitruvius's writing on Roman farmhouses (Vitruvius, 15BC) and Roman villas. However, the earliest appearance can be dated around 5000 BC in the Chaldean City of Ur (Oliver, 2003). In Italy, circa 700 BC, courtyard designs were referred to as atrium houses (Blaser, 1985), and early vernacular dwellings in Sub-Saharan Africa can be read as courtyard arrangements (Steyn, 2005). Thus, as a vernacular residential arrangement, the courtyard building is usually overlaid with the socio-cultural practice of family life and the reproduction of that life.

Steyn classifies 'any open living space that is the focus, or organising structure, of a dwelling ... typologically... as a courtyard' (Steyn, 2005:112). It follows the wider conceptual analysis of Rapoport, who explores 'The Nature of the Courtyard House' (Rapoport, 2007) through a series of criteria in environment-behaviour studies. This extended concept of the courtyard house is based on the abstract understanding of what the space does, as opposed to how it looks

morphologically. The courtyard house is thus a dwelling that does not necessarily resemble the prototypical sample with a central void — the court/yard — rather, it corresponds to a set of attributes that describe ‘spatial behaviour in context’ as a single unit as well as in the resulting urban fabric (Rapoport, 2007). This again ties back to the underlying relationships of the city, the buildings and the people inhabiting them. Rapoport’s analytical proposition thus cuts across locality, religion, time and culture and is not bound to any of those in particular. The proposed criteria for considering a courtyard “type,” in order of importance, are as follows:

- distinct **privacy** mechanisms in public and private relationships,
- culture-specific set of **transitions**, for example, inside–out thresholds
- courtyard activities as **part of a larger setting** (block, neighbourhood)
- courtyard as the provision of **access** to other spaces
- courtyard houses as compact urban-type increasing **density**
- courtyard house as **climatic efficient** and comfortable
- **lack of shape**, which might conceptually be considered as lack of identity for some or, following Appadurai, providing the “privilege of being invisible” for others (Appadurai, 2003:50)

The courtyard house, according to the above criteria, deals in very specific ways with *the design of distance* (introduced in Chapter 2) and can be considered the controlled side of sharing. This is valid in the urban context, on the neighbourhood scale as well as inside the property itself. The courtyard house, or the compound – introduced as a synonym for the “inside out city” (Rapoport, 2007:58) – is a building type that basically faces inwards, away from the street, and does not share much from the inside that is visible to the outside. The distinct privacy mechanisms between inside and outside are expressed through abrupt transitions, like walls and doors. The porosity/permeability of the boundary is rather low in the typical courtyard house and is particular to the bungalow compound examined here and its context. This porosity/permeability is despite all private domains being spatially linked to the public domain through some kind of linkages. These are often a sequence of thresholds like a path, the porch or

verandah that might transition into a hallway. Of note for the bungalow compound is also the ‘hole in the wall’ concept (Dormann *et al.*, 2020) that will be investigated in detail in Case Study samples.

The privacy inside a courtyard can be physically demarcated or not but is often regulated through other parameters like time-based routines and rhythms, cultural rules, an allocation of activities in the yard, and accepted gradients of ideas of personal space. The definition of territory and the devices used to secure spatial boundaries vary between culture and form and from culture to culture (Rappoport, 1969) – and may be entrenched legally or primarily through social mechanisms. In addition, and as one of the most obvious functions, the courtyard serves as shared access and route to the other, more private, and enclosed indoor spaces. Due to its mostly compact layout, the courtyard house is often considered a suitable typology for the process of urban densification, as it implies more people getting closer together. The yard, as an integral outdoor component, is also part of climatic comfort considerations, linked to health control and ventilation of spaces, regulating the flow of air, and providing possibilities for vegetation.

The re-description of the urban **bungalow compound** as a form of courtyard house is fundamental in that it deals with domestic life from the inside, and this section thus aims to add to the debate on contemporary housing typology, or typicality, in the South African context. The work considers the documentation of these bungalows transformed into urban compounds as a contribution to knowledge in the continental development of inside-out houses. However, this contribution is with different references that can address incremental growth and change of use as it happens. A brief review of these continental manifestations follows.

4.3.2 Referencing the African Void

The courtyard, as part of a compound, has played a significant role in traditional African architecture and society (Steyn, 2005) and is often associated with rural settings, largely due to Africans often having politically restricted access to urban

life in colonial periods. It is however a contemporary form of progressively developing housing in urban and urbanising areas of the Global South.

This section looks into the practice of sharing space – essentially co-housing - in a contemporary, vernacular, domestic context, with a particular focus on **the role of the urban yard** in the African compound. The bungalow compound places itself at the intersection of multiple histories and, therefore, serves as a specific case of locality-making and home practice in Johannesburg. Its transformation falls into what Rappaport describes as the ability of vernacular architecture to directly and unconsciously translate particular social needs and cultural values into physical form (Robinson, 2006). The comparison to other current African precedents of ‘room and yard’ arrangements behind a boundary wall – as essentially defined by Rapoport (2007) above – allows us to understand the bungalow compound as part of a spectrum of typicalities rather than a unique occurrence. The intention here, therefore, is to build up contemporary reference points, or rather an extended citational ground through compound precedent, investigating the ‘as built’ elsewhere on the continent, in conjunction with associated layers of meaning and values. As the “tacit knowledge base of architecture” (Wright, 2012:47), this is ultimately to situate the bungalow compound within a band of ongoing urban transition –as a form of living with relevant ‘house qualities’ in the metropolis of the Global South (Morton, 2019; Mitchell & Tang, 2018; Woditsch, 2018; ETH Zurich MAS Urban Design, 2016; Williamson, 2014; Jenkins, 2013; Pellow, 2002).

The Involuting Compound

The *zongo* – the Hausa word for “strangers’ quarter” (Pellow, 2002:1) or “stop over” (Williamson, 2014:3) – is the term used for a transient place to stay, initially for Muslim migrants, in urban Ghana’s centres. These are single-story, high-density, mixed use compound structures, with residential courtyard arrangements and shops along the edges. The land is entirely private property, and the concept of landownership is based on rules set by the Islamic religion, with no official record of property boundaries (Williamson, 2014). Property is not traded

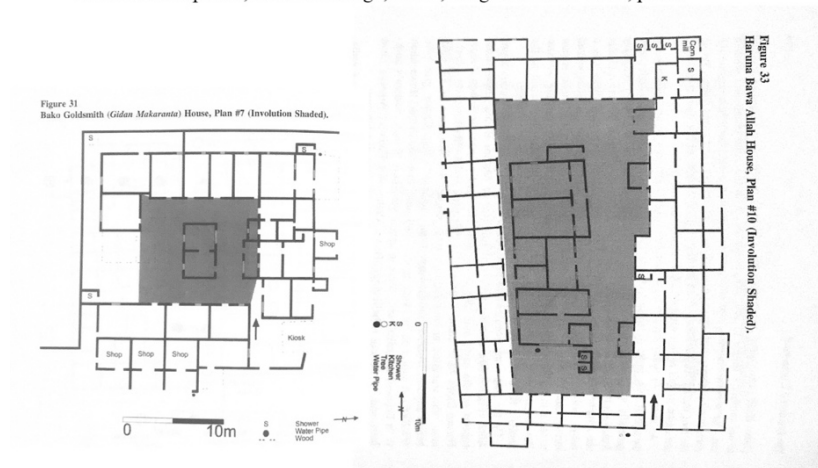
(sold and bought) but inherited and subdivided between heirs. In principle, the rooms of one family group around a larger courtyard and shared space for circulation and infrastructural services exist “at the blurry margins” (Williamson, 2014). Maintenance is, at best, collective and, at worst, non-existent. The *zongo* appear like internalised settlements— and are often ‘slumified’ in the extant literature, partly due to infrastructural and sanitary challenges (Williamson, 2014). Pellow (2002) paints the overall quarter/neighbourhood of *zongo* as ‘bounded.’ This is a perception that Williamson attempts to counter with the re-description of “fluid spaces shaped from a constellation of pressures.”

Pellow’s (2002) study of the Sabon *zongo* in Accra as a place of home for Nigerians who have relocated to Ghana is conceptually introduced as an intersection of social and spatial practices between “Landlords and Lodgers” (Pellow, 2002). The built structure is home to a community created in 1910 by a local Hausa leader as a place of refuge for Muslim Hausa migrants from Northern Nigeria. As it turns out, 1910 was around the same time when the bungalows in Yeoville and Rosettenville were being planned and erected. The *zongo* is a unique settlement that “incorporated a pre-colonial past from Northern Nigeria, a colonial overlay, and an adapted post-colonial form” (Pellow, 2002:2). Physically, the Sabon *zongo* looks like an endless series of rooms with corrugated roofs and courtyards of different sizes. Originally on plots laid out by the British as part of the town planning scheme, it has since blurred its physical delineation of streets, house plots, and its original religious and ethnic base.

Williamson also describes a process similar to British beginnings and contemporary consequences, a condition similar in some ways to the bungalow compound in this study. While the *zongo* is a very particular, localised socio-spatial phenomenon, it does share other important issues the bungalow compounds are facing, as densely populated ethnically heterogeneous neighbourhoods, such as here in Yeoville and Rosettenville. Its morphology of open and closed spaces is a clear result of socio-cultural order, overlaid with economic necessities that structure its so-called “anthill architecture” (Pellow,

2002:149) into spatial sequences that manage to absorb cultural practice, social requirements and economic needs, in a loose-fit kind of arrangement. What has carried across the last century is the rectangular enclosure – that has, in principle, **one controlled entrance, a forecourt, and a central courtyard** inside the ‘house.’ The entrance is linked to social meetings and business activities, either as a dedicated room, a doorway, or a recessed entrance. Smith, 1965 in (Pellow, 2002:157). The layout of the courtyard separates the kitchen, the bathroom, – and, in the Muslim tradition, male and female domains. Rooms around the (usually diminishing) yard are for extended family and, in more current times, for lodgers as an income-generating device. Added rooms (over time) have, however, **distorted compound boundaries, and the outer compound wall has often been ‘thickened’** to accommodate business activities.

Involuted compound, Ghanaian Zongo, Accra, Diagram Pellow 2002, p 151



Bungalow compound, Yeoville, 2018



Figure 9: The involuted compound (Pellow, 2002:151 and Author's own, 2023)

The additions have also moved into more prominent positions. The central all-purpose yard is being compromised with owners building in due to a lack of space and continued urban growth. Pellow (2002) coins this evolving form the involuted compound (Pellow, 2002:151). Figure 9 shows the yard and its developing geometries. Presented in the same scale, grain, and texture of the room-based layouts are very close in proportions to the bungalow compounds in the study areas, highlighted in shaded-in areas on the three plots in Yeoville. While the *zongo* started with a central void that is taken over by built form, the bungalow compound started from the revers. With a solid form on a plot, that is organically reconfiguring itself through numerous additions, the yard has turned into the central connecting figure. Both examples are developing residential types that have morphological, urban connotations in different contemporary African cities.

Imported Composite

The juxtaposition of the Afro-Brazilian bungalow, the Yoruba compound and the evolving Yoruba bungalow in Nigeria describes the relationship and transformation **from courtyard to corridor** as a spatial form of cultural adaptation in use and building practice (Osasona, 2007; Vlach, 1984). These developments of new patterns of domestic housing and vernacular building types again can be placed around the turn of the 19th century, similar to the arrival of the colonial bungalow in Johannesburg.

“The traditional Yoruba compound (agbo’le)⁴⁶ comprises individual units (oju’le)⁴⁷ brought together in a cohesive whole, guaranteeing appropriate spatial relations which have implications for social interactions. [...] A major feature of this aggregation of spaces is the courtyard [...typically] angular in its dispositions, generally approximating a rectangle, but could be very irregular in outline. As with Hausa architecture, there is a clearly defined entrance [...] but with Yoruba, there is invariably another (back) entrance.” (Osasona, 2007:4)

⁴⁶ Literally, “the fold of dwelling units” (as in a shepherd and his fold) (Osasona, 2007:22).

⁴⁷ Literally, “the eye of a dwelling unit,” (or “the eye of the house”), referring to the entrance to a single room, or homestead (Osasona, 2007:22).

Until the 20th century, all buildings in ancient Yoruba cities were courtyard or compound houses, with different numbers of yards for different purposes (Vlach, 1984). This has, however, changed since the beginning of the century, either through immediate colonial intervention or what Osasona (2007) calls “colonially-aided modifiers” – the repatriates turned “master craftsmen,” returning from South America (mainly Brazil) to Nigeria after the end of the Slave Trade. The ‘Yoruba bungalow’ then became the new dominant building type, as a two-phase copy/appropriation process from the imported ‘original’ in the capital Lagos. This is mainly due to an interplay of colonial directives, imported materials, and the builders' skills to translate in practice what they were trained for elsewhere. The buildings are made from masonry structures, with timber frame roofs covered with metal sheeting, and raised above the ground after the wrong assumption that malaria was caused by ‘emanations from the ground’ (King, 1984) as part of the British mosquito eradication campaign (Oluwasegun, 2017). The Afro-Brazilian builders added verandah and porches to entrances, as experienced in practice overseas, and planned the buildings along a hallway followed by a corridor with rooms on either side.

What sounds rather ordinary or ‘normal’ a century later, was in fact a major change in the layout of circulation spaces— as the introduction of the corridor started to replace the traditional courtyard arrangement and transformed the urban morphology in relation to the living units. Instead of spaces turning towards the courtyards in various degrees of privacy, spaces now open out on to a (semi-private) central corridor (face-me-I-face-you), which in turn, connects with (semi-public) front and back verandahs — and, at times, goes above to several floors. The role of the hall, in this case, a very distinct import from the global North, extends these two elements in a sequence of arrival, access and control. The Yoruba adopted this significant change, through respecting the Afro- Brazilian culture as opposed to reading it as a British directive (Vlach, 1984). Some amended the imported copy and still added a courtyard, and simpler, more popular versions of the bungalow moved into the hinterland as localised versions of the imported copy. This process created its own pattern book based on 1:1 scale

“samples” – the transfer being verbal and visual rather than through written word and plans as in pattern books. From the outside, some of these single-story buildings have a strong resemblance to bungalows in Johannesburg.

Expanding Aspiration

The contemporary compound house in Ghana has been described as a transfer of the traditional rural model to a more urban location and now covers more than half of major cities’ residential stock and houses three-quarters of the country’s population (Biamah-Ofosu, *et al.*, 2023; Afram & Korboe, 2009; Andersen, *et al.*, 2006). Visible morphological changes, from the air and at eye height, have seen competition with the multi-storey ‘villa’ as a newer and seemingly more desired housing type (Ibukun, 2021; Andersen *et al.*, 2006), a development Pinard has also traced in Dakar, Senegal (Pinard, 2016). The villa, whether as a traditional single-family version or multi-unit flat edition often does not include the void – outside space – as part of the ‘active’ communal living space, for outdoor living, meeting, trading space. It is essentially either left-over space due to minimum requirements of building regulations or serves to represent lifestyle/status. This building trend also seems to accommodate another considerable transformation in the life of the African (compounded) city, that is, rapid urbanisation and the related demographic change from extended to nuclear family living (Ibukun, 2021; Afram & Korboe, 2009; Andersen, *et al.*, 2006).

Another major impact on the remaining and performing compounds is the change of use to exchange value. This means that the property is not primarily used to accommodate the owner and their extended families (which, in fact, might actually not exist as such in one place anymore in many instances), and instead is rented out, often as subdivided accommodation, for low-income tenants (Ibukun, 2021), albeit with related issues of overcrowding and inadequate infrastructure. This, in turn, does not help contribute to a reversal of the existing stereotypes of slummification, and the stigma of being “unacceptably backward” (Andersen *et al.*, 2006:33). Contemporary research, while very aware of the current conditions and acknowledging compound limitations, suggests the need to investigate the

compound house in Africa as a potentially aspirational model for current ‘house forms’ relevant for a changing and growing population (Biamah-Ofosu *et al.*, 2023). It is also seen as introducing forms of incremental house ownership to many lower-income urban residents (Andersen *et al.*, 2006), and hence developing affordable construction methods that permit expansion over time, horizontally and vertically (Afram & Korboe, 2009). This actually takes us back to Brand’s “economic grammar of construction” (Brand, 1994).

The above has been a quite brief review of different forms of ‘urban compound’ housing from the African region – certainly NOT exhaustive but highlighting some of the contemporality (in historical and present terms) and the evolutionary concepts of spatial and related changes these are undergoing. At the very core of this discussion –which will be returned to below – is the nature of what is considered aspirational, propagated and supported in practice – that is, what can be seen as a form of capacity building– for whom and by whom, in the production of localities that permit multiple imaginaries of what *could be*. (Simone & Pieterse, 2017; Jenkins, 2013; Appadurai, 2003).

4.4 Urban Compounds

4.4.1 Compound Layers

The final section of this chapter links back to the previous chapter’s call for **re-description** as a method – and also prepares the analytical format of undertaking and presenting the empirical research work. The intention is to ‘un-see’ the house, to make way for new patterns to visually emerge. ‘Un-seeing’ the house is to view it as if it did not exist as a pre-classified entity through deconstructing the plot and the compound into its elements – identifying the ‘small spaces’ that make everything work in order to reach a better understanding of its workings as an emerging morphology working through **layers of change**.

If I were a building owner these days, that’s something I’d be interested in: the future potential of existing structures, whether they’ll have to be extensively modified to cope with change or not (Duffy, 2009, in interview with R Genevro, 3:07).

The study borrows the principles of Brand and Duffy (1990, 1994) to read transformations in buildings through *shearing layers* to analyse the morphological changes – and illustrate new, evolving patterns in compound lives. The research customizes these author’s terms of use, making these particular to the place of investigation. Brand’s shearing layers of change (Brand, 1994) start from Duffy’s premise that “there is no such thing as a building” (Brand, 1994: 12). His concept looks at structures in terms of building components and their ability to adapt or change across different time spans. The term was originally coined by Duffy (1990) as a form of facility management related to costs and life span, which he separated into shell, services, scenery, and set. Brand extended Duffy’s concept into six layers that have different times of change and possibilities of adaptation: site, structure, skin, services, space plan, and stuff (Fig.10). This study is particularly interested in the role of *site* and *stuff* in the context of the bungalow compound. These two layers seem to have a particular deterministic role in Brand’s set-up, one being eternal and the other one in constant change or motion. However, due to radical changes in forms of agency that are embedded in both *site* and *stuff* in the Johannesburg samples, they seem to be of high significance for what Duffy calls *use potential* (Duffy, 2009) when applied to the transforming bungalow properties.

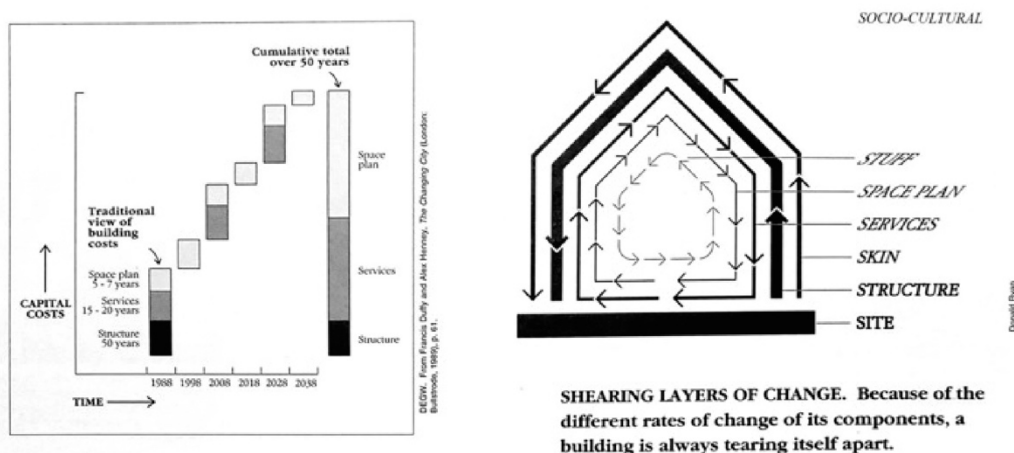


Figure 10: Shearing layers of change (Brand, 1994:13)

The other pairings of importance for the analysis are service plus space plan and skin plus void. The rationale for the pairings is explained as follows.

As a very particular process of morphological transformation, the compounds not only confirm Brand's opening statement about the change rate in building layers – as when he describes the conversion of an architectural magazine to one about interior architecture: “interior revisions where the action and the money were”⁴⁸ (Brand, 1994:12). This insight also opens up different perspectives of understanding of the nature of interiority – or simply put, multiple readings of inside and outside conditions. While Brand refers to high-end, high-cost projects, the bungalow compounds are placed at the lower/ medium end of property developments. It is important to note that Brand's analysis does not measure financial costs *per se* but versatility and implications for spatial configurations through socio-cultural change. A high ability to adapt can thus be used to revise a common understanding of the value of basic elements and, at the same time, highlight issues of agency – such as the potential of the corridor, the expanding role of the boundary wall, the relationship of appliances, services, and space planning. Therefore, the bungalow compound is first described layer by layer to explain the above-identified *coupled layers* as an analytical strategy.

Brand describes the **site** as a legally defined lot in a geographical setting at a specific urban location. He (and Duffy) term this layer as ‘eternal’ (Brand, 1994:13). In South Africa, the site is not eternal, as when legalities in terms of access to land and property have undergone a radical change, for example, between 1913 and 1991.⁴⁹ The site's relationship to people via legal regulation and codes has been exclusive in these times of change – but in different ways. Over time, there has always been an inside/outside situation. While the city has defined and continues to outline permissible footprints, volumes of structure, densities, and restrictions on site – laws of segregation determined limited access, presence, movement, and visibility on-site for black people until 1991. Since then, multiple un-recorded additional structures have been ‘hidden’ from the public eye (that is, the eye of the City Council) behind the rising boundary wall to avoid

⁴⁸ This was being said in a context of high end, expensive home renovations documented in the Architectural Digest, an ‘International magazine of Fine Interior Design.’ <https://www.architecturaldigest.com/about-ad/>

⁴⁹ These are critical dates for Black people to be denied access to landownership (Natives Land Act, 1913) and the legal reversal of the process. The Land Act was repealed when the Abolition of Racially Based Land Measures Act 1991 came into force. The legal definition of the lot, or the stand, as per the original deed, was bound to conditions that excluded black ownership (see Report of the Transvaal Leasehold Townships Commission, 1912).

administrative penalties. In that sense, the boundary wall has become the beginning and the end of the site, but – through constant ‘thickening’ because of added rooms and programmes – it has turned from a line/limit into a three-dimensional, inhabitable space with a shape. The site and the built structure have thus merged into an overlay of ‘eternal’ with ‘constantly changing,’ as both a line of negotiation between private ownership and public interests as well as administrative/legal demands and regulations.

The basic **structure** of the bungalow building has mostly not changed in the last hundred years since its inception, and is therefore worth exploring in some detail. It consists mainly of local brickwork and natural stone from the area. External walls are often finished with plaster and paint. Internal walls are finished with plaster and paint or wallpaper. Single-storey buildings have 9-inch/23 cm external walls and 4-inch/10 cm internal walls. Roofs are built with prefabricated timber trusses on “a preferred pitch of 27-28 degrees” (Hindson, 1987:93) (later 30 degrees) and covered with corrugated metal sheeting. Ceilings are made from 2mm pressed and decorated iron plates, ordered from a catalogue and imported from England – but new structures or repairs use dry ceiling board. Room heights are generous, with 2.6m being average, due to regulatory required airflow given to fireplaces and chimney emissions (that is, the smoke had to be able to move up and out without compromising oxygen intake). The foundations were usually minimal, buildings placed on a plinth of stone with rock bed foundations or later concrete strip foundations. Additions at the back were originally built for cars, coal storage, and domestic quarters– mostly with no real foundation, low wall height, and often no floor or wall finishes or ceiling. New additions at the front were usually built from 23cm brick walls, with timber roofing, metal sheeting, and concrete floors. The planning and erection of structures ‘as built’ has often been reduced from an envisaged interaction between the City council, owner, architect, and engineer to more recently (when they occur) between the owner and an in-house builder.

The **skin** as the exterior surface of buildings (Brand, 1994) has multiple locations, dimensions, and purposes in the bungalow compound. The research looks at the skin as the continuous, composite line of outer walls of the bungalow or the verandah, where applicable, plus the entrance, the extended boundary wall on the inside, and the outline of the void (yard). The outside of the boundary wall serves as a public interface, with openings, either as access to the property or providing services along the sidewalk. These lines may overlap with the structure. Times of change differ along different sections of the continuous skin, which is examined in the Case Study samples. From a material perspective, skin and structure are mostly inseparable, with the skin being plaster and paint – with the exception being the verandah, a three-dimensional extension of the exterior surface.

The **services** of the bungalow compound are as basic and often as original as its structure. Water pipes, drainage, and sometimes natural gas lines run below ground when on public land, and above ground, and as much as possible along the exterior wall when on private property. Electrical lines run above ground and down from the roof into the rooms. Airflow is natural, through windows and via built-in air bricks, as required by the Public Health Act 1919. Services, waterlines, and power points have multiplied with the organic growth of rooms on the properties; some are pay-as-you-go. The service lines around the house have often become part of its skin, and their maintenance is the responsibility of the owner or landlord. Brand gives 7 to 15 years for the replacement of services – but in some bungalow compounds, major parts of the infrastructure (and that of the city likewise) may have reached close to 100 years. That, of course, does not mean that they should not be replaced -- but it also does not mean that they will be.

The original **space plan** of the bungalow follows a ‘front to back’ sequence, not considering natural light as orientation. The front faces the street, and the back is accommodation for a car, domestic help, and coal storage, following strict rules of racial separation, as stipulated in the title deed and building regulations. The corridor and entrance 'hall' are central spaces for circulation, with rooms left and right as the basic layout, in a limited number of pattern book variations. In

transformation, the plan of house and its additions are laid out by the owner as an investment project based on the potential of its exchange value of the non-normative 'family.' However, the main layout of the house often has not been changed for a hundred years, although the space is used very differently. The corridor/hall has often been transformed into a shared or private kitchen. The transformation process is very dynamic — every year, changes are made, sometimes more often, in terms of use, but seldom imply the amendment of the space plan. The repeated constant is the 'room' as the lowest common denominator. The yard, however, is often the result of fluid negotiation between tenants and changes the most, with multiple patterns of spatial use throughout the day.

Stuff refers to peoples' most precious possessions, and the nature of items in the bungalows and the areas under investigation has multiplied over the years. However, the repetition of much of the same stuff across multiple rooms indicates the folding of many fairly similar lives back into rooms, from 'one family, one house' to 'one household in one room.' The 'moving beds' in Yeoville around the beginning of the month are more than a myth. The movement of stuff depends mostly on the change of tenants as their stuff moves with them, replaced by similar items, which are not exactly the same. Landlords generally provide kitchen facilities to share. Sometimes they also provide wardrobes and washing lines. Tenants bring beds, chairs, sometimes tables, fridges, microwaves, and buckets. Brand's layers give stuff a daily to monthly rate of change, with little importance. In the context of this study, however, stuff is an essential part of people's **homes**, as well as small-scale business setups, and the movement of people and stuff is highly interlinked. The placement of the stove or the microwave, for example, has measurable power to change the property's spatial behaviour, as well as its social life, in multiple ways – and eventually, in terms of the bungalow compounds' wider urban performance.

Concerning linkages and relationships, Brand suggests an ordered hierarchy between his layers that the bungalow properties cannot follow fully. Where the

site previously dominated structure, it is now needs / demands that dominate the site through structure. Where structures previously dominated skin, these are often merged in the bungalow samples and are not separable as building components. In the form of the thickened boundary line facing the public, the ‘skin’ even becomes an independent service provider, albeit often without official consent and hence partly camouflaged (or paying for protection). Services still, however, dominate the space plan, although stuff in the form of mobile appliances has the power to change that – that is, in principle the space plan does still dominate stuff BUT it can work the other way around – stuff can amend the space plan, in terms of use.

4.4.2 Compound Elements

The main elements of the bungalow compound have been identified in referencing the African void/ yard and the ‘small spaces’ (Chattopadhyay, 2022) that are crucial for the space’s operations, and through these this study will be “excavating the micro-narratives of building detail” (Koolhaas, et al., 2018). Tailored to the transformative history of the bungalow property, the study examines the four main functional components of the bungalow compound ensemble: the plot, the rooms, the boundary wall, and the yard, through distinct elements to measure, describe and understand the transformation. These are the boundary wall, the rooms, the corridor (and hall), the verandah, the steps, the openings (or ‘hole in the wall’), the beds, the taps, the stoves, complemented by the washing lines, the cars, and, at times, the plants. All are distinctive elements of the everyday life in the bungalow compound, assembled and constantly re-assembled in a wide number of variations and combinations, and are briefly described below. These also place themselves in a particular relation to and are part of the analysis of *layers of change*.

A **verandah** is an outdoor area, a porch that is attached to the outside of a building and a historical component of the bungalow, ostensibly of colonial Indian origins (although much more widespread globally and historically). In its colonial manifestation in India, the verandah ran around the building as a

thoroughfare and enabling air circulation across all rooms. It replaced or excluded any corridor from the dwelling (King, 1984). In South Africa, the verandah is often called a ‘stoep’ – a wide, raised step to sit on in front of the house and a traditional threshold, widespread in formerly white neighbourhoods, as well as in farm houses. It has become important in this discussion not as a heritage element of architectural preservation but due to the exclusionary cultural connotations that it gained when Douglas Calderwood recommended its omission in the design of accommodation for black people (Calderwood, 1964), despite its recognised role historically and contemporarily in social and spatial compound practices of black culture.

A **corridor** is a passage, a space dedicated to circulation between rooms without having to enter them. As much as it separates, it permits individual access to rooms and provides a degree of privacy and interchangeability of use (Evans, 1997). The bungalow’s main layout is based on a central, mostly linear corridor, which (at times, and with a small enlargement in width), stands in as an entry hall, socio culturally significant for filtering access and arrival (Rosselin, 1999). As an architectural element, it is not original to the type but has enabled major parts of its transformation. Calderwood, who developed “Principles of Mass Housing” (1964) for the Apartheid regime, reduced the corridor in the development of his NE51 housing model series (Calderwood, 1953, and Calderwood and Connell, 1952) to an absolute minimum. This design hugely influenced dwelling for Black Africans under Apartheid.

A **boundary wall** is generally defined as “any wall erected on, above or over the physical boundary between two properties so that they stand on or occupy space at least partially on both properties” (Bregman, 2018). Boundary walls in Johannesburg were, at times, required by title deeds in particular areas like Yeoville (Greenlees *et al.*, 1912). Building regulations define distances for buildings to be kept from boundary walls, heights that are permitted and materials that can be used to erect them. Boundary walls have significantly ‘thickened’ and

programmed at the front and the back, and at times in-between bungalows since 1991 in the process of their becoming compounds.

A **‘room’** is the basic unit that the City of Johannesburg has used to describe the size and type of a house since its beginnings, in reports, regulations and census. The Johannesburg Housing Commission, for example, reported in 1903 to the Lieutenant-Governor of the Transvaal that “there is a conspicuous absence of small cottages from three to four rooms, with kitchen and pantry, at a rental from 5-15 pounds per month” (Sansom *et al.*, 1903). A room in Yeoville and Rosettenville today is – as explained above – an independent rental unit that can house more than one person and can be considered a form of urban currency (Dormann & Mkhabela, 2019).

The **yard** of a house is the grounds of the building. A courtyard is a shared open space that is enclosed by walls or buildings (see Chapter 4), and as per Rapoport, a courtyard house and a compound are exchangeable descriptions for similar phenomena (Rapoport, 2007). The yard in Johannesburg has historical connotations of slum, as explained earlier (Hellmann, 1969:1948; Calderwood, 1964:85). The grounds of the bungalow compound are the one element that has often changed most in its organic transformation, and the yard needs to claim its presence as an essential void form (see Fig.11).

Concerning a **kitchen**, Johannesburg’s building regulations have long permitted only one on each property (Johannesburg, 1979:33). This kitchen was also the place where black labour and white needs for nutritional care met. According to historic accounts they were also places of day-to-day violence when housewives would even use weapons to direct their domestic workers (Van Onselen, 1982). The evolution of the private kitchen over time as a social place for making and sharing food is being challenged by appliances that can turn each room into an ‘apartment kitchenette.’ The stove, where it exists, has moved through the house in these transformations, from the back kitchen to the hall and even to the front of the house, as public eatery nestled within the boundary wall.

A **bathroom** is inevitably linked to concepts of ‘dirt,’ and its removal, and associated with personal hygiene and privacy as well as public infrastructure – and is not as easily movable as a kitchen. A **tap**, however, is, and these have multiplied in the bungalow compounds across the yard.

A **bed** is qualified as house ‘stuff’ (Brand, 1994), is most easily replaced – and has a high mobility factor. In the bungalow compounds, beds are closely linked to people, often as their most valuable domestic possession next to a fridge, and these move with them. They are ubiquitous in nearly every room; still, these are not ‘bedrooms.’ More than any other ‘stuff,’ they have become a measuring unit of wider spatial mobility and closer spatial change.

4.5 Summary

Chapter 4 has taken a typological approach to understanding key issues surrounding the bungalow properties’ transition from a freestanding single-family residence to a multi-unit courtyard arrangement (Fig.11). This chapter interrogates the relationship between social life and physical form across scales through the role of the house and the yard in dwelling processes. The discourse draws from literature on architectural typology, anthropology, and building systems and uses selected compound precedents from across the continent. In so doing, the chapter has looked at key issues through their rational relationships and their representation, arguing that the bungalow compounds as unfinished objects hold important knowledge of people and local conditions. The latter section of the chapter links back to the call in Chapter 3 for re-description and prepares an analytical frame for the investigation through empirical work. Here, it introduces the concept of the shearing layers of change, which, in appropriation, are later used to assist in deconstructing the bungalow plot turned compound house into components. All this – as before – intends to undermine the dominance of the built form in favour of the morphological workings and re-describe the relationship of social life and physical form *what is*, to discern *what could be*.



Figure 11: Case Study #1-#36, emerging courtyards (author's own, 2023)

CHAPTER 5 PROCESSES OF RE-DESCRIPTION

Methods of Collecting and Cataloguing the Empirical

Architecture is the movement and the relationships that are enabled by the way you open, close and channel functions, people and movements within [...] the hard facts – walls, doors, streets, stairwells, the syntax of a building and of the city. They are enabled, they are not determined, by the way matter is organised across space. Every contact, every incident leaves a trace, and we need to augment the capacity to notice and then connect the traces. Each trace is recorded in another way but they are all recorded on surfaces. Each incident is like a bundle of threads, entangled with the world that it is part of. You need to very carefully entangle it and tie them to their histories to understand how different actors (people) are architecturally disposed in relation to each other. (Weizman, 2022, 5:20m)

5.1 Introduction

Chapter 5 puts the previous methodological and theoretical parts of the study (in Chapters 3 and 4) into practice. With reference to the professional category of ‘red line drawings,’ the study argues the need for legitimacy of organically added structures on and within bungalow compound properties. In addition to reflecting on the agency and act of drawing, the research elaborates on the ‘exclusive’ nature of the relevant actor’s knowledge (owners, residents, and other users) and ethical considerations vis-à-vis the fieldwork process. The chapter outlines the various specific methods and tools used in the complex documentation process of 36 purposive and convenient, in-depth case studies. It addresses the practicalities of how exclusive knowledge embedded in the current layout (or structures) can be revealed as a collection of evidence and evaluated as emerging possibilities. The chapter is structured in three parts: Section One explains the approach, Section Two addresses the process and tools, and Section Three relates to a strategic mechanism for ordering the resulting knowledge(s) based on suggested categories (groupings) emerging from the data collected.

5.2 Empirical Work: Following the Evidence for What *Could Be*

5.2.1 The Re-descriptive Case Study

Drawing

The documentation of the extensive fieldwork addresses one of the main challenges of the current properties – that of being un-documented – and ‘draws’ them into existence. The use of drawing is common in urban fieldwork and a central process of architectural production (Tayob, 2018). The meaning of drawings as forms of representation goes beyond the recording of information, and it is necessary to address the choices of ‘how to tell’ (Tayob, 2018; Chora & Bunschoten, 2001). This is of particular importance in the documentation of areas that operate at the margin of the existing norms for which the drawing formats might be a part. Here, the research uses the professional category of ‘red line drawings’ to interrogate and argue for the legitimacy of organically added, officially illegal structures on bungalow compound properties. Redlines are, within the architectural profession, drawings that mark changes in what has been built as opposed to what was planned. These are applied in two Case Study areas that were said to be historically redlined⁵⁰ and where the presence of the architectural profession has remained elusive post-1990 (Dormann & Mkhabela, 2019). In so doing, the study understands the process of re-describing the existing as a conceptual investigation – as opposed to some sort of post-occupancy evaluation. Hence, the ‘as built’ drawing is employed as interpretive, and as a speculative tool, as opposed to a ‘sterile service instrument’ (Modesitt & Norman, 2021:291). In this process, *measurement* is not neutral but rather becomes a practical and theoretical act of authorship in the process of representation and position-finding through ways of seeing.

In cultural or economic valuation processes – such as in heritage protection or property development speculation activities – (red-line) drawings and spatial

⁵⁰ In academic literature the areas under investigation, and similar neighbourhoods along the mining belt of Johannesburg, are often referred to as redlined, this means that banks limit or significantly reduce bonding properties in the area, and if so, with conditions that secures the insurance high against risk. (Haferburg & Huchzermeyer, 2017); (Beall, Cranshaw, Parnell2003:120).

documentation become complicit vessels for power and manipulation in leveraging meaning in different ways. Lines, scale, texture and colour values thus become signals and tools for value ‘production.’ The tools used to measure and draw also inevitably bias certain values above others and, therefore, attempt to regulate or control space or aesthetic objects in different ways. In addition, exposure and revelation of certain values or meanings also “build a world” in the sense that they develop new relational qualities and new ways of seeing objects or spaces. As built red-line drawings record the structural changes to a building differing from approved plans, a spatial reality scan of sorts, the recording follows strict rules and conventions. It is usually considered to be a neutral service instrument of the profession, which it is actually not, as **rules** have pragmatic purposes as much as they are **technical power tools to assert legitimacy**⁵¹ (Modesitt & Norman, 2021).

Catalogue

In order to assess the serial nature of the bungalow properties within their large variety, the red line drawings are compiled in the form of a catalogue that references the pattern book (described in Chapter 2) and the distribution of bungalow designs at the time of their arrival in Johannesburg. The merging of the red-line and pattern book formats provides a comment on issues of transformation of the generic (how has the imported, and often repeated, pattern/plan been amended?) as well as transferability of the specific (how do the potentially infinite variations compare?). The research looks at recoding change as a production of people’s choices, as a database of possibilities – countering the prolific indifference of the developer’s catalogue of homes as a capital-driven model of domestic production (Utting, 2018). Note that red-line drawings deal with the building after it is built and the pattern book before building. One is about state rules and regulations, for example, urban health, while the other is about

⁵¹ This links back to the of the ‘power of the line’ in the surveyor’s diagram in the later 1800s when Johannesburg was laid out as a sea of 495 plots, mostly accommodating privately owned (residential) properties. The research is interested in the performance of these lines as *geometries of practice of the everyday*, and resulting plans that display *layouts of aspiration*. These layouts hold the potential of developing qualities. Recalling Aureli’s reference to the architectural plan as “concrete abstraction” (Aureli, 2017), it is used as a form of architectural notation, translating many purposes (e.g. money, codes, beliefs) into a spatial and organisational layout.

suggested aspirations for the many. In fact, the rules and regulations ostensibly for public good equally embed social construction and pursue imaginaries – as chapter two had pointed out when the Minister of Health prescribed the ‘cleansing’ of inner city areas of Johannesburg in the early 1900s. The information that has been the basis for the making of the catalogue is thus a complex composite of information: in a sense, a low-key interpretation of Forensic Architecture’s *ground truth* (Weizman, 2010), where results of a digital process, such as satellite image analysis, are “anchored to a precise location in the world” (Forensic Architecture, 2023).

5.2.2 Exclusive Knowledge: Ethics in the Working Context

Research work on the bungalow compounds deals with what it coins *exclusive knowledges*. This includes knowledges that people hold that is of great value for the research process but which they have no obligation to share. The spatial recording of peoples’ lives, at times in the shadows⁵², turns, at times, into a form of professional voyeurism – to see how ‘they’ live – and hence appropriates ‘found’ information with no feedback into the context from which it came. The study has thus respected first and foremost the ‘right to exclude’⁵³ – of the state, or planner, or architect, or researcher – from access to, or information about, the property unless they have been permitted with reason. The study has also respected the right ‘to twist the truth’ and imagine other realities in conversation with what are inevitably strangers. As a result, like any research project in this context, the bungalow compound research fieldwork was walking a fine line between recording facts and aspirations, both of them equally important testimonies of what is/or could be possible. Dealing with exclusive knowledge challenged the composition of methods to fill the gaps inevitably created across a

⁵² Shadow is another loaded term in relation to the Apartheid state degrading black people to being invisible, see Joseph Lelyveld, *Move your Shadow: South Africa, Black and White*, New York, Penguin, 1986, p ii;

⁵³ Property, and more so private property, carries a discussion about morals, the right to exclude and the need to “account for societal interests” (Rosser, 2013:109) within this right of exclusion. Rose (2007) offers three interrelated processes to locate the moral questionability of property: its acquisition (where property was acquired through wrongful acts), its distribution (where property was unequally distributed) and commodification (where things when treated as private lose their meaning) (Rose, 2007). While the ownership of the bungalow compound in Johannesburg clearly qualifies for moral objections through acquisition through wrongful acts (after Rose), latest since 1913’s Native Land Act from a historical point of view, the study wants to extend the discussion into today’s set up of ‘as built’ practices and into the production of the empirical work of the research itself.

spectrum of individual cases, and also had to deal with different degrees of depth (and type) in the knowledge generated. The reporting has dealt with this ‘lack of’ (as addressed theoretically previously) by comparing the case studies across a number of different key elements, and hence not needing all the same levels of information from every property, however, still ‘knowing enough’ to identify and assess potential trends. Dealing with exclusive knowledge from the field was also, to some extent, countered with the data that was publicly available for the individual properties.

5.3 Ground Sampling, Methods in Practice

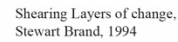
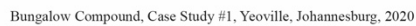
5.3.1 Analytical Structure

The empirical part of the study interrogates the material footprint of the properties as source and documents performance over time through drawings (and other additional information) across three registers.

- As a **series of spatial patterns** translating social, economic and legal (political) values and related regulations over time.
- As a **transforming building type** with architectural elements transforming in the context and circumstances, reversing an understanding of solid and void/individual and shared spaces.
- As a composite of the above through different **figurings and forms of occupation**, measured in programme, density and infrastructure.

The bungalow plot is the unit of analysis taken as the base across an amended version of Brand’s shearing layers (Brand, 1994). The “layers” analysis permits the addressing of the gap that “will inevitably occur between developing requirements and the residual long-lasting building shell” (Duffy & Hutton, 2005:40, 1998) – and the “[interesting] absence of fit, that is ‘slack’” (Duffy & Hutton, 2005:39, 1998) – as multiple versions of potential and aspiration have been materialised across time.

Bungalow Compound, Inner Workings



The bungalow compound's changing layout and organisational structure describe the basic shift from the house on the plot to the plot as a compound house and **merge interiority with exteriority** by shifting from prescribed functionality to sequences of previously defined elements such as walls, rooms and corridors.

- **stuff on site**, looking at the **emerging space** plan through domestic practice,
- **services, space plan and key built elements** to interrogate the role of 'small spaces,' and the repurposing of the initial double life of *served* and *serving*,
- **skin** and **boundary wall** as the envelope of **the void**, to explore the form and significance of the emerging void, the courtyard.

5.3.2 Sampling Criteria, Data, Process

Plot by Plot

The foundation method of the empirical work was randomly sampled information on a ‘plot by plot’ basis, unpacking and mirroring the transformation practices of the bungalow properties themselves. This method mimics a practice of city-making termed “plotting urbanism” (Karaman *et al.*, 2020), which describes a process of urban development that works incrementally, from property to property, in rapidly urbanising cities in the Global South and beyond.

The concept permits us to deal with overlapping forms of formal and non-formal urban growth through repeated and similar incremental building activities on private properties in low-income, highly dynamic neighbourhoods, such as in this study. The above authors use this term to describe how forms of ownership vary, how preferred typologies are linked to the commodification of existing houses, how change is a response to the speculative land market (supply on demand) plus landlords, and how tenants often have social relationships that are governed by physical proximity (Karaman *et al.*, 2020).

Duration

The bungalow compounds were investigated on site from 2018 to 2020, specifically focusing on each suburb in the first two years⁵⁴. The study is mainly qualitative but includes a range of quantitative data aspects to establish trends with information that was not available on site. It worked across the three scales noted previously: plot/block/neighbourhood - investigating the relationship of people’s ‘as built’ private space to the city and as part of the city. The unit of analysis is the current bungalow property, typically on a stand on approximately 15/30 m (495 sqm) of long existence.

⁵⁴ On 26 March 2020 South Africa went into lockdown due to a global pandemic, the National State of Emergency was lifted 5 April 2022. Physical access to both Yeoville and Rosettenville from the outside was severely limited during that period.

Selection

The work was structured around an initial non-biased selection of samples. The eventual selection of illustrative Case Study properties was inevitably (as mentioned under 5.2.2) the result of negotiated access and, as such, dependent on circumstances and, to a certain extent, reputation (through chain referral). The investigation had no selection criteria that referred to physical particularities other than dealing with bungalow properties that were originally built in the larger Yeoville and Rosettenville areas, with the indication of some process of transformation, either physically amended, on the market for sale, or having a different/additional programme, or a change in ownership that indicates social cultural changes. Aspects such as heritage elements or material specifications were not part of the initial selection, nor was a focus on the race or gender of the owners or residents or specific programmes and activities housed in the structures.

Sample Size

There was a suggested, but not pre-determined target number of samples at the beginning of the study, with thirty being indicated as a good number for qualitative studies if saturation of resulting information is not reached prior (Gorard, 2013). The data collection process was gradual. Inevitably, for an individual PhD study, this process was also linked to issues of limited resources and time. However, the gradual process of fieldwork permitted turning the initial random selection into purposive sub-sampling to identify cases that were particularly informative, to target ‘difficult to reach’ situations, and to select specific cases for more in-depth investigation (Ishak & Bakar, 2014). A total of 42 bungalow compounds were recorded in a raw database, half in each suburb; however – due to different degrees of access over time – 36 purposive cases became the basis for the final investigation (Fig.13), six of these in more supportive roles.

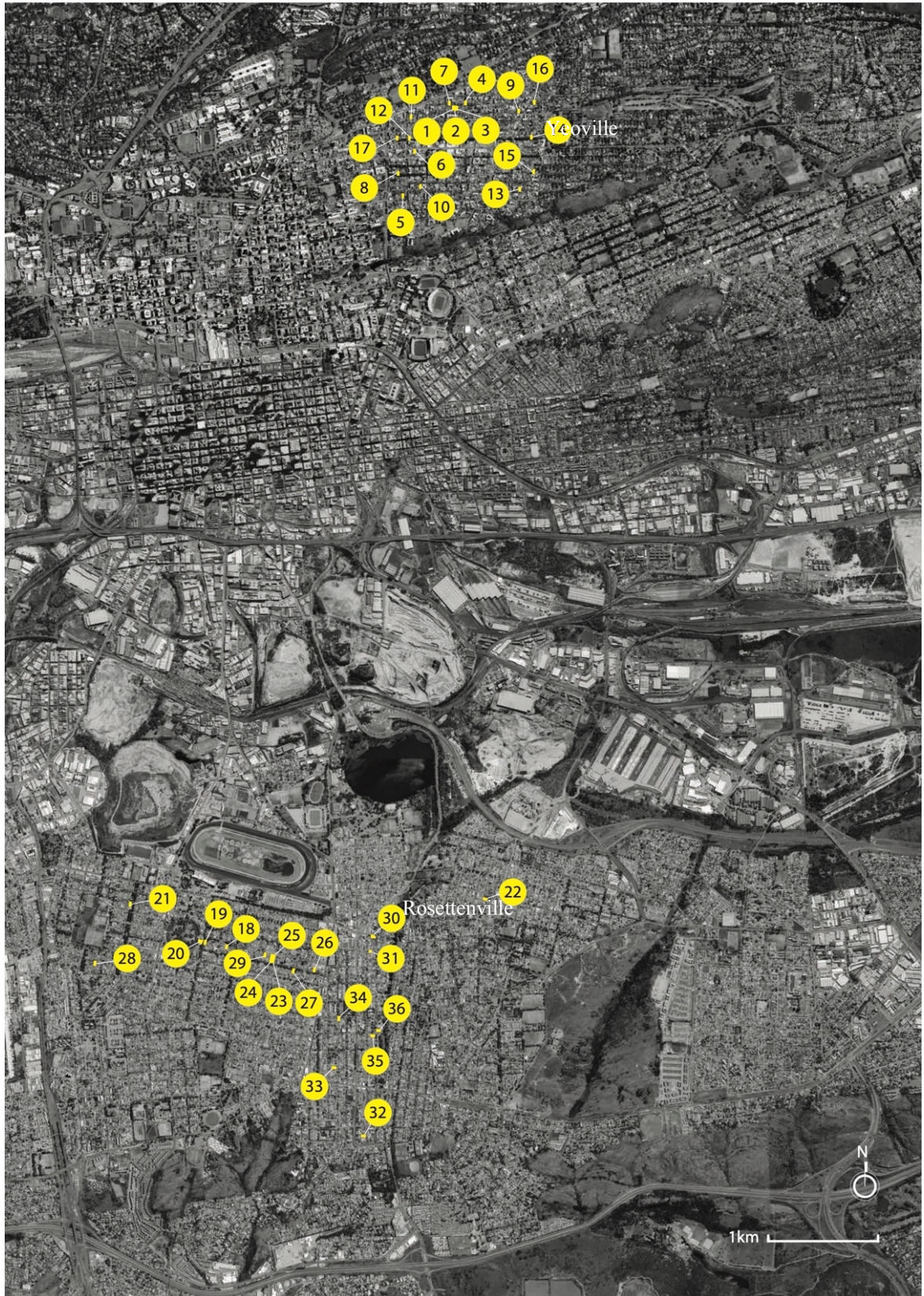


Figure 13: Case Studies, site plan, Google Earth image appropriated (author's own, 2023)

External validity

The evidence of wider, or external, validity refers to the repetitive nature of the bungalow property across the ‘old’ suburbs north and south along the Johannesburg mining belt. The existing urban fabric in the selected parts of both areas is largely homogeneous in terms of plot size and building type. The neighbourhoods are both part of Johannesburg’s earliest suburbs and, most importantly (as noted earlier), they have both been highly repopulated since 1991, as well as morphologically transformed. Both areas are also close to the *Corridors of Freedom*, since 2017 renamed *Transit- Oriented Development Corridors*. As introduced in Chapter 2, the corridors are an urban development project that propagates increased mobilities, urban densification, and mixed-use programmes to counter wide spatial segregation and create access to economic opportunities for all, particularly the marginalised majority of the past. As such, the areas of investigation are part of a macro-scale urban renewal scheme that theoretically enhances privately driven forms of densification, where each single property has the potential to contribute to this larger development (subject to change of conditions) (Harrison *et al.*, 2019).

While the suburbs exist independently on each side of the major East-West city mining belt, there is an inherent relation between them – firstly, from a personal aspirational perspective, as a place of residence and property for owners, and secondly, as urban areas that provide low income, low rise, high-density DIY accommodation that is available and affordable and not very far from the city centre. As a result, the study is not comparing the suburbs but rather their complementarity in terms of plot samples as indicators for continued urban development in differing contexts with high degrees of similarity. While the number of bungalow compounds examined is limited, they are of significant relevance to a larger context beyond their particular locations, and so have an external validity in case study methodology (Yin, 2003).

Data

The collection of data /information about the bungalow compounds was implemented via three main approaches – a sort of triangulation of information to explore the transformative value of the existing urban fabric across its juridical, economic and socio-cultural properties. The data obtained is firstly based on direct observation and a physical survey, when possible, through photos, if permitted, sketches, and unstructured interviews. The physical survey was complemented with a review of council drawings, when available, and satellite imagery, available over time. At times, when access was difficult to arrange into bungalow compounds that were occupied, properties on sale were visited, and photographs from sales advertisements were also used.

While not considered at the study's inception, the sale history, transactional values, and registered bank loans became important factors in the data collection as the research developed. This is because the switch from use to exchange value became prominent during the investigation, and information about all properties was available in the public domain. Public institutional and regulatory information and material from archives and libraries were accessed when available. To a certain extent, these records (that is, other than the in-depth site visits undertaken into the social life of the properties) all follow similar processes that banks, real estate agents and the City Council (CoJ) make use of to establish the value of private property when selling, bonding and taxing.

The research process thus also included forms of remote inspection: through Google Earth tools, checking the deeds registry, property reports, verifying ownership and registration details on the CoJ's open access database GeoLIS <<https://ags.joburg.org.za/cgis/index.aspx>> - an online app that lists each property with stand number, size, street address, current owner, municipal value, neighbourhood sale reports of property companies, existing regulations and potential infringements, and required documentation). Outside of some purchased property reports, the study only used non-pay services.

On Site

On site, each neighbourhood was screened on foot across the entire area after preliminary drive-throughs, starting from main movement arteries and working into the suburb. The author's prior work in both areas over five years assisted the initial entry⁵⁵. Despite perpetual changes, some key personal contacts became constant over time. This overall physical screening allowed the reading of the neighbourhood at eye height and observation of everyday activities⁵⁶.

Documentation of the site was also an integrated part of three research - design studios ARPL4000A in the Honours Programme of the School of Architecture & Planning, University of the Witwatersrand in 2018, 2019 and 2020, led by the doctoral candidate as a staff member. Students assisted the research on ground under direct supervision during the mapping phase of context. The researcher and students 'stood out' as non-residents in both areas, triggering conversations between the team and the local population. These conversations often turned out to be the first step in getting access to more information. If the first contact was with tenants, an attempt was made to contact the landlord to get permission to access the property, make photographic records, and measure them to construct the drawing record of existing structures and spaces. The drawings produced, based on the information obtained, were returned to the users and owners for their approval and, if requested, were made available as the basis for a potential council or grant submission 'as built.' This only applied to a few properties where continuous access was permitted. The other properties were each reconstructed via an intensive digital assembly by the author. All fieldwork was cleared through the relevant University Ethics Committees (Appendix G).

Unstructured interviews were undertaken during the fieldwork periods with residents, tenants, landlords, owners and real estate agents in order to understand their relationship with their neighbourhood and the use of space: private, shared

⁵⁵ The author was part of both Yeoville Studio YS (2010-2012) and Rosettenville Studio RS (2013-2015), as a lecturer/researcher and in parts studio leader (RS 2014/15). The studios were practice-based, community engagement programmes by Wits School of Architecture and Planning SoAP, under the auspices of the Centre for Urbanism & Built Environment Studies (CUBES). The City Studios used the neighbourhoods as urban laboratories with the aim to enhance action research, for the benefit of the community as well as research outputs and alternative pedagogies of SoAP.

⁵⁶ Screening walks were undertaken in the first two weeks of the following time spans that were used to compile research documentation: Yeoville 5.2.- 3.4.2018, Rosettenville 4.2. - 1.7.2019, Yeoville and Rosettenville 3.2 - 1.7.2020 (national lockdown 26.3.2020)

and public.⁵⁷ The conversations were led by the insight people had in the workings of the area, as well as their interests and concerns they were willing to share. A significant amount of detail is overseen, or not understood by short time visitors such as students, and, at time the author herself. While talking to people on site does not reveal a ‘truth’ or a ‘complete’ picture of the area, it does introduce nuances and perspectives that piece together parts of the puzzle urban life on the bungalow compounds is about. After initial observations, particular interest was taken in foodways, water points and beds (the latter as the biggest item of many people’s possessions and their most private “space”). This helped to trace routines, regulations and infrastructure relating to cooking, eating, washing, sleeping, and other emerging activities in context. This focus is based on the social role and material culture of food and “dirt” (or rather the avoidance of this) in domestic everyday life. At the same time, the most basic and direct translation of these into the layout as the kitchen and bathroom had historically been employed as an instrument of power, to separate, and discriminate. As a result, in part, the spatial imprints of the properties have been rooted in Apartheid’s legacy of oppression and segregation. The placement or the omission of cooking and washing spaces, as well as location of entrances, has translated domestic practices on the properties into (bungalow) compound geometries that accommodated ‘double standards’⁵⁸ over more than a century. The current configurations also embed power relations but now indicate a much wider spectrum of necessities and aspirations and point to drivers of what *could and should become*.

Plan ‘As Built’

The collection of raw material answered to a ‘wish list’⁵⁹ of information, as indicators of a range of embedded knowledge, that was known would always remain incomplete due to the private nature of the spaces, as explained earlier. The first and most important output of the ‘baseline production’ of

⁵⁷ The interviews were, due to the confidential nature of life in the properties, and the preferences of the residents, owners and agents unstructured conversations around a group of topics that served mostly to indicate perceptions and issues that were relevant that could then be documented otherwise. A broad outline of questions is listed in Appendix A.

⁵⁸ As alerted to in Chapter 2, the life of people of different color was highly regulated also on private property.

⁵⁹ Plan, sections, elevations of bungalow compound, threshold mappings, as observed, yard anatomy, as it presented itself to date, il/legalities, – blueprints of regulatory processes, temporary activities, density profiles, as found on site, spatial biographies of landlords and lodgers, as accessible.

data/information was the **reconstruction of the plan ‘as built.’** Due to the repetitive nature of the bungalows and their similarities in height and materiality, the ground floor plan permits the drawing of sections and elevations, if required. It also serves as a base drawing to map existing thresholds and record the configuration of the courtyard. The plan also permits recording of the number of bedrooms – and beds – as an indicator of density profiles, as found on site. Enriched by the conversations, spatial biographies of landlords and tenants could be reconstructed when accessible. The measuring process was a combination of real measurements and reconstruction through photographic records. Again, this was possible due to the bungalow’s standardised nature in terms of sizing and use of standard material. In a subsequent step, spatial il/legalities were identified, often as an overlay of structures ‘as built’ with blueprints of regulatory processes. An ownership inventory was produced based on this information for the areas under investigation to understand demographics on the ground in a wider way, as well as in terms of belonging.

The use of institutional knowledge was important as it framed the spectrum of the non/ formality and the il/legality within which the bungalow compounds operate. Institutional information covers drawings and documentation from archives, like the City Council, and possibly libraries, as mentioned above. While it took two years to get access, all but two original drawings of the bungalows could be located. However, **none** of the current alterations were recorded by the City. Nevertheless, aerial photography of all properties was available on the City’s website from 2000-2019, showing the existence of all additions!

5.3.3 The Making of the Catalogue

In order to be able to illustrate the selected bungalow compounds as exploratory ‘samples’ in a systematic way, on the plot, as part of a block, and along a street in one of the neighbourhoods under investigation, a page layout template was developed, to capture relevant and available information – as much as the lack thereof (reminding the reader that “lack of” is important as discussed previously).

The Template

The template was developed (Fig.14) using the plan of the building, ‘as built,’ and its three-dimensional extrusion in different scales and forms of representation for visual analysis.

At the top left of each catalogue page, an aerial photograph from Google Earth of the neighbourhood block is used as a site plan (1), showing a birds-eye view of the property in its immediate context. This is information that is publicly available and of public knowledge, including that of the city. The site plan is complemented in the same row by two same-scale exterior axonometries (2), showing the bungalow property in its original and current layout as BEFORE and AFTER. Data about plot size, number of rooms, and coverage ‘as built’ (solid) and open yard space (void) is captured in these drawings. Below the site plan, the data of the property is summarized (3) in relation to existing regulations of Floor Area Ratio (FAR), coverage, and height, and then growth in terms of sqm is noted. A space index counts rooms as the lowest common denominator and most basic *element*; as well as infrastructural services (water and electricity) related to *stuff* (stoves, sinks, WC); and other building *elements* identified earlier as typologically relevant (for example, verandahs). Programmes other than domestic accommodation are listed here.

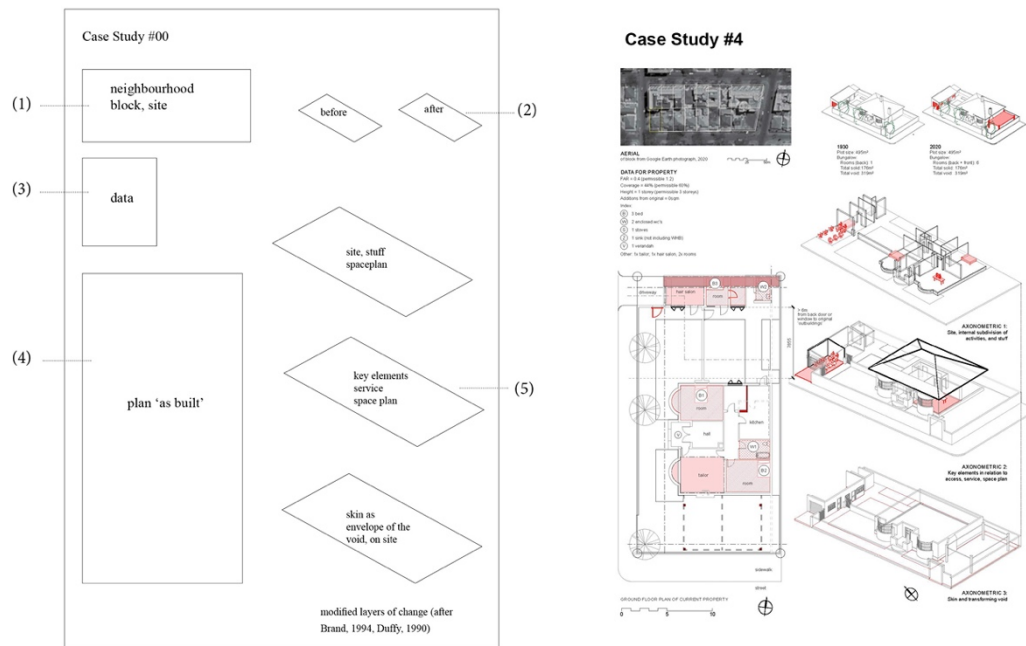


Figure 14: Template layout and work in process Case Study #4 (author's own, with Sarah de Villiers, 2023)

The ground floor plan of the property (4) takes up the lower left half of the page, recording the spaces 'as built' at the time of their recording. The drawing largely follows the red line conventions, minus the detailed measurements, due to the scale of representation in this report. Service lines, regulating lines, and contraventions (which thus turn into negotiating lines) are indicated, as well as *stuff* that determines the programme. Changed programmes are indicated through red surface hatching. The street is at the bottom of all properties despite their different geographical orientation – which is indicated through a changing north arrow. This decision was taken due to the strong back and front division of the properties under Apartheid laws, which are more visible this way, as well as their slow erasure or elimination and future potential.

The exploded axonometric (5) on the right side of the page deals with the illustration of layers of change and the role of architectural elements. The top layer interrogates interiority and programme on site by focusing on internal subdivisions and activities linked to *stuff*. The middle layer represents the transformation of the use of space in relation to key elements. services, and

changing space plans. The bottom layer visualises the skin/structure and the form of the void, which is transforming into exterior (courtyard) rooms.

The drawings are accompanied by a single property description of '*what is*,' which is the basis for evaluating the data.

The Process: Re-construction of the “Now” (to Reveal)

As mentioned above, the plan 'as built' was constructed through the overlay of the original drawing and some information on the current situation as it *is*. As a visual representation, the sequence of Figures 15, 16, and 17 gives insight into the process. The investigation recorded change over time, an aspect that is only represented as BEFORE and AFTER on the template, as noted above. In relation to other information – such as changes of ownership and the passing of laws – this permitted the construction of a timeline of physical change for the properties in relation to other events and understanding the 'now' in a more layered manner.

Change over time 1_Site Visit



Figure 15: Arrival. Streetview Case Study #1 and #2: 'Holes in the Wall' (Photo by Sameeha Aziz, ARPL4000A, 2020)

Change over time 2_Timeline of physical alterations in context

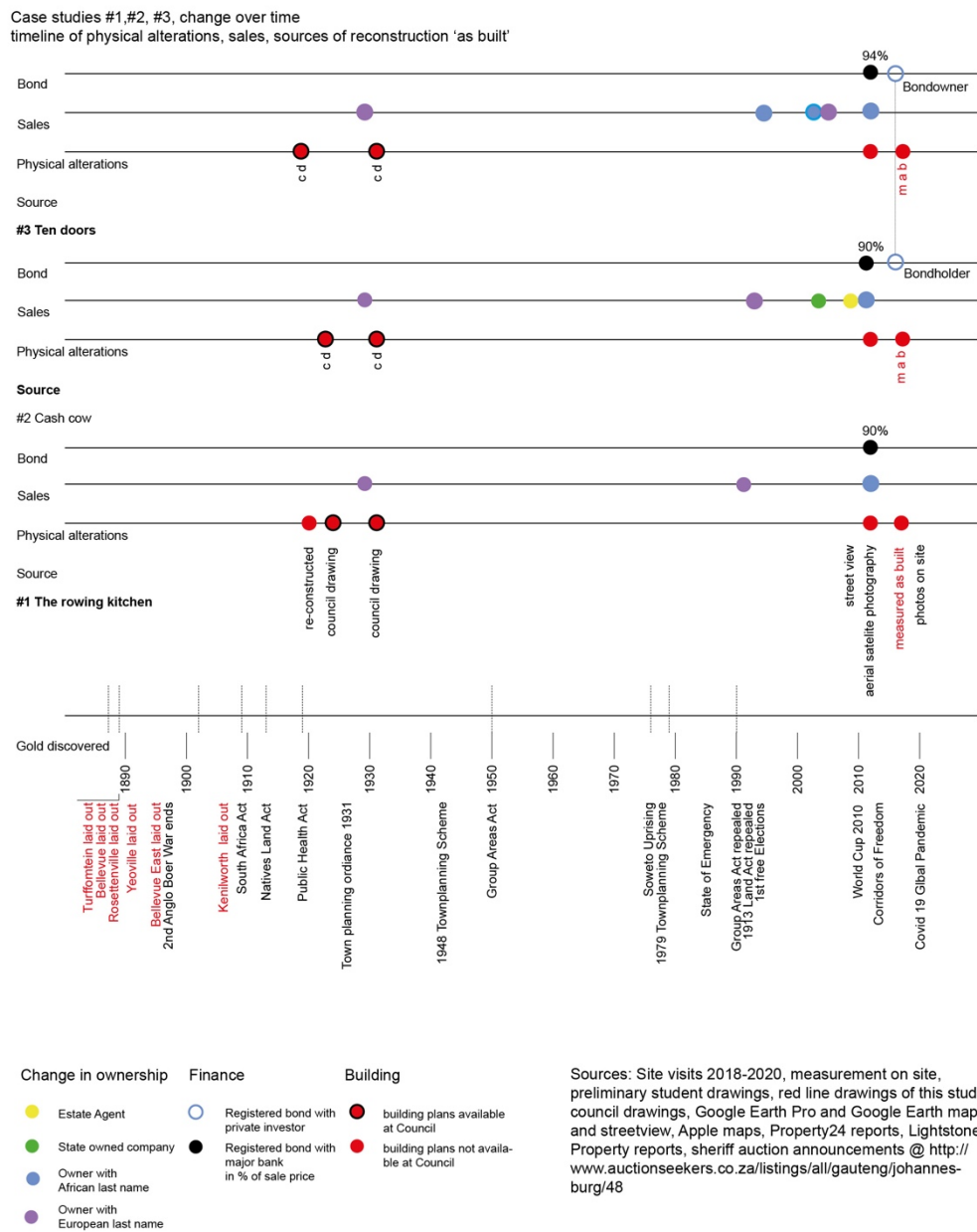
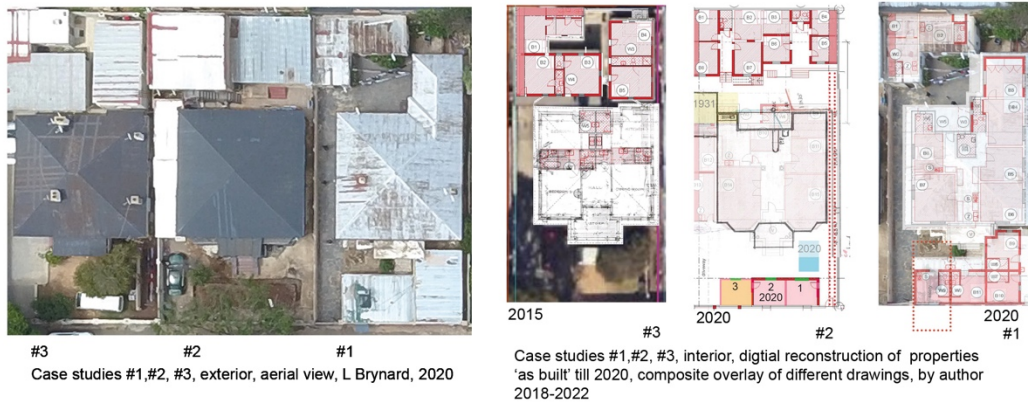


Figure 16: Case Studies #1, #2, #3, Change over Time; Timeline of Physical Alterations, sales, finance, and sources for the reconstruction of the 'as built' drawings (author's own, 2023)

Change over time 3_ Re-Constructing the *Now*



Case studies #1, #2, #3, change of time
Story board of physical alterations, reconstruction 'as built'



Figure 17: Case Studies #1, #2, #3, change over time; Storyboard of physical alteration, reconstruction of “as built” (author’s own, 2023)

Comparing unfinished objects (to evaluate)

Within its comparative set up, the catalogue of these 36 case study properties is as organic as the changing layout of each plot, and the information collected is as temporary as it differs from sample to sample. While the analysis shows that there are clear patterns in the original layouts, appearances, and materialities – as much as there are in the amendments made over time – it also shows inconsistent, incomplete, and (at the time of thesis submission), already partly outdated data, at least in parts. The study takes advantage of this condition and interprets the incongruence of forms and figures as layouts of *aspiration*. The research refers to those as *plot holes*. In fiction, a plot **hole** or plot error is a gap or inconsistency in a storyline that goes against the flow of logic established by the **story's** plot. Such inconsistencies include things as illogical, unlikely or impossible events and statements or events that contradict earlier events in the storyline (Dormann *et al.*, 2020). In real life, such narratives challenge our assumptions. This is because in any situation, although we might not understand what happened – yet it did happen – this probably made sense to someone for some reason.

The *plot holes*, figuratively speaking, consequently place the outcome of research on the spectrum between the **forensic** and the **imaginary**. The work thus proposes consideration of potential intersections of the forensic and the imaginary as readings of, at times, diverging and shifting **aspirations** (Appadurai, 1986; Appadurai, 2003; Appadurai, 2004). Aspiration looks at the properties as commodities with social lives whose multiple value is determined “by a judgement made about them by subjects” (Appadurai, 1986:3). This means personal interests in the compounds determine their transformation – and their divergent futures. Aspiration is also considered an ability to do something or take action regarding something and relates to the context required to enable these actions. Common aspirations, or re-occurring plot holes, may indicate a trend that is relevant for future urban development, and currently overlooked in the larger narrative.

While the bungalow compounds have been investigated on a case-by-case basis, the research is further interested in what the properties do as a collection. The study considers the sum of what happened in any individual bungalow compound as a basis for the configuration of emerging typicalities into *groupings* as a developing urban register. Explored in Chapter Three, ‘typicality’ (as opposed to typology) encompasses experiences and local practices that are linked to a particular – typical – spatial configuration that hold morphological connotations. Following the most common distinctions in typological classifications that have been based on use (programme) and/ or morphology (layout) of the architectural object (Forty, 2000), the *compound groupings* are based on what happens⁶⁰ on **and** with the properties, e.g. as mixed use places of accommodation and business, as neighbourhood networks, as investments on the property market, as infrastructural objects. The groupings are thus approached as performative and relational forms of temporary categorisation, in a spatial and regulative context.

The final section of this chapter will introduce five groupings identified through the research process. While the defining of the groupings originated in the analysis of the case studies, it may appear as if the discussion of methods and findings are merging at this point. However, in order to outline the emerging typicalities and their various scales, and eventually decide on a selection of the case studies for discussion, it seemed imperative to introduce the plot-by-plot groupings before moving to specific detail of individual bungalow compounds. The following section is thus a transition between methods and findings, or maybe in itself a comment on the finding of methods in contexts under development. It begins with an assessment of multiple interests, that have resulted in infinite variations of transformation, to conclude with the need to reconfigure existing categories when dealing with cultures of conversion. The proposition of emerging compound groupings shall be understood as an approach to deal with developing urban complexities across professional scales, and the comprehensive understanding of their performance that ultimately call for the accommodation of contingencies.

⁶⁰ ‘What happens’ is later referred to as compound *doings*.

5.4 Emerging Typicalities

5.4.1 Compound Interests: Multiplying value

Compound interest is commonly understood as a form of long-term (slow) yet exponentially growing financial investment, where interest gathers interest in addition to the principal capital. It describes a multiplication of the principal investment through the accumulation of interest as a most effective principle of exponentially added value to capital.

Architecture, as a practice that designs space to accommodate people and their everyday activities, can frame forms of life and determine values of space, people and their interests as manifested in daily practices – through layout, materialities, sizing, and access to views, and light, services among other things. Like property or real estate, it is also an investment that can gain or lose value over time (see Fig.18 for the transactional history of the case studies). As real estate, property is generally considered an investment with slow but steady returns and low volatility, according to a popular online platform (The Investopedia Team *et al.*, 2022), at least in areas of relative political stability.

This study draws an (admittedly blunt) parallel here to the compounding of architectural interests and attempts to translate the principles of financial investment (monetary compound interest) in the context of small-scale owners/landlords of bungalow compounds in the selected focus areas in Johannesburg. While compound interest is a calculable relationship between time and money, the study of existing bungalow plots as DIY development adds ‘space’ as the third critical factor in the perpetual negotiation of property value – with intended profit figures being often pushed upwards through the highest feasible density at the lowest cost in the shortest turnaround.

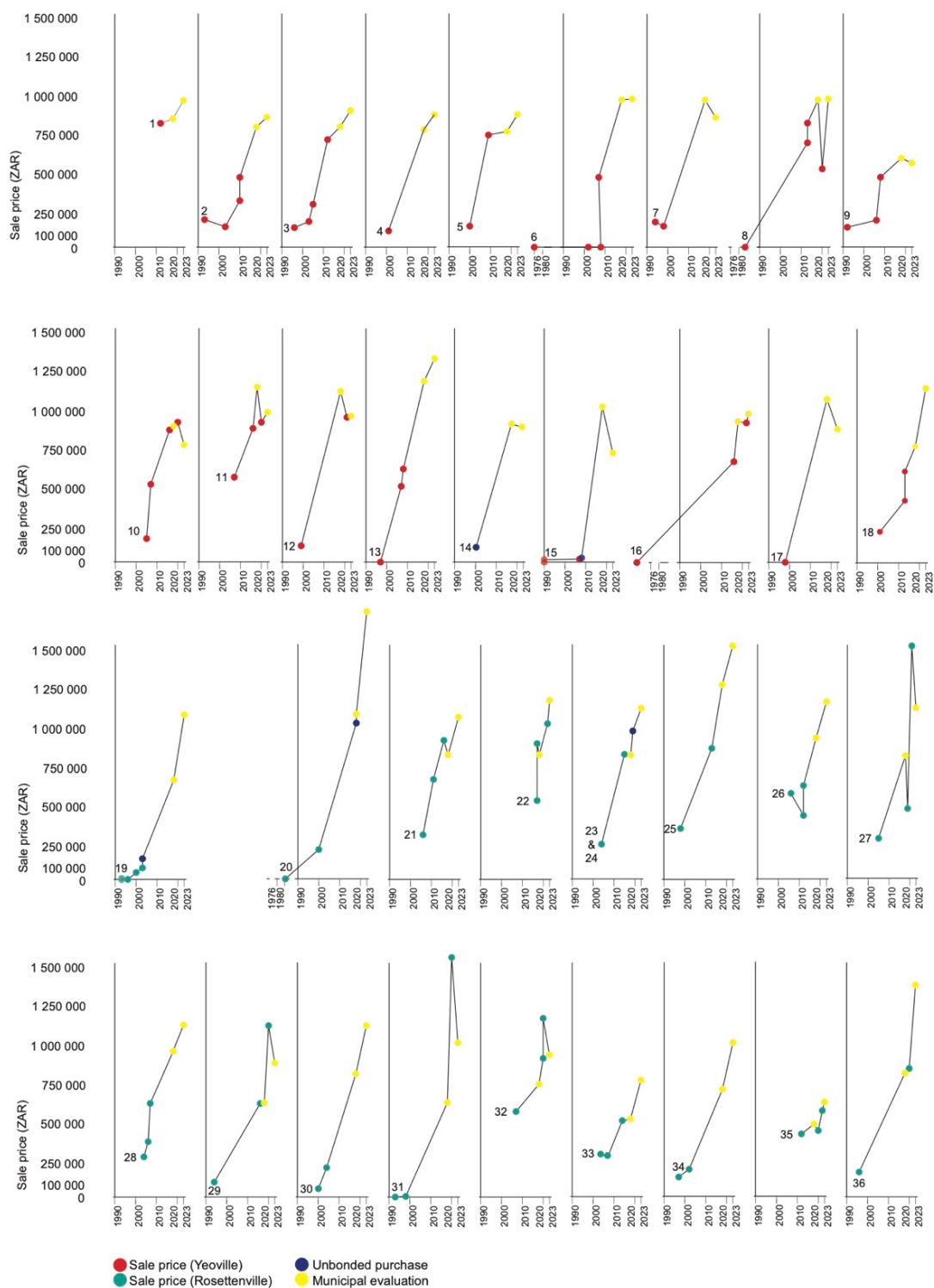


Figure 18: Sales history of case studies, based on information from property reports provided by Property24 and Lightstone Properties, detailed as table in Appendix B (author's own with Tammy Ohlson de Fine, 2023)

To achieve this, the post-1994 bungalow landlords of Yeoville and Rosettenville are compounding the capital output of their properties through **subdivision** (of space) and **multiplication** (of people and use): broadly speaking, the transformation of the one-family house into multiple households organized in rooms, additions of rooms along the boundary walls, the absorption of supplementary programmes, and the **activation of the yard** as productive void, in between space and **outdoor rooms**.

Compounding here is thus also used to mean ‘adding to’ increasing of’ as well as the process of combining more than two different elements. The added value thus could commonly be understood as the accommodation of additional uses and increased densities resulting in more rental income and more relatively affordable places to stay in prime urban locations. Compounded interest, however, also included the need to absorb vehicles, keep up maintenance of the street and its sidewalk, and expand infrastructure and services such as water, electricity and waste removal at the most basic. The growth and value of the single property can be influenced by – as much as it is a contribution to – the neighbourhood’s overall condition, its accessibility, cleanliness, safety and security. The plot compounding process is such an urban-level project.

The analogies of compound interests suggested here in the bungalow context are plural and complex, as they are operating with different measures, and this study follows the intersection of the juridical, economic, and ethical (as introduced in Chapter 3). If the traditional economic understanding of compound interest lies in the multiplication of financial value, the bungalow compounds are dealing with division as another form of multiplication, through a number of measures: use, households, income, space per person, forms of business, as well as practices of sharing – resources, relations, space. The measures to evaluate the current state of affairs (the ‘now’) are taken primarily from the perspectives of the four main protagonists as follows.

Firstly there is the city (and its agents) as official governing authority that plays a significant role in upholding private property rights while preserving basic health and safety standards. Secondly, there is the property owners who can exercise their fundamental ‘right to exclude’ as long as they pay their dues to the city “through a variety of acts – such as paying taxes, and erecting fences” (Taylor, 1994), while seeking approval for all structural changes, and having the appropriate number of kitchens. Thirdly, there is the tenant, without whom the rental exchange cannot take place – which acts as security for the fourth protagonist, the bank, which produces the incentive to invest through loans with unsurpassed interest rates. The bungalow compound violates many or most of the typical built investment ‘measurements,’ the figures do not add up. Figure 18 illustrates the wide-ranging transactional history of the case studies as an overview of purchases over time. Sales prices vary greatly (see Appendix B), and there is no general pattern, other than most of the properties have been bought far below evaluation value. Plans for contemporary forms of life appear inconsistent in different degrees and configurations. Yet it convinces (some) through its persistent and resistant performance via the organic transformation from the free-standing, single-family house to a rooming courtyard arrangement: that is, urban compounding.

5.4.2 Compound Transformations: Infinite Variations

The sum of the single property descriptions presented through the fieldwork is a provisional catalogue of realities, as much as a collection of temporary possibilities. The implicit uncertainty of this phrasing is considered appropriate here as a retainable (urban) quality, referring back to Lury’s notion of incompleteness (2021) and the process of re-description (Simone, Pieterse, 2017) – as explored in Chapter 3. The ‘as built’ representations are analyses of the spatial configurations of people’s everyday lives in an African metropolis, layering visuals that are the product of complex economic transactions, cultural practices, legalities, political ‘plotting’ and imaginaries. They **reveal** the multiple pieces of knowledge (or parts thereof) that are embedded in the ongoing transformation of bungalow properties. Their visual reconstruction is based on the

finding of material ‘things’ in particular arrangements on each plot. In the attempt to account for their meaning and purpose in context, these relations are illustrated through compound anatomies across three sets of appropriated *shearing layers*. The fieldwork sample illustrations are complemented by single plot descriptions that portray their ‘behaviour’ in detail through the lens of legalities, forms of aspiration and values, and evolving geometries.

These self-centred objects have extended themselves to the property's boundary line as a network of layers and, ultimately, a system of spaces, integrating (or confronting) lived experience and local practice with institutional/regulatory frameworks. While the ‘Victorian’ life of other days is still shining through cracks in remaining pressed ceilings and air bricks, the current versions of the bungalow properties share more qualities with the complex compound composites of Ghana and Nigeria than with their original lookalikes in Carshalton, Surrey (Philips, 1926:60). In general, Johannesburg’s ‘verandah house’ (Hindson, 1987) has blended with its yard and its extensions into an ever more “unsettling hybrid structure” (Chakravartty & Ferreira, 2012) – or rather, many variations of these, including doubtless imports for the wider African region.

In the attempt to understand the bungalow compound life strategically, the research steps back from the multiple details of the ‘plot-by-plot’ catalogue approach to subsequently extract emerging ‘categories.’ These translate as groupings that have been “charged and enacted in the sticky materiality of practical encounters” (Tsing, 2004). In essence, as introduced in Chapter 4, it is the compound as a ‘building’ in context, including the experiences and local practices of the environment, as embedded knowledges. Carl refers to it as the typicality of site, and in a particular situation which generally refers to **what is happening in a particular place at a particular time**. The research refers to these groupings as *Compound Doings* which are used to describe forms of change in different modalities.

5.4.3 Compound Doings: Plot-by-Plot Groupings

Same Same, Same Different: General Equivalents Reconfigured

The bungalows started their lives on the ground as a rather large group of similar nuclear family houses, with some place for controlled difference and ‘bit by bit’ extensions. As in most of the detailed case studies, and mentioned briefly above, the basic layout of Johannesburg’s ‘verandah house’⁶¹ typically translated as a plan divided into two (often equal) halves, with a central passage and rooms on each side, a verandah in the front or wrapped around sideways, service rooms at the back, a driveway on one side and the fire distance set-back on the other. All this exists under low-angled variations of (what became signature) pyramid roofs, with pitched insertions on one side or another. The service rooms, like the kitchen and bathroom, under lean-to roofs at the back of a house, were often the first extensions in the first years of the properties’ lives, different from the outdoor rooms for servants and services along the rear boundary wall. Corridor variations are shown as T, L, and H II shapes. The general room width (between three and four metres) not only renders the spaces ‘larger than smaller’ but also makes their use interchangeable and thus provides flexibility. In addition, it matches approximately the outdoor driveway width. This indoor/ outdoor match also applies to the central corridor, which is equivalent to the outdoor fire distance setback. The old and new additions along the now thickened boundary lines echo these dimensions as well, often in a perpendicular direction. ‘Bands’ with spaces of circulation for activities, people, and staff alternate and print spatial patterns into the ground that loosely fit most of the properties (see Fig.29) in variation. The blueprint of the layout does not necessarily distinguish between inside and outside spaces. Nor do some of the activities take place.

In terms of the programme, the transforming properties have remained mainly residential, albeit with many differing forms of accommodation, or have turned into mixed-use, often as contemporary versions of the traditional/initial shop-house. This means that, in principle, we have a blueprint of demarcations in the

⁶¹ As explained in Chapter 2, the research chooses not to differentiate between the imported verandah house and the vernacular cottage, as opposed to other classifications (Hindson, 1987; Radford, 1982).

ground, a sort of ‘one fits most pattern,’ and a programme that (generally speaking) has not changed in nature, but most certainly in detail.

The research aims to understand this ‘composition of lines’ made by peoples’ lives: as planned, as built, as appropriated – and as underlying systems of organization – across the transforming properties. As a series of systems, the plots organize and reconfigure themselves along these lines by absorbing daily routines, people and their stuff, offering services, directing flows of capital, air and water, and most of the time, but not always, keeping an eye on basic health and safety. Over time, compound ‘doings’ have proactively amended norms established at different times for other people and developed (power) relations that run parallel to official forms of governance through negotiated points of contact.

Compound doings thus describe typicalities as forms of urban change on private grounds, where ‘plots become house’ and ‘rooms become currency,’ each playing a particular role across the compounding spectrum. Most case studies find themselves in more than ‘one situation’ and so loosely fit in more than one of the five groupings, which capture an essential part of the complexity of knowledge the bungalow properties hold (see Fig.19). For the purpose of this research report, the case studies have been placed into the categories below by where they seem to best support the overall analysis of the full fieldwork. Given the volume of the catalogue, in the main thesis text, only one detailed Case Study sample is selected for each category/grouping to illustrate the principal characteristics of this, albeit using supporting evidence from other cases as required. Nevertheless, the full catalogue attached serves as a base and overarching reference (Appendix H), is available for detailed verification, and is recommended for parallel consultation as necessary.



Figure 19: Visual table of case studies, yard forms, programmes, groupings, and sample cases indicated (author's own, 2023)

The five main groupings are as follows:

Merging

Merging deals with the composite nature of compounds (Dormann & Mkhabela, 2019), and focuses on how the different parts, elements, activities, people, and processes are related, or relating, to each other and sometimes turn into something new. The attention is on the softening of ‘boundaries’ in particular of the house, property, understanding of ownership, shared spaces, roles of people, institutions, and the law. *Merging* introduces, for example, two main kinds of porosity that the bungalow compounds have cultivated – top-down as voids, open to the sky and eye height perforations as inside-out transitions across walls. *Merging* is often seen ‘in action’ as cross-programming. *Merging* also relates to networks and relations people establish in the ‘running’ of the properties as generators of value. Transgressions are considered here as an operational necessity and require one to withhold or reconsider judgment.

Re-scaling

Rescaling is considered a (bottom-up) continuation of the surveyor’s work in the bungalow compound layout, albeit more complex. It addresses issues of size, scale, capacities of smallness (Chattopadhyay, 2022), and the altered distinctions of former served and serving spaces. These processes work both from the outside in and the inside out. In a plot-by-plot manner, the house is subdivided into ‘one home per room,’ with beds as measuring devices. These extend in various ways onto the plot, which then – as a newly configured entity – turns into a courtyard form of house. While the rooms (in the house) remain physically mostly as they were, the in-between spaces have been reconfigured, often by the residents and/or the owner, to provide privacy, control or channel comings and goings, absorb services and infrastructure, maintain productive distances. The interventions and demarcations are often small or invisible to outsiders and do not necessarily appear on a plan. They are contours of sharing embodying social relations, economic ambitions and limited resources. *Re-scaling* works on contingencies and translates hierarchies and values that make sense to those who enact them in

everyday practices. In the next step, it also introduces a discussion about the scalability of bungalow compound knowledge.

Sleeping

Sleeping describes (aspects of) properties that seemingly remain unchanged. A *sleeper* looks like it is doing nothing – or not much different – since inception: housing a single family on private grounds, with a verandah and some green around it. While that might be true for some (indeed fewer and fewer) of the properties, sleepers are also active parts of real estate portfolios, waiting to be flipped and traded (see explanation of terms later). They hold potential, and they stay relatively still, suggesting stability. The investment here is time, to make the most of their transactional value. To some extent, the generally low occupancy of *sleepers* balance out increasing densities of the wider context while compounding interest on the capital base. Physically, they are in pre-compound physical stages, although economically, they may or may not have switched from use to exchange value. *Sleepers* are, at times, difficult to decipher in their trajectories. Rapidly becoming the exception rather than the rule, their existence permits a measure of urban change.

Enfolding

Enfolding looks at the extruded boundary line over time, in the front of the property and/or on the threshold between public and private space. With the transformation of the ‘hole in the wall’ into small-scale commercial entities, supplying urban services as a direct response to very local demands and as a new three-dimensional façade, these structures operate as protective envelopes (Chattopadhyay, 2022) – or are the houses ultimately besieged? They are certainly rendered invisible at eye height. *Enfolding* interrogates the activation of the street edge as urban space ‘take over,’ and the effect of the elimination of the front yard into the inside of the house and also changing forms of street life.

Yarding

Yarding is the practice of providing outdoor space to living beings for activities that usually happen indoors. It is one of the main spatial characteristics of the bungalow compounds - and also the category manifested in most individual formations. There is not a single pair of properties detected with the same yard space and yard usage in the areas under investigation. While the mainly residential properties use the open space as an extension for domestic life practicalities as well as social encounters, there are what the research calls 'parallel services,' in the lack of, or in addition to, state-run communal facilities, such as schools, skill centres, churches. These services/programmes require outdoor spaces for different reasons to register and operate legally. *Yarding*, as a contribution to urban life, renders the void into an active form, 'the other house,' that responds to the need for adaptability and flexibility of compound life.

5.5 Summary

Chapter 5 has addressed one of the main challenges of the current properties – that of being un-documented – and laid out the methods, and tools the extensive fieldwork developed of 'drawing them into existence' as built. The step-by-step process was largely guided by ethical aspects of how to access, and respect people's 'exclusive' knowledges, including the fine line between recording what can be considered fact and aspiration, on a case by case basis. As a result, the varying degrees of breadth and depth of knowledge generated were assembled, as a spectrum, around physical, and organisational, key elements that every property contains, due to their original, repetitive pattern. The compositional methods so responded to previous theoretical and methodological issues, by turning 'the lack of' in one case or another, into 'knowing enough' across the field, to identify and assess potential trends, and particularities. The reconstruction of the properties and the tracing of their transformation through different scales and detail have made use of multiple ways of recording to lay out a catalogue of possibilities. The subsequent drawings form a composite of these recordings as both a basis and an analytical outcome. The work is as much about the (re-)description of the

bungalow compounds *as found*, as it is about the making of the red-line drawings *as built*.

The findings have led to five groupings that are based on the dynamic operations of the transforming properties, each dealing with specific aspects of their performances. *Merging* works across existing boundaries and established network, *re-scaling* addresses issues of *enlargement and contraction* of size (in relation to various meaning), *sleeping* indicates degrees of stability and potential (investment) development likewise, *enfolding* deals with the thickening of the boundary line and its inhabitation. This leads to, at times, the visual disappearance of the bungalow. Finally *yarding* as shared common denominator amongst the case studies, with the most individual formations, provides the basis for adaptability and flexibility of the emerging compounds.

In doing this, the chapter has argued that the empirical work is ‘following the evidence of what *could be*.’ The latter part of that sentence is purposefully ambiguous. Firstly, it suggests an inherent element of guessing, assuming, and drawing multiple conclusions from what we see and think it means. Secondly, it includes the possibility of imagined future change – that is, what we see now could lead to this, or to that, or to something else. Based on the five defined groupings, an analysis of underlying principles, relations, and workings of the transforming plots is presented in Chapter 6.

CHAPTER 6 CATALOGUE OF FINDINGS

If categories are unstable, we must watch them emerge with encounters. To use category names should be a commitment to tracing the assemblages in which these categories gain a momentary hold. [...] I need names to give substance to noticing, but I need them as names-in-motion (Tsing, 2015:29,293)

So much is different from what one initially thinks. I find myself constantly making wrong assumptions. (Author 2023, in a conversation about the bungalow compounds)

6.1 Introduction

Chapter 6 presents the findings in the form of a catalogue of 36 case studies that mirror the operations of the properties: plot-by-plot. The chapter is structured in two sections. Section one focuses on five key cases from the catalogue to represent each of the groupings introduced in Chapter 5. While the analysis draws from the whole catalogue, the descriptive text in this chapter is partly reconfigured, with an added emphasis on the characteristics of each particular category. Additional illustrations of the compounding process, over time and in context, supplement the assembly of the visual narrative. Section two deals with the series of case studies as a whole and reviews these through a *summary of tendencies*. The aim of the chapter is first to translate the sum of the single property descriptions into wider analytical findings. These are thus situated between singular specificity and over-reaching trends - and raise issues of (non)scalability. This also aims to permit the knowledge outcome to counter official assessments (CoJ, 2015) of “inefficiency” - by suggesting ‘versatility’ as an antonym and finally considering the catalogue as a collection of not mere actualities but possibilities.

6.2 Forms of Change

6.2.1 Key Cases

The research considers bungalow compounds as “non-canonical stores of knowledge” (Chattopadhyay *et al.*, 2020), as introduced in Chapter 3, which, in the areas under investigation, are largely undocumented. Yet they take shape as undocumented forms of change through the intricacy of their current operations – their doings. To give names to these workings is an attempt to capture the transformation as a process, in process (Tsing, 2015). The five ‘descriptor’ groupings cover the main operational principles that have emerged through the detailed fieldwork analysis – each (as noted above) illustrated in the main thesis text through the spatial configuration of one sample that unfolds into intersecting legal, economic and socio-cultural narratives (NOTE: **the full detailed catalogue is available for perusal at the end of this document, Appendix H**).

These key cases of *merging*, *re-scaling*, *sleeping*, *enfolding* and *yarding* were selected under the following criteria: they are all on a 495 plot, which is the typical plot size. Alternatively, some are double plots, half a plot, and other-shaped plots (due to street layout). Three come from one of the two studied suburbs, two from the other, to achieve a kind of balance. Across all, available historical public records – like council drawings – were available, and early amendments could be traced. In addition, there have been ways to record change over the study period itself, through site visits across the study period and other contemporary information collection.

These key category ‘groupings’ are not exclusive, and overlap. The key chosen Case Study samples are however able to illustrate the ‘category’ they represent while also being part of others. Similarly, other case studies are part of the same category. A coded index of all properties (Fig 19) indicates similar characteristics on the other plots to understand the variety – and indeed complexity – of the wider composition. A selection of those is included after each key case to illustrate the spectrum. The overlap and different forms of how each ‘doing’ can

unfold indicate the fluidity in the bungalow compounds, which is a challenge and also an opportunity. In Yeoville and Rosettenville, as part of an African urban context in flux, the analysis addresses issues of perceived inoperability, which yet *de facto* **operate** (Simone, 2016; Matsipa & Simone, 2020).

The table of the “universe” of case studies (Fig.19) indicates that nearly all case studies are *re-scaling* and *yarding* in some way. That is linked to the single room as a new unit of measurement and newly added structures along the boundary. *Enfolding* as more advanced ‘adding on’ is a successive process and has a different stage of development that around one-third of the samples were engaged in. *Merging* is at times, challenging to detect, as it can be a temporal activity or linked to invisible conditions, like ownership. The assignment to that group is, therefore, relative to the knowledge that has been available. If a property is not said to be ‘merging,’ it does not mean it is not doing this but that the study did not have access to that information.

The categories are also not consequential; for example, *re-scaling* does mostly, but not always, lead to *yarding*. Rescaling can describe when someone starts to ‘scale down’ inside the house by using only a few rooms and leaving the others furnished but not part of everyday life anymore. That activity does not necessarily affect the use of the yard.

The Key Cases are #1 The Roving Kitchen (merging), #19 Corner Community divided (re-scaling), #7 The Widow’s House (sleeping) , #6 High Street Camouflage (enfolding) and #22 Structures of Believe (yarding).

CASE STUDY # 1

MERGING

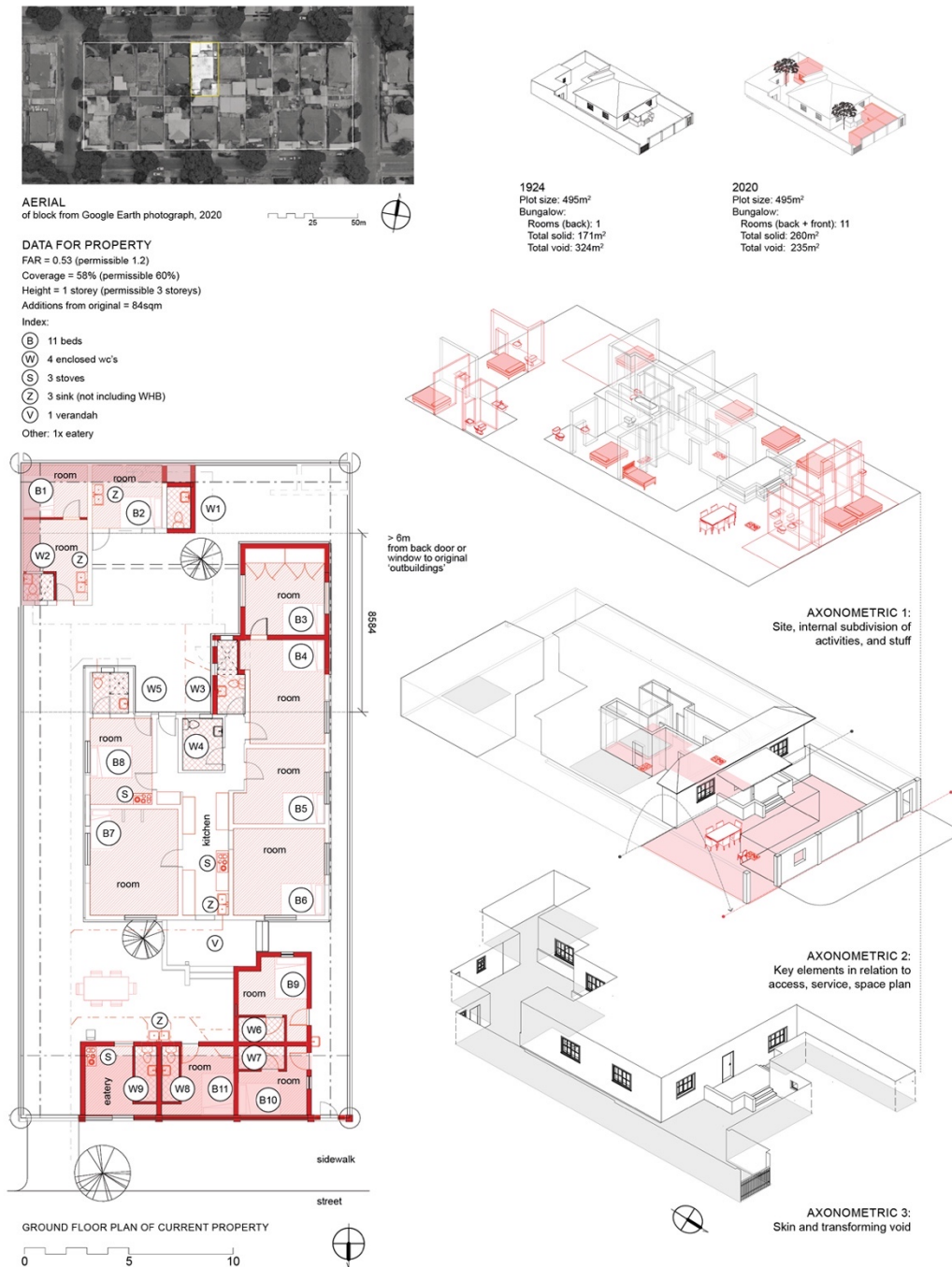


Figure 20: Case Study #1, The roving kitchen (author's own with Sarah de Villiers, 2023)

6.2.2 Key Case Study #1 The Roving Kitchen

MERGING

Focuses on the relational nature of the bungalow compounds, often through the softening of existing boundaries. Introduces the concept of urban porosity as active void spaces, and eye height perforation. Deals with cross programming.

Summary

The property (Fig.20) has developed a layout that merges traditional domestic indoor activities with outdoor spaces and overlaps public and semi-private areas in a rather fluid way. While the boundary wall has ‘thickened up’ physically, it has equally softened as a border, both to the street and on a neighbouring side. Management of the plot, and its development stay within the extended family of the owners, as has the construction process of extensions. A particular feature that traces transformation on such a plot is the changing position of the stove and, moving with it, the kitchen – frequently visited by a building inspector. There are also strong neighbourhood relationships.

Before and After

The transformation of this particular property has taken place in four main stages.

- A: **Small at the back:** A first extension of approximately ten square metres is recorded in 1924 as an enlargement of a bedroom, which turned into a “walk-through” dining room in 1931, when another bedroom and a WC were added to the house, and a garage was added outside. These additions are recorded at the Council.
- B: **Internal changes:** A second set of major amendments happened after the change of ownership in 2012 – around the relocation of services and internal conversions. The kitchen in the main house turned into a rental room and moved into the hall; the outdoor WC was turned into a second full bathroom, accessible from the inside; the scullery was converted into a WC; the garage turned into rental accommodation, with its own bathroom and

kitchenette; and the former room for domestic workers turned into a studio with bath and cooking facility.

- C: **Front additions:** In 2017, four additional self-catering rental units with bathroom were added along the boundary line. These additions have not been recorded by the Council.
- D: **Programme changes:** Rooms started to accommodate different programmes, like a preschool that moved after two years, and a restaurant that needed to close under the Covid-19 lockdown. It moved from a more prominent location and started to operate from a domestic base.

Programme

The programme has changed over the years, from single-family residents to shared rental accommodation as a major constant. While not all of this programme may happen in the other related case studies in this grouping, in this key Case Study, this has been blended with home businesses, kindergarten, and most recently, a restaurant.

Inventory

Rooms: Bungalow compound #1 offers twelve indoor rooms, six inside the bungalow, four newly built units at the front, along the edge of the sidewalk and two at the back: the former garage and domestic worker's room combined with the prior coal room. The bungalow has been equipped with two bathrooms, one male and one female. The original kitchen has been transformed into a residential unit with separate access. All additions have their own bathroom, and the occupants are able to prepare food inside their units. Electricity is supplied through pre-paid meters.

Boundary Wall: The street-facing boundary wall serves as a business advertisement. The wall at the back is deemed structurally unstable by the current owner. The wall to the west is often crossed by neighbouring residents and playing children.

Openings: The street-facing boundary wall has a pedestrian gate, a vehicle gate, and a shop window (hole in the wall). The house has two doors, the outdoor

rooms have six doors in total. The house has 12 windows, and the outbuildings have seven windows.

Service/ space: The ‘kitchen of the house’ has moved from the back to the front over time and is adjoined by the ‘dining room.’ Bathrooms have multiplied, firstly along existing waterlines at the back of the property, then as an extension in the ‘front of house.’

Yard: Three smaller courtyards, a linear driveway and a ‘fire distance path’ divide the property as a series of semi-private meeting places that manage to control access and channel the flow of residents and frequent visitors without crowding the circulation routes.

Stuff: Outdoor: chairs, outdoor table, umbrella, outdoor sofa, pot plant, buckets. Indoor: kitchen in hall, beds in rooms.

Extra: Laundry line at the back. No rental contracts exist. Entry doors to the house (front and back) are open.

People: 24

Animals: none

Trees: Several small trees on the property.

Elements – Relating

The centre of the compound is **the front verandah**, as a threshold between public and private programmes and as a point of control, as both street entrances can be monitored from that position. The manager of the property, the owner’s son or a cousin stays in one of the newly built units in the front, directly opposite the verandah. During numerous site visits over a period of three years, they have been working on the verandah with a group of male business partners. With simultaneous views onto the open entry gate, their unit is a second entrance from the fire distance path side, the main house entrance or the sidewalk outside the property. Their room and the verandah have turned into the ‘control room’ of the compound.

A key element of the change on this property is the moving **kitchen**, the **stove**, and the adjoining **dining room**. Due to racial divisions, the kitchen was initially placed at the **back** of the property (SE corner). It was part of the **serving spaces**,

operated by black employees who needed to be as invisible as possible in the white neighbourhood, and in close proximity to the servant accommodation along the back wall and the dining room. It then moved to the former **‘hall’ corridor space**, as a **communal cooking facility** has been fitted with appliances and utensils by the landlord, with the verandah as an eating space. The communal kitchen was operated by female tenants, who were all originally from the Congo. One of them resided on the property for 14 years, first as a domestic worker in the back room and then as a tenant inside the house in the former living room. After her departure and a growing demand for more smaller eateries in the neighbourhood, the kitchen turned into a **public restaurant** and **moved to the front**, as an extruded boundary and a ‘hole in the wall.’ The lunch table is placed in the courtyard below the verandah, and the sidewalk, as an extension of the property, accommodates the takeaway cue. With the entrance doors of the main house open (unlocked) at the back and the front, the driveway and the internal corridor are two equal systems of circulation and merge inside and outside seamlessly.

The **extruded boundary wall** at the front has turned into a second skin inside the plot and opens up to the sidewalk. The research refers to this fairly typical shop type as ‘eye height’ porosity, which fuses here with the ‘open to sky’ rooms – in this case, the new dining room and the ‘access control space.’ The height of the boundary wall along the driveway permits visual contact with the neighbouring property and so assists in ‘extending’ the narrow fire distance path, a main route of access on the other side. It is also low enough for children to jump across and play together. The **void** space exceeds legal boundaries and is a continuous **in-between** as opposed to a clear back and front as initially laid out.

Legalities

The additional rooms were built in the front of the property because the existing wall at the back seemed structurally unsafe to the active owner. They learned this when the adjoining plot added double-storey units and the construction showed cracks. The rooms were built by a family member in exchange for accommodation in the transformed garage. The overall costs were not more than

R45,000 for 65 sqm⁶². They have not yet been recorded by the council⁶³. Despite having built over the building line along the street edge – a notable transgression – the physical changes on the property are largely within building regulations. The local building inspector has noted the new structures and not reported them to the authorities. The health inspector is doing regular checks on the restaurant kitchen. There are internal agreements that involve exchanges of sorts that keep the restaurant off the record.

Aspiration – Speculating

The property is an income-generating investment. The property was bought in 2012 for R800,000 by a single man and a married couple, although the wife has no shares. The husband is the ‘active owner’ out of the three; he visits several times a week and often works out of the car, in the driveway or on the street facing the restaurant. Monthly rental income is between R22,000-R24,000. The property is bonded by one of the main South African banks. The owner, who is actively involved in the everyday life of the plot, also co-owns an apartment in the neighbourhood. He was planning to sell the house for R1,200,000 to his son but eventually put it on the market in 2019 for R1,050,000. He did not speak about the co-owners in the sale conversation. The son had several business ideas, one of them Pizza King Take Away, that opened and closed. The property has not been sold.

Networks, neighbourhood links

A special aspect of the *merging* category is the extension of the plot beyond the boundary, to neighbours and other networks, which produces a sort of local urbanity that is specific to the urban context. Some detail of this has been noted in the text above. This Case Study is further related to the two adjacent properties on the east, in terms of development since their inception when they presented nearly identical outlines and similar layouts. All three switched from use to exchange value after a change of ownership between 2010-2012, and completed their main extensions in 2017, and now have distinctly different layouts. Combined, they offer a variety of accommodation, in three basic price ranges, low, medium, and

⁶² According to the owner, in conversation with author in 2018

⁶³ A set of ‘as built’ plans were produced and handed to the active owner in the first year of site visits, but are now outdated. It has not been discussed why they were not submitted.

higher, with #1 being placed in the middle. According to one owner, this has not been planned upfront but developed so as not to compete but to complement each other's portfolios. The tenants tend to move across properties depending on their financial means. Two of them make use of a cleaning service that is run from the third one. Neighbourhood links extend further along the street when freshly slaughtered chicken make their way up the road from the backyard of Case Study #9 to the public dining room of grouping #1 Roving Kitchen.

Geometry

Void Shape: small outdoor room sequence arranged diagonally across, with three parallel lines of circulation.

Compound doings: **Merging**, yarding, re-scaling, enfolding.

[For other case studies in this category, see Catalogue Appendix H, Table Groupings.]

Merging can, as indicated, extend into the detection of neighbourhood networks and urban space. In Case Study #20 for example, the new owner has set up an array of service outlets along the street (Fig.21), where, on the opposite side his brother is managing his spaza shop. They have created a mini high street between the activated boundary edges. The residents of Case Study #19 are clients on both sides of the road and use the in-between space as public 'hang out,' merging not only indoor and outdoor on the property like Case Study #1 but spill out into the public realm.



Figure 21: Aspects of merging, activating the public edge, new networks, Case Study #20, #19 (author's own, 2023)

CASE STUDY #19

RE-SCALING

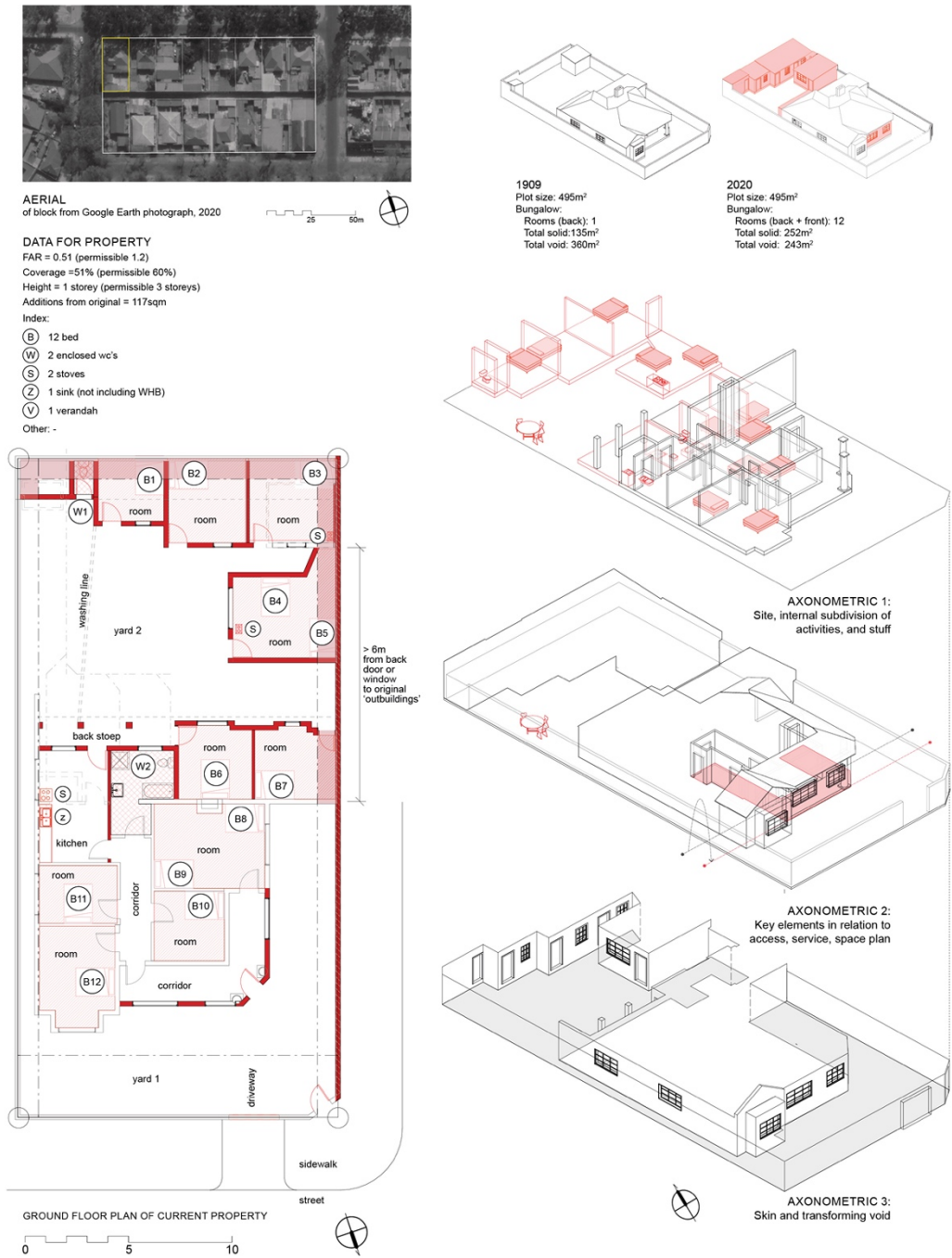


Figure 22: Case Study #19, Corner community divided (author’s own with Sarah de Villiers, 2023)

6.2.3 Key Case Study #19 Corner Community, Divided

RE-SCALING

Addresses issues of size and scale, capacities of smallness and the altering of what was considered served and serving spaces. Introduces the room as urban currency, and beds as measuring device.

Summary

From the small original ‘villa’ in 1909, the bungalow on the corner plot has been transformed into a rent-a-room compound (Fig.22) where the house and backrooms share a yard and sanitary infrastructure yet are able to operate as two independent entities at the same time. The residents use the street as an extension of their living space and participate actively in neighbourhood social life.

Programme: Rental rooms, extended family, and tenants.

Before and after: The transformation of the property has taken place in four main stages.

- A: **Small outdoor:** The first addition of an outdoor WC along the back wall is recorded at Council in 1924.
- B: **Extend to divide:** A second major change to life on the property is recorded in 1952, shortly after the Group Areas Act was passed in 1950. Firstly, the extension of the service areas of the house (kitchen and bathroom) and back of house verandah as articulated threshold between inside and outside. The verandah lined up with the construction of a garage, which separated the property into a distinct back and front. Secondly, the move of the room for the domestic worker, out of sight, from the street edge to the back corner of the plot following the Town Planning Scheme at the time (Johannesburg-City-Council, 1947:11).⁶⁴
- C: **Decay:** By 2003, the outdoor structures were unroofed.

⁶⁴ Part IV Building Restrictions and Use of Land 15 (c) No building for use for occupation by non-Europeans, other than buildings for occupation by non-European domestic servants, shall be erected in any use zone without the consent of Council. Provided that buildings for occupation by non-European domestic servants should not be erected in any use zone in a position which would be likely to cause injury to the amenities of the neighbourhood.

D: **Additions and conversion:** Between 2006 and 2013 the back part of the property was re-constructed: two more units were added, and the garage was converted to rentable units.

Inventory – Accounting

Rooms: The property has four rooms inside the house and six rooms outside (this includes the converted garage that is adjoined to the house but accessible from the outside. One bathroom and a kitchen inside the house, and a water tap and a toilet outside.

Verandah: The verandah is a 90-degree corner wrap-around and has been closed off. Inside, two doors go into the former dining room and the corridor of the house.

Stoep: The house has a stoep at the back as a threshold between the kitchen and the courtyard. This was part of an addition in 1952, and it is still in use as an occasional entry for the residents in the house and access to the shared courtyard.

Boundary Wall: The boundary wall has two portions that follow the internal division of the plot. An early, if not original, section has decorative ‘see-through’ elements around the ‘front,’ and a higher closed-off part at the back. That part displays its incremental construction over time through a mixed materiality.

Openings: The wall currently has two openings. The original pedestrian entry at the junction of the corner, and a vehicle gate that was added to the northern side between 2013 and 2017. The garage door from 1952 was walled off in 2013.

Service/ space: The kitchen and bathroom have remained in their initial positions. The outdoor toilet is still where it was placed in 1924. It is shared by the residents in the rooms.

Yard: The yard is split in two, the front as access and parking space, the back as shared space for the rental units and the back of the house for the bungalow.

Stuff: Beds, curtains, laundry line. Plastic chairs, buckets, crates. Outdoor furniture.

Extra: Laundry line, sidewalk hang out.

People: 16 at the time of the visit.

Animals: n/a

Trees: No trees are left.

Elements – Relating

Site, Internal Subdivisions, Activities, and Stuff

The overall layout of this plot has not changed significantly since 1924, with outdoor rooms moving along the same boundary line and an additional structure on the western side at the back. The property has remained purely residential with a switch from use value to exchange value/income generation, at least since the last change of ownership in the early 2000s. The subdivision of the plot is personal – the owner's family lives in the house with extended relatives, and the 'outdoor house' is rented to tenants. According to residents, the owner only lets to 'locals',⁶⁵ on average two people per room. These selection criteria have led to tense dynamics amongst neighbours, with some of them being entrepreneurs from other African countries.

Key Elements in Relation to Access, Service and Space Plan

The verandah is internalised and is no longer the threshold of arrival that was planned. The indoor bathroom and kitchen are shared only amongst the residents in the house. All residents on the plot use the same entrance in the front, the tenants of the rooms at the back use the path that results from the fire distance at the eastern side as an access passage to the yard that connects their units.

Skin and Transforming Void

The southern part of the property 'behind' the house has been removed from the public eye since 1952 and remains hidden, with a higher boundary than the front part. The front part seems more porous, with the door and gate often open. The tenants who are not working during the day spend a lot of their time outside the yard, directly outside of the property at the street corner or at the shop across the road, with an eye on 'their' entrance. The open spaces both in the back and the front have roughly triangular shapes rotated by 90 degrees, as is the arrangement

⁶⁵ The residents refer here to South African citizens.

of rooms along the direction of the respective passages. The garage turned into rooms that separated the two sections. Access to the part ‘behind’ is via the outdoor fire distance passage. This is despite the possibility of a separate entrance on the western boundary wall, which would reduce the control over the comings and goings on that side. Cars are parked in the front. It is like having two houses – one closed and one open, on one property with a single shared entrance.

Legalities

All changes on the property till 1952 have been approved by the council. The first subsequent extension in 2012/13 basically re-built the outdoor room from the original in 1909⁶⁶ that had been removed from the public eye in 1952. It moved from its location on the boundary line along the sidewalk inside the property two years after the Group Areas Act (1950) came into effect. The second extension is new and has not been recorded. The current structures are within the zoning limit of six units. The provision of sanitary rooms for the back of the property is limited to one WC and one tap outside.

Aspiration – Speculating

The property’s past shows characteristics of being ‘flipped’ (its capacity ‘to make money quickly’ for a middleman, indicated through fast consecutive sales). However, in this case, it did not make capital returns. Tracing back, the link between five of the six transactions that are listed on the property report from one of the largest property search portals in South Africa is the connection to one of the main South African Banks, and a number of entities it merged with.⁶⁷ So, instead of being a “flipper,” it might be part of a larger (and abandoned) investment portfolio of the bank. This is an important possibility, considering the rumours⁶⁸ of redlining or disinvestment in the area by major banks. On paper, the

66 The room was in both plans, from 1909 and 1952, labelled ‘boys’ room.’ This is a derogatory term considering that mostly adults lived in those spaces, and of different gender too.

67 The first three purchases are bonded. The three registered bonds in 1993, 1995 and 1997 for R96, R79 and R93 are with NBS Bank Ltd. NBS is short for the Natal Building Society, established in 1882. In 1998 it merged with Boland Bank to NBS Boland. In 1999 NBS Boland merged with BoE Holdings Limited. BoE was the fourth buyer of the property in 2000. BoE ceased to exist in 2002 and merged with Nedbank. The property sold in 2002 to a female individual who works for a construction company, a conglomerate that is banking with Nedbank. She sold the property two weeks before she owned it on paper to the current owner.

68 ‘Rumour’ because the banks denied numerous claims of redlining made by agents, potential buyers, researchers and the media, <https://mg.co.za/article/2000-05-05-banks-desert-yeoville/>

property has changed owners six times between 1993 and 2002, divided into two sets of three sales that took place very close to each other. The first set was priced R107, R85, R93, the second R 46,000, R75,000 and R135,000. The first amounts can be considered as zero in terms of real estate value. The second amounts are considerably higher, yet still low on the spectrum of the market. The sellers and buyers range from a female with an Afrikaans last name to a male with an African last name to a clothing company for uniforms in the first set of transactions. The second set involved the clothing company selling to a banking group in 2000, the year it was placed under liquidation by court order. The group ceased trading in 2002,⁶⁹ when a female active in the building industry and the current owner, a female with an African last name, both concluded their purchases. As per official records, the current owner bought the property two weeks before the flipper herself purchased it from the bank.

This amount of detail lays out the history of a house that, most possibly, has been used as a trading asset – unsuccessfully, though – and not as a home. During the period of flipping owners, there has been no visible investment on the grounds – just signs of deterioration. The first aerial satellite image on the CoJ site in 2000 shows the same structural configuration as the approved council plans in 1952, albeit without roofs on the outdoor structures. This changed in 2006. Around 2012, more outside rooms appeared along the southern boundary wall, completed in 2013. Another structure along the western boundary appeared in 2014.

As per Google Maps, the conversion of the garage to rentable rooms took place after 2009 and was completed in 2013. The property offers accommodation at a lower cost than others in the neighbourhood. This attracts tenants with less disposable income and often no work. Despite being good clients in their corner shop, the entrepreneurial success of their neighbours is met with comments related to their ‘being from elsewhere,’ taking up jobs, and not being welcomed in South Africa. Their own unfulfilled aspirations were captured and publicly shared when they participated in the Rosettenville group action “I Wish” (2014) as part

⁶⁹ <https://www.news24.com/news24/a-sad-farewell-to-boe-20020709>

of the Inside Out project,⁷⁰ a public art project initiated by the French artist JR (2011).

Networks, Neighbourhood Links

While the property has, like most of the other related fieldwork case studies, re-scaled the size of a home into rooms and so multiplied the number of households on the plot, the back and front of ‘house’ are clearly separated through access routes once on the property. Other similar case studies also show this pattern and take it even further by subdividing the house by allocating rooms to the entrance from the back or the front (for example, Case Study #10). Positioned on a street corner, the two halves could have independent access – but for control purposes, only one entrance is provided, often ‘looked after’ by residents on the sidewalk. The ‘contours of sharing’ extend, in this case, into public space. The yard life of the property is relatively strictly regulated so that meeting spaces and socialising spill over to the other side of the road, where a small activity ‘street’ is developing.

Geometry

Void Shape/ Type: Back and front ‘house’ with communal outdoor rooms.

Compound Doings: Re-scaling, Yarding, Sleeping (History)

[For other case studies in this category, see Catalogue Appendix H, Table Groupings.]

While re-scaling is about sub-dividing, it also addresses the issue of extending through, for example, the reconfiguration of access. In Case Study #31, which is on half a plot, the driveway has been re-scaled into a corridor for the plot to turn into a compact larger ‘house’ with openings as perforation. Another aspect of the expansion is explored in Case Study #23, which ‘sits on’ two plots, always owned together by the same person or group until recently. Landownership has been divided, with the structure sitting on what appears as one property.

⁷⁰ <https://www.insideoutproject.net/en/explore/group-action/i-wish>

CASE STUDY #7

SLEEPING

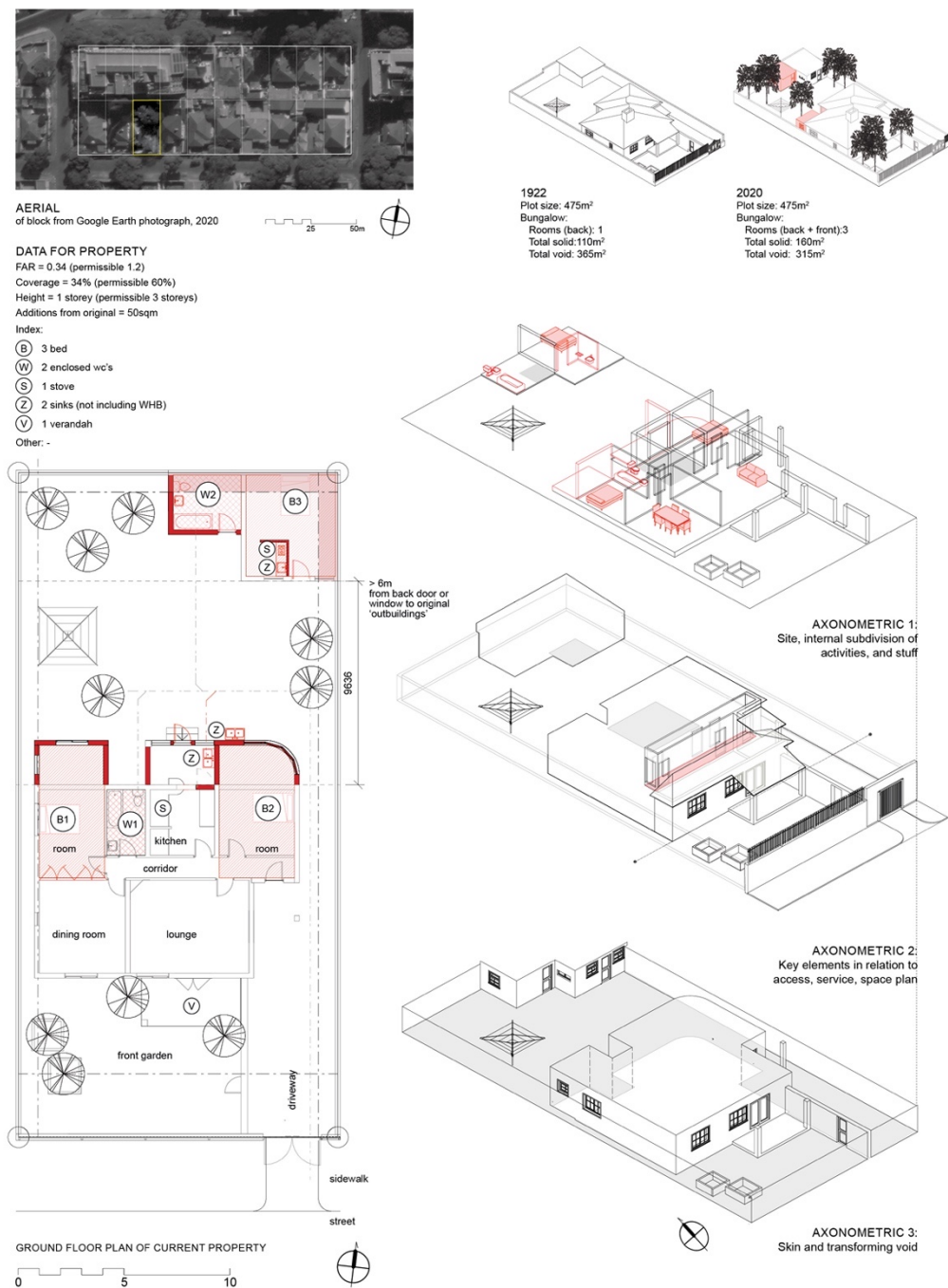


Figure 23: Case Study #7. The widow's house (author's own with Sarah de Villiers, 2023)

6.2.4 Key Case Study #7: The Widow's House

SLEEPING

Refers to what has remained apparently unchanged: a free standing single family house with a lawn and a backyard. Holding potential for development, indicate stability and balance densification elsewhere in the suburb in the overall picture.

Summary

The property(Fig.23) maintains what family life used to be, with half of the house being actively in use, the other half intact 'as it was,' as a repository of memories. Co-owned by mother and son, it is a retirement place for the parent and, at times, a location for commercials by the off-spring film director. In the advertisement, the house plays itself, with the verandah as a social condenser.⁷¹

Programme: Private residence for one person, her past, a cat, and some fish

Before and After

The transformation of the property has taken place in three stages, the last of which was 40 years ago.

- A New garage:** between 1934 and 1944, a new garage was added to the property.
- B Porch additions:** in 1945, the structure from 1923 was extended at the North facing back by a porch/ scullery, in line with the enlargement of the adjunct bedroom.
- C Garage conversion:** in 1982, the garage was converted to a studio with a kitchen and bathroom.

⁷¹ <https://www.picturetree.co.za/dstv-kung-fu/>

Inventory – Accounting

Rooms: The main house has four rooms, now furnished as two bedrooms, a lounge and dining room, a bathroom, and a kitchen. The garden unit is a guest studio with a bathroom, kitchen, and one big room.

Verandah: The verandah is in front of the lounge and was amended in 1945.

Stoep: The stoep at the back of the house, built in 1922, was turned into extra space for the kitchen and the main bedroom in 1945

Boundary Wall: The boundary wall in the front is half solid, covered with ivy, and has a palisade extension, but it can still be seen through. The walls to the next-door neighbours are low enough to allow looking into each other's properties.

Openings: The street-facing boundary wall has a vehicle gate with two doors.

Service/ spaces: The corridor of the main house runs parallel to the street, and the house is accessed through a small, covered entry that leads directly into the passage. The verandah is not linked to the entry. The servant spaces, kitchen, and bathroom are on the north-facing side, together with the bedrooms. The former garage and outdoor room were transformed into a guest unit in 1985.

Yard: The open space is divided into a back and a front garden, with grass, many plants, and trees. The front yard is adjacent to the living spaces but south-facing.

Stuff: 2 beds, cupboards, shelves, couch, side table, bookshelf, dining suite, framed diplomas, framed family images, books, pots, kettle.

Extra: A fishpond.

People: Mother with a visiting son.

Animals: A cat.

Trees: Many trees, some of them very high. All are very well maintained.

Elements – Relating

Site, Internal Subdivisions, Activities and Stuff

The house has remained as it was after the alteration in 1945 that saw an extension of the main bedroom and the kitchen. The garage was converted into the currently empty studio in 1983. The space has continuously been used as a family residence and is now the retirement home of an African lady in her 70s,

Sheila* (not her real name). Her son is a filmmaker, and despite graduating from Wits Film, Drama and Art History more than two decades ago, his room has remained untouched for many years. It seems almost a sacred space, with his mother's hopes and ideas for the future (then) externalised in space. Similarly, the dining room contains many memories of her late husband.

Key Elements in Relation to Access, Service and Space Plan

The key elements operate in principle as originally planned, with a corridor separating bedrooms and living areas parallel to the street. The low occupation of the house translates into it being used half – that is, the main bedroom, kitchen, bathroom, and garden are the principal areas of Sheila's everyday life.

Skin and Transforming Void

The façade of the building and outbuilding have remained as 'originally' planned, with a cat door in the kitchen entry. The outdoor space is similar to the original layout, but without connotations of racial discrimination and exclusion. The garden is beautifully manicured and very well maintained.

Legalities

The last structural changes took place in 1983 and were recorded by the council. This property is built as planned and has proof of it.

Aspiration – Speculating

Mother and son purchased the plot in 1998 for a fifth of its current evaluation by the council. The neighbouring property, which has one more bedroom but is otherwise quite similar, was on the market⁷² in 2023 for R1.4 M, which is ten times as much as the purchase price of this property. The investment in this case, however, is less monetary than emotional and an act of socio-cultural affection and care. There has been no switch from use value to exchange value to date. Sheila lived 50 years under apartheid and was 54 when she could afford AND was

⁷² <https://www.privateproperty.co.za/for-sale/gauteng/johannesburg/johannesburg-cbd-and-bruma/yeoville/21-dunbar/21-dunbar-street/T4219607>

legally permitted to be a property owner. In her version of events, her son purchased the property to have a safe place for her to stay when she grew older. The son now looks after his mother financially. The property has been bonded twice by one of the country's main banks, first with 90% of the purchase value in the year of the acquisition and then with another 35% of the original purchase price nine years later.

Geometry

Void Shape/ Type: Back and front garden.

Compound Doings: Sleeping, re-scaling

Networks, Neighbourhood Links

This property, like the other sleepers, withdraws from the public through the front garden. This category is in a pre-compounding stage and has transformed socially and culturally through ownership.

[For other case studies in this category, see Catalogue Appendix H, Table Groupings, p6 .]

Sleepers hold development potential of different kinds for the neighbourhood. Case Study# 17 a family home in the second generation of the same black family, something rather rare in the area, with no intention to move or sell, continuation indication and some sort of (now rare) stability. Case Study #8, the Kingpin's House, holds onto emptiness as a speculative investment and turns into a blank spot in its context. Two sleepers that transformed in the duration of the research cases #12 and #20, both following business models that respond to the demands of the existing context.

CASE STUDY # 6

ENFOLDING

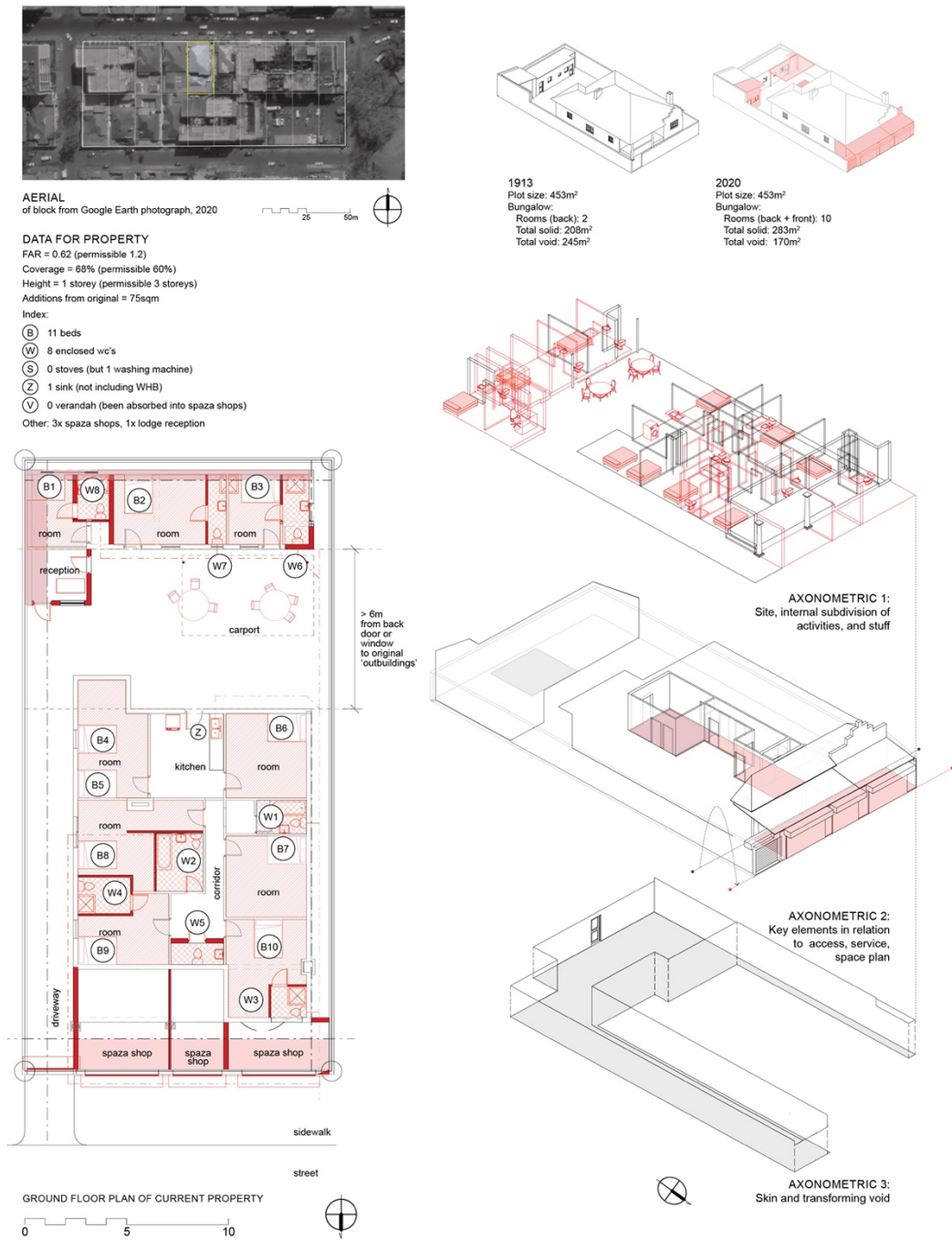


Figure 24: Case Study #6. High Street Camouflage (author's own with Sarah de Villiers, 2023)

6.2.5 Key Case Study # 6: High Street Camouflage

ENFOLDING

Focuses on the thickening boundary line of the properties and the developing thresholds between public and private urban spaces as active edges. Introduces the ‘hole in the wall’ as emerging typicality.

Summary

The former front garden has been transformed here into a triptych of shopfronts that operate as ‘walk-in facades’ along the high street (Fig.24). The front door of the bungalow-turned-guesthouse has disappeared and moved to the back. The entrance is past the driveway. The minimum stay of guests is one hour.

Programme: Public front shops, semi-private back: rental rooms, guest house as shadow business

Before and After

The transformation of the property has taken place in five stages.

- A: **Small at the back:** The garage was the first extension at the back, undated, before 2000.
- B: **Front addition:** In 2012, a spaza shop that trades through the window – with writing in Ethiopic- was added to the front of the property. The front façade of the building is still visible.
- C: **Internal changes:** The house is converted into a guest house. Additional bathrooms are added after 2015.
- D: **Front additions:** In 2018, two shops are framing the entrance to the bungalow, which is now a guesthouse. The front façade of the building outside the entrance and the front yard have disappeared.
- E: **Front and access amendments:** The guest house entrance has been converted into a shop. In 2020, the access to the guest house will be from the back.

Inventory – Accounting

Rooms: The property offers nine bedrooms in the guesthouse, three outside, one reception and three shops in the front. There is a kitchen turned walk-through entrance, and four or more bathrooms inside the house, and three outside.

Boundary Wall: The street-facing boundary wall has merged with the façade of the building into three walk-in shops. At the back, the wall has been extended by outbuildings since 1923.

Openings: The front boundary has a vehicle gate that serves as pedestrian access to the house and the rooms at the back. The shops have three entrances altogether. The house has one door and fifteen windows, and the back buildings have seven windows and four doors.

Service/ space: Main traditional ‘servant’ spaces have disappeared, in particular those that entrenched social and racial stratification – the front garden, verandah, double corridor, kitchen, and garage.

Yard: The yard is operational on the side and at the back and now serves as front of house.

Stuff: Beds, pillows, and towels. A washing machine in the kitchen, no stove.

Extra: The property was an early Airbnb in Yeoville but has since been unlisted. It has an online presence on several booking systems, but one cannot complete the booking. The guesthouse only takes cash payments. One shop in the front used to sell the best Ethiopian Coffee in the area.

Trees: The last tree was replaced by a shaded gazebo before 2019.

Elements – Relating

Site, Internal Subdivisions, Activities and Stuff

The guesthouse has spatially re-arranged the usual sequence of arrival in a lodging establishment while keeping the traditional order. The layout makes use of the entire plot and includes indoor and outdoor rooms, working with explicit public and private thresholds. The hotel’s lifestyle services, like the sundry shop, eatery, IT corner, and hairdresser, are all placed in the front and available to guests and the general public. Dirty laundry and the short-term company of

strangers are dealt with in the back at an extra charge per hour. The driveway doubles as the lobby; part of the converted garage is the reception. Strategically placed, it is also the control point between ‘ins’ and ‘outs’ of the private section of the compound. The covered courtyard between the longer rentals outside and the guest rooms inside the bungalow serves as an outdoor hall.

Key Elements in Relation to Access, Service, and Space Plan

The driveway, courtyard and corridor are the basis for the movement system ‘from the back.’ The verandah does not exist anymore, either in the front or the back. The front door is literally closed and blocked up. The house is thus camouflaged. The attempt to disguise it is a characteristic the property carried in its original layout with a double corridor that ran on opposite sides of one wall – One for the public, one more private. One for white people, and one for black.

Skin and Transforming Void

The concealment of the front façade – the pretty face of the ordinary plan – through a terzet of shops is the most significant change in the context of skin. The void is controlled and simple. It has the shape of an L, with a dedicated purpose. Most of the time, it remains empty.

Legalities

The building has kept the original structures approved in 1921. In terms of legality, the front structures need to be recorded, and airflow needs to be considered. However, due to the freestanding nature of the house that remains on three sides, this should not be a problem. The guest house charges hourly rates. The accommodation of some short-term activities – like sexual services – is not (yet) deemed legal in South Africa. Payments are only made in cash, and there are no receipts. As such, shadow business might take place.

Aspiration – Speculating

The property was owned from 1976 to 2002 by a man who was born in Italy and whose profession is described as “builder, landlord.” The current owner is from

Ethiopia and owns more than one property in the area. The transactional history records three 'zero' transfers in 1976, 2002 and 2008, with a first sale for R450 000 in 2007. The zero transfers indicate inheritance. The recording of the inheritance after the sale here indicates an administrative correction, the claiming back of the property by the wife to pass it over to the children, as she had suddenly found herself co-owning the property with an African couple after the passing of her husband. The 2007 sale to another African couple was bonded to 100% by one of the main South African banks. The subsequent 2015 sale was a sale in execution by auction. As the property is not bonded, the purchase must have been a cash transfer. The price was more than double that of the previous sale and exceeded the inflation value and the municipal evaluation (Kalllipa, 2010), and it still does. This means that the building was purchased above market price and in cash. The former domestic residence is now a 100% mixed-use business building with potentially high daily turnarounds.

Networks, Neighbourhood Links

This property illustrates the disappearance of the 'face' of the bungalow as characteristic of the category. 'Here, the urban context has taken over and placed the 'house' in the second position, rendering it invisible and making it inaccessible from the front. One could discuss if the new 'buffer' is actually protecting activities in the house that might be on the border of legitimacy. The covering-up is a clear turn towards life on the street, away from what happens on the inside. Within the community, there has been opposition towards this kind of amendment in some cases, as a significant number deal with activities in the entertainment industry and do not necessarily contribute to a safer or cleaner neighbourhood environment. Other residents, like the late owner of #17, did not see a problem with this as long the law was able to regulate any potential conflict (Kalllipa, 2010).

Geometry

Void Shape/ Type: L Shape, for procedural access

Compound Doings: Enfolding, Re-scaling, Merging, Yarding

[For other case studies in this category, see Catalogue Appendix H, Table Groupings.]

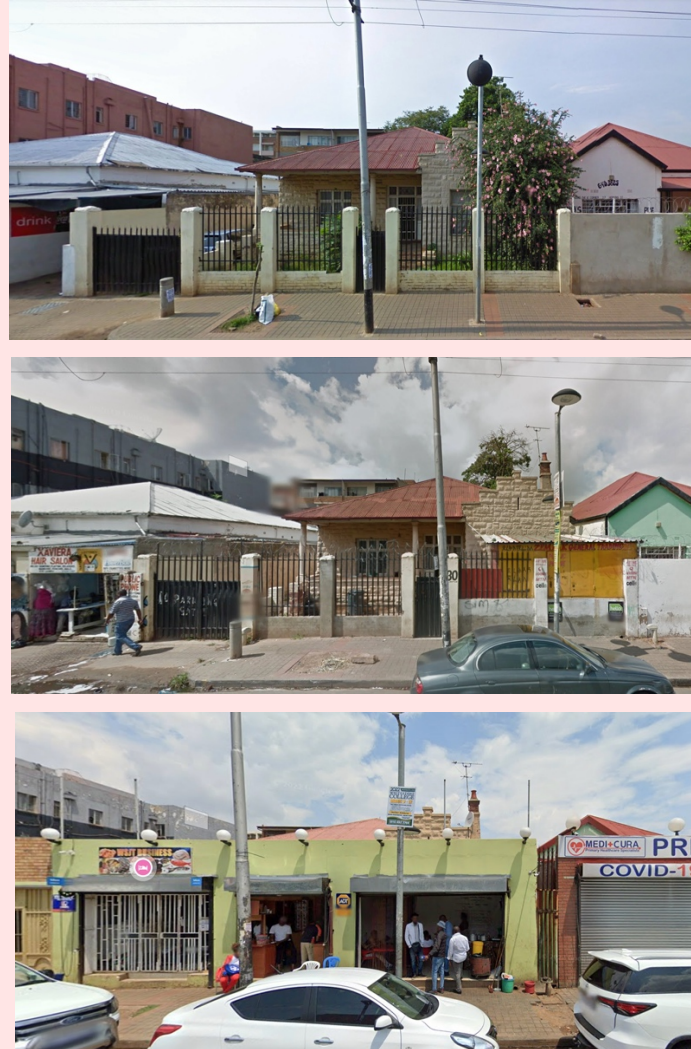


Figure 25: Streetview Case Study #6 2010, 2015, 2022 (Google Maps, 2023)

Enfolding structures affect the transformation of the original bungalow in its essence. The bungalow disappears and changes its internal set up when losing its main entrance (Fig 25). Case Study# 36 illustrates how the semi-detached house remains ‘the same’ on one side. In contrast, its twin is surrounded by a commercial envelope that reorganises life from the outside in – and potentially renders some indoor spaces critical for habitation because the new structure closes off existing openings. Case Study#22 shows how enfolding can transgress from closed to open space and turn into *yarding*.

CASE STUDY #22

YARDING

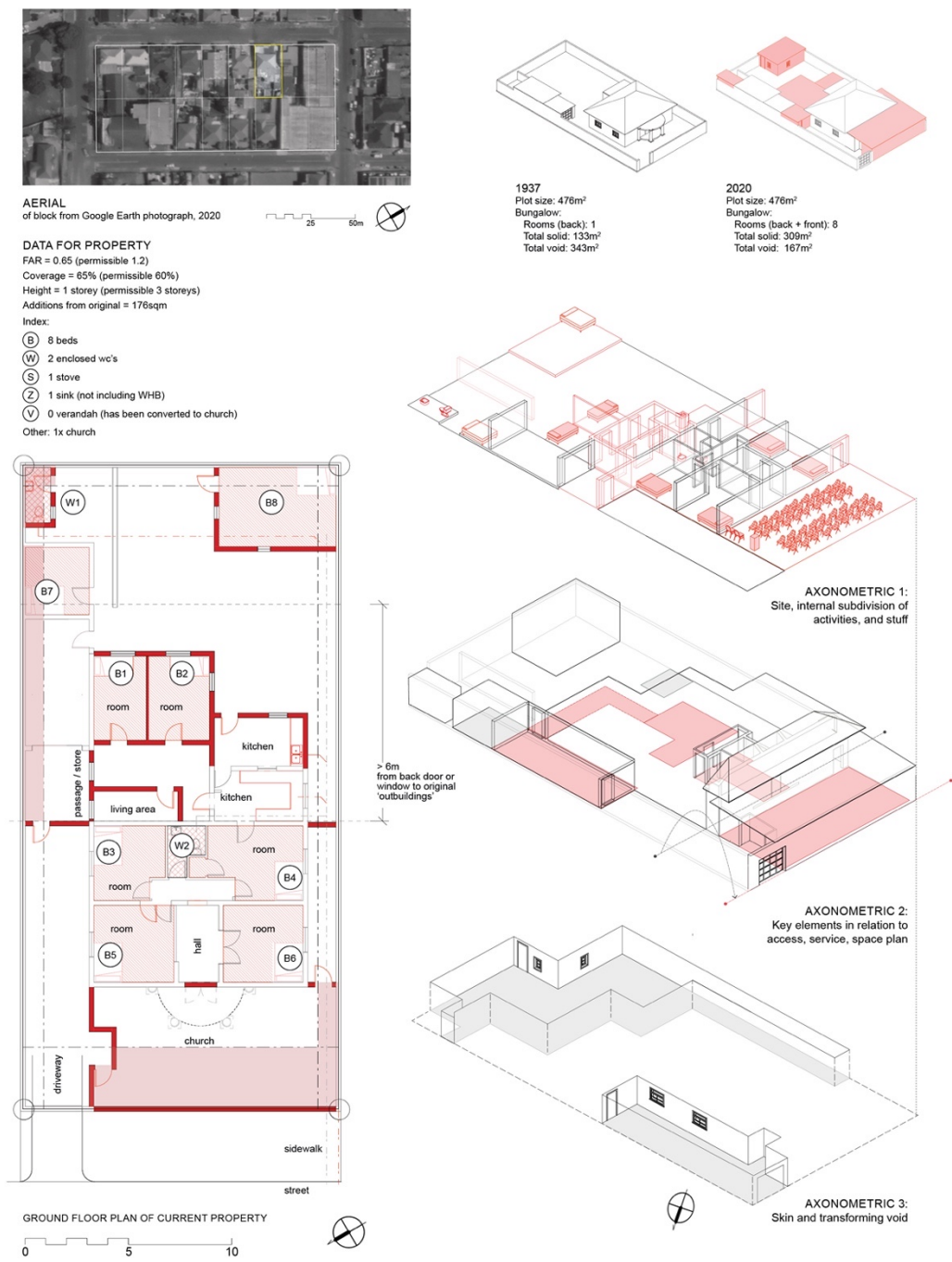


Figure 26: Case Study #22. Structures of Belief (author’s own with Sarah de Villiers, 2023)

6.2.6 Key Case Study #22: Structures of Belief

YARDING

Provides outdoor space for activities that usually happen indoors. Operates as an extension of domestic life, social encounters and economic activities. Main spatial characteristic that responds to the required contingencies of compound life.

Summary

Here, the property develops a unique form of leasehold. While the owner of the property lives in the bungalow residence with his family, the space around, former back and front yard, is leased by a church and its community. The pastor and his family live behind the house and share an entrance with the owner: through the garage into the yard and into the kitchen (Fig.26).

Programme: Private residence, accommodation, and place of faith as income generators.

Before and after

The transformation of the property has taken place in five stages.

- A: **Back of house:** the first extension to the 1937 structure was a kitchen at the back in 1952.
- B: **Garage extension:** Before 2000, the garage was extended to ‘meet’ the house.
- C: **Back of house:** a rental 2-bedroom unit is added next to the kitchen between 2003-2006
- D: **Back of house:** the kitchen is extended further in 2009.
- E: **Back room:** A back room is added along the boundary in 2009 and destroyed in 2018.
- F: **Front of house:** A church was added to the front of the house; it replaced the verandah in 2018.

Inventory – Accounting

Rooms: The property offers six rooms, a shared kitchen and a bathroom inside the house, two of those rooms were added to the original four-room house. One outdoor room serves as a storage room and a toilet in the backyard. A large room for a church congregation is the new front of house, ' up to the boundary line.

Verandah: The verandah was a significant feature of the property that was removed in 2018 and replaced by a church that reaches from the façade of the building to the boundary wall. The back verandah became part of the kitchen in 1952.

Boundary Wall: The street-facing boundary wall is part of the church room. The north-facing boundary wall along the driveway is one with the garage and the storage room.

Openings: The entrance to the property is through the vehicle gate onto the driveway. Access to the house is past the northern boundary wall into the garage through a garden door leading to the kitchen door. There are ten windows and three main doors to access the buildings – the church door, the garage door, and the kitchen door. The storage room has its own door.

Service/ space: Rooms with access to water are placed along the original eastern façade of the bungalow that faced the garden. The kitchen was an extension in 1952 and is now the main shared entrance to the house of both owner and tenants.

Yard: The yard that is left is in the back, to be accessed through the garage, and is used by the congregation if so desired, or required. The driveway, as part of the open space, needs to account for parking requirements when registering a place of faith in a residential area.

Stuff: Beds, kitchen table, many plastic chairs. Two chairs that are big and signify authority.

Extra: The church.

People: Two nuclear families, eight people and a full congregation.

Animals: n/a

Trees: No trees are left.

Elements – Relating

Site, Internal Subdivisions, Activities, and Stuff

The communal spaces – church and garden, surround the domestic part of the property. The owner lives in the house with his family – as it was, only his entrance is through the back, and his living room and hall do not have natural light anymore as the church is directly attached to the house. The pastor has lived with his family since 2005. The kitchen as an entrance is shared, but not as a cooking space.

Key Elements in Relation to Access, Service and Space Planning

The verandah has ceased to exist, and the corridor and hall are disconnected from arrival. They have been replaced by the driveway and the garage. The entrance through the garage is independent of the house so the garden can be adjacent to the church. The outdoor toilet serves as a shared ablution. The fire protection setback on the southern side of the house is blocked by the church. In case of a fire, the people in the house only have the door in the garage to get off the property. Should the fire start in the garage, they are trapped and cannot leave without danger.

Skin and Transforming Void

The void is discontinuous due to the placement of the church and diminishing in size as new rooms are being built. The front façade of the building, the church and the boundary wall merge into one structure.

Legalities

There is no building permit for the church, nor is there a permit to practice and congregate. The owner (at the time of the investigation) had a building plan with a ‘spaza stamp’ that sought permission to extend the existing building by a ‘lounge’ (aka church). The current zoning does not include a religious building on site. That drawing omits the residence of the pastor added in 2005. The drawing does not apply the required professional conventions and is signed by Johannesburg Water. It is not part of the drawings Johannesburg Council has on file.

Aspiration – Speculating

The owner of the property at the time when the research was conducted, bought the property in 2017 from a ‘flipper’ who made a significant profit in a day – with 67% capital gain of the price he paid to a legal entity. The purchaser paid above council evaluation, so, not undervalued, and as new property owner he had ambitious plans. In addition to the special leasehold arrangement from 2018 when the church was added, he planned to add six more rental units and go double story. However, he was taken to court by a trustee of the SA Home Loans Guarantee Trust (SAHL Trust) and the property was auctioned in 2022 for a reserve price of R800,000. It was sold three months later for 25% more – R 1,000,000 to a 27- year- old female with an African name, who has marked herself as ‘looking for work’ on a professional online network. The purchase is bonded 100% by one of the major African banks. The church continues to worship at the property. Construction for two more rooms has started at the back. The property has been turned into a place of faith, in parallel to the residence. It is a community gathering space that is a lucrative income generator at the same time.

Extra: Networks, Neighbourhood Links

The yard is the space that has changed most in its layout, shape, size, and use in the transformation from bungalow into bungalow compound. All properties have a yard and all properties under transformation are *yarding* to a certain extent. However, places with community programmes make use of, or need the yard to run operations. Places that are running in parallel to what is usually, or has traditionally been a government institution – schools, kindergarten, skill centres, churches. Some of these require (as per law) a certain amount of outdoor space per visitor / participant, others need it to congregate, or so as to not place a burden on the neighbourhood, for example through parking.

Geometry

Void Shape/ Type: Driveway corridor with eye of the needle entry to shared backyard.

Compound Doings: Yarding, enfolding, merging, re-scaling

For other case studies in this category, see Catalogue Appendix H, Table Groupings.]

Yarding is the category with the most variation in use and form; see Figure 11, where the yard forms are shown as a morphological series and the catalogue (Appendix H), where the groupings, and programmes are listed. The yard is the basis of the bungalow compound's ability to adapt and absorb change with flexibility. The workings of the yards and their differences are generally best understood when looked at through forms of governance, or as socio-cultural constructions in terms of programme. An obvious comparison would be between Case Study #23/#24 (2 plots, one property) and #25, which look rather similar in footprint and layout. However, Case Study #23/#24 has a manager, who presents himself as the owner of the property who uses the yard on an everyday basis as a car mechanic. This open-air activity encourages other residents to make use of the spaces as well, and they share access to services. Case Study #24, on the other hand, has only independent self-catering units with a strict code of conduct for shared areas. The yard has been reduced to mere circulation space and bin storage, similar to a managed apartment building. The 'open' yard attracted more small families with children when visited during fieldwork, while young urban professionals seemed to prefer the more formally regulated yard. The costs of living (rent) were comparable.

In Review

This section has given insight into the layered workings of the compound case studies in a case-by-case selection. As the plots turn into a rather complex system of physical transformation with socio-cultural, economic and legal structures that often seem similar in essence but different in each combination, the study has compiled a summary of tendencies that all case studies follow below.

6.3 Summary of Tendencies

The previous section presented a selection of key Case Study samples as primary evidence, already pre-analysed by means of prior cataloguing of groupings along *compound doings*. This pre-analysis came in fact through the detailed analysis of the full catalogue – and was applied here to make the substantive detail of the full catalogue more immediately accessible – and as a step towards the wider analysis and conclusions of the study. In an arboreal analogy, the aim is to help understand the deep knowledge of each “tree” (that is, the Case Study) in relation to the wider “forest” (that is neighbourhood), and in this way – eventually – to bring this knowledge to bear on the importance of similar “forests” elsewhere (at urban and even wider continental level). **The reader is encouraged to access the full catalogue of fieldwork primary research as much as possible.** This subsequent chapter section now looks at the series of case studies as a whole and goes on to conclude with a summary of tendencies as overall findings. The structure follows the analytical layout of the prior drawings and descriptions, and links to the overall themes identified in Chapter 1 and carried across Chapters 2-4.

Parts of this summary are quantified, to provide an approximate idea of sizes and scales that the compounds are providing overall. However, the evidence provided here focuses on *tendencies*, as the numbers are largely based on information that was communicated by people on the properties, who might not have known or declared every detail accurately. In addition, situations can change quickly in the context under investigation. As a result, numbers need to be seen as relative, yet remain indicative of trends at the time, which, once linked to other information, can confirm or question certain assumptions made on behalf of the properties, and their performance. The different sections of the analysis are seen as assisting each other in detecting commonalities and differences across the samples.

6.3.1 Before and After Physic

‘Before and after’ illustrations have been used to merge information from council plans and current satellite imagery, both sourced from the CoJ as hard copies and online, on site recordings, as well as information from other publicly available information visible in computer programmes such as Google Earth, Google Maps and Apple Maps. Overall, these drawings show a significant increase in coverage of built form (see Fig.27), with a ‘before’ ratio of circa 1:2 (built : unbuilt) as a common proportion on a 495 plot, but the ‘after’ ratio averages approximately as 1:1 (built : unbuilt) and is, in some cases, more often a relation of 3:2 (built : unbuilt).

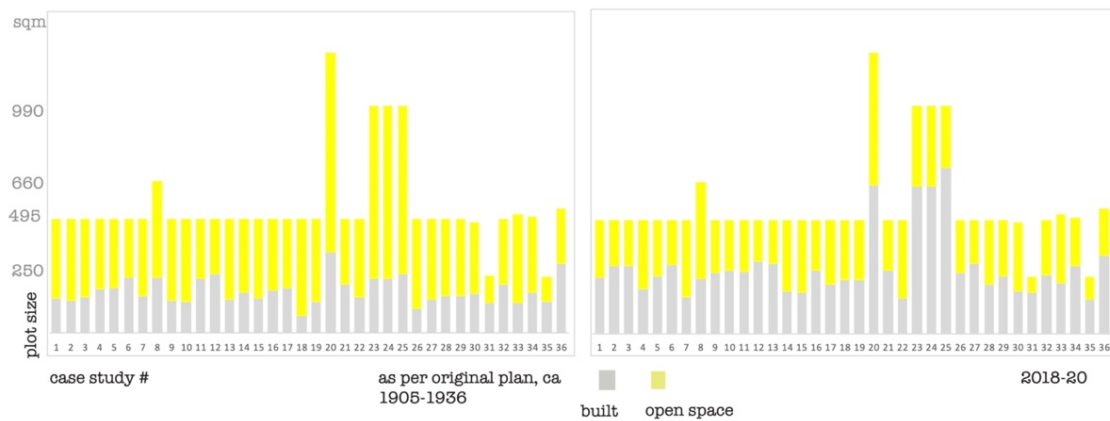


Figure 27: Built versus unbuilt space per plot, as per original plans ca 1905-1936 and between 2018-2020. (author's own, 2023)

Generally, the back boundary has been built against, or upon, and since inception, all properties with available documentation had an outhouse on the original plans, mostly a French drain WC, often accompanied by a room for domestic workers, or builders on site. Now 90% of the properties have extended the structures at the back, many already in the first decades of their existence. Early amendments were mostly extending the back of house through sanitary upgrades in bathrooms and the enlargement of the kitchen, often by a scullery, with a separate entrance for black domestic workers. These changes were usually council approved, even if it was a small addition of less than ten square metres. In more than 60% of the case studies the initial ‘outbuildings’ are still in use in one or another way, or left traces in the new conversions. In more than two thirds of the cases, more rooms

have been added. However, the bungalow as a spatial shape/form remains dominant from a bird's eye view in most situations, although at eye height, this is not always the case. This is due to either the increase in height of the boundary wall or through structures erected in the front. One quarter of the collection now has a structure with rooms for habitation or businesses in the front of the house. It is noteworthy that no bungalow has changed its roof in structure or shape in the last two decades, other than one after destruction by fire.

6.3.2 Data: Densities, Programme

Density of Rooms

The density calculations of the bungalow compounds propose to use the single room as a dwelling unit, whether inside or outside the original house. This proposition is based on the recordings of everyday practices across the case studies and the areas under investigation at large. The average number of dwelling unit rooms on the properties lies around 11 to 12, with slightly more of these within the house – a constant of six. That also is reflected in a more detailed breakdown (Table 2).

On 53% of the properties, the main house offers more rooms than the yard, for 25% of the sample the inside and outside room numbers are equal, and on 19% of the properties the relationship is reversed – the yard offering more rooms than the house. This being said, there are huge differences amongst the single plots, ranging from 5:17 (house : yard) to 10:1 (house : yard). With 11.5 as the average amount of rooms on the 495 plot across the samples, this would correspond to a theoretical average density of 232 DU/ha, with a maximum of 444 DU/ha and a minimum of 20 DU/ha (the latter a single house on a plot). The City of Johannesburg aims at “a low-rise high density housing development of between 100 and 300 dwelling units per hectare.” (CoJ, 2015:43), yet erroneously places these 495 properties on a spectrum of 7-13DU/ha (CoJ, 2015:58), see Appendix F. The calculations above are meant to serve as a numeric exercise suggesting alternative reality readings when re-scaling the dwelling unit down to the room, in line with every practice on the ground.

case study	rooms / house	rooms/yard	total rooms	bathroom	extra toilets	kitchen
#1	6	6	12	8		2
#2	5	17	22	2	4	1
#3	5	5	10	9		10
#4	5	2	7	1	1	1
#5	5	3	8	1	4	1
#6	9	7	16	8	1	1
#7	4	2	6	2	1	2
#8	7	1	8	1	1	1
#9	6	3	9	3		1
#10	7	6	13	1	2	
#11	7	2	9	3	2	1
#12	10	1	11	11	1	
#13	7	10	17	2	1	1
#14	10	4	14	2		2
#15	4	5	9	2	1	1
#16	8	5	13	2		2
#17	7	3	10	1	3	1
#18	5	2	7	2	1	1
#19	6	5	11	1	1	1
#20	10	10	20	8	2	1
#21	5	6	11	1	1	1
#22	6	2	8	2	1	1
#23/24	5	12	17	10	2	10
#25	5	22	27	27		27
#26	5	6	11	4	2	1
#27	5	7	12	2	1	1
#28	5	5	10	2		1
#29	4	5	9	2	1	1
#30	5	2	7	1	1	1
#31	4	6	10	6	1	1
#32	5	3	8	2	1	1
#33	6	1	7	1	1	1
#34	4	3	7	2	2	1
#35	5	1	6	1	1	1
#36	11	2	13	3	1	2
Calculated Average	6,1	5,2	11,3	3,9	1,2	2,3

Table 2: Rooms and services, Case Study #1-#36 (author's own, 2023)

Density of People

The calculation of the amount of people per property is based on a usual standard of two, sometimes three people, per room across the sample. It is also the usual occupancy per room that was found on adverts, repeated in verbal rental, or

booking agreements, and supported by real life documentation on site. The *sleepers* with nuclear families are placed at the lower end. Educational services provided numbers of students attending. The average per rented room somehow correlate with Census Statistics (Frith, 2013) where the average household size is approximately three people nationwide. The mathematical average for the number of residents across the sample is 22, yet visibly fluctuating on a spectrum ranging between 44 and 1 person per plot (see Fig 28).



Figure 28: People per plot at time of fieldwork 2018-2020 (author's own, 2023)

Compound Densities: People and Rooms

As a relative measure, space (floor area) is often set in relation to occupation (demographic / number of people), with varying cultural and geographic understandings of what constitutes a dense urban area (Jenkins & Mottelson, 2020). A key measure, internationally, is also the house or dwelling unit and its occupants – sometimes defined as households. The bungalow compound negotiates density measurements around a spectrum of variables with one constant: the built structure in the centre of the property, numerous rooms inside and additional rooms outside. In the current bungalow compound context, little is established about how to measure or even define what is a 'household'. Numerous non-typical household compositions have been recorded across the single case study series in Yeoville and Rosettenville, as is often the case in African urban areas (Jenkins, 2013). In official documentation of 'Housing Circumstances', they

are simply listed per member number (CoJ, 2016) with one to three members per household being the most common size in the city, relating back to the occupancy per rental unit across the samples.

Within the oscillating spectrum of rooms and people per property, the study explores the illustration of a potential occupational density of the bungalows in Yeoville and Rosettenville through **a small focus sample of Case Studies #1, #2, and #3**. Two properties are within the average range of rooms and people in the overall series, one is on the upper extreme. Within a generally growing population in the area (Table 1) and increased building activity (Fig.27) the sample might illustrate a reasonable range of current developments. In relation to the spatial organisation of the bungalow compound, all rooms inside and outside the house are treated as individual units with one double bed, usually two people with or without children, as residence or business unit.

The indicators to frame the existing estimated net⁷³ densities of the bungalow yards are based on the number of physical structures per plot and the number of dwelling units per plot. This is then calculated as units/ha to compare figures throughout the table and read through **other ‘units’** of this forms of co-housing: **rooms**, households, people and plot ratios (Table 3).

	R20 000	R36000 + R2200	R22 500	
Income/ Rental/month/ estimate				
	2000pm/unit	1800pm/unit	2250pm/unit	
Rent/ unit				
Bungalow Compound Densities	Net estimate per block; 20 plots; 1ha			
	Compound 1	Compound 2	Compound 3	Average
1 Dwelling Units	3 dwellings; 12 units/plot; 240 units/ha	4 dwellings, 20 units/ plot; 400 units/ha	3 dwellings; 10 units/plot; 200 units/ha	14 units/plot; 280 units/ha
2 Habitable rooms	240 rooms/ha	400 rooms/ha	200 rooms/ha	280 rooms/ha
3 Households	240 households/ha	380 households/ha	200 households/ha	273 households/ha
4 People (estimate)	500-560 people/ha	760-800 people/ha	400-480 people/ha	553-613 people/ha
5 Plot ratios, coverage	coverage 50%	coverage 54%	coverage 47%	coverage 51%

Table 3: Density calculation of the bungalow compound samples (Dormann, 2020)

The estimated numbers of residents and households based on the focus samples suggest a grey area, or rather a possible gap between official recordings and lived

⁷³ Net density includes only plot areas and multiples thereof. This includes driveways, yards, garden space, outbuildings, original structures, spaza shops.

realities. This is despite the census picking up significant densification and sweeping demographic change as noted early in the thesis. If the sample properties are close to the average bungalow plot in terms of occupation – which sale adverts over the last years and grey literature suggest they are (PrivateProperty, 2023; property24, 2023) – the average net population density of the bungalow compounds is up to 580 people/ha, which falls between medium and high urban population densities (Tonkin, 2008). The number clearly exceeds the census 2011 in terms of densities (217.8 p/ha) as well as the household figures illustrated in the ICHIP Strategy Programme. The fieldwork data in fact indicates over three times more households than there are [Res A: bungalow type] properties officially recorded in Yeoville and Bellevue/ Bellevue East (CoJ, 2016, 35). The household average in the focus samples is 13,6 per compound plot, and 11 across the sample series.

Programme

The activities on the case study properties are multiple and mostly mixed. All but two properties have a dominant residential component, that is either short- or long-term rental, or the owner and/or their household resides on the property (or a mixture thereof). The other two non-residential properties offer parallel services only, both educational, to children and women. One property is also a place of (commercially oriented) worship. Overall, only 8% of the properties (3 total) are solely used as they started off – as a private residence for one family. More importantly, approximately 90% of the properties are income generating, in one way or another, and most rent out rooms on the property for that purpose, and these cover from 10-100% of the available usable built space. However, approximately 50% of the case studies offer additional programmes in addition to any form of dwelling and accommodation.

The additional programme is in many cases related to the life of the residents or visitors to the area, often as a public extension of otherwise domestic activities that turn into a service, when not available ‘at home.’ This could be a restaurant, take-away, or the rental of a bed for a particular time. Hair & nail salons cater for body and personal care, the tailor looks after clothing and house fittings, furniture

can be upholstered, cars are repaired in the mechanic's yard, or on the sidewalk, and fresh slaughtered chicken is exchanged across the boundary wall. The spaza supermarket satisfies any other needs of the everyday until late hours.

Approximately 90% of these 'extra-residential' programmes make use of the yard space. The programmes are not always 'fixed,' and they can fluctuate in terms of schedule and intensity. They are absorbed by the space, and at the same time, absorb portions of it when required. However, the way they are set up, they would not be able to operate without the yard.

6.3.3 Geometries of the Plot

The geometries of the plot read graphically as the transformation from a freestanding house to a courtyard / compound arrangement, across an amended version of the Brand's shearing layers of change (Brand, 1994). As described in Chapter 5, Brand's six layers have been adapted into three pairs and the analysis displayed via three axonometric drawings in the catalogue. The first drawing looks inside the built volume(s) and the arrangement of **stuff**, with the whole **site** as a base of the compound – or the newly emerging and transforming 'building,' as this research asserts. This means the drawing shows what happens on the side, from the inside out. The second drawing deals with the relation of key architectural elements to **services**, and or/ as **service spaces**, with a particular focus on **access** across the **space plan**. This means that the drawing shows how people move through the side, and how selected architectural elements, related to access and service, have adapted their purpose over time. The third drawing explores the representation of the **skin** surrounding the yard, that partly overlaps with the **structure** of the original house, and also additions. This means the drawings show different shapes and forms of open space (Rapoport, 2007) that have been developed / auto-designed by people who own and use this.

Stuff and Internal Subdivisions

The most common objects that move in and out of the bungalow plots are **beds**, double and queen size, to accommodate more than one person if needed. They dominate the internal layout of the properties and are a vital possession of the

tenants. They are also the main income generation measure of the landlords, when number of beds equals number of rentable rooms. While bed spaces change at times rather fast, with moving tenants, they are then replaced with copies of the same, hence, somehow constant.

The **original internal layout of the bungalow has mostly not been amended** in structural terms, such as in the re-positioning of walls – specifically loadbearing ones. 15% show changes made after 1990, in most cases in relation to additional bathrooms, sometimes kitchens. What has been **adapted however, is the use of rooms**, now mostly bedrooms, but also some classrooms, or very occasionally a dining room or lounge.

Due to their largely similar and rather generous size, the existing rooms are able to provide for a wide range of activities. The rooms that are not ‘within the original house’ are also more often than not, based on conversions or amendments of early structures, like garages, domestic accommodation, coal rooms, playrooms, even horse stables. Those are at the back or the side of the property. While lower in ceiling height, newly built additions at the back, side, or front, are generally similar to the room sizes inside, albeit a slightly tighter version. The supply of bathrooms, toilets and sinks varies greatly. Shared kitchen spaces are not common - nor are they particularly desired, based on discussions with residents. In selected cases however, like in Case Study #1, the changing position of the stove and the sink demonstrates the social and economic impact of changing foodways in the house, on the property, and more generally in the urban context. A recurring item in the yard is the **washing line**, and remains, together with the **bucket**, an important accessory in everyday life across all samples.

Key Elements

The key elements of the bungalow compound form part of a “**geography of small spaces**” (Chattopadhyay, 2022) that participated in the production of the “colour line” (Chattopadhyay, 2022) with **political and cultural connotations** beyond served and serving spaces concerning people, across all the scales of plot, block,

and city. This role of material parts (the verandah, the stoep, the corridor, the boundary wall) and infrastructural components (the stove and the water tap) has been included in the fieldwork and analysis in the previous chapters from a contextual (Ch2), methodological (Ch3,5) and typological (Ch4) perspective. The drawn analysis has looked at such elements in relation to access, services, and space plan. The resulting figures are complex and, nearly in every case, highly individual, overlaid by information of socio-cultural and economic practices on the plot. The findings of these setups are discussed in the following section. This part is looking at the building elements themselves.

The **verandah** as part of the entrance sequence has been **closed**, in full or partially, in one-third of the case studies. This happened mostly before 1990 and was often linked to the extension of the room bordering it or making space for a garage, for example. The verandah, however, still provides one entrance to the house in all but two cases, where it has been replaced together with the front garden by a newly built structure. Nevertheless, the main entrance to the original structures on these properties is now at the back, not the front. When newly closed, it is a room on its own for residential or other use, and it is also **not necessarily used by all residents** of the house. There are, at times, **hierarchies** among tenants and their rooms in relation to the proximity of the verandah. As a result, in some cases, it has been turned into a secondary entrance. When it is **open**, it can still play the threshold role between inside and outside, the house and the street – as a **strategic point of observation**, with the compound gate as the main entry now, and not the front door of the house. At the same time, there are some examples where there is now space to hang the laundry, more typically at the **back of the house**.

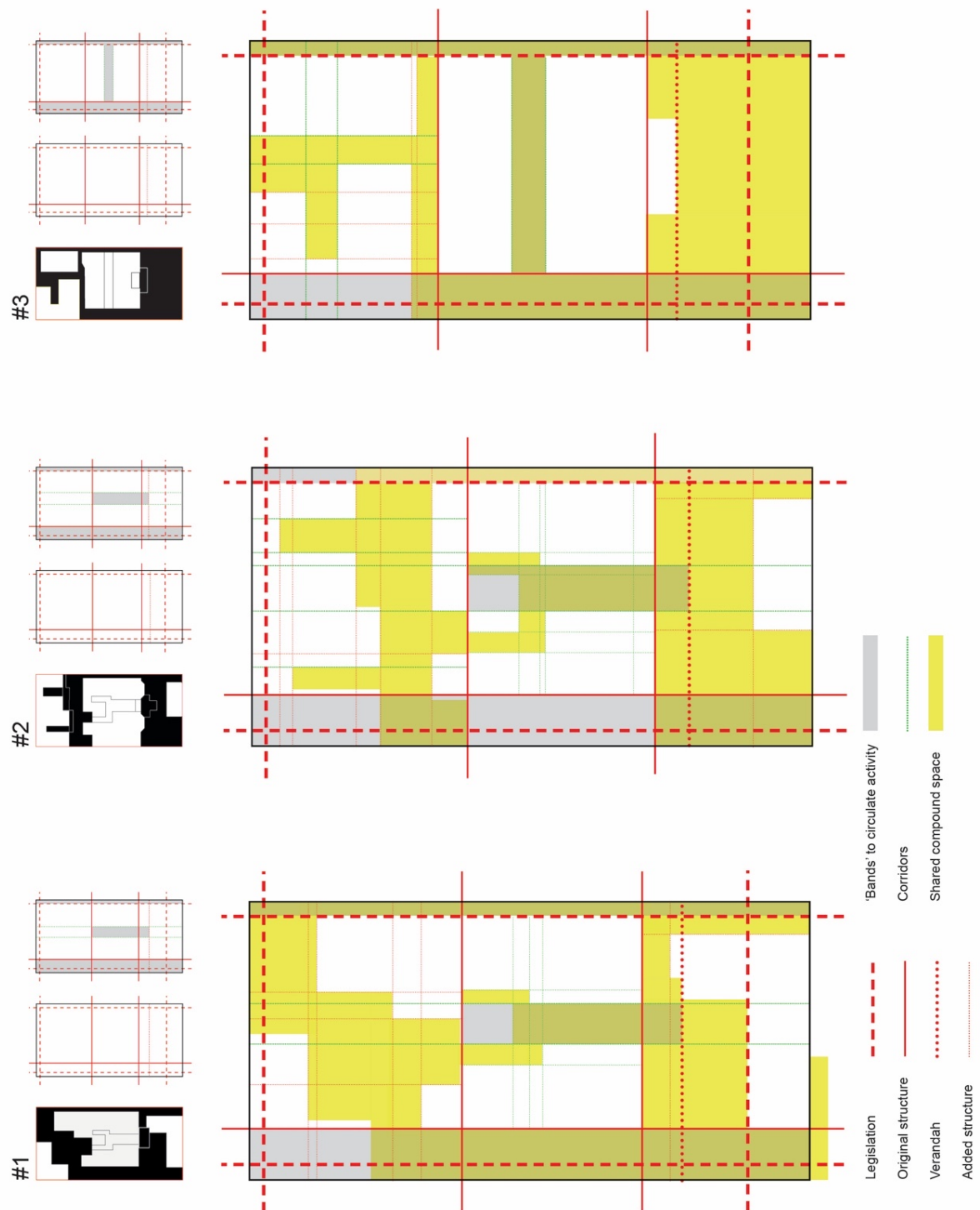


Figure 29: Emerging compound geometries. Case Study sample #1,#2,#3 (author's own 2023)

The **corridor** has remained unchanged on most properties and is the element that permits the **subdivision** of the house into rooms as single units. It is the **lifeline for internal adaptations**, and at the same time, provides **room for flexibility**, that is, the set-up of different physical arrangements (Rabeneck, et al., 1974; Schneider & Till, 2005). The circulation space is centrally positioned (Fig. 29) and slightly larger in size to allow for a smooth transition to an **internal service spine** or a series of bathrooms and kitchens. This setup also enables the rooms of the freestanding single-family house to become independent entities as units that can be accessed from the outside. Another adaptive scenario is **the conversion of the entrance hallway**, a rather grand name for the entrance portion of the corridor that is often slightly wider. The half metre of extra width is able to absorb a kitchen counter and can thus turn into a shared utility space.

The **boundary wall** has been undergoing the biggest transformation over time, as visualised in the ‘before and after’ drawings. From a simple demarcation of land as ‘one’s own,’ as requested per original deeds, and providing some privacy, it has extended in height and depth. It is now a three-dimensional structure with different thicknesses that are in parts inhabited or activated with other programmed activities.

6.3.4 Skin and Transforming Void

Responding to the separatist politics of the apartheid regime, the system of spatial circulation was based on the parallel existence of different ethnic/race groups on each plot, with designated space for each and as little contact as possible (albeit obviously some “grey” zones of overlap). This translated into access to the property, movement across and designated destinations, being associated with ‘white’ and ‘black,’ ‘served’ and serving’ ‘more’ and ‘less,’ and different material/infrastructure specifications. While the open space permitted people to plan a life ‘apart’ of Apartheid, the void today is often the shared centre, albeit not in a spatial central position. Most of the properties have also maintained the position of openings to access the plots – both pedestrian and vehicle gates – as

they existed for decades. The movement across the plot and designated destinations has changed, multiplied, and redirected. The initial space for the driveway (now used for the programme in 70% of the case studies) and the thin narrow passage between properties as a result of fire distance regulations (used by 25%) have been repurposed as outdoor passageways and are of high value.

The back of the properties is not anymore ‘lesser than’ or reserved for a particular kind of people as before. Invisibility is now a choice and, at times, a desired quality. The void has many forms across the bungalow properties, with a code of use that is not easy to access for visitors to understand, nor is it uniform across neighbourhoods. Figure 28 explores the emerging pattern across Case Study #1, #2, #3, highlighting the ‘shapeshifting’ yard with *bands as spaces of circulation for activities, people, and staff*, as described in Chapter 5.

While the materiality of the ‘skin’ is rather basic, with mostly plastered brickwork that doubles up as structure, together with ready-made windows and doors that are available and popular, it is the in-between rooms that create a form of ‘productive porosity’ that deserves closer attention. In some cases, the void as an open space has nearly disappeared, yet it is quite loose, fluid, and versatile in its use as a threshold and functional area. In contrast, other cases have a significant amount of space overlaid with strict rules and are mostly empty. The compound version of double (sided) skin has two outsides, like an extruded boundary wall that deals through a public service programme with the sidewalk and also the internal courtyard. The outdoor rooms vary in size but are designed around the dimensions of everyday commodities – like the car, chairs, a table and chairs, the length of a laundry line, a couch – and space to walk around them.

6.3.5 Legalities

Legalities are dynamic issues in the bungalow compound context. The development of apartheid was embedded in property law (Hamilton, 1987), and so were the property rights and the refusal thereof, literally putting everyone on the plots ‘in their place.’ The laws of segregation were blueprinted onto the land, with

lines of division still visible underneath transformations. Reminders of that past are also captured in current title deeds that continue to name the ‘township owner’ (e.g. Kenilworth Estate and Finance Corporation Limited) as having the power to approve changes of use or subdivision (see Appendix D) – even though these processes have long been transferred to the relevant municipalities, and private leasehold turned into freehold around the middle of the 20th century (albeit only for white citizens). While the section of property rights that excluded the ownership or presence of any person of colour, other than domestic employees, has been omitted (which proves that the deed document as such has actively been amended post-1990), the remaining wording is the same or similar to early publications from 1908 published in the Report of the Transvaal Leasehold Township Commission in 1912 (see Appendix C).

The contemporary list of *don'ts* in such deeds sounds like it comes out of gold prospecting township beginnings with a fear of rural practice on urban territory and then from a loss of control with growing densification of a largely transient urban population. For example: “no grass or reed houses, shall be allowed to be erected [...] nor shall any dairy establishment or any cow stable or kraal [...] be allowed” (Appendix D (b)). It is not clear why these details have remained as they were and have not been updated in line with more current planning language, or content. What might seem like a rather lengthy detour into a minor detail, does in fact highlight the urgency for change in the context of legitimacy of the case study properties (and others like them). An essential legal document like a title deed that lays out the ground rules of landownership and is yet based on wording of an abolished system of racial discrimination, is in itself “a microcosm of the transition from Apartheid land control in townships to the law as it is presently” (Manoim, 2022). At the same time, the, in parts, inappropriateness of the deed’s detailing, and the need for change, may open up opportunities to consider processes of transformation within the law. By making use of “horizontal knowledge transfer” (Eckert, 2012:148), based on, for instance the re-description of a situation *as is*, not *as it was*, or *as it should be*, particular perceptions of problems might turn into parts of emerging ‘solutions.’

As a result, and to understand how far *what is* differs from what *should be*, this investigation has firstly looked at the legalities of the built form from two main perspectives. One key issue is the relative compliance of the structures ‘as built’ within the current Town Planning Scheme (City of Johannesburg, 2018) which the properties fall under, and main points of the National Building Regulations (Building Standards Act, 1977) that could be assessed when the properties were visited, or through other documentation. Basically, this means comparing what is there to what is permitted to be there. The second key issue is the recording and approval of changes to the original structures by City Council, which deals with the official recognition of what was there and is permitted to be there then.

The overall discrepancy between these two above processes is remarkable. Indeed, all of the current plot morphologies are (loosely) within the permitted limitations of the Town Planning Schemes, in terms of usage, height, coverage and F.A.R, although coverage is at liminal threshold on some properties. The one recurring, and obvious, non-compliance is in the required distance of 3-3.5 m of any built structure to the street boundary and the height of the boundary line of 1,8 m. This could easily be permitted with a request for relaxation, like in other comparable suburbs, for example Melville on the western side of Johannesburg CBD with a similar urban morphology.

None of the case studies had council permission for actual structural transformations on the plots after 1983 – at the time the study fieldwork ended. Most of the cases had historic permits for amendments as small as the removal of a shed, or the extension of a room by the depth of an inbuilt cupboard (#1). Of the two plans post 1983 that were found to exist, one was filed and approved at council but not compliant with reality or council submission standards (case #36) showing a garage that no car could ever enter; and the other one (case #22) looked more professional but was not filed at council, nor did it comply with council submission standards. In the possession of the owner, the latter had a fake approval stamp that is available for a small payment on the streets of the CBD of Joburg. When accessing the properties, and in discussion with owners, the author

offered to produce council submission drawings ‘as built’. Two owners were interested and consequently have received a plan. They said they had professionals to sign off and process the drawings once done, however, none of them had submitted anything to council by June 2023.

The properties are now generally zoned Residential 4, a change from, in many cases, Residential 1. This translates into higher potential densities from one dwelling per stand (in the bungalow case 20 plots per hectare, see Table 3) to between 41-120 dwellings per hectare (CoJ, 2018). Amendments in usage other than residential mostly fall under the secondary uses permitted in that zone: “religious purposes, places of instruction, childcare centre, social halls, institutions, special buildings, sport and recreation clubs, public or private parking areas, medical consulting rooms, guest house, tavern/ shebeen” (CoJ, 2018). They have not necessarily been recorded as such or are slightly on the margin of the descriptive functional spectrum, like a restaurant and a spaza shop which are in fact often permitted with special permits (CoJ, 2018). Based on verbal accounts of the owners and residents of the bungalow properties, the building inspectors in both areas are however aware of many changes, and accept them informally for a fee, and for a limited amount of time. The ‘hole in the wall’ restaurant of #1 also has frequent checks by the health inspector, with similar arrangements for ongoing “approval” like that from the planning department. None of the inspectors were available for a meeting or an interview, and no owner was willing to give out more detail on this matter.

In fact, most of the living arrangements on the bungalow plots would fall under the City’s understanding of ‘communes’ - *a dwelling house where the habitable rooms are rented out for an extended period to unrelated persons who share the communal facilities such as the kitchen, lounge, dining room and bathroom* (CoJ, 2009) – if the total number of residents in the house (or on the property) does not exceed 8-10 people – otherwise they could be categorised as a guest house or boarding house (CoJ, 2018). It’s safe to assume that few or none of the bungalow properties under investigation, or many others in the neighbourhood, have ever

obtained a required permit “*for premises of accommodation establishments*” in term of Section 61 of public health in terms of the law (CoJ, 2011:32). That looks at the general number of people, nature of foodways, type/standard of waterlines and related washing facilities, and issues of waste and insect control. At the same time, based on the detailed property descriptions, it is also safe to assume that most, if not all applications, could be issued, with small alterations on the property.

This means in terms of the legality of the structures, there is thus a quite a high level of **congruence** between what is *allowed to be there* and what is *actually there*, but a significant incongruence of what is *officially known to be there*. This **incongruence** is part of the problem space (Lury, 2021) introduced in Chapter 3 – with urban compound design as “a problem-solving activity with a vast space of possible solutions, or rather situations” (Shields, 2021; Simon, 1996). This is raising the question if the fact that whether “things” unknown is the problem, or rather “what” is unknown is the problem. Taking this thought further would be asking what does ‘unknown’ mean, when a significant part of the information about the so called “unknown” is based in fact on sources that are publicly available, from the city (as used in this research).

Legalities are not limited to material structures and the programme that plays out around them, in particular, in the bungalow context of the two suburbs under investigation. Moving forward, this text takes a short step back and recalls Chapter 2 introducing **the plot** as the legal frame of Johannesburg’s urban landscape, and the close relation between people and plots as properties. All details about owning them (or not), living on them (and how), working on them (and where) were to be legally enforced, as a coordinated urban control system, from the colonial conquest and land dispossessions in the 19th century, to 1885 when the story of the 495 plot began to take shape and form as the city grid, on to Johannesburg as it is governed today. And, in fact, this extended urban legal form of social control over the years culminated with Apartheid as a form of institutionalised racial segregation when legal bodies prescribed and controlled

cultural and economic practices for every detail of all life, and all people, in separated groups.

Il/legalities can be, as a result, a matter of difference in viewpoint and social value, and therefore to a certain extent subjective – reversible. This aspect is important as the discussion around current existing spatial configurations continue to distract from considering their social value to many of their users, on multiple scales, and turns into an argument around positionality and related biases on ‘what can be defined as right and wrong.’

6.4 Summary

Chapter 6 presents the findings which form a catalogue of thirty-six case studies that mirror the operations of the properties: plot-by-plot. The chapter is structured in two sections that separated the plots as individual entities, representing emerging categories, and the group as a whole. Section one focused on five key cases from the catalogue to represent each of the groupings. Section two dealt with the series of case studies as a whole and reviewed these through a *summary of tendencies*. The purpose of the chapter has been to translate the sum of the extensive catalogue of single property descriptions (in the Appendices) into wider analytical findings.

The reading of the data leads to a provisional conclusion that will be discussed in detail in the next chapter. Summarising briefly for now, the research claims that the properties under investigation – only slightly over a century after their arrival as colonial constructs – have managed to transcend not only the colour line in creating a transformational type but bring the idea of *aspiration* into a contemporary African context, that serves many more than just a privileged few. By developing new and other categories of living and working together, or side-by-side and not without limitations, or areas of concern the bungalow compounds have become an important knowledge resource and an active part of urban life.

CHAPTER 7 INTERPRETING LOCAL PRACTICE: COMPOUND APPLICATIONS

The aspirational house is ambitious. Intellectually, it has the ability to reconsider hierarchies and translate these into the design of distances that connect. As an investment, it is relentlessly pragmatic and hopefully imaginative. As an urban composite of solids and voids, it treats thresholds with care– for something or someone to support their performance. It understands the privilege of invisibility and has the ability to absorb – programmes, people, and things. Operating from the inside it knows more than you see. You’ll find it in Yeoville. Just ask for Donald’s House.

Author, 2023, Design Studio Briefing

7.1 Introduction

As private properties in inner-city suburbs, the bungalow plots have historically been state-regulated with strict translations of discriminating racial subdivisions on the 495 portions of land and projecting ideals of white family life on imported layouts. There was a lot of ‘the same or similar’ on the individual stands, clearly ordered from front to back, kept neat and dust free by invisible black labour (Van Onselen, 1982), within prescribed distances of control (CoJ, 1979; CoJ 1947). These inscribed patterns continue to exist as an underlying blueprint; however, they are manifested as (and in) a radically different socio-cultural context as a result of political changes and different economic ambitions.

While the bungalow and its imported domesticity have taken centre stage in a narrative about the production of a global culture (King, 1984), its afterlife in some suburbs in Johannesburg has turned more towards the African continent as citational grounds and forms of reference – i.e. the urban compound as described in this thesis (Biamah-Ofosu, et al., 2023; Andersen et al., 2006; Pellow, 2002;). In so doing, the organically transforming bungalow properties manifest different kinds of yard life to accommodate the growing number of urban residents, their socio-cultural values, habits, needs and related services. Within the bungalow

plot, the void now features as a significant element of facilitating such change - and, in the process, changing itself. Chapter 6 has highlighted the incongruence of current figures and forms, and a gap in official documentation, and/or recognition of the processes involved. In official terms, what is not documented does not exist. What does not exist remains unexplored, other than in the shadows. Hence the importance of this research. However, it is important to note that, while the properties operate largely individually ‘plot-by-plot’ (Karam et al., 2020) the research has proposed to look at their ‘doings’ to understand developing typicalities more categorically, and, at the same time, leave space for contingencies as part of an everyday replete with multiple trajectories.

The examination of compound ‘doings’ has brought to light the commodification of housing, as wealth creation in a speculative property market in the shadows, while partly circumventing official regulatory processes, and the nature of densification in absorbing urban growth on multiple scales. The use of the idea of ‘type’ as analytical frame to re-describe the transformation from free-standing house to courtyard building has more of a morphological connotation than that of simple building type (Dovey & King, 2011) when describing emerging conditions of domestic life through elements of everyday practice in this study. In fact, the bungalow compound as ‘a house that merged with its plot’ might just be part of a subsequent process of entrepreneurial urbanization, introduced as ‘plotting’ (Karaman, et al., 2020) in Chapter 4. The research proposes to specifically refer to these physical and socio-cultural changes as *urban compounding*.

The understanding of the issue of these sample neighbourhoods as transforming *problem space*, introduced in Chapter 3, resulted in the production/ visualization of an extensive catalogue of quite complex *developing solutions*, presented in Chapters 5 and 6. The current chapter will discuss this spectrum of possibilities under the umbrella of ***compound application***. It is noted that the research started with the premise that the transforming bungalow properties are “unsettling hybrid structures” (Chakravartty & Silva, 2013: 2) and hold exclusive knowledge. The main question was, how the knowledge embedded in the transformed bungalow in

Rosettenville and Yeoville could be revealed, evaluated and *appropriated* in the design process of urban accommodation? The notion of appropriation is linked to the understanding of application as *putting something to use, being the use, something is put to, laying something new onto something existing (layering), or a formal way to request something*.

This final chapter draws together the wide range of findings and discusses the potential applications of these – that is, of bungalow compound knowings, doings, and formations as dynamic urban (design) resources in three sections: as property developments with the capacity to aspire, as speculative imaginary, transitioning from the empirical to the conceptual, and as unexpected collaborations and sociocultural practice in the project of the void. With reference to the catalogue of possibilities, each section implies adjustment of existing perceptions and proposes to consider a ‘re-description of the now’ as emerging strategies through appropriation. Naturally, as a stand-alone PhD study, this is all undertaken within limitations (also discussed below).

7.2 Urban Compounds as Site, Model or Mechanism for Densification

7.2.1 Reversing Assumptions, Countering Removal: The Aspirational House

The research proposed to consider the bungalow compound as an ‘aspirational house.’ This proposition purposefully counters the city’s association of the properties with developing “‘slum’ housing facilities” (City of Joburg, 2017:43; City of Joburg *et al.*, 2016) in need of regeneration and removal. The discourse of ‘yard life equals slum’ and related negative connotations continue to exist (Dormann, 2020), despite persistent attempts of the bungalow compounds to provide adequate supply (rooms, services, jobs, networks) to growing (and changing) demand in the densifying areas.

When referring to living conditions, *adequate* admittedly covers a large spectrum, in particular in relation to infrastructure and services, regarding basic health and hygiene as well as safety and security. The research is not claiming

there is no need for improvement, actually, far from it. It suggests however that firstly much of what is there, made through private provision on bungalow grounds, is potentially *better than, or as good as*, and secondly *more than the lack of*, referring to new housing provision for lower income groups. There was a conservatively estimated backlog of 450 000 housing ‘units’ in 2018 (Ministry Cooperative Governance and Traditional Affairs, 2020), and this deficit has already risen rapidly since, due in part to inward migration to urban areas (Ministry Cooperative Governance and Traditional Affairs, 2020). The demand for housing ‘units’ continues to rise exponentially, with a statistical increase of households in Johannesburg that has exceeded the 29% natural increase of population by approximately 10% in the eight years between 2011 and 2019 (South African Cities Network, 2021). The government’s average delivery of 3500 units per year (Ministry Cooperative Governance and Traditional Affairs, 2020) appears largely insufficient, if not irrelevant from a strategic perspective. The developing bungalow compounds act **as active sites of densification**. On the other hand, meeting some objectives the city needs to address but does not manage to through state investment. One wonders if it is the relative independence of these ‘inside out’ properties, that keeps them being understudied and (mis)represented as inadequate – as opposed to accepting their retention and reinforcing their aspirations. This point will be picked up in what follows.

Following Chapter 3 and 4, the understanding of bungalow compound aspirations is placed on a spectrum between the forensic and the imaginary. The forensic covers the analysis of physical evidence, and the activities related to, or resulting from the material footprint – which was the focus of Chapter 6, as noted previously, to address how best to engage with the described and analysed trends in actual manifestation requires some forward projection – and the imaginary relates to the search for possible drivers behind what we see happening and could come to happen.

The hopes, desires, and aims related to the action of **transforming properties, all translate from the interests of the different parties, as authors, actors or**

agents,⁷⁴ involved in the making of these ‘house worlds’ and ‘home spaces’ (Jenkins, 2013). These include **owners** who buy, and eventually transform the properties – increasingly for (often lucrative) exchange value – as well as **investors**, **banks**, or other lending institutions, who provide capital for the purchase and changes, and **real estate agents** who manage sale transactions (again with lucrative returns). It also, of course, includes the residents – increasingly made up of **tenants** who rent, live, and work in the urban compounds – and who focus on the use value, as do **customers** who use the services offered on the properties. Then there is the **city council**, its various departments and the agents who are (theoretically) looking after the well-being of the neighbourhood, through the application of their byelaws (but for whom this may also be a lucrative monetary exchange) – and some within the city council should of course also be interested in a wider frame of reference for urban and socio-economic development overall. In addition to the above there are also **builders**, **plumbers**, **electricians**, who literally facilitate the physical change, and shops/warehouses which supply materials – again with a monetary focus. Finally, and rather theoretically, in reality, there could / should also be **architects** and **engineers** or other built environment “agents” (for example draught-persons) as actors, who can plan transformation, as well as **heritage representatives** interested in retaining cultural memory – all of whom should also have some wider frame of reference apart from the individual use and exchange value. As has been clear from the detailed fieldwork, the last three groups of professionals mostly are not involved in the Case Study series.

Chapter 5 referred to aspiration as a capacity (to aspire) which is linked to the regulation of access to material equity (Appadurai, 2004). This also includes the right to choose of living location, urban services, ownership of property and access to capital. In South Africa, this sector, like all other parts of life, was politically constrained for most of the 20th century for black people until a

⁷⁴ Scenarios need authors, actors, agents, and angels. Authors create plots for scenarios. Plots express their dreams, desires. Different authors write different scenarios; sometimes, these different versions clash. Authors react; they strategize; they adapt their scenarios. Actors play characters with desires within scenarios. Agents set rules that affect scenarios and the desires played out by the actors. Angels are symbolic heroes and messengers capable of moving through different layers of space (CHORA & Bunschoten, 2001).

legitimate socio-political transition started post-1990. With both suburbs being zoned as ‘white’ until 1990⁷⁵ the possibility of ownership here was limited to a small percentage of the population, as explained in Chapter 2. While political access to property ownership and capital was thus “opened up” to wider society in the 1990s, the reality of economic change has been much slower. However, social change has taken place, as this study documents, and with that there is also cultural change. These factors have been at the root of the productions of the transformations this research has studied in detail – that is, how aspiration has been channelled by economic realities for the majority, and how locating aspiration within the city (for example, the search for closer access to income generating opportunities) has produced a specific economic, social and culturally based physical transformation in terms of the built environment in certain areas – which may not be what the city and/or professionals envisaged. As infinite formations, the bungalow compounds’ plans in many ways are in fact aspirational maps. The structure, as built, turns into a blueprint of people’s visions of ways of life within the choices they can make, overwriting time and prior constraints. The extensive study catalogue in this research records these visions and ideas, as ways in which – people make sense of the plot, translating new, ‘other determinations’ – compound measures and scales, everyday rituals and amended codes, through the relative permanence of drawings.

7.2.2 Multiplying Wealth, Absorbing Services

Historically, aspirations regarding the bungalow properties have been linked to investor’s capital gain (as speculative investment), homemaking (as socio-cultural manifestations), political / territorial planning paradigms (for example the colonial / Apartheid legal segregation) and local materialization of an imported building type (and its initially minor physical assimilation). However, the 1990s radical political change has not translated into radical ethnic change in landownership generally across the country.⁷⁶ However, in the suburbs under investigation, the

⁷⁵ President de Klerk announced on 19.4.1990 the repeal of the Group Areas Act. The Abolition of the Racially Based Land Measures Act 108 was instated in 1991. <https://www.gov.za/documents/abolition-racially-based-land-measures-act>.

⁷⁶ As per Land Audit Report (Department: Rural Development and Land Reform, 2017), 72% of individually owned farmland was still owned by Whites in 2017, and 7% of urban erven owned by Blacks, as two extreme numbers in a rather complex first audit post 1994. The report differentiates between farms plus agricultural holdings and erven in urban areas.

situation differs drastically, as described in Chapter 1. At the time of investigation, 100% of the case studies were owned, and inhabited, by black Africans, while all original drawings indicate prior owners with last names of English, Afrikaans or Portuguese descent. Indeed, one property has recently been inherited by a 2nd generation black African. Apart from the specific case studies examined in depth here, larger portions of both areas have been ‘ownership’ checked and, together with census data, this supports the trend indicated in the fieldwork case studies (ARPL4000A 2020, 2019).

Switch from Use to Exchange Value

The biggest change in the economic basis of the properties is most certainly the **switch** from what can more easily be described as **owner use value to owner exchange value**. In the large majority (92%) of the case studies the purchase serves **income (rental) generation in the everyday use**, as opposed to its original purpose as a **family home**. All the while, nearly all (94%) of the ‘exchange value’ properties still offer the use value of a home to residents (albeit more and usually unrelated tenants). In one-third of the cases, the owners share the property with tenants who run businesses or live on the premises. However, two-thirds of these properties are purely income generating by offering residential accommodation of different sorts – and other options to conduct business.

Financial profit as a driver for ownership of these transformed bungalow/urban compounds moves one part of the compounded aspirations into the field of **transactions**. It feeds into the basic unit of ‘rooms as (urban) currency,’⁷⁷ from a commercial, or monetary, and a socio-cultural⁷⁸ perspective. The transactions take place between different parties – as private people or legal entities, the latter are also represented through private individuals. In that regard, the reading of

The former make up 6% of the overall land parcels, 97% of the total land and are owned by 7% of all landowners. The latter are 94% of the land parcels on 3% of the land, owned by 93% of the landowners. Double as many black individuals (than whites) own 7% of the urban land owned by individuals, when the half the number of whites own 11% of the same overall amount of land, which, in average, allocates three times as much land to whites than blacks, in an urban context. While the numbers are not always directly relating, it does show a significant discrepancy between different races and landownership, continuing to display historical patterns of exclusion.

⁷⁷ Currency being understood as a standardized medium of exchange that indicates (monetary) value.

⁷⁸ David Graeber speaks of forms of ‘social currency’ and ‘human economy’ at the intersection of exchanging material goods, services and transforming social relationships (Graeber, 2012).

transaction as a cultural practice is similar to understanding property as a social relation – referring back to Graeber:

A bundle of rights and privileges with regard to some object [thing], held by a person or group of persons to the exclusion of all others. [...] It is important to stress that this is not, fundamentally, a relationship between a person and a thing. It is a relationship between people [through a thing] (Graeber, 2007).

Aspirational compound transactions happen in the areas studied on multiple levels that mostly centre around one of the two scales – the room as the smallest unit of subdivision and the plot as the legal frame holding the rooms (that is, not just in the bungalow structure, but through the compound). No dealings – either with rooms or with plots are a straightforward process that outsiders can easily comprehend or access, given the “grey area” nature of the legality and form of economic exchange. Renting a room or occupying one, selling/ buying/ keeping a plot, and additions and conversions to the built fabric on the plot, are often closely interrelated processes that happen on a ‘plot by plot’ basis and can only be generalised to a certain extent. Overall, the details of the empirical work portray the bungalow properties as part of a monetary exchange system that operates through merging networks in the formal and non-formal sector ‘between economies’ as indicated in Chapter 2: the ‘market’ (that shows up in statistics), the ‘infra-economy of material life’ in the shadows of everyday living, and the invisible forces of ‘privileged actors’ who can disturb established orders and profit from this to their advantage (Braudel, 1981). In this context, the property reports of the case studies reflect some unexpected detail in terms of property acquisitions.

In fact, **more than four out of five (84%) of the listed transactions were bonded** by one of **the major South African Banks**, at between 80-110% of the purchase amount, and most often more than once in the last three decades,⁷⁹ post-1990. Three quarters (72%) of the remaining unbonded properties (16%) were purchased by African owners from elsewhere in the continent, all as business

⁷⁹ The accessible property reports from Property 24 and Lightstone mostly go back to the 1990s.

investment. In addition, the creative subdivision of land ownership can serve as a form of credit extension across private business partners, as well as private bonds between two neighbours which diffuse the concept of ownership. A remaining few unbonded properties were sold for a low price that might not require a bond, after being owned by the banks themselves previously. This means that **the sample series does not confirm that the areas have been red listed but rather the opposite**. Although there needs to be a discussion on whether the number of samples, combined with the randomness of selection, permits a wider generalisation, or this a more unique situation – at any rate, this is a significant revelation of how the local housing economy works.

Within this complicated history of economic transactions, half of the properties are ‘**flippers**’— a term used in property circles to describe a quick purchase and resale of a property for a profit. “Flipping is primarily done by investors who purchase units early in the development and then flip them either before or soon after transfer” (Lee, 2005:71). The bungalow properties as ‘development’ in this sense were politically timed. Hindson (1987) explored the first wave as speculative housing development between 1890 and 1920, and this research arguably examines another aspect of this in the immediate post-1990 period through the case studies.

The market opened low in the 1990s due to radical political change and the research shows that a first, rather low entry, ‘flipping’ trend appeared in the early 2000s when properties became part of the ‘market’ – when mainly non-mainstream real estate agents considered the areas as part of their portfolio. Subsequently, 30% of the case studies were sold for a quick profit 2007/ 2008, simultaneously with the Global Financial Crisis⁸⁰ and a pending recession in South Africa. A third period of “flipping” can then be placed around 2010-13, and the fourth peak in the series occurred from 2020 onwards, linked to outstanding bond repayments. A **flipping profit** of the bungalow properties reaches on

⁸⁰ 2007/08 was the most severe worldwide economic crisis since the Great Depression of 1929.

average an increase between **20 to 30% from purchase to resale price**, with a time delay that is recorded as a day, and as long as a year.

As mentioned above, ‘flipping’ is part of the business practice of professional traders who buy at a low price, often with a set of known clients to sell to. For some of the clients, it is also a way to introduce **illicit funds into the legitimate financial system** and divert regulation of transactions through a middleman with a ‘safe’ property investment. Half of the flippers were sold at a **sheriff auction**, which are used by banks for Sales in Execution (SIE) to recover unpaid bond payments. SIE are published in the **Government Gazette** where the property description refers to **mostly outdated official information** available at Council (Appendix H, Case Study #31), and not to the situation on the ground. The official system – banks, sheriff, court – must be aware of the double life some properties lead – on paper and at eye level –, it is literally impossible to un-see a double storey walk up right next to the boundary line. However, none of the institutions approached on this was willing to comment.

Seemingly empty sleepers, of – for example – deceased owners, might be easy targets to acquire for alleged **syndicates that operate from within institutional structures**, along with others in the suburbs under investigation. It is a way to take over property at a price far below market price and make a considerable profit on resale, resulting in an excellent risk/reward ratio without any further investment in the capital base, nor (unfortunately) in improving urban life. Depending on the legitimacy of funds,⁸¹ certain forms of ‘take over’ can border on hijacking, a practice of claiming fraudulent ownership of a building that has turned into a significant problem for the city. More attention is usually given to hijacking and similar illegal activity in the inner-city multi-story buildings due to critical density and the health, safety and security issues of the residents.

⁸¹ Study #8 stood out in the series with a purchase amount 67% lower than the previous sale. It turned out it is a flipped property (2013) that has been on auction in 2017 (RSA, 2017:46), 2020 (RSA, 2020), and was sold in 2020 to be then re-advertised for sale in 2021. The listed owner of 2017 had died in early 2016 with an outstanding bond. The 2020 purchase amount was less than a third of the subsequent asking price in 2021 and was a bargain even in the fluid urban compound market. While this could certainly be a ‘one-off catch’ for the new owner, it appears this is not the case. The current owner is alleged to be a property hijacker in Johannesburg with a legal track record of fraud, intimidation, and assault (Govender, 2022).

However, there are bungalow properties that have a similar reputation. One of the case studies seems to fall into this potential category, as it appears unpopulated, and it does not pose visible health and safety issues. It is actually the only one of all the properties where no additional structure has been added on to the plot since its design around 1900 by renowned English born architect John Moffat (linked to the building of the School of Architecture at the University of the Witwatersrand) and has its original tectonic features still intact. The point here is that ‘profiteering’ from the sale of properties, or properties owned by potential ‘profiteers’ don’t necessarily appear neglected, overcrowded, dirty, or in any particular way. Some simply decide to keep ‘quiet,’ where there is nothing to see, nothing to hear, there is nothing to catch anyone’s attention. While planned invisibility was historically used as a manifestation of abusive political control, signifying ‘unworthiness’ to a large proportion of urban residents, this has now turned into privilege, a choice, and at times, an aspiration.

It might be safe to conclude that a large portion of the bungalow **properties** are in fact part of an **active real estate portfolio**, that somehow **operates in between the radar of context driven (often continental) networks, insider practices, and official regulation**. While the trading amounts are usually in the conventional segment of the real estate market⁸² (Centre for Affordable Housing Finance in Africa, 2022), the location of the properties and the continued growing demand for accommodation around the centre of Johannesburg makes them profitable investments, with a proportionally high yield. Access to this portfolio, and more so, to its operations, is however very context-specific, rules are different, and interests diverse. The trading process, with somehow highly individualised workings – plot by plot, or owner by owner – is best described as “a series of transactions that connect different economies and spaces to each other” (Roy, 2005) and produce a particular culture of exchange. The bungalow compound thus translates Roy’s early framing of informality as a mode of

⁸² The Centre for Affordable Housing Finance in Africa (2022) defines the housing market in the following segments: • **Entry market**—properties worth R300 000 or less, **Affordable market**—properties worth R300 000 -R600 000 **Conventional market**—properties worth R600 000 -R900 000, **High-end market**—properties worth R900 000 -R1.2 million, **Luxury market**—properties worth over R1.2 million .

urbanization that merges formal and non-formal processes by accommodating their co-existence.

In addition to the variety of accommodations offered, the compounding properties provide a spectrum of neighbourhood services – shops, hair treatment, childcare, car repairs, tailoring, entertainment, restaurants, cleaning services, satellite network installations, and herbal health treatment. The bungalow properties generate multiple other forms of wealth creation for more recipients than the landlord. While they contribute to the making of rather vibrant urban contexts, they often operate without legal paper permits and attain temporary legitimacy through scheduled arrangements with the official representative of the City via on-site, in-person, and ‘off the record’ transactions, as per verbal accounts of several business owners on the Case Study properties in both areas. They are not in hiding, nor are they truly unrecorded, yet they officially do not exist. They are ‘on a list’ that is connected to the City, but through an individual, not the system.

The existence of these very visible shadow spaces - a contemporary manifestation of Braudel’s “material civilization” (Braudel, 1981), indicates ‘frailty’ in the framework of the law. Again, returning to a point made in Chapter 4, Roy (2015) maintains that informality, while a system of deregulation, can be thought of as an alternative mode of regulation. This leads to a discussion about the nature of the problem, situated between what and how: is it about. *What* is regulated and *how*? and /or *how* is non-compliance dealt with? The problem space moves from the physical and/or programmatic breach of an existing regulation – from the architectural perspective an unauthorised typological change – to debatable ethics within authorities.

And then again, it is not known whether the city employee on the ground who takes matters into their own hands is doing the ‘shadow space maker’ a service when the bureaucratic apparatus has produced a backlog that carries the risk of increased ‘collection and recoveries’ by lenders if the income generating alterations wait for paper approval. The ‘solution’ on compound grounds,

anywhere on a spectrum between a win-win or lose-lose, presents itself as a dynamic problem that operates on the principle of **contingency** or slippage, as introduced in Chapter 4. As an approach to urban life, it operates quite successfully through social relations across space, governance, and finance when the city is not *working according to plan*. While, by definition, this is often treated as a form of crisis management and exception, it is, in fact, rather the norm in everyday life in the transforming bungalow without being overly dramatic. *Contingency* as a conceptual approach in compound practice enables productive versatility. It turns, the research argues, into an antonym of inefficiency, something the city might want to take into consideration in its attempt to remove and replace the existing fabric (see Chapter 1) or when actually dealing with this in regulation or macro-scale planning. The *doings* introduced in Chapter 6, as emerging categories, describe different ways in which the bungalow compounds prepare for, work through, and work with contingency.

7.3 From the Empirical to the Conceptual: Speculative Futures

7.3.1 Forms of Flexibility and Adaptability: New Typicalities, Complex Structures

The study suggests that the empirical findings, as a catalogue of possibilities, hold relevant concepts of development in the making. As ‘life after on (or in) what was before’ they deal with appropriation and adaptation as knowledge from the ground, imaginaries tested in the everyday – that in turn might be worthy of being appropriated in the architecture of future planning and urban accommodation, in these areas or similar applicable contexts.

What has been introduced in this study as *compound doings* – merging, re-scaling, enfolding, yarding, and sleeping – are forms of flexibility and adaptability that exceed the house as an ‘object’ and transcend the old social-spatial hierarchies on the plot to create alternative ways of arranging and sharing spaces. This profiles the bungalow compounds as architectures that “compounded” challenge the city in terms of its restructuring. The properties’ operations are addressing new forms

of production and institutional orders through modes of cultural and physical appropriation and often share wider economic interests. The question of type enters the realm of urban morphology, as a developmental strategy on private properties that is only very partially orchestrated by the public sector. The *doings* are thus descriptions of change as a process in formation and are an integral part of the specifics of how the properties tend to behave within the limits of the plot and beyond.

The analytical concept of this study aimed at visually deconstructing the bungalow plot turned compound/courtyard house into different components, trying to ‘unsee’ the house in the centre as the dominant ‘object’ and instead to understand more of the morphology’s workings. Following the claim that “there isn’t such thing as a building” (Duffy, 1990) the *shearing layers of change* (Brand, 1994; Duffy, 1990) offered a way how to approach the amended use of buildings over time systematically. A modified version of Brand’s pace layer concept, re-arranged into three sets of axonometries, illustrates the significant typological change in use and morphology across all case studies as a catalogue of emerging patterns. Considered a dynamic model, this works ‘vertically’ and ‘horizontally’ as organizational forms relative to space and time (Chora & Bunschoten, 2001) – either as a comparative series of the same across the samples or as components in relation to the single plot. The bungalow/compound evidence also implies some amendments in the change rate that determines the hierarchy of the layers in Brand’s proposition, which in turn has implications on the notion of contingency when strategically applied.

The analytical drawings recorded transformation from inside out (Fig 12) beginning with “*stuff on site makes space plan.*” The findings suggest that the *site* can behave as ephemeral as buildings, when the outline of the plot turns into the circumference of the ‘house.’ At the same time, the same property line remains inviolate as a legal entity. The convulsion of slow = persistence of site, and fast = change of space plan and arrangement of stuff, collides at the boundary and so changes its nature as a building element, from primarily excluding to potentially

accommodating. *Stuff*, **on the other hand**, can retain a status of permanence and serve as an evaluating device. While keeping its ability to move, it is simultaneously turned into a constant of the transforming bungalow properties. The bed, as the smallest common denominator, operates as the basic compound scale for measuring room sizes, densities, and financial profitability. It is also the valuable possession of every single proprietor and the centrepiece in each room called home.

A second focus was placed on “*the significance of small spaces*,” interstitial spaces that *serve*, usually in supporting roles when planning division, expurgation, but also connection of programme, and more importantly social relations (Chattopadhyay, 2022). The analysis picked up on the early narrative of the bungalow’s double life of *service*, oscillating between served and serving, creates a complex structure of people, spaces, and infrastructure. The findings have shown that while having started from a uniform set of strict principles regarding layout, purpose, and societal values – the likes of corridors, verandah, driveway, boundary wall have taken a key role in the transformation process to loosely fitting services, access, and sociality into unique compound configurations.

They are fragments that demonstrate how “soft can override hard,” socio-cultural practices manage to rearrange spatial orders and material values in their appropriation of physical space. In general, the samples displayed significantly more variety and versatility than designed propositions in the City’s envisioned future documentation. While this might be a general observation that applies to many self-built structures (Morton, 2019; Simone & Pieterse, 2017; Jenkins, 2013; Brand, 1994; Rapoport, 1969), it is important to note that the bungalow compounds, in their structural adaptability, operate on their own programmatic ‘bands’ that integrate small spaces, infrastructure and in parts, major building regulations.

Further findings of the space planning analysis indicate that the position of *services* can enhance the adaptable nature of the bungalow compound, and

equally constrain future flexibility of spaces. This is mostly concerning the connection to ground services like public water, and also, but less so, electricity as top down in installation. This refers to the most amended ‘rooms’ on the properties in size, position, ways of use, quantity, kitchen, and bathroom. In the context of the sites under investigation it is nowadays mostly not about the integration of new technologies (Brand, 1994), but an extension of the existing, due to increased demand.

The placement of a stove, for example, its use and maintenance, can indicate ways of socializing and cultural specificities of the current residents. When it moves, and /or the residents or users change, the context around the stove potentially adapts. Boundaries are loose, and change is frequent, as replacement through appliances or turning domestic space into public eatery. On the other side, the multiplication of bathrooms that are not connected to a corridor— or which even go as far as replacing the passage in the centre of the bungalow—severely limits optional future change, at least without considerable cost. This raises questions about possible saturation points of growth on the single property, and subsequently their longer-term developmental value. One of their current outstanding qualities is high versatility with low-cost alteration, as a form of yet unrecognized built environment efficiency. However, this might get lost when using turns more monofunctional, and space less adaptable.

Thirdly, the research investigated the most visible change, an outside space which developed a degree of urban interiority that mitigates public and private life: the skin of the structure ‘as-built’ as *envelope of the void*. The dilution of the bungalow’s dominance on the plot gave rise to the re-appearance of the yard as a dominant spatial entity, which eventually triggered the transition towards a type that is rather common on the African continent: the compound or courtyard house (Rapoport, 2007). The research showed that in the documentation of the bungalows, the history of the part of the plot, which is not built upon, began, and ended with the site plan, which, in more than one case, was inaccurate. Form and shape of the open spaces seemed merely a result of what has been constructed as

house, garage, shop, room. The investigation shows that the void, in many cases, is actually dimensioned, and laid out to fit purpose, or rather numerous purposes.

The loadbearing structure, usually the most significant and expertise demanding element of construction only plays a role in its 2nd purpose as skin. It has remained mostly unchanged, which indicates certain (healthy) limitations of the properties' ability, or willingness, to amend itself. The permanence of structure as a limitation to change could translate into a conceptual approach towards design processes, and their regulation, to be discussed in section 7.3.1.

7.3.2 From Convoluting Hybrids to Urban Bungalow Compounds: The Void as a Project

In the context of ongoing densification, growth is measured in rising numbers that one can count and inter-relate – of people, plots, houses, rooms, square metres of land, to name a few. In the axonometric anatomies of the case studies, the research has explored a variable that the bungalow compounds offer which is neither counted or valued as an independent 'element' nor even named for that matter – despite its significant role, across socio-cultural, economic, programmatic registers: *this is the void, the yard, the open space* on the properties.

Central to the groupings as part of the findings in Chapter 6, this section takes the discussion around the yard of the compound a step further and claims that it is a reversed version of the architectural understanding that Chapter 3 introduced as *practicing the project*. "Practising the project means to put forward something that does not exist yet" (Aureli, 2012). The yard obviously exists and has been constructed – as 'the other building' on the 459 sqm plot that is open to the sky. It does not exist – yet – as an architectural project, but as an idea, a concept, an urban element on private grounds, and as a drawing, on a legend or any other abstracted version of itself in the current discussion about the future of bungalow properties.

While flexibility and adaptability have been anchored on the plot through a layout of lines (grid) in the ground as introduced in Chapter 6, it is the yard as contingency space that absorbs the pressure, the shock, of the physical and programmatic (typological) change, more or different people, cars, chicken, perpetually. The void as a project transcends the thresholds between inside and outside and works its way across the house through the corridor and the verandah, to the boundary wall into the sidewalk. It negotiates transitions of privacy with the assistance of *small spaces*. In itself not a project of fragmentation, it will be considered as a project that accommodates fragmentation. It can be seen as a project that merges building typology with urban morphology, accommodating a fluctuating, yet rising number of residents.

A focus on the void as an integral part, element or component of the emergent situation might thus assist in guiding people's aspirations and make them work in the interests of the city, as opposed to trying to control what has proven to be challenging under the circumstances (CoJ, 2016). The void would thus act as part of an architecture of the built environment tissue at a mid-scale, between public and private, on the plot and as part of the urban fabric. The research finds that the compound void has a degree of porosity essentially required for its successful performance. In Johannesburg's town planning scheme this would be conventionally measured through zoning specifics – as a relation between percentage of plot coverage, density of dwelling units, and floor area ratio – which have a difficult time keeping up with ongoing, often small scale, changes, and exclusively deal with quantity, not quality (other than parking cars).

The research has attempted to address this gap by introducing emerging categories coined as *doings*. They describe operations and assist in revealing and evaluating the richness of the properties (that is, their *in-depth structure*) in relation to their complexity (*formal manipulation of type*) (Carl, 2011). Following this effort, the findings introduced the term 'eye-height porosity.' The term describes a situation when the boundary wall, as a *thickening edge on the other side of the street*, has turned into a façade as an urban narrative canvas, that, through inside out

openings, is accommodating services, offering private – public interactions, being actively responsive.

In the meantime, the case studies have demonstrated that it is the form, and purpose of the void that shapes and organizes the life on the properties, obviously in combination with what happens in the rooms around it. However, surrounded by a multitude of different structures from different times, the physical shape is often not easy to visualize as an entity. The project of the void deals with the idea of “formlessness” not as the absence of form but as an appreciation for ongoing activities that are enabled, by “which stability (such as it is) is maintained” (Jackson, 2014). As documented, the yard provides spaces for a multiplicity of uses, as well as a sort of independence through individual access to private rooms as rental units, parallel to socio-cultural interaction.

A number of current research studies (Biamah-Ofosu, et al., 2023; Jenkins & Mottelson, 2020; Morton, 2019; Williamson, 2014; Jenkins, 2013; Afram & Korboe, 2009; Osasona, 2007; Andersen, et al., 2006; Tipple, 2000) have looked at similar urban developments on the continent, confirming the historical and more recent relevance of yard life in the African city in the context of rapid urbanization, while also addressing challenges of recognition, and potential applications of these emerging spatial principles in everyday translations, as accepted built form or policies dealing with transformation. In Johannesburg there have also been attempts to address such issues, the latest being in the ongoing TOD Corridors, introduced in Chapter 2. However, the study argues that there is an inherent failure embedded in these in their attempt to 'clean up' and overdesign regulations for an architectural product that should be based on two key features.

Firstly, a compromised, conflictual, and prevailing clash between interests – economies, markets, city governance and management, cultures, people (as owners, residents, service providers), and infrastructures. Secondly, an existing ‘stock’ of proprieties that covers much, and more, of what the ‘ideal’ form of urban densification is expected to provide but doesn’t necessarily look like the

architectural/urban design visions. With the knowledge of the transformed bungalow plot recognized as a particular version of the ‘compound house’ and some validity as to an emerging category, design processes for lower-cost accommodation might be addressed more comprehensively, as suggested below.

7.4 Room for Improvement: Regulating Efficiencies

7.4.1 Dissolving Existing Incongruences: Guiding New Orders

The study started from empirical engagement with the properties studied in context, on a plot-by-plot basis, on a random selection with two defined areas of urban interest. The initially inductive aspect of the research made use of the knowledge embedded in the buildings, the spaces between them, and their transformation. The aim was to understand more about the social, economic and juridical entanglements of ‘the house’ over time, as accommodation of private lives, and as part of the city. While it has been hard not to notice, the change of the freestanding family home to a multi-unit compound / courtyard arrangement has remained somehow elusive, and unregistered.

It seemed important to provide ‘proof of life’ of their existence ‘as built’. As a prerequisite to argue for the legitimacy of the undocumented, and to underline their worthiness, the study developed drawings of the properties with nearly forensic detail, and analytical layers to represent the emerging typological change. As the subsequent more deductive case studies and their history have shown, these recordings deal, on multiple scales, with complex dynamics of recognition (Povinelli, 2011). Conceptually the research has merged two visual formats to record the situation on site. Both are common within the architecture / urban design profession and even the history of the bungalow: red line drawings and the pattern book. They equally deal with architecture as a product (Aureli, 2012) of transformation and transferability, within a rather formalized system of control, by the state and / or the market.

The first tracks change during construction and prepares the drawings **after** they are built, for official approval. The second is typified by catalogues of house plans and designs, very popular under the reign of King George and Queen Victoria of England, often for builders and clients to choose a design **before** the building was constructed, to then move ahead, often without an architect. The first format is about rules and regulations that concern structural safety and security, urban health, and connections to infrastructure, and also in the bungalow's early life embedded the physical, logistical, and aesthetical arrangements of racial segregation. The second format deals with the image of the house, as a desire to aspire to the projected lifestyle and the organization of life within, without connection to the site. It also addresses modes of popular production and replicability of design without architects and often thus simplified costing.

The findings have shown that the bungalow compounds now are in a deficit of authoritative approval – but potentially raw material as samples of popular production, and 1:1 visualizations of aspirations for an updated version of emerging patterns of urban life. In other words, the pattern book of possibilities is inverted into a catalogue of realities as-built solutions that respond to people's multiple aspirations and needs. This means, from the perspective of design research, there is empirical evidence of the knowledge embedded in the bungalow transformations as a valid contribution to the discourse around the design of urban accommodation provision and a conceptual understanding of the value of the urban compound as a transforming type – but normative references that could apply in a potential process of implementation are missing.

The implications here may be to turn to what Carl calls the “topography of praxis” (Carl, 2011). He describes it as “the structure of involvement with people and things that comprise urban praxis” (Carl, 2011), or typicalities, as embedded within constituencies – the particular culture of a place as the basis for bottom-up guidance as opposed to standard generalizations implemented from ‘above.’ In the case of the bungalow compounds in Yeoville and Rosettenville (and similar places like these two areas), this could result in taking advantage of the density of

ownership and start working plot by plot on guiding the diversity as embedded quality, and the transformation processes as forms of low-cost built environment efficiency- as the basis for maintaining and improving.

Such a “guidance” process would imply some form of technical/legal involvement to manage overall and assist in improving the product, directing the discussion towards a professional vacuum (gap) that has been detected in the study. The involvement of the professionals that usually prepare the making of built structures and sign off on them, responsible for their safe and adequate performance – such as architects and engineers – seem notably absent in the world of transforming bungalows. As are the city regulators and their service providers. The profession as a technical provider and city council as a regulating entity appear to lack the capacity to deal with either the administration of ‘life on the ground’ in the way both institutions have been doing it, ‘traditionally’ – or change the format of engagement from prescriptive to proscriptive (Tipple, 2000).

Without wanting to turn to a detailed discussion on governance and participation, which has not been a focus of this thesis, it would certainly be advisable to treat the knowledge embedded in the transforming bungalow properties as *open source*, in some organized, orchestrated, or even curated way. This would assist in enabling transformation and a continued provision of housing (and other service) delivery from the small-scale private sector in a context where public resources are scarce.

7.4.2 Unexpected Collaborations

The study of the transformed bungalow in the context of urban densification comes at a time when its existence faces major challenges but also explicit opportunities. In the light of manifestations of both urban management and housing crisis in the inner city (Zack et al., 2010), there is a high demand for affordable accommodation, yet little knowledge about space-sharing practices on private properties (Charlton, 2019). The mere recognition of the ‘bungalow compound’ as a unit in official documentation could support the understanding of

their potential within the urban context. But is this enough? Or how would we get there? What does a process of recognition entail that actually works in practice and not only on paper? We should recall that we are dealing with an “unsettling hybrid structure [...] a juridical-economic-moral entity that, as *property*, has material (as asset), political (as dominium), and symbolic (as shelter) value” (Chakravartty & Silva, 2013:2). In the case of the bungalow compound, this is a ‘house’ that currently works in the shadows – and not too badly for the many involved in its manoeuvres.

In coming close to an ending, the question that hovers over this work – as in the life of ‘the house’ – is: what needs to be done? The research has identified what has been termed compound *doings* as the main drivers for compound operations. As some sort of hypothetical question turning recommendation, what about considering the compound *doings* not solely as drivers for **what** happens within the transformation of the properties but equally as ways to deal with these in a more appropriate, supportive way – from a professional, from an institutional, and from a knowledge perspective. This thesis potentially leads to some form of “knowledge transfer” – from the bungalow/compounds and their actors – to the professionals, regulators, financiers, and urban modellers. This could then, in turn, modify the action of these so-called “higher order” entities engaging with the emerging and positive values identified, while mitigating the negative – making all of this more visible.

The curation of knowledges that are embedded in the transforming bungalow compounds addresses the need for the *merging* of disciplines and working in inter-disciplinary or trans-disciplinary ways. Architecture, planning, and urban design are all shifting practices that have not found their role in areas under investigation or similar neighbourhoods. Their active involvement is an exception rather than the norm. And these are only some of the entities that potentially engage with the dynamic of these areas – as shown in the research: for example, financial, legal, and regulatory bodies are already involved in rather invisible ways.

In terms of architecture and urban design, a significant number of the private properties with the right to exclude are opening up to the public, in one or another way, and so their development is of public interest. As current and developing urban forms they require different forms of management, forms which can work on contingencies as ‘spaces of negotiation.’ The study has demonstrated that there is some need to explore (and agree) on what is measurable and what is accounted for, based on how the spaces are used and not necessarily how they are currently assumed to be used. This means rethinking *scale* and *size*, of units, ‘families,’ architectural elements, rethinking standards (or requirements), rethinking policy, rethinking communication of regulations (or recommendations) and rethinking the recording of their applications. All of this needs to be developed on practical terms, involving every discipline and user to make it work. For that to happen, even in parts, a lot of what is considered ‘professional practice’ might have to be unlearned because it simply is not applicable in the context at stake. If we can agree on considering that the bungalow / compound properties are a success of sorts after all, they have been supplying more housing units than the government managed to provide in these areas seen as priority for urban change, and they cater for a more multicultural and multinational clientele – we need to relook who ‘made’ them and revisit the question of expertise, and then, the education of all actors.

This research started, before it began, during two City Studios that were organized by the School of Architecture & Planning of Wits University, as introduced in Chapter 1. While facing their own challenges for different reasons, it was an opportunity to experience the areas from the inside out, and streetwise, over a significant amount of time. It was the unexpected collaborations with many different characters, and “working across [that] difference” (Tsing, 2015) that framed the reading of ‘the compound house,’ and the appreciation of its diverse abilities.

7.5 Limitations

Comments on the limitations of the study are structured around the issue of size, scale, (non) scalability, and access. This is in relation to the number of case studies and the decision to explore their layout/ set up in as much detail as possible. The amount of accessible detail differed plot by plot, so the overall breadth and depth made sure the data collection remains illustrative of the context under investigation. The overall number of properties is covering a wide diversity of layouts, but does not deal for the most part, with vertical extensions. This phenomenon was rather underdeveloped in the beginning of the study but seems to have picked up during the Covid 19 lockdown from 2020 to 2022.

It is an area that needs to be investigated further, as structural issues will be more relevant in transformations. Of course, the nature of sampling means that other different bungalow transformations may well exist. While the bungalow started as a design that was replicated across the city (and the country), and most properties are on a similar size of land, it might have been considered as a ‘scalable project’ – transferable without changing the framing. The research about the transforming compounds, however, has broadened to include different information in different situations in order to reconstruct a fuller picture. But it was still important to understand the properties and their individual narratives. This renders the research, to a certain extent, non-scalable in output, but not so in compositional method.

In addition, due to the private nature of the properties as the home space of the residents, access was not always possible, nor was the taking of photographs. The study then reverted to sketches and verbal descriptions. Also, some properties have had an extremely high change rate. This means that the situation as presented in the case studies doubtless, will probably have changed during the study – but that is inevitable in rapidly transforming urban situations such as encountered in many countries. While the location of the properties in relation to the greater suburbs might have given more insight to particular findings, the ethical clearance did exclude this detail.

7.6 Summary and Conclusion

The reading of the transformed bungalow compound, as typological evidence for socio-cultural change and as a form for urban densification in the contemporary Southern African city, comes when its existence faces significant challenges and explicit opportunities. The research has certainly not aimed at a “celebration of colonial architecture with large verandahs and pressed steel ceilings [or accepting] domestic architecture that reinforces dominant nuclear family living” (Parnell, 1995:15), nor is it romanticizing the non-formal, for its resilient and dynamic interventions, without acknowledging its infra-structural limitations. In the light of a housing policy that was declared unconstitutional in 2011⁸³ and manifestations of both urban management and housing crisis in the inner city (Zack *et al.*, 2010), there is a high demand for cheap accommodation, yet little knowledge about space sharing practices on private properties (Charlton, 2019) has been researched and documented.

The detection of the bungalow compound and its elements aims to close this professional vacuum using architectural and urban design tools in close connection with local skills and material resources. This mainly focuses on the City of Johannesburg’s ‘Corridors of Freedom’ initiative. Their conceptual framework for the densification of existing residential areas along main transport arteries is largely built around the transformation and growth of the single dwelling property (see Figure 3) and thus through private finance. With major parts of Rosettenville and Yeoville being earmarked as ‘appropriate areas for densification’ (JDA, 2014), the bungalow has the opportunity to officially turn into a pilot for a new form of vernacular architecture: urban compounds, (partly) self-produced, socially efficient and economically supportive. Its owner would take over the small-scale private developer role with a multi-ethnic African clientele to supply. The relevance of design will depend on its capacity to understand and translate socio-cultural values into form and process. The findings

⁸³ A press release from the Socio Economic Rights Institute (SERI) and the Centre for Applied Legal Studies (CALS) reported on 1 December 2011 on a Constitutional Court ruling the previous day, which ordered the City of Johannesburg to find alternative accommodation for residents being evicted from a property in the inner city.

and recommendations imply the need of some form of technical and legal involvement from the professions and potentially the City to assist in improving and managing the compound development. The incorporation of the bungalow knowledges into urban and town planning policies would require further study as a way forward.

Some Final Remarks

Thesis writing is inevitably quite impersonalised, yet it is also a personal journey – often long and even convoluted. In concluding here, I take the opportunity to reflect briefly on the research in a personal way. I first had a 'close encounter' with Yeoville, and then Rosettenville, in 2010, when we ran a three-year City Studio for planning and architecture students in the School – although I had worked and had personal experience of similar areas well before. I became intrigued by the nature of the dynamic changes and the initial insights with the students into the social and cultural drivers of these.

The idea to take this preliminary (and quite 'light-touch') research further was compounded for me by my experience of other forms of co-housing, especially those emerging in African cities – which I had read about in other research, visited or worked on as an imaginary set up in prior postgraduate studies. I became even more convinced that these two neighbourhoods needed serious study when the census results came out demonstrating such abrupt and almost total socio-cultural change in demographics. As my initial research proposal demonstrates, I had a theoretical background in typology research, as well as a strong interest in the idea of design research as this was emerging in academia. In the years that followed the acceptance of my research proposal (June 2017), I had the opportunity to run an Architecture Honours teaching module entitled Advanced Design Studio – which was paired with another on an Architecture Research Project.

The then Head of School, and supervisor of this PhD, encouraged several staff on the former module to use a three-year stint teaching this as the basis for their own

research development – which was an opportunity for me to engage with research about, for and through research together with students. This helped my focus on the bungalows considerably, and I led the module into ever more complex territory. In fact – while researching the bungalows and their evolution as compounds – could seem like a simple morphological analysis, my parallel reading in theory and design research praxis helped widen the scope significantly.

Inevitably the pandemic of 2020 affected all the research, particularly on ground work – and a number of other issues at times also slowed this up – but it kept evolving as indeed what ‘seems simple’ is unpeeled in deeper ‘layer’ to reveal the inherent complexity. Part of this revealed complexity surprised me – for instance the way the City ‘engages’ by not dealing with these changes in a formal way, ‘unseeing’ much of the information they have at hand, and the way the private sector (especially banks) also ‘engage’ on a continuous basis despite a general perception that they do not – not to mention the fact that many of the changes are ‘close to’ what regulations might aspire to instruct.

This bolstered my intention to both query the concepts of ‘informality’ and even ‘slum’ as applied to the areas – and the idea that these areas needed to be changed from outside – when in fact the research was continuously demonstrating that they were already providing the essence of what the City and profession might aspire to regulate – but emerging from the inside, ever so incomplete and through non-formal mechanisms. The research journey has been challenging for many reasons but also of enormous personal interest, life in the ‘house on the plot’ never ceased to surprise, resisting any conventional labelling, continuously amending itself – which kept me going.

I hope I have been able to inject some of my enthusiasm, and respect, for these emerging new (African) urban compound forms with existing urban fabric in the thesis, and that my research and its findings could be of some relevance to not only further teaching of professionals but reconsideration of planning and other city management approaches. This could expand the opportunities of, and

possible application of design-led research in other aspects of African urbanity like the design of streets as most common public spaces, and infrastructural systems and their maintenance and services as part of the design processes. Ultimately, I believe that many of those who shared their knowledge(s) with me could benefit from some form of continued engagement – and possibly assistance in the recognition and consolidation of their development successes – and I would like to see how I can personally advance this within my academic role and practice-oriented research.

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APPENDICES

Appendix A List of Case Studies, Interview List and Questions

Nr	Suburb	Begin Fieldwork	Name
1	Yeoville	2018	The roving kitchen
2	Yeoville	2018	Cash cow
3	Yeoville	2018	Ten doors
4	Yeoville	2018	The tailor's house
5	Yeoville	2018	Little angels, zero beds
6	Yeoville	2018	High street camouflage
7	Yeoville	2020	The widow's house
8	Yeoville	2020	The kingpin's house
9	Bellevue	2020	Chicken house
10	Yeoville	2020	Four room potential
11	Yeoville	2020	Phantom verandah
12	Yeoville	2020	Mother's visits, walk-ins and hourlies
13	Bellevue-East	2020	Rooms for trees
14	Bellevue-East	2020	#MakeRoomForHer
15	Bellevue-East	2020	Inside business
16	Bellevue-East	2020	United back
17	Yeoville	2020	The parents' home
18	Turffontein, Rosettenville	2019	It's a lifestyle, or it isn't (anymore)
19	Turffontein, Rosettenville	2019	Corner community, divided
20	Turffontein, Rosettenville	2019	Family business, wrapped up
21	Turffontein, Rosettenville	2019	My brother's keeper
22	Regent Park Estate, Rosettenville	2019	Structures of Believe
23	Kenilworth, Rosettenville	2020	Cottages, bedrooms and a yard
24	Kenilworth, Rosettenville	2020	Cottages, bedrooms and a yard
25	Kenilworth, Rosettenville	2019	Double Up
26	Kenilworth, Rosettenville	2020	Half a house
27	Kenilworth, Rosettenville	2019	Nothing without a roof
28	Turffontein Rosettenville	2019	Living in ruins
29	Kenilworth, Rosettenville	2019	2nd income
30	Rosettenville	2020	Who's Heritage
31	Rosettenville	2020	Half stand full house
32	Rosettenville	2020	Auto electrical
33	Roettenville Ext	2020	Nothing to see
34	Rosettenville	2020	Ann's Day Care
35	Rosettenville	2020	Zigzag boundary
36	Rosettenville	2020	House G, dizygotic twinning

Greater Yeoville: Yeoville, Bellevue, Bellvue-East

Greater Rosettenville: Rosettenville, Kenilworth, Turffontein, Regent Park Estate, Rosettenville Ext.

Nr	Suburb	Time	Interviews, conversations
1	Yeoville	2018-2020	Owners, tenants
2	Yeoville	2018-2020	Tenants
3	Yeoville	2018-2020	Tenants
4	Yeoville	2018	Owner
5	Yeoville	2018	Owner
6	Yeoville	2018-2020	Employee, tenants
7	Yeoville	2020	Owner
8	Yeoville	2020	Real estate agent
9	Bellevue	2020	Tenant
10	Yeoville	2020	Tenant, care taker
11	Yeoville	2020	Tenant, care taker
12	Yeoville	2020	Owner, manager
13	Bellevue-East	2020	Neighbour
14	Bellevue-East	2020	Student of programme at facility
15	Bellevue-East	2020	No interview
16	Bellevue-East	2020	Estate Agent
17	Yeoville	2020	Owner
18	Turffontein, Rosettenville	2019	Owner
19	Turffontein, Rosettenville	2019-2020	Owner (family member), tenant
20	Turffontein, Rosettenville	2019-2020	Owner
21	Turffontein, Rosettenville	2019	Brother of owner
22	Regent Park Estate, Rosettenville	2019	Owner
23	Kenilworth, Rosettenville	2020	Manager, tenants
24	Kenilworth, Rosettenville	2020	Manager, tenants
25	Kenilworth, Rosettenville	2019-2020	Tenant
26	Kenilworth, Rosettenville	2020	Owner (manager)
27	Kenilworth, Rosettenville	2019	Estate Agent
28	Turffontein Rosettenville	2019	Neighbour
29	Kenilworth, Rosettenville	2019	Owner
30	Rosettenville	2020	No interview
31	Rosettenville	2020	Estate Agent
32	Rosettenville	2020	Estate Agent
33	Rosettenville Ext	2020	No interview
34	Rosettenville	2020	Estate Agent
35	Rosettenville	2020	Estate Agent
36	Rosettenville	2020	Estate Agent, shop manager

Greater Yeoville: Yeoville, Bellevue, Bellevue-East

Greater Rosettenville: Rosettenville, Kenilworth, Turffontein, Regent Park Estate, Rosettenville Ext.

Brief description of interview tool (semi structured): questionnaire, please see below. Many of the questions have not been answered in detail, and no resident or owner did reply to all.

- **Interview Guide_Residents**
- **Personal information**
- Where are you from originally?
- When did you move do this place/ Yeoville/ Rosettenville? With whom? When?
- How did you know about this property/ room in Yeoville/ Rosettenville?
- How old are you?
- Do you work? As what?
- **Living in the Bungalow Compound**
- What type of space do you live in?
- How is it furnished?
- What do you use your space for?
- How long have you been living on the property?
- Do you pay rent? How much? To whom?
- Do you like your room?
- What would you change in your room if you could?
- How many people live with you?
- Are these people - family? friends?
- Do you know most/all people on the property? How?
- What spaces do you share with other residents?
- Where do you cook?
- Where do you eat?
- Where do you store your food?
- Where do you wash (personal hygiene)?
- With whom do you share the toilet?
- Where do you wash (laundry)?
- Where do you dry laundry?
- Would you mind showing me the spaces?

- How do you maintain privacy?
- How do you secure your possessions?
- Who is cleaning the shared spaces?
- Do you feel safe inside the property?
- Are there rules you have to follow as to how to behave on the property? If so, who makes those rules? Who told you about them? What happens if you ignore them?
- Where do you meet visitors? Does anyone control the access to the property?
- Do you use the garden/ open space? How?
- Is there a business run from the property?
- Who maintains the property? What happens if there is a problem to report?
- What would you change inside the property if you could? What do you like/ dislike? Why?
- **Living in the neighborhood**
- Where do you go outside the property? What is a typical week in Yeoville/ Rosettenville for you?
- Do you shop in the neighborhood? Where?
- Do you meet friends in the neighborhood? Where?
- Do you feel safe in the neighborhood?
- What do you like/ dislike about the neighborhood?
- If you moved to another place in the neighborhood or elsewhere, where to and what place would you be looking for?
- Where have you lived before?
- **Interview Guide_Owners**
- **Personal information**
- Where are you from originally?
- When did you buy do this place in Yeoville/ Rosettenville? Why?
- How did you know about this property in Yeoville/ Rosettenville?
- Do you live on the property?
- How old are you?
- Do you work? As what?
- **Owning in the Bungalow Compound**

- How many people live in your building? How do you choose tenants?
- How did the property look when you bought it?
- What alterations did you make? Why?
- Did you need building permission? Did you get building permission?
- If so, who made the council submission? Who made the plans?
- How much did you invest in the property since you bought it? Purchase costs and possible alternations?
- How is the profit/ expense margin?
- How would you extend the property if you could?
- How would you feel about extending vertically?
- Where do your tenants cook?
- Where do your tenants wash (personal hygiene)?
- How do you deal with safety inside the property?
- Are there rules your tenants have to follow as to how to behave on the property? What happens if they ignore them? Do you have a manager?
- Does anyone control the access to the property? Are visitors allowed?
- How is the open space used?
- Is there a business run from the property?
- How do you maintain the property? What happens if there is a problem to report?
- What would you change inside the property if you could? What do you like/ dislike? Why?

Appendix B Case Studies Tabled History of Transactions

Case Studies #1- #36, Transactional history of sales and finances, based on Property Reports from Property24, <https://www.property24.com/purchase-property-report> and Lightstone, <https://lightstone.co.za/Residential-Property-Information>, (author's own, 2023)

22.10.2023

Urban Compounds _ Sale History _ Capital Gains and Losses

#1				
Yeoville	Year sale			
name: The roving kitchen	2012			
Sale Price	800000			
Actual gain in sale				
%				
Equivalent purchase / sale year w/ inflation				
Equivalent 2023	1417559			
Municipal evaluation 1.7.2018	828000			
Municipal evaluation 1.7.2023 under evaluatic	947000			

#2				
Yeoville	Year sale	Year sale	Year sale	Year sale
name: Cash Cow	1993	2003	2010	2010
Sale Price	180000	130500	300000	450000
Actual gain in sale		-49500	169500	150000
%		73%	230%	150%
Equivalent purchase / sale year w/ inflation		359864	177473	300000
Equivalent 2023	965477	348776	589689	884533
Municipal evaluation 1.7.2018	767000			
Municipal evaluation 1.7.2023 under evaluatic	841000			

#3				
Yeoville	Year sale	Year sale	Year sale	Year sale
name: Ten doors _ outside in	1996	2003	2005	2012
Sale Price	125000	160000	280000	690000
Actual gain in sale		35000	120000	410000
%		128%	175%	146%
Equivalent purchase / sale year w/ inflation		196618	162107	418572
Equivalent 2023	527783	429236	741156	1044109
Municipal evaluation 1.7.2018	771000			
Municipal evaluation 1.7.2023 under evaluatic	887000			

#4				
Yeoville	Year sale			
name: The tailor's house, moving	2001			
Sale Price	110000			
Actual gain in sale				
%				
Equivalent purchase / sale year w/ inflation				
Equivalent 2023	341357			
Municipal evaluation 1.7.2018	764000			
Municipal evaluation 1.7.2023 under evaluatic	828000			

#5				
Yeoville	Year sale	Year sale		
name: Little angels, zero beds	2000	2009		
Sale Price	135000	720000		
Actual gain in sale		585000		
%		433%		
Equivalent purchase / sale year w/ inflation		216517		
Equivalent 2023	443232	1437960		

Municipal evaluation 1.7.2018	745000	
Municipal evaluation 1.7.2023 under evaluatic	854000	

#6				
Yeoville	Year sale	Year sale	Year sale	Year sale
name: High street camouflage	1976	2002	2008	2007
Sale Price	0	0	0	450000
Actual gain in sale	Estate	Estate	Estate claimed back	450000
%				
Equivalent purchase / sale year w/ inflation				
Equivalent 2023		1087303		1087303
Municipal evaluation 1.7.2018	950000			
Municipal evaluation 1.7.2023 under evaluatic	956000			

#7		
Yeoville	Year sale	Year sale
name: The Widow's House	1994	1998
Sale Price	165000	138000
Actual gain in sale		-27000
%		84%
Equivalent purchase / sale year w/ inflation		223446
Equivalent 2023	813042	502133
Municipal evaluation 1.7.2018	949000	
Municipal evaluation 1.7.2023 under evaluatic	837000	

#8				
Yeoville	Year sale	Year sale	Year sale	Year sale
name: The Kingpin's house	1983	2013	2013	2020
Sale Price	0	675000	800000	510000
Actual gain in sale		675000	125000	-290000
%			119%	64%
Equivalent purchase / sale year w/ inflation			675000	1117503
Equivalent 2023		1130663	1340450	611562
Municipal evaluation 1.7.2018	950000			
Municipal evaluation 1.7.2023 under evaluatic	956000		seller loss	buyer bargain

#9			
Yeoville	Year sale	Year sale	Year sale
name: Chicken house	1992	2006	2008
Sale Price	130000	170000	450000
Actual gain in sale		40000	280000
%			265%
Equivalent purchase / sale year w/ inflation		298401	198687
Equivalent 2023	765597	436162	987850
Municipal evaluation 1.7.2018	570000		
Municipal evaluation 1.7.2023 under evaluatic	542000		

#10				
Yeoville	Year sale	Year sale	Year sale	Year sale
name: Four room potential	2005	2007	2016	2020
Sale Price	150000	500000	850000	900000
Actual gain in sale		350000	350000	50000
%		233%	170%	106%
Equivalent purchase / sale year w/ inflation		164433	852843	1004186
Equivalent 2023	396787	1206532	1202509	1077746
Municipal evaluation 1.7.2018	869000			
Municipal evaluation 1.7.2023 under evaluatic	759000			

#11				
Yeoville	Year sale	Year sale	Year sale	Year sale
name: Phantom verandah		2007	2016	2020
Sale Price		540000	860000	900000
Actual gain in sale			320000	40000
%			159%	105%
Equivalent purchase / sale year w/ inflation			921071	1016000
Equivalent 2023		1303225	1216815	1077746
Municipal evaluation 1.7.2018	1121000			
Municipal evaluation 1.7.2023 under evaluatio	969000			

#12			
Yeoville	Year sale	Year sale	
name: Mother's Visits, walk ins and hourl	1999	2021	
Sale Price	105000	930000	
Actual gain in sale		825000	
%		886%	
Equivalent purchase / sale year w/ inflation		316861	
Equivalent 2023	363212		
Municipal evaluation 1.7.2018	1094000		
Municipal evaluation 1.7.2023 under evaluatio	941000	1066040	

#13			
Bellevue East	Year sale	Year sale	Year sale
name: Rooms for trees			
	1997	2007	2008
Sale Price	0	485000	600000
Actual gain in sale		485000	115000
%			124%
Equivalent purchase / sale year w/ inflation			533861
Equivalent 2023		1170643	1315670
Municipal evaluation 1.7.2018	882000		
Municipal evaluation 1.7.2023 under evaluatio	874000		

#14		
Bellevue East	Year sale	
name: #MakeRoomForHer		
	2001	
Sale Price	100000	not bonded
Actual gain in sale		
%		
Equivalent purchase / sale year w/ inflation		
Equivalent 2023		
Municipal evaluation 1.7.2018	882000	
Municipal evaluation 1.7.2023 under evaluatio	874000	

#15				
Bellevue East	Year sale	Year sale	Year sale	
name: Inside business				
	1999	1999	2007	2008
Sale Price	1200	12000	14000	20000
Actual gain in sale		11900	2000	6000
%		12000%	117%	143%
Equivalent purchase / sale year w/ inflation			17178	15410
Equivalent 2023	352	41469	33796	43861
Municipal evaluation 1.7.2018	988000			
Municipal evaluation 1.7.2023 under evaluatio	708000			

#16			
Bellevue East	Year sale	Year sale	Year sale
name: United back	1969	2016	2022
Sale Price	0	650000	900000
Actual gain in sale		650000	250000
%			138%
Equivalent purchase / sale year w/ inflation			859000
Equivalent 2023		919000	962000
Municipal evaluation 1.7.2018	813000		
Municipal evaluation 1.7.2023 under evaluatic	930000		

#17		
Yeoville	Year sale	Year sale
name: The parents' home, 2nd gen black	1998	2023
Sale Price	143	estate
Actual gain in sale		
%		
Equivalent purchase / sale year w/ inflation		
Equivalent 2023		
Municipal evaluation 1.7.2018	1051000	
Municipal evaluation 1.7.2023 under evaluatic	858000	

#18			
Yeoville	Year sale	Year sale	Year sale
name: It's a lifestyle, or it isn't (anymore)	2001	2013	2013
Sale Price	205000	400000	580000
Actual gain in sale		195000	180000
%		195%	145%
Equivalent purchase / sale year w/ inflation		380210	400000
Equivalent 2023	636873	669759	971151
Municipal evaluation 1.7.2018	745000		
Municipal evaluation 1.7.2023 under evaluatic	1139000		

#19						
Turffontein	Year sale	Year sale	Year sale	Year sale	Year sale	Year sale
name: Corner community, divided	1993	1993	1996	2000	2003	2003
Sale Price	107	85	93	46000	75000	135000
Actual gain in sale		-22	8	45907	29000	60000
%		79%	109%	49462%	163%	180%
Equivalent purchase / sale year w/ inflation		107	108	119	107	108
Equivalent 2023	574	456	392	152000	202727	364910
Municipal evaluation 1.7.2018	637000					
Municipal evaluation 1.7.2023 under evaluatic	1060000					

#20			
Turffontein	Year sale	Year sale	Year sale
name: Family business, wrapped up	1984	2000	2018
Sale Price	0	180000	1000000
Actual gain in sale		180000	820000
%			556%
Equivalent purchase / sale year w/ inflation			458697
Equivalent 2023		591286	1289053
Municipal evaluation 1.7.2018	1060000		
Municipal evaluation 1.7.2023 under evaluatic	2599000		

#21 My brother's keeper			
Turffontein	Year sale	Year sale	Year sale

name: My brother's keeper	2006	2011	2016
Sale Price	261000	640000	890000
Actual gain in sale		379000	250000
%		245%	139%
Equivalent purchase / sale year w/ inflation		347240	400000
Equivalent 2023	581491	669759	971151
Municipal evaluation 1.7.2018	800000		
Municipal evaluation 1.7.2023 under evaluatic	1030000		

#22			
Regent park	Year sale	Year sale	Year sale
name: Structures of Believe	2017	2017	2021
Sale Price	520000	870000	1000000
Actual gain in sale		350000	130000
%		1,67307692	1,14942529
Equivalent purchase / sale year w/ inflation		520000	1022219
Equivalent 2023	700770	1172442	1146958
Municipal evaluation 1.7.2018	798000		
Municipal evaluation 1.7.2023 under evaluatic	1151000		auktion

#23&24			
Kenilworth	Year sale	Year sale	Year sale*
name: Cottages, bedrooms and a yard	2004	2015	2019
Sale Price	227000	800000	850000
Actual gain in sale		573000	50000
%		352%	106%
Equivalent purchase / sale year w/ inflation		406490	975897
Equivalent 2023	613299	1207014	1051300
Municipal evaluation 1.7.2018	796000		
Municipal evaluation 1.7.2023 under evaluatic	1090000		one plot/half site sold

#25			
Kenilworth	Year sale	Year sale	
name: Double Up	1998	2013	
Sale Price	330	840000	
Actual gain in sale		839670	
%		2545,45455	
Equivalent purchase / sale year w/ inflation		520000	
Equivalent 2023	700770	1172442	
Municipal evaluation 1.7.2018	1250000		
Municipal evaluation 1.7.2023 under evaluatic	1500000		

#26			
Kenilworth	Year sale	Year sale	Year sale
name: Half a house	2006	2012	2012
Sale Price	550000	411000	600000
Actual gain in sale		-139000	189000
%		75%	146%
Equivalent purchase / sale year w/ inflation		796362	411000
Equivalent 2023	1411113	728271	1063169
Municipal evaluation 1.7.2018	905000		
Municipal evaluation 1.7.2023 under evaluatic	1120000	auktion	

#27			
Kenilworth	Year sale	Year sale	Year sale
name: Nothing without a roof	2005	2019	2021
Sale Price	260000	450000	1550000

name: My brother's keeper	2006	2011	2016
Sale Price	261000	640000	890000
Actual gain in sale		379000	250000
%		245%	139%
Equivalent purchase / sale year w/ inflation		347240	400000
Equivalent 2023	581491	669759	971151
Municipal evaluation 1.7.2018	800000		
Municipal evaluation 1.7.2023 under evaluatic	1030000		

#22			
Regent park	Year sale	Year sale	Year sale
name: Structures of Believe	2017	2017	2021
Sale Price	520000	870000	1000000
Actual gain in sale		350000	130000
%		1,67307692	1,14942529
Equivalent purchase / sale year w/ inflation		520000	1022219
Equivalent 2023	700770	1172442	1146958
Municipal evaluation 1.7.2018	798000		
Municipal evaluation 1.7.2023 under evaluatic	1151000		auktion

#23&24			
Kenilworth	Year sale	Year sale	Year sale*
name: Cottages, bedrooms and a yard	2004	2015	2019
Sale Price	227000	800000	850000
Actual gain in sale		573000	50000
%		352%	106%
Equivalent purchase / sale year w/ inflation		406490	975897
Equivalent 2023	613299	1207014	1051300
Municipal evaluation 1.7.2018	796000		
Municipal evaluation 1.7.2023 under evaluatic	1090000		one plot/half site sold

#25		
Kenilworth	Year sale	Year sale
name: Double Up	1998	2013
Sale Price	330	840000
Actual gain in sale		839670
%		2545,45455
Equivalent purchase / sale year w/ inflation		520000
Equivalent 2023	700770	1172442
Municipal evaluation 1.7.2018	1250000	
Municipal evaluation 1.7.2023 under evaluatic	1500000	

#26			
Kenilworth	Year sale	Year sale	Year sale
name: Half a house	2006	2012	2012
Sale Price	550000	411000	600000
Actual gain in sale		-139000	189000
%		75%	146%
Equivalent purchase / sale year w/ inflation		796362	411000
Equivalent 2023	1411113	728271	1063169
Municipal evaluation 1.7.2018	905000		
Municipal evaluation 1.7.2023 under evaluatic	1120000	auktion	

#27			
Kenilworth	Year sale	Year sale	Year sale
name: Nothing without a roof	2005	2019	2021
Sale Price	260000	450000	1550000

Actual gain in sale		190000	1100000
%		173%	344%
Equivalent purchase / sale year w/ inflation		556473	485863
Equivalent 2023	688711	556935	1776734
Municipal evaluation 1.7.2018	791000		
Municipal evaluation 1.7.2023 under evaluatic	1100000		

#28			
Kennilworth	Year sale	Year sale	Year sale
name: Living in ruins	2004	2006	2007
Sale Price	265000	356000	603000
Actual gain in sale		91000	247000
%		134%	169%
Equivalent purchase / sale year w/ inflation		279240	377992
Equivalent 2023	716436	913375	1457078
Municipal evaluation 1.7.2018	943000		
Municipal evaluation 1.7.2023 under evaluatic	1105000		auktion

#29			
Kennilworth	Year sale	Year sale	Year sale
name: 2nd income	1994	2016	2020
Sale Price	96000	600000	1100000
Actual gain in sale		504000	500000
%		625%	183%
Equivalent purchase / sale year w/ inflation		333891	708837
Equivalent 2023	473010	849997	1318711
Municipal evaluation 1.7.2018	637000		
Municipal evaluation 1.7.2023 under evaluatic	860000		

#30			
Rosettenville	Year sale	Year sale	Year sale
name: Who's Heritage	2000	2000	2004
Sale Price	55000	55000	180000
Actual gain in sale		0	125000
%		100%	327%
Equivalent purchase / sale year w/ inflation		55000	66805
Equivalent 2023	180611	180611	1776734
Municipal evaluation 1.7.2018	791000		
Municipal evaluation 1.7.2023 under evaluatic	1100000		

#31 Half stand full house				
Rosettenville	Year sale	Year sale	Year sale*	Year sale
name: half stand full house	1993	1998	2020	2023
Sale Price	120	160	1650000	
Actual gain in sale		40	1649840	
%		1,333333333	10312,5	
Equivalent purchase / sale year w/ inflation		152		
Equivalent 2023	643	675	1977548	
Municipal evaluation 1.7.2018	613000			
Municipal evaluation 1.7.2023 under evaluatic	980000			on auction

#32			
Rosettenville	Year sale	Year sale	Year sale
name: Auto electrical	2007	2020	2020
Sale Price	550000	880000	1150000
Actual gain in sale		330000	270000
%		160%	131%

Equivalent purchase / sale year w/ inflation		1108300	880000
Equivalent 2023	1329010	1055245	1379013
Municipal evaluation 1.7.2018	724000		
Municipal evaluation 1.7.2023 under evaluatic	920000		
#33			
Rosettenville	Year sale	Year sale	Year sale
name: Nothing to see	2004	2007	2014
pro	270000	263000	480000
Actual gain in sale		-7000	217000
%		0,97407407	1,82509506
Equivalent purchase / sale year w/ inflation		302085	402651
Equivalent 2023	729953	635508	757588
Municipal evaluation 1.7.2018	500000		
Municipal evaluation 1.7.2023 under evaluatic	750000		

#34			
Kennilworth	Year sale	Year sale	
name: Ann's Day Care	1997	2002	
Sale Price	125000	175000	
Actual gain in sale		50000	
%		140%	
Equivalent purchase / sale year w/ inflation		171321	
Equivalent 2023	486092	496528	
Municipal evaluation 1.7.2018	681000		
Municipal evaluation 1.7.2023 under evaluatic	980000		

#35			
Kennilworth	Year sale	Year sale	Year sale
name: Zigzag boundary	2012	2020	2022
Sale Price	400000	425000	549710
Actual gain in sale		25000	124710
%		106%	129%
Equivalent purchase / sale year w/ inflation		591072	588679
Equivalent 2023	708779	556935	
Municipal evaluation 1.7.2018	467000		
Municipal evaluation 1.7.2023 under evaluatic	614000		

#36			
Rosettenville	Year sale	Year sale	Year sale
name House G, dizygotic twinning	1996	2020	
Sale Price	160000	825000	
Actual gain in sale		665000	
%		516%	
Equivalent purchase / sale year w/ inflation		563480	
Equivalent 2023	675693	989292	
Municipal evaluation 1.7.2018	785000		
Municipal evaluation 1.7.2023 under evaluatic	1365000		

Tool of calculate inflation:
<https://www.inflationtool.com/south-african-rand?amount=100&year1=1996&year2=2020&frequency=yearly>

Sales information: Property reports from Property24 ,
<https://www.property24.com/purchase-property-report>, Lightstone Properties,
<https://lightstone.co.za/Residential-Property-Information>

Appendix C Extract Transvaal Leasehold Township Commission 1912

From: Transvaal Leasehold Townships Commission, 1912. *Report of the Transvaal Leasehold Townships Commission*, Cape Town: Union of South Africa, pp 48,49,52,53,56,57,70,73,91,92,93, accessed at the archive of the Cullen Library, University of the Witwatersrand

Ownership, Size, Stands, Costs 1912, Report of the Transvaal Leasehold Township Commission			
	Bellevue	Bellevue East	Yeoville
Owner	Witwatersrand Township Estate and Finance Corporation, Ltd., Group.	Witwatersrand Township Estate and Finance Corporation, Ltd., Group.	Johannesburg Consolidated Investment Company, Ltd, Group (Barney Barnato)
Seller			Johannesburg Building Estate Syndicate, Limited
Original farm	Doomfontein	Doomfontein	Doomfontein
Surveyer	R.F. Bertrams		Thomas Yeo Sherwell
Laid out	1889	1896	1891
Type of ownership	Freehold owner	Leasehold owner. Freehold owners are the heirs of F.J. Bezuidenhout, senior, Van Boeschoten and Lorents, leasehold half Van Boeschoten abd Lorents, half Corporation. 1896 the owners of the farm Doomfontein granted a lease for 99 years to R.F. Bertram and H. Lorentz. Rent for first 5 years was 125 Pounds/ year, 250 Pounds for 94 years.	
Type of township	Private leasehold township	Private leasehold township	Private leasehold township
Year of Purchase	1903	1902	1896
Purchase Price	22028 Pounds/ cash	1902 the Corporation purchased Bertram's half for 16782 Pounds, 16 Shillings, 11 Dimes	116273 Pounds, 1 Shilling, 8 Dimes
Area/ Size	51 morgen 218 sq.rds	38 morgen 393 sq. rds. 131 sq. ft	115 morgen 403 sq.rds 4.7 sq feet
Number of Stands	608	503	1234
Ownership of stands	369 freehold, 239 leasehold	Leasehold, expiring 1995	Leasehold, 99 years from 31.12.1891
Stand size			100 x 50 ft (majority)
Restrictions	The lot or any portion of it shall not be transferred, leased, or in any other manner assigned or disposed of to any coloured person, and no coloured person other than the domestic servants of the registered owner or his tenants shall be permitted to reside thereon or in any other manner occupy the same. Restrictions to be inserted in freehold title, as approved by the Governor-in-Council under Scheme 62 of the Township Amendment Act of 1908	No restrictions	1. On this lot no place of business of any description shall be erected or opened and not more than one house with necessary outbuildings and accessories thereto may be built thereon unless the consent of the township owner in writing has first been had and obtained. 2. This lot shall be neatly and properly fenced by the purchaser with wood and iron railings or good wire fence (or with any similar suitable material). In no case shall loose stone or reed or grass or any inflammable material be used for such fencing. The fence shall always be kept in good and thorough repair by the owner of the said lot for the time being. 3. On this lot no buildings shall be erected until plans have been submitted and approved by the township owner, and no buildings shall be built thereon at a distance of less than 12 feet from the street boundary, provided, however, that it shall be in the discretion of the township owner where such provision cannot be applied to remove this restriction either wholly or in part. 4. The mineral rights in and under this lot shall remain vested in the township owner, together with all rights pertaining to the holder of the mineral rights under the Precious and Base Metals Act, 1908, and any statutory amendment thereof. 5. This lot or any portion of it shall not be transferred, leased, or in any other manner assigned or disposed of to any coloured person, and no coloured person other than the domestic servants of the registered owner or his tenant shall be permitted to reside therein or in any other manner occupy the same.

Ownership, Size, Stands, Costs 1912, Report of the Transvaal Leashold Township Commission

	Turffontein	Turffontein West	Turffontein Large Areas
Owner	Turffontein Estate, Limited, Group formed 1893 to acquire the Ras portion of the Turffontein Farm	Turffontein Estate, Limited, Group formed 1893 to acquire the Ras portion of the Turffontein Farm	Turffontein Estate, Limited, Group formed 1893 to acquire the Ras portion of the Turffontein Farm
Seller			
Original farm	Turffontain	Turffontain	Turffontain
Surveyer			
Laid out	1889	1889	
Type of ownership			
Type of township	Private leasehold township		not a township/ agricultural land
Year of Purchase			
Purchase Price			
Area/ Size	203 morgen	113 morgen	
Number of Stands	1628	175	
Ownership of stands	Leasehold expire 1988	Leasehold expire 1988	
Stand size	100 x 50 ft (majority)	34 sq. rds to 5 1/2 morgan	2-50 morgen
Restrictions	1. The lot is sold for a dwelling, business or garden lot, but the owner from time to time shall not have the right to make or cause to be made any bricks, tiles or earthenware pipes, or other articles on the lot, or to remove the soil, gravel or other substances, save and except for buildings and erections on the said lot. 2. The mineral rights in and under this lot shall remain vested in the township owner, together with all rights pertaining to the holder of mineral rights under the Precious and Base Metals Act of 1908 and any statutory amendment thereof. 3. The standholders shall not construct grass or reed huts or houses, or cattle kraals, upon the said lot, nor shall be open upon the lot any canteen, restaurant, or place for the sale of wines and spirituous liquors, without the consent of the township owner thereto first had and obtained in writing. 6. The lot or any portion of it shall not be transferred, leased, or in any other manner assigned or disposed of to any coloured person, and no coloured person other than the domestic servants of the registered owner or his tenant shall be permitted to reside therein or in any other manner occupy the same. 2 reserves were granted to the Municipality public gardens and rotunda park. P56	1. The lot is sold for a dwelling, business or garden lot, but the owner from time to time shall not have the right to make or cause to be made any bricks, tiles or earthenware pipes, or other articles on the lot, or to remove the soil, gravel or other substances, save and except for buildings and erections on the said lot. 2. The mineral rights in and under this lot shall remain vested in the township owner, together with all rights pertaining to the holder of mineral rights under the Precious and Base Metals Act of 1908 and any statutory amendment thereof. 3. The standholders shall not construct grass or reed huts or houses, or cattle kraals, upon the said lot, nor shall be open upon the lot any canteen, restaurant, or place for the sale of wines and spirituous liquors, without the consent of the township owner thereto first had and obtained in writing. 6. The lot or any portion of it shall not be transferred, leased, or in any other manner assigned or disposed of to any coloured person, and no coloured person other than the domestic servants of the registered owner or his tenant shall be permitted to reside therein or in any other manner occupy the same. Some properties have water rights P57	

Ownership, Size, Stands, Costs 1912, Report of the Transvaal Leashold Township Commission

	La Rochelle	Rosettenville. South Village Deep Portion	Rosettenville Extension
Owner	Leased by J.E de Villiers from the Turffontein Estates, Limited in 1892, since 1903 administered by the Estate Agency Department of the Consolidated Goldfields of South Africa, Limited	Leasehold L. Rosettenstein, freehold section Turffontein Estate, Limited, Group formed 1893 to acquire the Ras portion of the Turffontein Farm. 1899 half to South Village Deep g.m. co. Ltd., and half to A.V. Rosettenstein.	A.V. Rosettenstein
Seller		L. Rosettenstein	Turffontein Estate, Limited, Group
Original farm	Turffontein	Turffontein	Turffontein
Surveyer	J.E de Villiers, 1895-1896	L. Rosettenstein	L. Rosettenstein
Laid out	1895	1889, 1891, 1894, 1896	
Type of ownership			
Type of township	Private leasehold township	Private leasehold township	Private leasehold township
Year of Purchase		1899	1908
Purchase Price		25000 Pounds	Leasehold rights 1899 21500 Pounds, plus 1000 Pounds transfer
Area/ Size	55 morgen 377 sq.rds.	131 morgen 205 sq. rds	
Number of Stands	611	918	858
Ownership of stands	Leasehold expire 1988		
Stand size		varying size	
Restrictions	1. The lot is sold for a dwelling, business or garden lot, but the owner from time to time shall not have the right to make or cause to be made any bricks, tiles or earthenware pipes, or other articles on the lot, or to remove the soil, gravel or other substances, save and except for buildings and erections on the said lot. 2. The mineral rights in and under this lot shall remain vested in the township owner, together with all rights pertaining to the holder of mineral rights under the Precious and Base Metals Act of 1908 and any statutory amendment thereof. 3. The standholders shall not construct grass or reed huts or houses, or cattle kraals, upon the said lot, nor shall be open upon the lot any canteen, restaurant, or place for the sale of wines and spirituous liquors, without the consent of the township owner thereto first had and obtained in writing. 6. The lot or any portion of it shall not be transferred, leased, or in any other manner assigned or disposed of to any coloured person, and no coloured person other than the domestic servants of the registered owner or his tenant shall be permitted to reside therein or in any other manner occupy the same. Number of liquor licences is limited to six. 14 stands have been granted to churches P75	The Company wishes to have inserted in the freehold title on conversion the clauses in the lease relating to liquor, coloured occupation brickmaking and mineral rights. It has never consented to any liquor licenses being granted in the township. P91	Conditions to be inserted in the certificate of freehold title to be issued for lots in the township of Rosettenville Extension, so approved by Executive Council Minute 2,408 dated 7th July, 1909 1. The lot or any portion of it shall not be transferred, leased, or in any other manner assigned or disposed of to any coloured person, and no coloured person other than the domestic servants of the registered owner or his tenant shall be permitted to reside therein or in any other manner occupy the same. 2. The transferee shall not have the right to open, or cause to be opened, upon the said lot any canteen, or place for sale of wines or spirituous liquors except with the consent of the said Albert Victor Rosettenstein first had and obtained. 3. The transferee shall not be entitled to make bricks upon the said lot; nor shall the transferee be entitled to dig or quarry building stone, gravel, sand or clay upon the said lot, except for use by himself upon the said lot. 4. All mining rights, precious stones, precious metals, mineral, coal, metals in, on and under the said lot, shall be and are hereby excepted and reserved to the said Albert Victor Rosettenstein and his successors in title hereinafter referred to as the transferor [...] 5. The said Albert Victor Rosettenstein, or his successors in title, shall at all times have the right to renew the Mynpacht Brief [mining concession] at present existing over the township of Rosettenville Extension, of which township the lot forms part of.

Appendix D Title Deed Case Study #21

From: Deeds Office, Johannesburg, 2019

dMangera & Associates
Prokureur/Attorney
591
TEL: (011) 837 4596

DEED OF TRANSFER
In favour of

OVER
ERF **TURFFONTEIN TOWNSHIP**

VERBIND MORTGAGED
VIR FOR R **79000,00**
0001145372017
2017-05-30

DEED OF TRANSFER
BE IT HEREBY MADE KNOWN THAT
appeared before me, REGISTRAR OF DEEDS at JOHANNESBURG, he the said Appearer being duly authorised thereto by a Power of Attorney signed at JOHANNESBURG on 7 December 2014, and granted to him by

Page 2
And the Appearer declared that his said principal had truly and legally sold on 25 August 2014 and that he, the said Appearer, in his capacity aforesaid, did, by these presents, cede and transfer to and on behalf of

his Heirs, Executors, Administrators or Assigns, in full and free property
KENILWORTH TOWNSHIP
REGISTRATION DIVISION I.R., PROVINCE OF GAUTENG
MEASURING 495 (FOUR HUNDRED AND NINETY FIVE) Square metres
HELD by Deed of Transfer Number

SUBJECT to the following conditions:

(a) THAT no canteen, restaurant, club, hotel, bottle store, or place of sale of wines, malt or spirituous liquors, whether by wholesale or by retail, shall be opened on the said Lot, nor shall there be sold, offered or exposed for sale, on the said Lot, under any Liquor License, whether wholesale or retail, any wines, malt or spirituous liquors as defined by the Liquor Licensing Laws of the Transvaal for the time being in force, without the consent in writing of the KENILWORTH ESTATE AND FINANCE CORPORATION, LIMITED, first had and obtained, provided always that the KENILWORTH ESTATE AND FINANCE CORPORATION, LIMITED shall not grant such consent in respect of more than twelve (12) distinct Liquor Licenses in all for the entire Township of KENILWORTH.

(b) That no grass or reed huts or houses shall be allowed to be erected on the said Lot, nor shall any dairy establishment or any cow stable or kraal used in connection with any dairy or any cows except those required for domestic use of the registered owner or the occupier of the said Lot, be allowed on the said ESTATE AND FINANCE CORPORATION, LIMITED first had and obtained.

Page 3
(c) That no sub-division of the said Lot shall take place without the consent in writing on the KENILWORTH ESTATE AND FINANCE CORPORATION, LIMITED, first had and obtained, and all sub-divisions of the said Lot authorised by the KENILWORTH ESTATE AND FINANCE CORPORATION, LIMITED shall be subject to all and every condition of this Deed of Transfer.

SUBJECT to such conditions as are mentioned or referred to in the aforesaid Deed.

WHEREFORE the Appearer, renouncing all right and title which the said heretofore had to the premises, did in consequence also acknowledge him to be entirely dispossessed of, and disentitled to the same, and that by virtue of these presents, the said

his Heirs, Executors, Administrators or Assigns, now is and henceforth shall be entitled thereto, conformably to local custom, the State, however reserving its rights, and finally acknowledging the purchase price to be the sum of R765 000,00 (SEVEN HUNDRED AND SIXTY FIVE THOUSAND RAND)

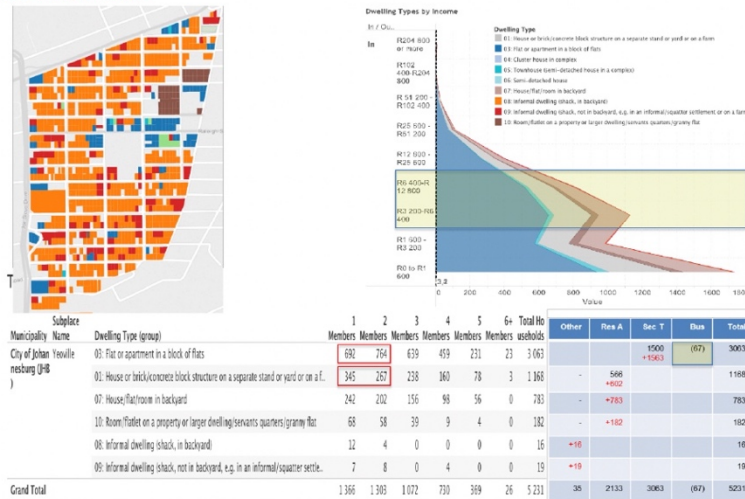
Appendix E Extract ICHIP Yeoville, 2016

From: Johannesburg Inner City Housing Strategy & Implementation Plan 2014-2021 STRATEGY & PROGRAMMES, 2016, Johannesburg Development Agency, City of Johannesburg Housing Department, Yeoville, Bellevue/ Bellevue East – Housing Circumstances, pp 28,28. Dwelling Type legend classifies bungalow properties as 08: Informal dwelling.

Johannesburg Development Agency / City of Johannesburg Department of Housing
Johannesburg Inner City Housing Implementation Plan 2014-2021
STRATEGY & PROGRAMMES

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Figure 6: Yeoville – Housing Circumstances

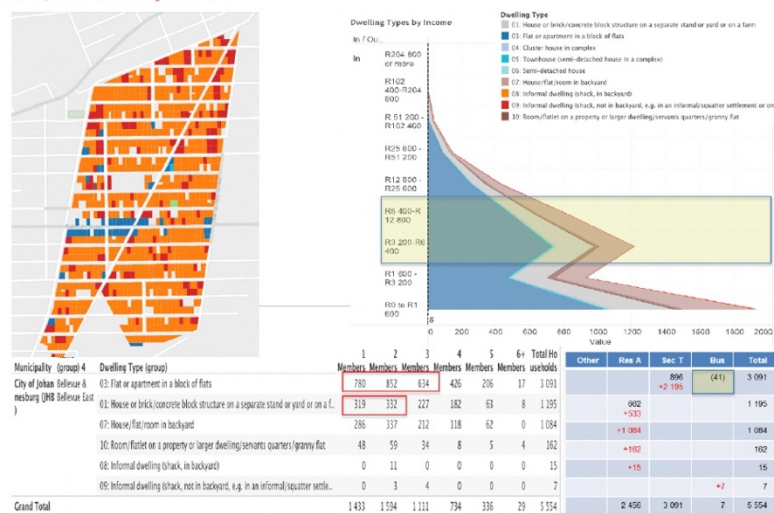


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Johannesburg Development Agency / City of Johannesburg Department of Housing
Johannesburg Inner City Housing Implementation Plan 2014-2021
STRATEGY & PROGRAMMES

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Figure 7: Bellevue / Bellevue East – Housing Circumstances



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Appendix F Louis Botha Avenue Development Corridor, Density

From: Louis Botha Avenue Development Corridor, Strategic Area Framework, City of Joburg, 2016, pp25,58,139. Similar information applies to the Turffontein Development Corridor, Strategic Area Framework.

Strategic Assessment

02. STRATEGIC ASSESSMENT

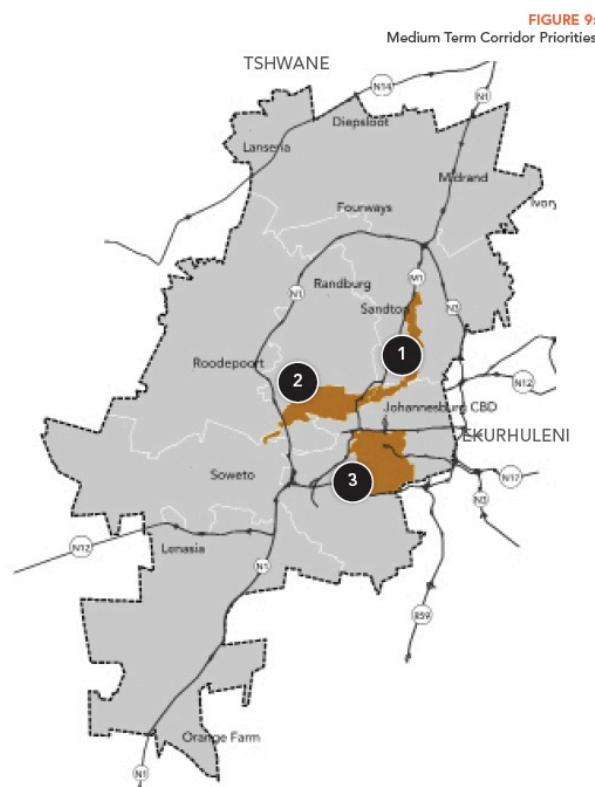
02A. Study Area

The Louis Botha Avenue Development Corridor represents one of three strategic frameworks that deal with the medium term scope of the Corridors of Freedom, the other two being the Empire Perth Corridor, and the Turffontein Corridor.

In the short to medium term - 2016

- Soweto to CBD along Perth Empire
- CBD to Alex
- Alex to Sandton
- Turffontein node
- The Mining Belt
- Soweto itself, including initial TOD Projects

- 1 Louis Botha Avenue Development Corridor
- 2 Empire Perth Development Corridor
- 3 Turffontein Development Corridor



25

The case study areas are located along 1 – Louis Botha Avenue Development Corridor and 3 – Turffontein Development Corridor.

WHAT FORM WILL DENSIFICATION TAKE

As outlined above, densification within the study area is likely to occur in a number of different ways. The physical response of densification is thus also likely to vary, depending on factors such as location, erf size, land value and development viability.

The sequence of diagrams that follow outline some of the key typological responses envisaged for the study area, taking into account existing structural conditions, existing precedent, and likely market responses.

The implications of each of these typologies in terms of density is indicated, as well as a high-level costing estimate, based on certain parameters

T1

**SINGLE DWELLING
(EXISTING)**

UNIT SIZE	235m ²
NO.OF UNITS	1
RATE / M	R5,200
UNIT COST	R1,222,000
BULK	235m ²
NET DENSITY	7DU/ha

T2

SECOND DWELLING

UNIT SIZE	200m ²
NO.OF UNITS	1
RATE / M	R4,900
UNIT COST	R980,000
BULK	400m ²
NET DENSITY	13DU/ha

T3

**SECOND DWELLING
(GARAGE CONVERSION)**

UNIT SIZE	250m ²
NO.OF UNITS	1
RATE / M	R4,900
UNIT COST	R1,225,000
BULK	250m ²
NET DENSITY	7DU/ha

T4

SEMI-DETACHED

UNIT SIZE	105m ²
NO.OF UNITS	2
RATE / M	R5,500
UNIT COST	R577,500
BULK	210m ²
NET DENSITY	13DU/ha

T5

MAISONETTE

UNIT SIZE	105m ²
NO.OF UNITS	4
RATE / M	R6,500
UNIT COST	R682,500
BULK	420m ²
NET DENSITY	27DU/ha

T6

**ROW HOUSE
(1 STOREY)**

UNIT SIZE	100m ²
NO.OF UNITS	3
RATE / M	R6,000
UNIT COST	R600,000
BULK	300m ²
NET DENSITY	20DU/ha

T7

**ROW HOUSE
(2 STOREY)**

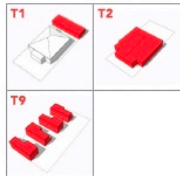
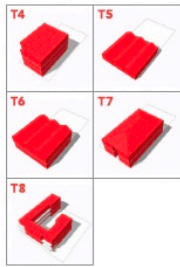
UNIT SIZE	100m ²
NO.OF UNITS	3
RATE / M	R6000
UNIT COST	R600,000
BULK	300m ²
NET DENSITY	20DU/ha

T8

2 STOREY BLOCK

UNIT SIZE	25-40m ²
NO.OF UNITS	14
RATE / M	R7,500
UNIT COST	R188-300,000
BULK	380m ²
NET DENSITY	94DU/ha

Official density assessments of dwellings similar to the bungalow properties T1, T2, T3.

FUNDING & SUBSIDY	LOCALITY OF PROJECTS & TYPOLOGIES	TYPICAL TYPOLOGIES
	Estate or Lifestyle Developments	
Private Equity & developer finance.	Mixed Use developments	
Bank Bonds and Personal Deposits.	Exclusive Townhouse or large single property	
Leverage 2nd property.	Close to Social Amenities - Schools, Malls & parks	
	Average size - 250 m ² 3 bedroom units	
	Densities: 40 - 60 DU/ ha (net)	
First Time Home owner subsidy/ guarantee.	Housing Schemes in Urban and Sub-Urban areas	
Bank & Institutional Funding.	Often sold off-plan for green field developments.	
Institutional Funding (PIC, DBSA etc).	Private developer or bank sponsored scheme	
Bond over land used as guarantee.	Incl. townhouses, single dwelling & multi-storey	
Low interest subsidies often feature.	Walk-ups - average size 120 m ² 2 bedroom	
	Densities: 60 - 120 DU/ ha (net)	
GPF low interest Loans and Equity	Inner City/Urban - Housing Schemes	
NHFC Debt Funding	Conversion of Office & Industrial Buildings	
Institutional Funding (PIC, DBSA etc)	Private developer or social housing institution	
Gearing of Donor Funding	Includes townhouses, row housing, multi-storey	
Limited Government subsidy for mix social housing schemes.	Walk-ups etc - average size 65 m ² 1 bed.	
	Densities: 120 - 200 DU/ ha (net)	
Potential for donor funding etc.	Designated restructuring zones	
Government Subsidised Schemes	Within these areas, the Capital Grant will apply	
Accredited project is a project in which ,	Take the form of medium density multi-unit	
Government makes a contribution.	Complexes - institutional management apply.	
Social housing primarily covers the rental	Includes townhouses, row housing, multi-storey	
tenure option and excludes ownership.	Walk-ups etc - average size 40 m ² 1 bed.	
	Densities: 120-180 DU/ ha (net)	

Official density assessments of dwellings similar to the bungalow properties T1, T2, T3.

Appendix G Ethics Clearance Certificate



Research Office

HUMAN RESEARCH ETHICS COMMITTEE (NON-MEDICAL)
R14/49 Doermann

CLEARANCE CERTIFICATE

PROTOCOL NUMBER: H17/11/11

PROJECT TITLE

Urban Compounds: Investigating aspects of rapid urbanisation and densification in Sub Saharan Africa and the effect on the physical morphology of selected suburbs in Johannesburg

INVESTIGATOR(S)

Miss K Doermann

SCHOOL/DEPARTMENT

Architecture and Planning/

DATE CONSIDERED

17 November 2017

DECISION OF THE COMMITTEE

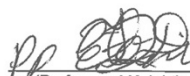
Approved

EXPIRY DATE

30 November 2020

DATE 01 December 2017

CHAIRPERSON

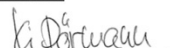

(Professor J Knight)

cc: Supervisor : Professor P Jenkins

DECLARATION OF INVESTIGATOR(S)

To be completed in duplicate and **ONE COPY** returned to the Secretary at Room 10004, 10th Floor, Senate House, University. Unreported changes to the application may invalidate the clearance given by the HREC (Non-Medical)

I/we fully understand the conditions under which I am/we are authorized to carry out the abovementioned research and I/we guarantee to ensure compliance with these conditions. Should any departure to be contemplated from the research procedure as approved I/we undertake to resubmit the protocol to the Committee. **I agree to completion of a yearly progress report.**


Signature

7.12.2017
Date

PLEASE QUOTE THE PROTOCOL NUMBER ON ALL ENQUIRIES

APPENDIX H

Catalogue of properties

Urban Compounds

Process

Recommended PDF View

Go to: Page Display

Select: Two-Page View, Show Cover Page

Kirsten Dörmann, 39758



Yeoville

Johannesburg CBD

Rosettenville

1km



A	Process sketch	2
B	Site plan	3
C	Content	4
D	Introduction	5
E	Groupings List	6
F	Programme list	7
G	Layout of pages	8
H	Overview Case Studies	10

Single Case Studies

Nr	Suburb	Field Work	Page
1	Yeoville	2018-2020	12
2	Yeoville	2018-2020	16
3	Yeoville	2018-2020	20
4	Yeoville	2018	24
5	Yeoville	2018	28
6	Yeoville	2018-2020	32
7	Yeoville	2020	36
8	Yeoville	2020	40
9	Bellevue	2020	44
10	Yeoville	2020	48
11	Yeoville	2020	52
12	Yeoville	2020	56
13	Bellevue-East	2020	60
14	Bellevue-East	2020	64
15	Bellevue-East	2020	68
16	Bellevue-East	2020	72
17	Yeoville	2020	74
18	Turffontein, Rosettenville	2019	78
19	Turffontein, Rosettenville	2019-2020	82
20	Turffontein, Rosettenville	2019-2020	88
21	Turffontein, Rosettenville	2019	96
22	Regent Park Estate, Rosettenville	2019	100
23	Kenilworth, Rosettenville	2020	104
24	Kenilworth, Rosettenville	2020	104
25	Kenilworth, Rosettenville	2019-2020	110
26	Kenilworth, Rosettenville	2020	116
27	Kenilworth, Rosettenville	2019	122
28	Turffontein Rosettenville	2019	126
29	Kenilworth, Rosettenville	2019	126
30	Rosettenville	2020	128
31	Rosettenville	2020	130
32	Rosettenville	2020	126
33	Rosettenville Ext	2020	126
34	Rosettenville	2020	126
35	Rosettenville	2020	126
36	Rosettenville	2020	134

Greater Yeoville: Yeoville, Bellevue, Bellevue-East

Greater Rosettenville: Rosettenville, Kenilworth, Turffontein, Regent Park Estate, Rosettenville Ext.

Introduction

In order to assess the serial nature of the bungalow properties within their large variety, the red line drawings are compiled in the form of a catalogue that references the pattern book and the range of bungalow designs at the time of their emergence in Johannesburg's urban fabric.

This catalogue is a dynamic entity, similar to the properties it is documenting. It is as much about the (re-)description of the bungalow compounds as found, as it is about the making of the red-line drawings as built. The individual in-depth case studies are represented through graphics (the redline drawings and through layers of change), in text form (single plot descriptions), and other selected visual material that demonstrates the change over time (identified also by publicly available street views). This material is complemented by the search for the (at times) invisible narrative behind the change. The latter provided the base for the text and the drawings to connect across themes and scales.

The drawings have been amended many times during the research due to the inherent dynamism of the properties changes, and a number of them are still incomplete, with the production of the catalogue encountering similar challenges to those the owners of the properties might meet in real life. How does one capture organic change with the precision the architectural drawing requires? The choice of a drawing programme that is set up to construct buildings as an analytical tool has been a learning experience and to some extent is a methodological innovation in this study. The conceptual reading of spaces was necessary to look closely at detail of what is to then describe what could be. Tracing the past, through existing drawings, assisted significantly in the assessment of the present, in particular after having experienced the site from the ground up.

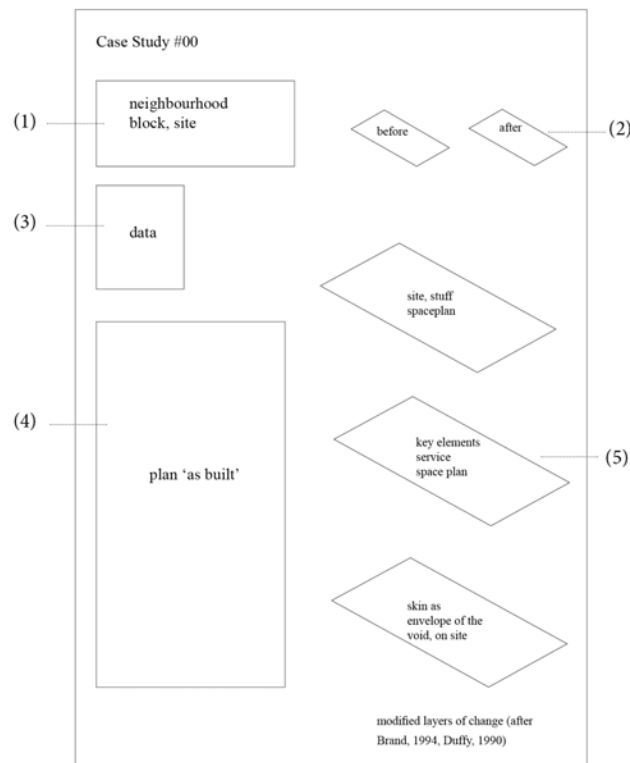
The following pages thus give insight to a complex process of production that attempts to understand the quiet radical transformation from a free-standing house to a courtyard building as an merging typicality, and an architectural project, in Johannesburg, as an African city.

Groupings

Doings per case study	merging	re-scaling	sleeping	enfolding	yarding	yard use
1	x	x		x	x	dining, working
2	x	x		x	x	corridor, bathroom
3	x	x			x	parking
4		x	x			garden, utility space
5	x	x		x	x	playspace
6	x	x		x	x	corridor
7		x	x			garden, utility space
8			x			garden
9	x	x			x	slaughtering
10	x	x		x	x	corridor, hall
11		x			x	corridor, hall
12		x			x	corridor, hall
13		x		x	x	corridor, bathroom
14		x			x	living room
15		x			x	corridor
16		x			x	corridor
17			x			garden
18			x			entertainment area
19	x	x			x	corridor
20	x	x		x	x	corridor
21		x			x	corridor, bathroom
22	x	x		x	x	church
23	x	x		x	x	corridor
24		x			x	mechanic
25		x			x	corridor
26		x		x	x	corridor, hall
27		x			x	corridor, hall, bath
28		x			x	corridor
29	x	x			x	corridor
30		x			x	unknown
31		x		x	x	corridor
32	x	x			x	corridor
33		x				front: car park
34	x	x			x	playspace
35		x			x	storage for material
36	x	x		x	x	corridor
	key case study					

Case Studies Groupings

Nr	Programme	Switch to exchange value
1	rental residential + eatery, owner	2012
2	rental residential	2010
3	rental residential	2012
4	single family residential + hairdresser in separate garage	2010
5	pre-school + spaza	2009
6	guesthouse, rental residential, high street shops	2007
7	single family residential	
8	unkown	2013
9	rental residential + fresh chicken sale	2008
10	rental residential + 'through window' shop	2016
11	rental residential + manager	2016
12	guesthouse, manager	2021
13	rental residential	2008
14	woman migrant skill centre, after school care	2001
15	rental residential	2008-2012
16	rental residential	2016
17	single family residential	
18	single family residential	
19	extended family residential + rental residential	1993-2000
20	rental residential , shops, mechanic workshop	2015-2018
21	family residential, rental residential	2011
22	family residential, rental residential, church	2017
23	rental residential , mechanic workshop	2015
24	rental residential , mechanic workshop	2015
25	rental residential	2015
26	family residential, rental residential	2015
27	rental residential	2005
28	family residential, rental residential	before 2000
29	family residential, rental residential	2016
30	rental residential , take away	2003
31	rental residential , edu service	2019
32	family residential + rental residential + remote car business	2020
33	residential	n/a
34	residential, daycare	n/a
35	family residential, rental residential.	n/a
36	rental residential, shop, production (tailor)	before 2009



Catalogue page layout, ground sampling: data, analytical structure
Author, 2023

“The bungalow compound anatomy is represented in three layers:

- **stuff on site**, looking at the emerging *space plan* through domestic practice
- **services, space plan and key built elements** to interrogate the role of ‘small spaces’, and the repurposing of the initial double life of served and serving
- **skin and boundary wall as the envelope of the void**, to explore the form and significance of the emerging void, the courtyard”

Urban Compound, Chapter 5.3.1, 2023

Layout Catalogue Pages

6.2 Case Studies, single plot descriptions

The case studies are framed/ formatted as single plot descriptions and follow the formatting guide below.

Single plot description

#0

Name: a name is chosen that describes an essential characteristic of the current state of affairs/ the transformation

Sources: the sources that assisted in constructing the property profile are listed

Programme: describes the activities that take place on the property

Summary

Logline of property.

In the case of the transforming plot, this provides a synopsis of how the 'hard' facts (the syntax of the buildings) and the 'soft' movement of 'living events' / daily activities interact as a particular compound composite. The intention here is to identify patterns across the case studies, that connect the individual plots into various groupings, while holding space for their singularity.

Inventory – Accounting

Rooms: Verandah: Stoep: Boundary Wall: Openings: Service/ space: Yard: Stuff:

Extra: People: Animals: Trees:

Elements – Relating

Site, internal subdivisions, activities and stuff

Rooms

Featured stuff

Key elements in relation to access, service and space plan

Corridor, Verandah, Openings, Boundary wall Hole/ Window

Skin and transforming void

Thickened wall , Shape of the yard, Activities

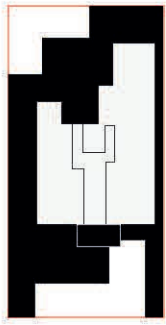
s

Legalities: Laws over time, counter legalities, legal practices

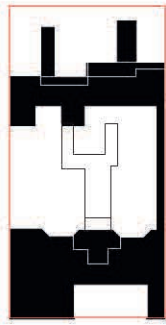
Aspiration – Speculating: Change and growth over time

Geometry: Void Shape/ Type, Compound Type

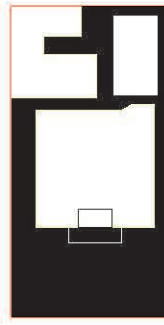
Layout Single Plot Description



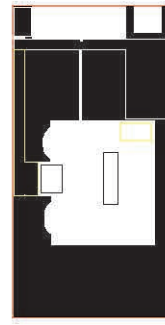
1
North: ↓
The moving kitchen



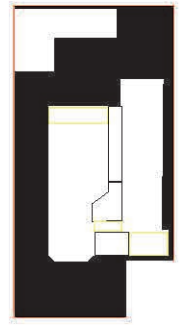
2
North: ↓
Cash cow, row yard



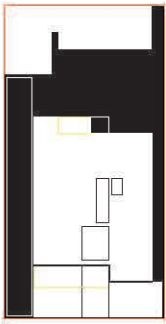
3
North: ↓
10 doors_outside in



4
North: ↑
The tailor's house,
moving sideways



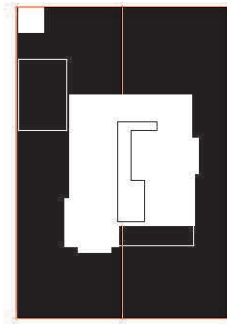
5
North: ↓
Little angels, zero beds



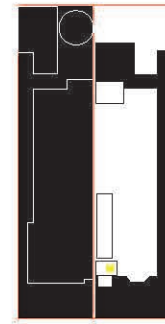
6
North: ↓
High street camouflage



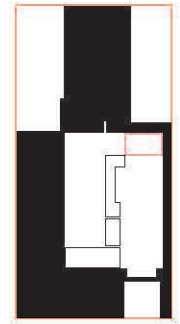
7
North: ↑
Picture perfect: The widow's
house



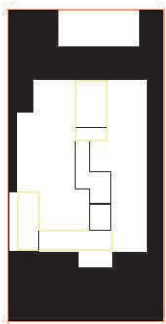
8
North: ↑
The kingpin's house



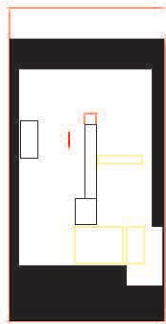
9
North: ↑
Chicken house



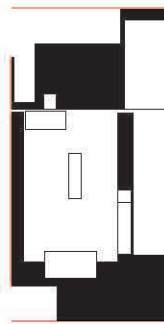
10
North: ↓
4 room potential



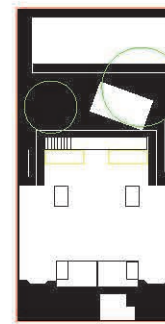
11
North: ↓
Phantom verandah



12
North: ↑
Mother's visits, walk-ins
and hourlies



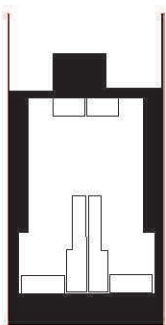
13
North: ↑
Rooms for trees



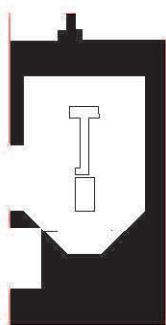
14
North: ↑
#MakeRoomForHer



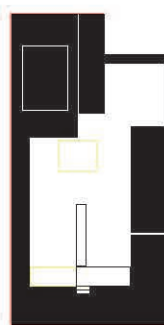
15
North: ↑
Inside business



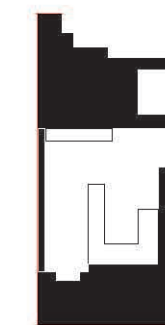
16
North: ↑
United back



17
North: ↑
The parents' home,
2nd gen black



18
North: ↓
It's a lifestyle, or it isn't
(anymore)

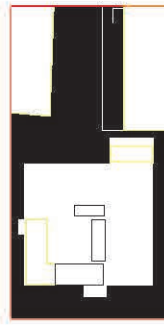


19
North: ↓
Corner community, divided

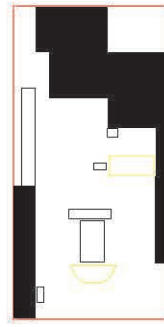
Case Studies Overview



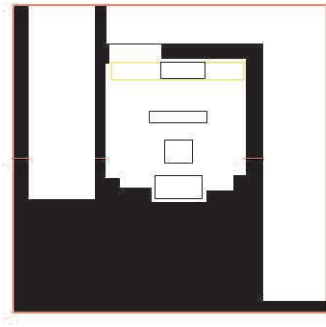
20
North: ←
Family business,
wrapped up



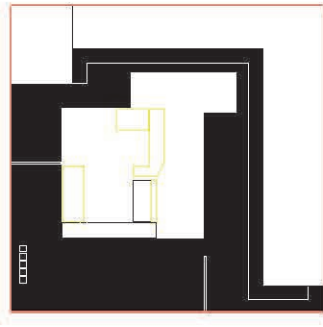
21
North: ↓
My brother's keeper



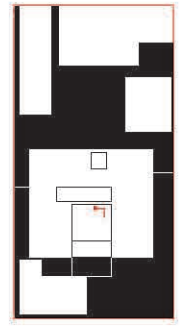
22
North: ←
Structures of belief



23
North: →
Cottages, bedrooms and
a yard

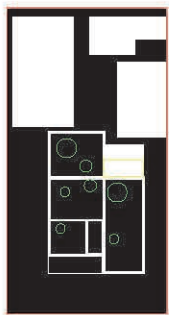


24
North: →
Cottages, bedrooms and
a yard

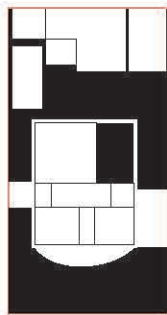


25
North: ↑
Double up

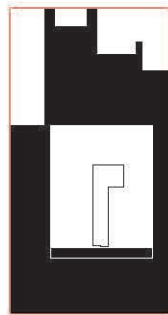
26
North: ↑
Half a house



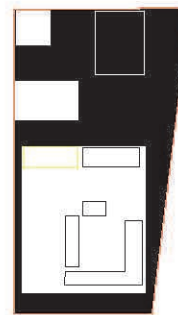
27
North: ↓
Nothing without a roof



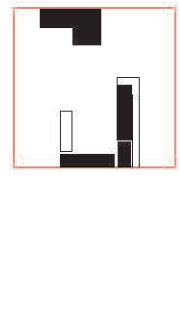
28
North: ↓
Living in ruins



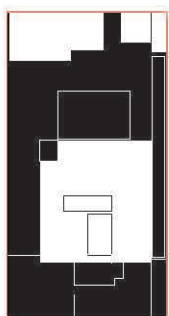
29
North: ↓
2nd income



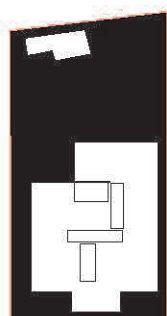
30
North: →
Who's heritage



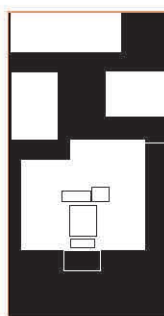
31
North: ↓
Half stand full house



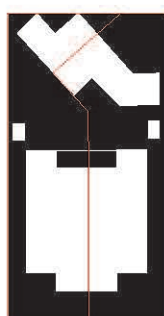
32
North: →
Auto electrical



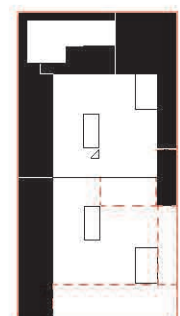
33
North: ← → ↑ ↓
Nothing to see



34
North: →
Ann's day care



35
North: →
Zigzag boundary



36
North: →
House G, dizygotic
twinning

CASE STUDY # 1



AERIAL
of block from Google Earth photograph, 2020



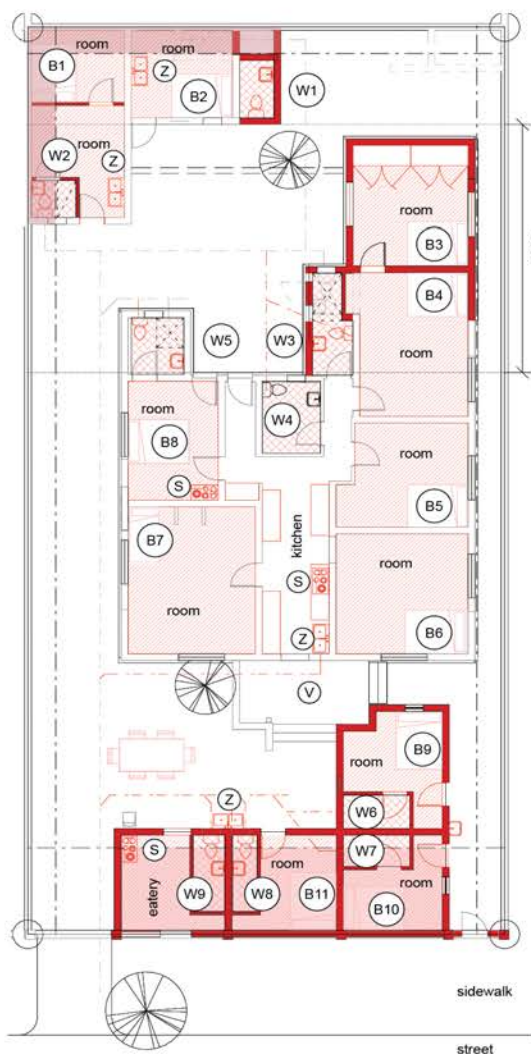
DATA FOR PROPERTY

FAR = 0.53 (permissible 1.2)
Coverage = 58% (permissible 60%)
Height = 1 storey (permissible 3 storeys)
Additions from original = 84sqm

Index:

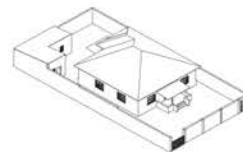
- (B) 11 beds
- (W) 4 enclosed wc's
- (S) 3 stoves
- (Z) 3 sink (not including WHB)
- (V) 1 verandah

Other: 1x eatery

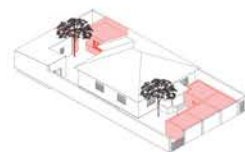


GROUND FLOOR PLAN OF CURRENT PROPERTY

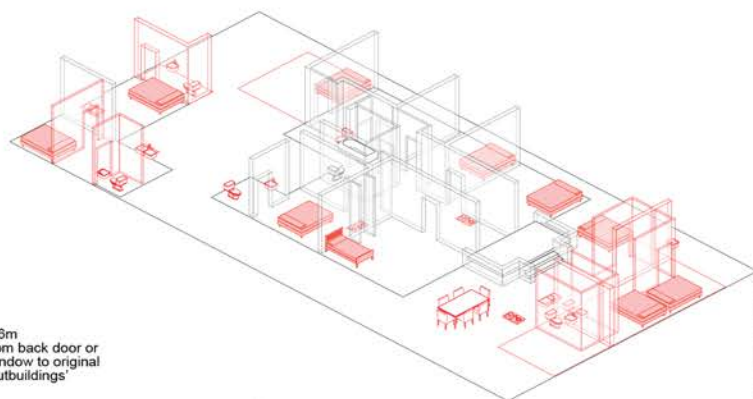
0 5 10



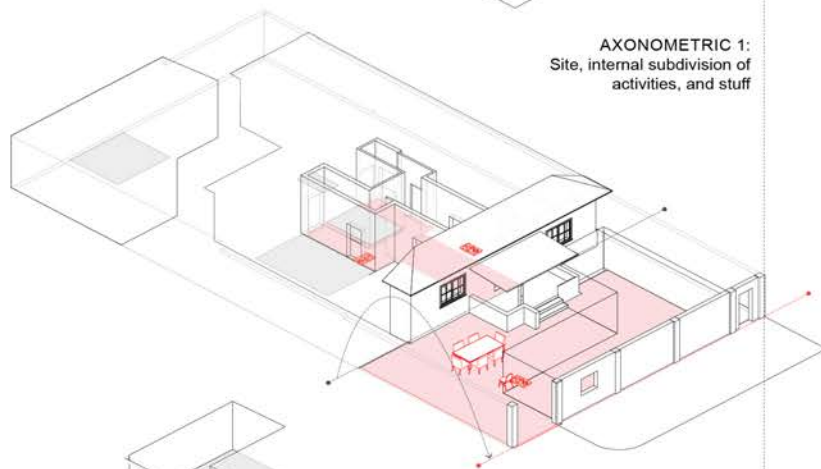
1924
Plot size: 495m²
Bungalow:
Rooms (back): 1
Total solid: 171m²
Total void: 324m²



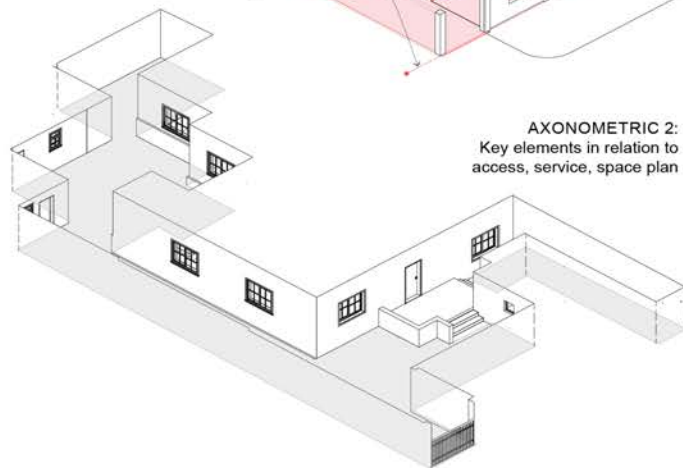
2020
Plot size: 495m²
Bungalow:
Rooms (back + front): 11
Total solid: 260m²
Total void: 235m²



AXONOMETRIC 1:
Site, internal subdivision of activities, and stuff



AXONOMETRIC 2:
Key elements in relation to access, service, space plan



AXONOMETRIC 3:
Skin and transforming void

*The red line drawings have been constructed with the assistance of Sarah de Villiers.

Single plot description #1

Name: The roving kitchen

Sources: Multiple visits over years, discussion with owner and residents, property report, satellite imagery, original archive plan, photos, description

Programme: Rooms to rent, restaurant, kindergarten, work from home business, other trade

Summary: The property has occupied the entire plot with a changing programme that used to take place inside the house.

Inventory – Accounting

Rooms: Bungalow compound 1 offers twelve indoor rooms, six inside the bungalow, four newly built units at the front, along the edge of the sidewalk and two at the back: the former garage and domestic worker's combined with the coal room. The bungalow has been equipped with two bathrooms, one male and one female, the original kitchen has been transformed into a residential unit with separate access. All additions have their own bathroom and cook inside their units, electricity is supplied through pre-paid meters.

Boundary Wall:

The street facing boundary wall serves as business advertisement. The wall at the back is not stable. The wall to the west is often crossed by neighbouring residents and playing children.

Openings:

The street facing boundary wall has a pedestrian gate, a vehicular gate, and a shop window (hole in the wall). The house has two doors, the outdoor rooms have six doors in total. The house has 12 windows the outbuildings have seven windows.

Service/ space:

The property has moved the kitchen from back to front.

Yard :Three small courtyards and a linear driveway divide the property through a series of semi-private meeting places that manage to control access and channel the flow of residents and frequent visitors without crowding the circulation routes.

Stuff:

Outdoor: chairs, outdoor table, umbrella, outdoor sofa, pot plant buckets. Indoor: kitchen in hall, beds in rooms

Extra: Laundry line at the back. No rental contracts exist.

People: 24

Animals: none

Trees: Several small trees on the property.

Elements – Relating

The centre of the compound is the front veranda, as a threshold between public and private programme and as a point of control, as both street entrances can be monitored from that position. The manager of the property, the owner's son or his representative, stays in one of the newly built units in the front, directly opposite the veranda. During numerous site visits over the period of a year, he has been ???? or working on the veranda with a group of male business partners, with simultaneous views onto the open entry gate, in his unit, the 2nd entrance, the main house entrance or on the sidewalk outside the property. As such, his room and the veranda turn into the 'control room' of the compound.

A key element of change on this property is the moving kitchen, the stove and the adjoining dining room. Due to racial divisions the kitchen was initially placed at the back of the property (SE corner). It was part of the serving spaces, operated by black employees who needed to be as invisible as possible in the white neighbourhood, and in close proximity to the servant accommodation along the back wall and the dining room. It then moved to the former 'hall' corridor space, as a communal cooking facility has been fitted with appliances and utensils by the landlord, with the veranda as an eating space. The communal kitchen was operated by female tenants, who were all originally from the Congo. One of them resided on the property for 14 years, first as a domestic worker in the back room and then as a tenant inside the house in the former living room. After her departure, and the growing demand for more smaller eateries in the neighbourhood, the kitchen was turned into a public restaurant and moved to the front, as extruded boundary and a 'hole in the wall'. The lunch table is in place in the courtyard below the veranda, and the sidewalk has essentially become an extension of the property. The extruded boundary wall has turned into a 2nd skin inside the plot, the void space is a continuous in-between as opposed to a clear back and front like initially planned.

Legalities

The additional rooms were built in the front of the property because the existing wall at the back seemed structurally unsafe to the owner. The adjoining plot added double storey units, and the construction shows cracks. The rooms were built by a family member in exchange for accommodation in the transformed garage. The overall costs were not more than R45 000 for 65 sqm . They have not yet been recorded by council but are currently being submitted for approval. Despite having built over the building line, all changes on the property are within building regulations. The local building inspector has noted the new structure and not reported it to the authorities. He takes payments to keep the restaurant off the record.

Aspiration – Speculating

The property is an income generating investment. The property was bought in 2012 for R800,000 by a married couple and an unmarried man, although the wife has no shares. Monthly rental income is between R22,000-24,000. The property is bonded by one of the main South African banks. The owner who is actively involved in the everyday of the plot also co-owns an apartment in the neighbourhood. He was planning to sell the house for R1,200,000 to his son, but did eventually put it on the market in 2019 for R1050000. He did not speak about the co-owners in the sale conversation. The son had a number of business ideas, one of them Pizza King Take Away. The property has not been sold.

Geometry

Void Shape/ Type: small yard sequence diagonal opposed

Compound Type: mixed use, extended family, has relations to the neighbour they share an 'active' boundary line with

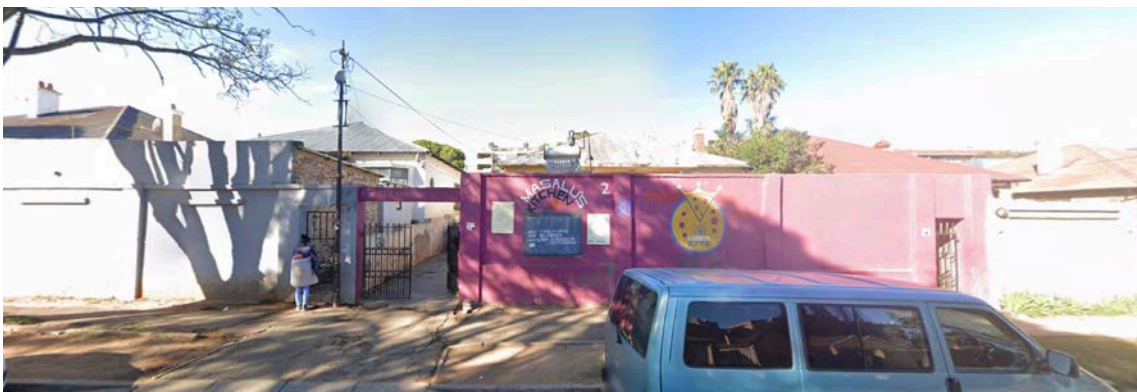
Compound Doings: merging, re-scaling, enfolding, yarding



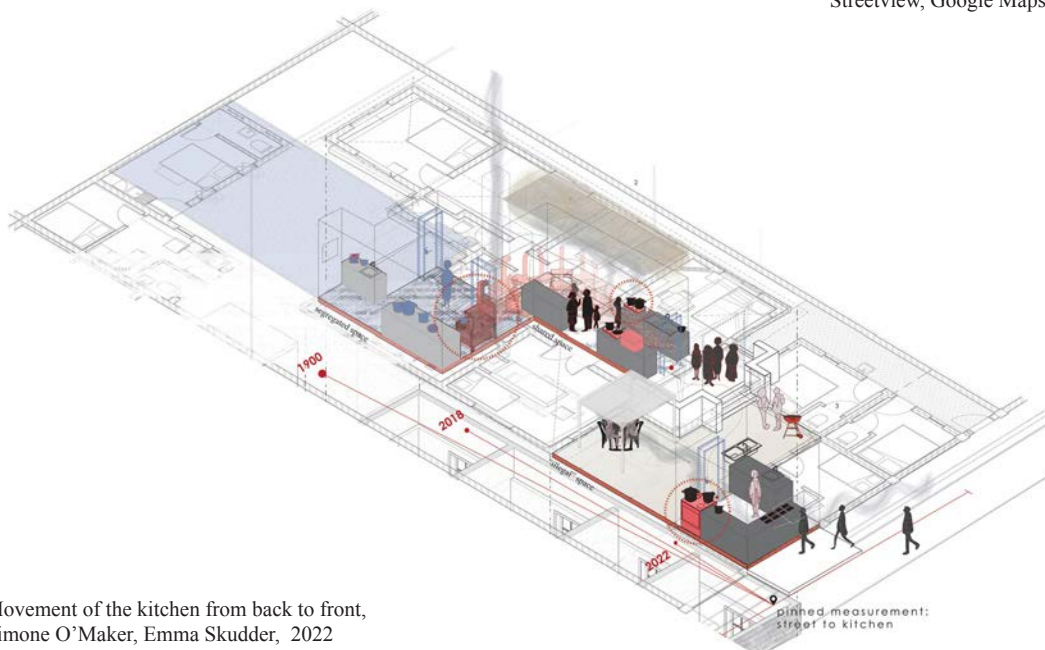
Streetview, Google Maps, 2010



Streetview, Google Maps, 2013



Streetview, Google Maps, 2022



Movement of the kitchen from back to front,
Simone O'Maker, Emma Skudder, 2022

CASE STUDY 2

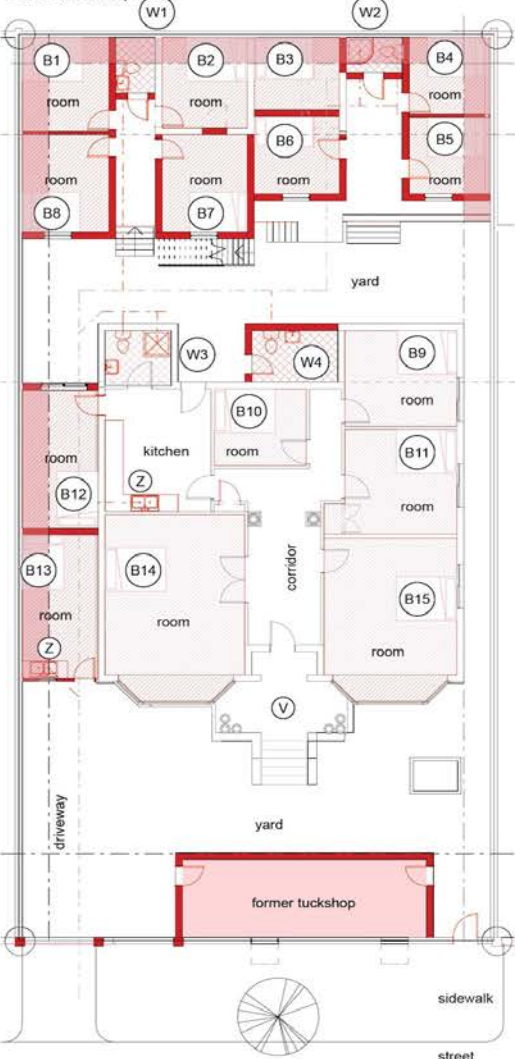


AERIAL
of block from Google Earth photograph, 2020

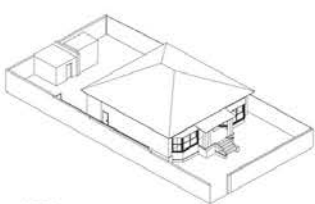


DATA FOR PROPERTY
FAR = 0.8 (permissible 1.2)
Coverage = 62% (permissible 60%)
Height = 2 storey (permissible 3 storeys)
Additions from original = 119sqm

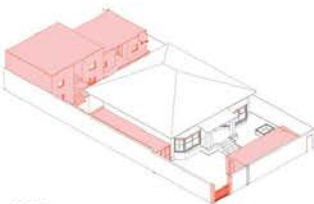
- Index:
- (B) 15 beds
 - (W) 4 enclosed wc's
 - (S) 0 stoves
 - (Z) 2 sink (not including WHB)
 - (V) 1 verandah
 - Other: 1x tuckshop



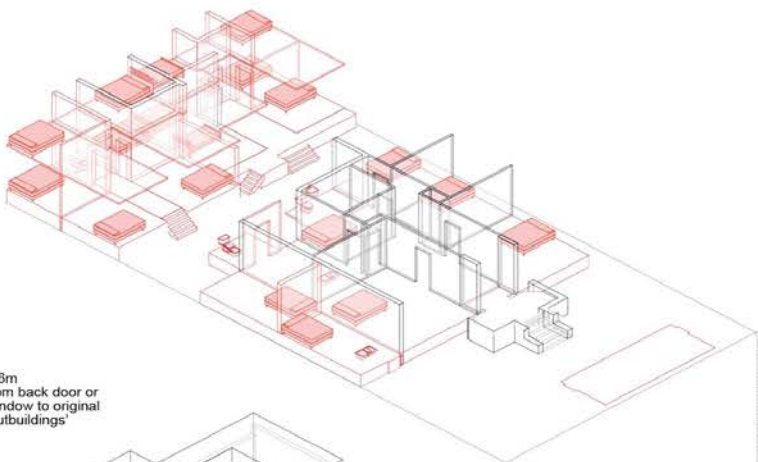
GROUND FLOOR PLAN OF CURRENT PROPERTY



1930
Plot size: 494m²
Bungalow:
Rooms (back): 1
Total solid: 175m²
Total void: 319m²



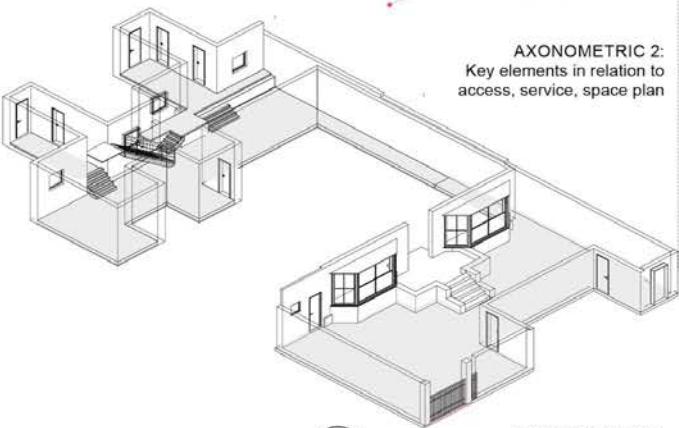
2020
Plot size: 494m²
Bungalow:
Rooms (back + front): 15
Total solid: 294m²
Total void: 200m²



AXONOMETRIC 1:
Site, internal subdivision of activities, and stuff



AXONOMETRIC 2:
Key elements in relation to access, service, space plan



AXONOMETRIC 3:
Skin and transforming void

Single plot description #2

Name: 'Cash Cow' Row Yard

Sources: Site visits across years, conversation with residents, property report, satellite imagery, council plan, sales ad, photos

Programme: Rental rooms (formerly with shop)

Summary: The single family house has transformed into a high density multi room yard, in parts double storey. t

Inventory – Accounting

Rooms: The bungalow compound offers twenty (two) rooms, five inside the bungalow, one shop unit (converted to three rooms in 2022) at the front to the sidewalk, two on the side of the bungalow (garage conversion), twelve at the back, four of them on a 2nd floor.

Boundary Wall: The property has built accommodation along three boundary walls, and at the back a double story.

Openings: There is one pedestrian gate and a vehicular gate at the front, and for a number of years a shop that sold 'through the window' (hole in the wall). The house has two entrance doors, one at the front and one at the back. The rooms all have their own doors, adding up to 18 in total. There are four shared doors to bath and WC. There are 16 windows for currently 22 rooms.

Service/ space: The bungalow units share a kitchen and two bathrooms, one male and one female. Six bedrooms have only access to natural air and light through a door to an open corridor. At the back four units share a bathroom. Although they have access to the communal bungalow kitchen, most tenants cook in their rooms. This compound has a cleaning service twice a week.

Yard: The yard now forms two open air passages between the main house, and rooms in the front and at the back. Outdoor spaces are utilised for circulation and by playing children.

Stuff: 22 beds, buckets, laundry line, brooms, toys

Extra: Shop window, now closed off

People: 22-66, tenants originally come from the Congo, Zimbabwe, Eastern Cape. They mainly live with 2 adults and children in each unit and are mostly related – husband, mother, sister, child.

Animals: n/a

Trees: no trees left

Elements – Relating

Site, internal subdivisions, activities and stuff

The site has transformed from a one family property to a yard arrangement with 22 living individual "family" units. The original house operates in its initial spatial configuration, with three times as many rooms outside as inside now, placed along the boundary walls. From being mixed used for various years the programme is now fully residential due to problems with the authorities.

Key elements in relation to access, service and space plan

The verandah of the main house does not play a significant role in the social life of the everyday living, but has been replicated at the back as a contemporary re-interpretation through small steps, or stoep, to sit on at the entry threshold in front of the backrooms. The yard does now appears as parallel built passages in terms of layout. Indoor and out-

door corridors have formed a tight organisational system of access, with shared facilities like bathrooms and kitchen on the edges. Kitchen and bathrooms are shared, see service/space above. With the garage that was previously built on the driveway between the house and the neighbouring property converted to a rental unit, the only way to the back is along the fire distance on the west side of the property.

Skin and transforming void

The system of passages and the considerable number of rooms have transformed the volume into a 'row yard' that works in two directions. East-West stripes, that run from N-S as five main volumes are penetrated by a set of North- South running narrower passages as 2nd layer access system.

Legalities

None of the extensions in the front or the back have been recorded at council. Some rooms do not have direct access to day light. Plot coverage is borderline within current regulations. The change of use from shop to accommodation was triggered by issues with local authorities. During the construction of the added rooms, the building inspector flagged the construction but authorised it later. No further details were available about this process. According to the tenants, payments for permits got too high to be profitable.

Aspiration – Speculating

The property's financial history shows a loss or little gain during transactions of ownership, but a high rental return on a monthly basis. Its transactional value as 'purchase power' has not changed between 1992 and 2010, when the last sale took place. This means despite a return of capital, the purchase power of the Rand as currency weakened significantly through inflation. In 2023 the purchase power of the 1993 sale price (R180000/ now =R965477) is actually higher than in 2010 (R450000/ now =R884533). The property's history also has multiple twists between bond holder and bond owners. It was bonded by a large South African port, rail and pipelines company four years before the company bought the property for a low price, with a loss on capital return of 27% to the then seller. Currently bonded by one of the main South African banks, by 90% of the (then) purchase price, there is a 2nd bond with the next door owner #3 as bondholder whom the tenants now described as the perceived owner of #2. The sale from the transport company to the current official owners, a married couple, was 'flipped' – this means it was sold twice within two months 2010 with a 50% return of capital for the intermediate owner, a real estate agent. Both current bonds are in the name of the wife. The couple doesn't live on the property anymore. The monthly rental in 2018 added up to around R38,000. The perceived new owner (owner #3) calls the property 'his cash-cows' (Interview April 2018). Construction of additions took place around change of ownership, firstly in 2010, with a small shop in the front of the garage, that then moved to the boundary wall when a first bond was approved. This made space for a rentable room. The 2nd phase took place 2014 with the addition of four rooms. Construction on the neighbouring plot #3 happened in parallel. The 2 story walk up structure of 8 rooms in total went up from April to July 2017 (visible on satellite images). This is shortly after another bond was registered, this time with the neighbouring owner as bondholder. The property was on auction twice in 2016 before the private bond. The replacement of the 'boundary wall shop' with three rentable rooms took place under lockdown, sometime between 6/2020 and 4/2021.

Geometry

Void Shape/ Type: Solid void rows, a matrix of passages.

Compound Type: High density rooming, with neighbourly connections on both sides.

Compound Doings: merging, re-scaling, enfolding, yarding



Streetview, Google Maps, 2010



Streetview, Google Maps, 2013



Streetview, Google Maps, 2022



The steps at the back of the property as 'new' verandah.

Photocollage:
Christine Havinga, ARPL4000A 2018.

Right: Financial transactions, merging ownership.

Property 24, property report, <https://www.property24.com/purchase-property-reportcom%2Fpurchase-property-report&us-g=AOvVaw2TAKH14Nlz2cwLri5PPGh6&opi=89978449>, accessed 1.12.2023

Auction Details

Auction held at: 69 Julia Street, Braamfontein, Johannesburg, Gauteng, South Africa, 2017

Date: Thu 25th Feb 2016 Time: 10:00:00
Case Number: 1847/15
Plaintiff: Standard Bank Ltd
Sheriff Office: Johannesburg East

Property Details

Property Address: Yeoville, Johannesburg, Gauteng, South Africa
Stand Size: 405sqm

Bedrooms: 3 Bathrooms: 1
Lounges: 0 Kitchens: 1
Dining Rooms: 1 Toilets: 0

For More Information Please Contact

Auctioneer: Mr. DH Greyling Attorney: S Roux Incorporated
Email: sheriff@web.co.za
Tel: +27 (011) 727 9340/5/6

property24

Property Report

Bonds

Bond Holder	Bond Number	Bond Owner Name	Registration Date	Bond Amount
owner#3		owner#2	30 Nov 2016	-
major bank			22 Mar 2012	R 400 000
		Transnet Ltd		R 200 000

Property Auction/ Yeoville, Johannesburg, Gauteng | Auction Seekers 2016, <http://www.auctionseekers.co.za/listings/all/gauteng/johannesburg/48>, accessed 1.12.2023

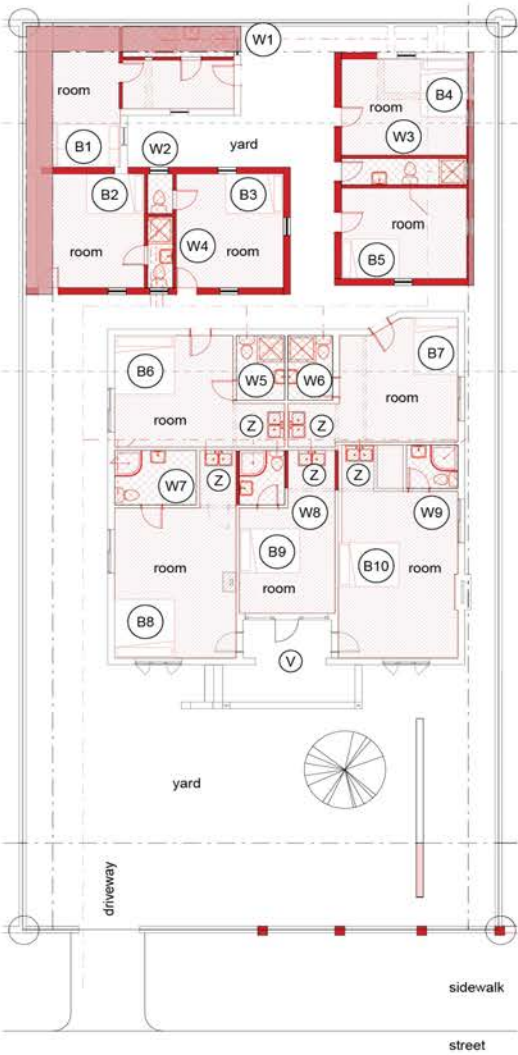
CASE STUDY 3



AERIAL
of block from Google Earth photograph, 2020

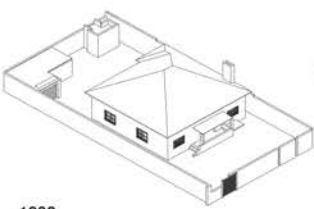
DATA FOR PROPERTY
 FAR = 0.6 (permissible 1.2)
 Coverage = 61% (permissible 60%)
 Height = 1 storey (permissible 3 storeys)
 Additions from original = 119sqm

- Index:
- (B) 10 beds
 - (W) 9 enclosed wc's
 - (S) 0 stoves
 - (Z) 5 sink (not including WHB)
 - (V) 1 verandah
 - Other: -

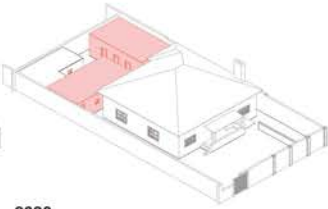


GROUND FLOOR PLAN OF CURRENT PROPERTY

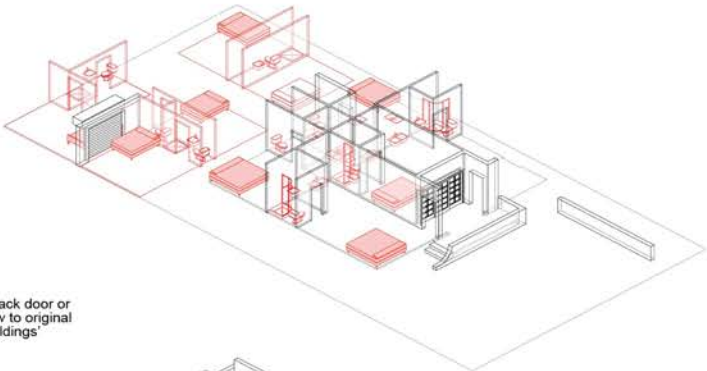
0 5 10



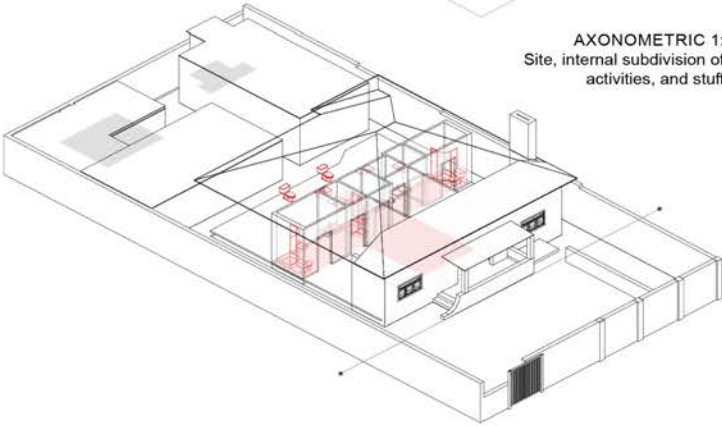
1930
 Plot size: 484m²
 Bungalow:
 Rooms (back): 2
 Total solid: 175m²
 Total void: 319m²



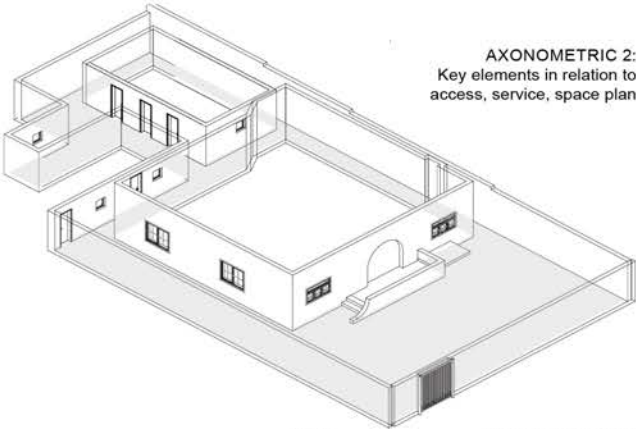
2020
 Plot size: 484m²
 Bungalow:
 Rooms (back + front): 15
 Total solid: 294m²
 Total void: 200m²



AXONOMETRIC 1:
 Site, internal subdivision of activities, and stuff



AXONOMETRIC 2:
 Key elements in relation to access, service, space plan



AXONOMETRIC 3:
 Skin and transforming void

Single plot description #3

Name: 10 Doors_Outside In

Sources: Site visits across years, conversation with residents, property report, satellite imagery, council plan, sales ad, photos

Programme: Rental ensuite units, room, bath, kitchen

Summary

Through converting the corridor's purpose from circulation to kitchenettes and bathrooms, the bungalow is now used from the 'outside in' as five independent micro apartments, joined by five more similar units at the back where the corridor re-appears in an outdoor version.

Inventory – Accounting

Rooms: The complex offers five units inside the bungalow and five units at the back of the property. Each unit, except two who share a bathroom, has their own entrance, bathroom and kitchenette.

Boundary Wall:

The solid boundary wall facing the street has not changed over the last decade and a half. The wall at the back has been extended into rentable spaces.

Openings:

The street facing boundary wall has one opening for vehicular entry, doubling up as pedestrian access. The structures on the plot combined have 10 doors and 20 windows.

Service/ space:

The internal bungalow corridor has been reused and converted to 'water rooms' – bathrooms and small kitchens. The service space at the back of the property, and the garage, have also been transformed into self-catering accommodation.

Yard:

The yard continues to exist 'as it was' in the front of house, albeit flowers and plants have been replaced for paving to accommodate parking. At the back, it takes the form of an outdoor corridor courtyard.

Stuff: Outside: laundry line, buckets, satellite dishes. Inside: beds, carpets, curtains, small tables, chairs, stoves, plates, cupboards, computer

Extra: For a long time, a mini bus taxi parked in the front overnight.

People: 10-30

Animals: n/a

Trees: One tree in the front yard

Elements – Relating

The original bungalow has been turned around in terms of circulation. The most prominent change in this property is the access to the all rooms of the original house from the outside, and an T shape axis for single bathrooms and kitchens on the inside. The hall has also been turned into a room. The outdoor verandah is recessed and covered. It serves as entrance for three units and takes on the role of the hall. The front yard is not used for communal activities other than parking and the washing and hanging of laundry, as there is little sharing on the property due to the ensuite bathrooms and kitchenettes.

The additions are hardly visible from the street. The original bungalow had an remarkable number of five fireplaces, one in every room that was not considered as 'servant'. Four of the chimneys are still visible on the roof, now structural support for DSTV satellite dishes.

Legalities

The structural additions happened sometime between May 2014 and May 2015, according to satellite imagery. These four rooms and their bathrooms have not been recorded by Council to date. The house, garage, toilet and coal room were approved originally in 1919. All changes to the property could possibly be amended to suit the Building and Town Planning Regulations. The original garage had been extended by a carport, with – from a top view – later conversion to a rental room.

Aspirations

The property has been sold four times between 1996 and 2012, and has since then remained with the same owner. The switch from use value to exchange value was finalised, for now, after the last sale. It is one of the few properties of the collection, if not the only one, that changed ‘ethnicity’ several times in that frequent series of transactions. Sold in 1996 by a 70-year old female owner with an Anglo-Saxon last name to a couple from a BaTswana family based in Soweto, the property was bought after seven years by a black female journalist, who in turn sold it after two years to an architect couple with Scottish/English background. They lived with their young children for seven years in the family home, before the current owner purchased it in 2012. He was the first owner since 1919 to invest beyond maintenance, in a relative radical alteration of the existing building through what looks like well-planned and well-placed changes, and the addition of structures at the back of the property.

Other than its neighbour, the property has steadily increased in price and capital return to the seller, and has in the last two sales even beaten inflation in terms of compound interest. Despite being similarly evaluated as the next door neighbour by the City, its last transactional value was 1.5 times higher, while having a comparable number of rooms. The property has been bonded throughout all of its sale history by two of the main banks in the country, between 90-100%. In terms of ‘rental portfolio’, studio living with own bathroom and cooking facility is an aspiration amongst tenants of the area, and with the management of the two neighbours being shared, the aim for some is to move from case study #2 to neighbouring case #3 when they have enough disposable income. The rent in #3 is 15% higher than on the neighbouring plot, and so provides 60% of the profit with half the amount of units. Tenants have stayed between four and five years, they are multi-national, and most (at the time of site visits), came from Nigeria, Zimbabwe and South Africa.

Geometry

Void Shape/ Type

Empty front, solidified back

Compound Type

Self-sufficient studios, with little sharing, and neighbourly connections on one side.

Compound Doings: merging, re-scaling, yarding



Streetview, Google Maps, 2010



Streetview, Google Maps, 2013



Streetview, Google Maps, 2022



Photocollage:
Christine Havinga, ARPL4000A

The rooms have small individual cooking facilities and bathrooms. Laundry is done in buckets outside, and dried on a shared launfry line. View into the passage behind the bungalow that gives access to the new units.

CASE STUDY #4



AERIAL
of block from Google Earth photograph, 2020



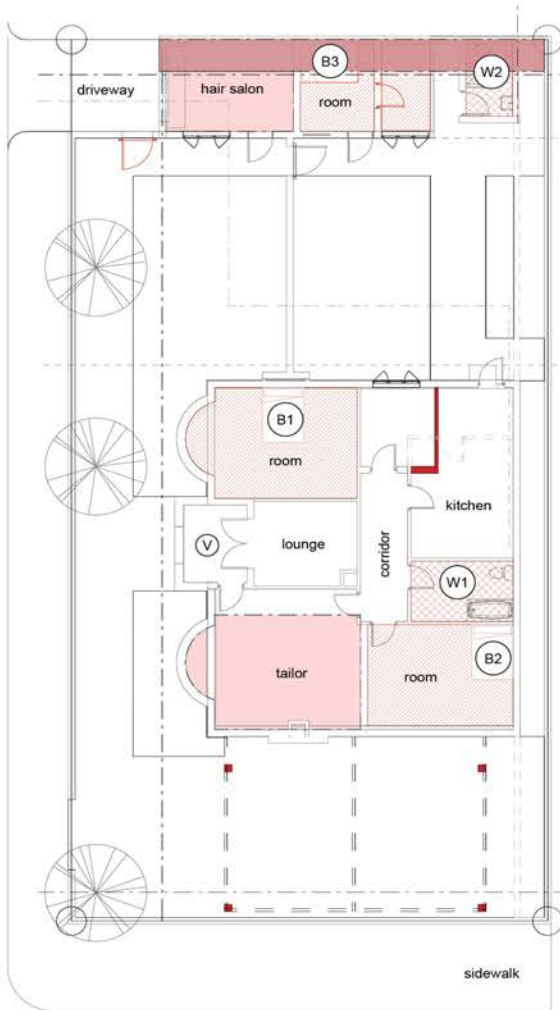
DATA FOR PROPERTY

FAR = 0.4 (permissible 1.2)
Coverage = 44% (permissible 60%)
Height = 1 storey (permissible 3 storeys)
Additions from original = 0sqm

Index:

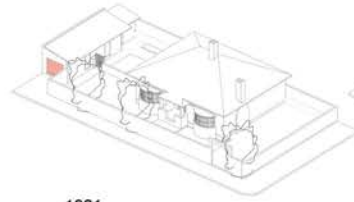
- (B) 3 bed
- (W) 2 enclosed wc's
- (S) 1 stove
- (Z) 1 sink (not including WHB)
- (V) 1 verandah

Other: 1x tailor, 1x hair salon, 2x rooms

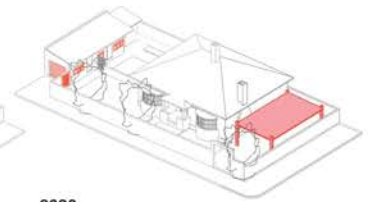


GROUND FLOOR PLAN OF CURRENT PROPERTY

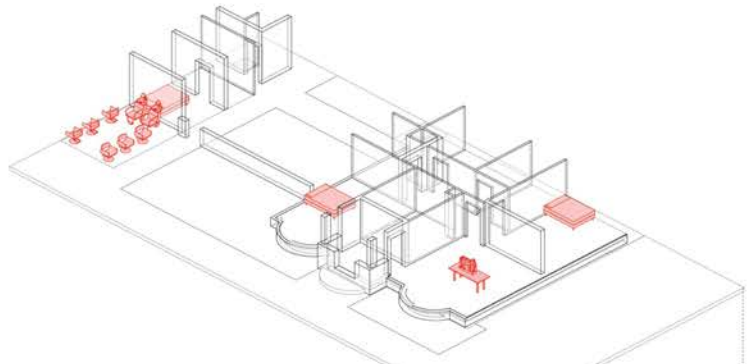
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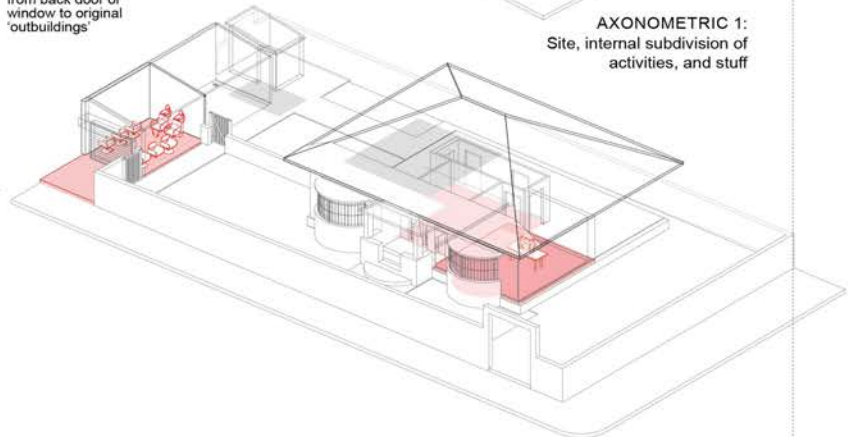
1921
Plot size: 495m²
Bungalow:
Rooms (back): 1
Total solid: 176m²
Total void: 319m²



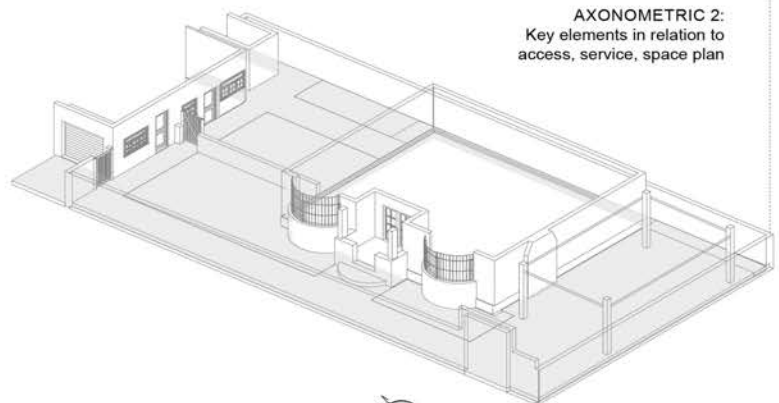
2020
Plot size: 495m²
Bungalow:
Rooms (back + front): 3
Total solid: 176m²
Total void: 319m²



AXONOMETRIC 1:
Site, internal subdivision of activities, and stuff



AXONOMETRIC 2:
Key elements in relation to access, service, space plan



AXONOMETRIC 3:
Skin and transforming void



Single plot description #4

Name: The tailor's house, moving sideways

Sources: Site visit, conversation with owner, property report, satellite imagery, council archive plan, photos, 1st bungalow contact in the area

Programme: Family residence, work from home tailor, hairdresser garage business rented out.

Summary

With the property structurally untouched since 1921, the openings in the boundary wall indicate a shift sideways from a closed off, street facing front verandah entrance to the kitchen door as main access point in the everyday.

Inventory – Accounting

Rooms: This property has five rooms, kitchen bathroom, garage converted to shop/ hairdresser, semi enclosed stoep, outdoor room and WC.

Boundary Wall: The current boundary wall runs along the outer perimeter, except access to the former garage which thus has public access. The initial boundary wall still exists on the western part of the property.

Openings: The street facing boundary wall has one car and one pedestrian gate. The pedestrian gate is at perpendicular to the garage / hairdresser front, so house and shop share the short driveway as 'entrance mat'. The shop acts as security check for visitors to the house. The initial main entrance with stoep are gated off and serve as laundry drying place. The house has seven windows and two doors. The outdoor rooms have three doors and three windows.

Service/ space: The property has an indicated sanitary passage along the eastern side, running north south, bordering WC, kitchen and bathroom.

Yard: The space in front of the house on a corner property was called 'garden' on the original plan and did run in an L shape. The 4th quarter was called yard. This part is the only section that is actively used currently everyday. The section on the southern side serves as car park. The rest is not utilised and empty.

Stuff: Advertisement for repair of appliances in front of hairdresser, plus price list. Sewing machine on table in former dining rooms. Beds in three rooms. Lounge/ passage space is empty.

Extra: Laundry line in the yard.

People: Family of four, one relative as tenant occasionally. Very low density.

Animals: none

Trees: One tree is used as screen along the street.

Elements – Relating

Site, internal subdivisions, activities and stuff

The house is used as a family residence and scarcely furnished. Everything is kept immaculate and clean. The large dining room is the atelier of the mother, wife, co-owner tailor who works from home. The main portion of her work is curtains. The garage is turned into a hair salon with chairs and mirrors. Customers and guests use the small entry in front of the garage to enter the saloon, the outbuildings and the house. The 2nd boundary wall at the end of the garage/ hairdresser separating demarcates threshold between the yard and garden. Now it is an additional security measure between street and main (kitchen) entrance.

Key elements in relation to access, service and space plan

The property has a short corridor in the centre that is accessed through the kitchen or

the lounge, that is accessed through the entrance stoep. This former main entry is closed off and hardly used. The property is entirely accessed from the side, past the outbuildings, through the kitchen.

Skin and transforming void

The void as a figure has remained similar to what it has been in the last 100 years. A kitchen stoep has been closed off, or was never built as per plan. The garage turned business is opening the space up to the public. With an apartment building as next door neighbour on the northern side, the hairdresser serves as a buffer and does not seem to belong to the property if one does not look closely. The current entry is next to the hairdresser. The open space at the back is the new front. The former 'front' is not operational.

Legalities

The original 1921 plans have been approved and are still valid. There is no information on the legal side of the home businesses.

Aspiration – Speculating

The property was purchased in 2001 for today's equivalent of less than half the evaluation price. It belongs 50/50 to husband/ wife as equal co-owners. The property is bonded with 80% by one of the major South African banks. The couple chose the area because of its close proximity to excellent schools. Their aspiration was to offer their two sons good education. They plan to return to Zimbabwe when circumstances permit. The rent of the hair salon covers fixed costs of the property. The wife is part of a female small scale business network running through the area that offers services related to domestic life, like repair of appliances, curtains, tailoring work, child care and beauty related care.

Geometry

Void Shape/ Type

From the outside, unchanged since inception, front garden and back yard with sanitary lane doubling as fire set-back, and access route to the back.

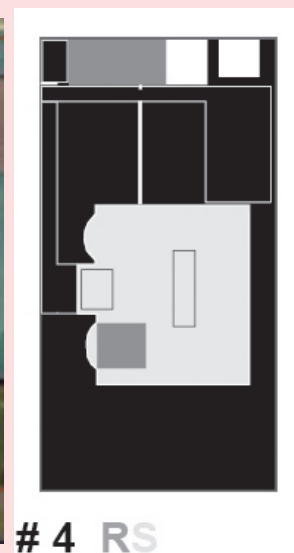
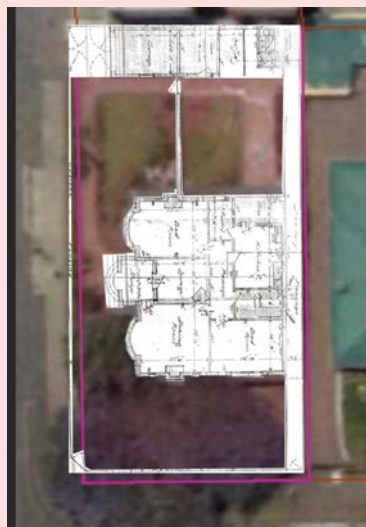
Compound Type

Family home, work from home, shop rental.

Doings: Sleeping (continued use as single family residence), re-scaling ('cutting off' a distinct part of the property and making active use of selected portions of the yard.)

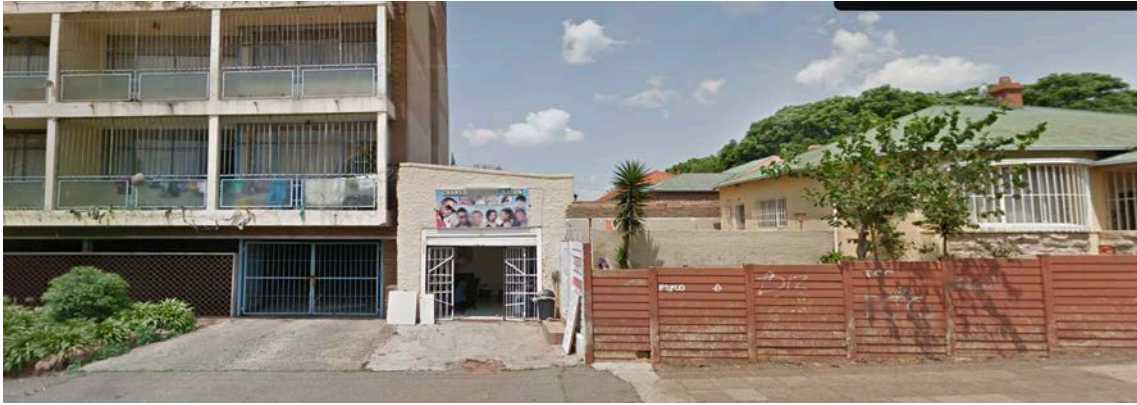
Compound Doings: sleeping, re-scaling

Plan from 1921 overlaid with Google Earth screenshot from 2023, indicating the current access route. The original entrance was to the property on the corner, leading to the verandah. That main door to the house remains closed, the verandah is used to dry laundry.





Streetview, Google Maps, 2013



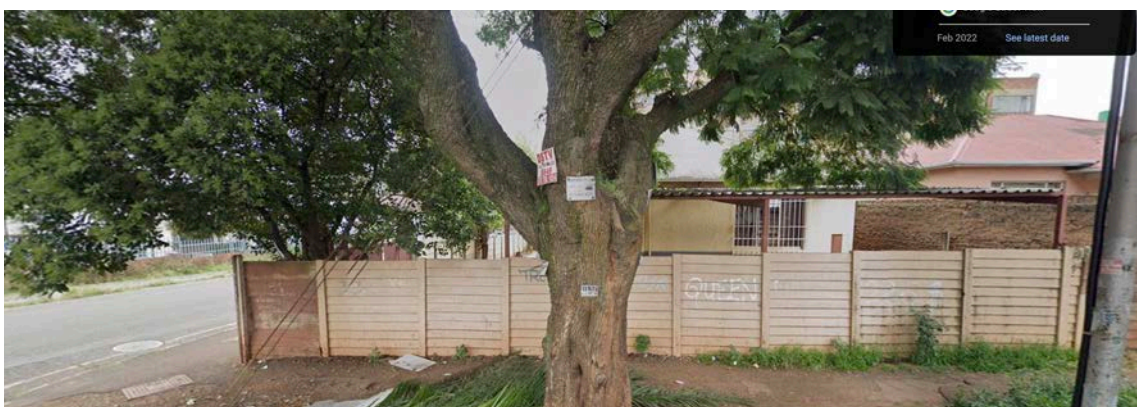
Streetview, Google Maps, 2015



Streetview, Google Maps, 2022



Streetview, Google Maps, 2013



Streetview, Google Maps, 2022

CASE STUDY 5

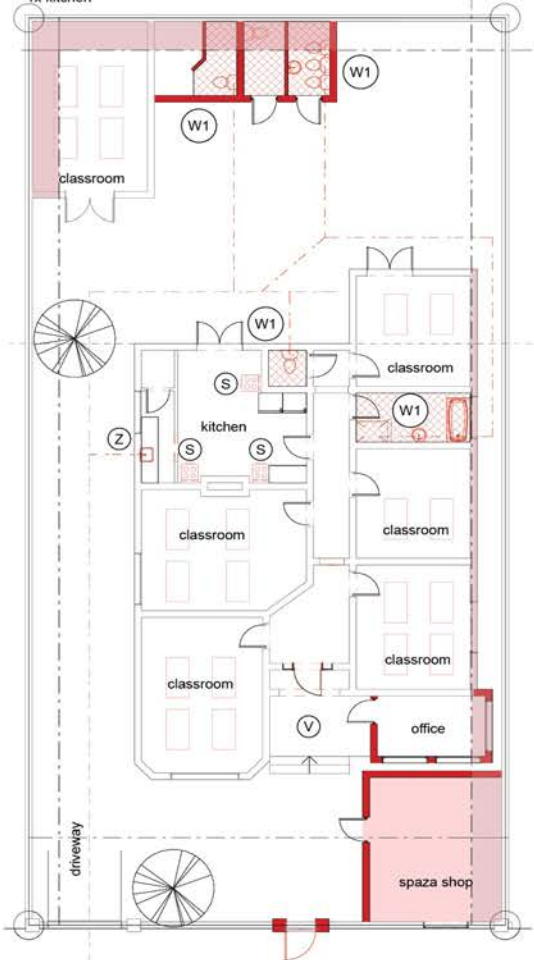


AERIAL
of block from Google Earth photograph, 2020

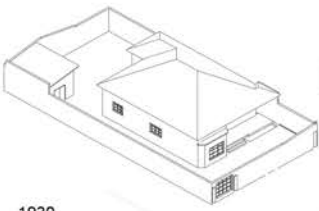
DATA FOR PROPERTY
FAR = 0.5 (permissible 1.2)
Coverage = 50% (permissible 60%)
Height = 1 storey (permissible 3 storeys)
Additions from original = 68sqm

- Index:
- (B) 0 beds
 - (W) 4 enclosed wc's
 - (S) 3 stoves
 - (Z) 1 sink (not including WHB)
 - (V) 1 verandah

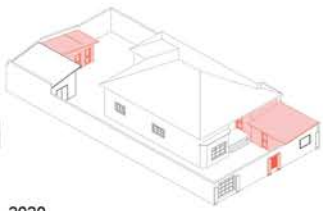
Other: 1x spaza shop, 6x classrooms, 1x storeroom, 1x office, 1x laundry room, 1x kitchen



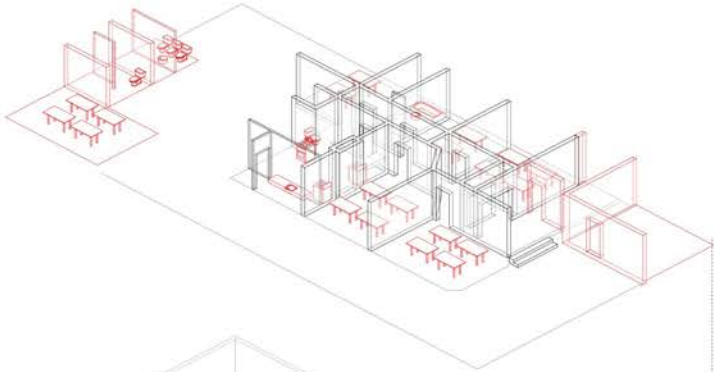
GROUND FLOOR PLAN OF CURRENT PROPERTY



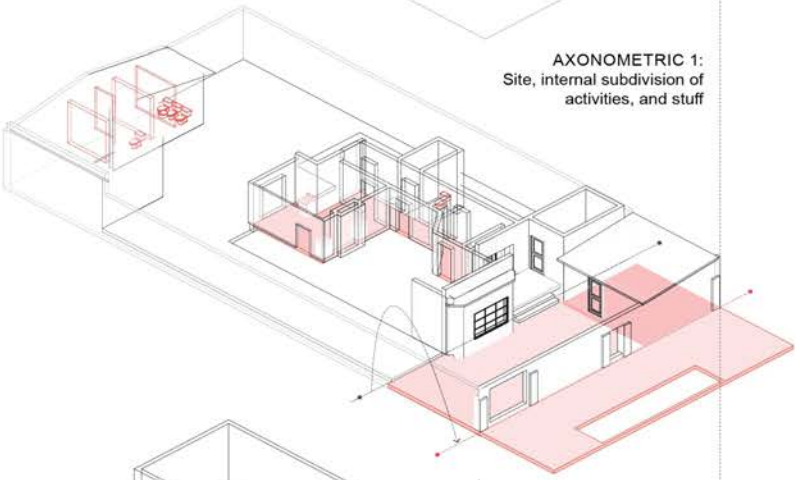
1930
Plot size: 477m²
Bungalow:
Rooms (back): 0
Total solid: 172m²
Total void: 305m²



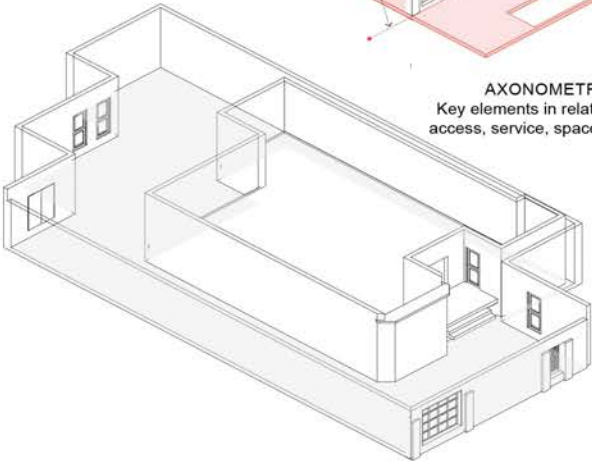
2020
Plot size: 477m²
Bungalow:
Rooms (back + front): 6
Total solid: 240m²
Total void: 237m²



AXONOMETRIC 1:
Site, internal subdivision of activities, and stuff



AXONOMETRIC 2:
Key elements in relation to access, service, space plan



AXONOMETRIC 3:
Skin and transforming void

Single plot description #5

Name: Little Angels, Zero Beds

Sources: Site visit, conversation with owner, property report, satellite imagery, council plan, photos

Programme: Pre-school and spaza shop

Summary

The property is operating as a preschool for young boys and girls from 3 years up to Grade R, using the yard as playground, the closed off part of the verandah as office and there is a spaza shop on the plot, facing the street.

Inventory – Accounting

Rooms:

The educational facility offers five classrooms inside the original house, and one outside in the re-purposed garage. There is one kitchen, one bathroom, four WCs, a storeroom, an office, a verandah and a spaza shop.

Boundary Wall:

The street facing boundary wall serves as advertisement and corporate identity of the facility, and is regularly repainted with care.

Openings:

There are three openings in the front boundary: one gate for vehicular access, a pedestrian gate and a window (hole in the wall) with an awning for the spaza as counterspace.

Service/ space:

The former backrooms have been kept as originally built, but were amended into multiple shared toilets for boys and girls.

Yard:

The yard has a clear back and front section, with a driveway as outdoor connection. The front yard is for arrival and pick up, the backyard and driveway are play areas for different age groups, and also utility space for laundry.

Stuff:

Chairs, tables, shelves, posters, 3 stoves, wardrobes, plates, cups, books toys

Extra:

Colourful paint

People:

Up to 40 children and one teacher per classroom, spaza owner

Animals:

n/a

Trees:

One tree in the front

Elements – Relating

Site, internal subdivisions, activities and stuff

The property has changed its programme completely - from residential use it turned into an educational institution. The physical layout however has remained very close to the original house. No new walls have been added, nor any other changes to the built structure were made. The generous dimensions of the rooms permit the re-purposing without problems. The only visible physical change is the spaza shop in the front – like many other residences the property has a hole in the wall since 2015 that services the neighbourhood.

Key elements in relation to access, service and space plan

The verandah has been half closed, the open part serves as entrance and drop off, the closed part as office and point of access control at the same time. The kitchen has space for three stoves to be able to cater for all children at the same time. The back entrance is the door the children use during the day, to go to the bathroom, and to play. Additional toilets have been installed in the former outbuildings, three for girls and three for boys. According to Legislation for Child Care Facilities, one toilet as to be provided per 20 children. This might be an indication to the indent of the facility to grow.

Skin and transforming void

Skin and void have remained constant other than the control of access on the verandah and the absorbing of the stoep at the back into the kitchen. Open space in the front is smaller than in some other properties, that prevents the thickening of the wall further at this point. The backyard is used as playground.

Legalities

There are no legal concerns on this property linked to built space other than the spaza shop at the front that has not been approved. The legal issues facing the institution are linked to its registration as a child care centre – following the Child Care Facilities By Law from 2015 and subsequent updates, the permit to use the residence as an educational facility must be issued by the Government. The structure that houses the facilities must comply with the National Building Regulations, and must be stable, waterproof, sufficiently ventilated, constructed of materials that are safe, supplied with a fire extinguisher, and must not contain physical feature that might present a risk to children. The children must be separated between the age of below and above three year-old groups, and the indoor play should be not less than 1,5 sqm per child and the outdoor area not less than 2sqm per child. The preschool has operated for more than 13 years and was registered with the Gauteng Department of Education (GDE) as a service provider. However, for the renewal of registration, the owner of the preschool lacked the required plans she needed to submit.

Aspiration – Speculating

The owner of the property aims at establishing an educational facility as income generator, and as a parallel social service in a densifying urban context. There is a high need for younger child-care in the area, with a majority of working parents. The property was sold in 2000 for 25% of the amount that the current owners, an African couple married in community of property, bought it for in 2009. They run a number of other businesses together. The purchase price was on the higher side, within the spectrum of the area. This is confirmed when the 2009 transaction matches municipal evaluation of nine years later in 2018 in actual value.

Geometry

Void Shape/ Type

Front / back as staggered outdoor rooms connected as loop through driveway and corridor.

Compound Type

Institutional , play room

Compound Doings: merging, re-scaling, enfolding, yarding



Streetview, Google Maps, 2010



Streetview, Google Maps, 2015



Streetview, Google Maps, 2022



Transformed garage in need for 'as built' permit

Legally required playyard for pre-school

Photocollage:
Christine Havinga, ARPL4000A

CASE STUDY # 6

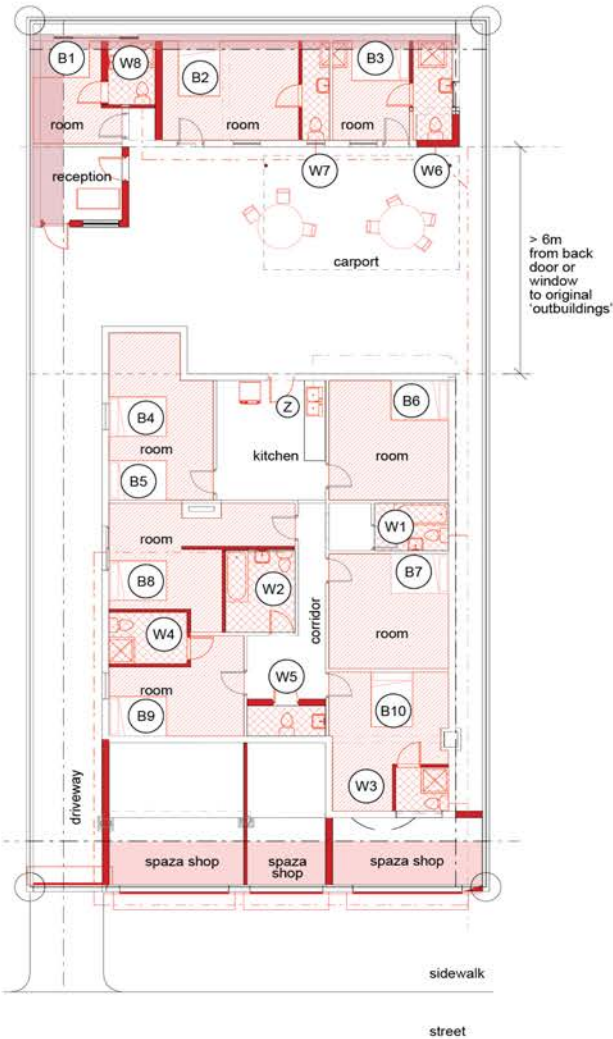


AERIAL
of block from Google Earth photograph, 2020



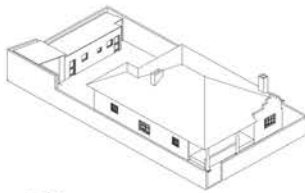
DATA FOR PROPERTY
FAR = 0.62 (permissible 1.2)
Coverage = 68% (permissible 60%)
Height = 1 storey (permissible 3 storeys)
Additions from original = 75sqm

- Index:
- (B) 11 beds
 - (W) 8 enclosed wc's
 - (S) 0 stoves (but 1 washing machine)
 - (Z) 1 sink (not including WHB)
 - (V) 0 verandah (been absorbed into spaza shops)
- Other: 3x spaza shops, 1x lodge reception

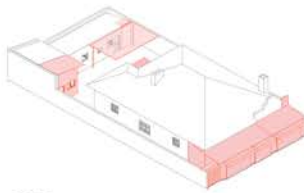


GROUND FLOOR PLAN OF CURRENT PROPERTY

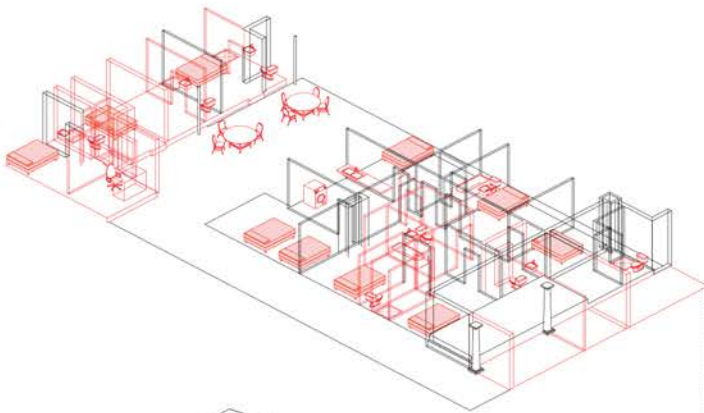
0 5 10



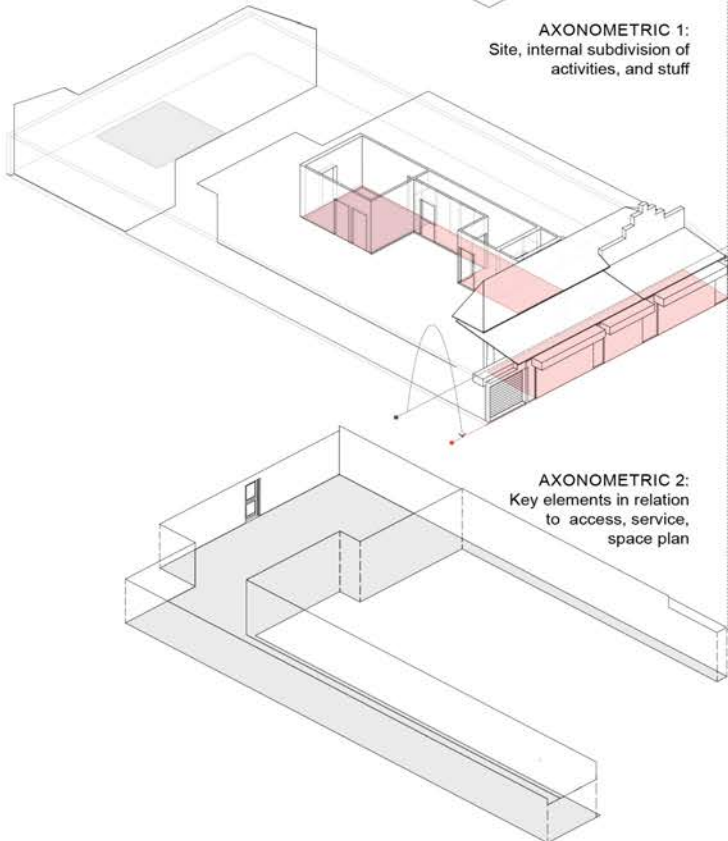
1913
Plot size: 453m²
Bungalow:
Rooms (back): 2
Total solid: 208m²
Total void: 245m³



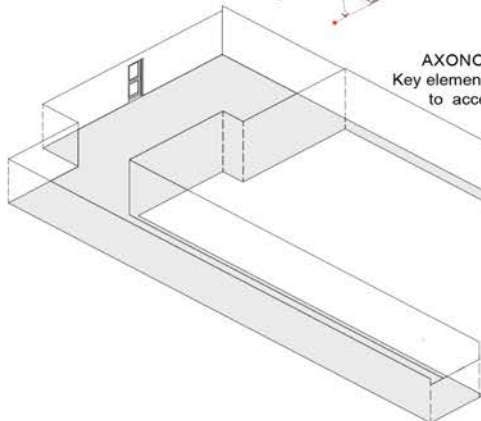
2020
Plot size: 453m²
Bungalow:
Rooms (back + front): 10
Total solid: 283m²
Total void: 170m³



AXONOMETRIC 1:
Site, internal subdivision of activities, and stuff



AXONOMETRIC 2:
Key elements in relation to access, service, space plan



AXONOMETRIC 3:
Skin and transforming void



Single plot description #6

Name: High Street Camouflage

Sources: Site visits across years, conversation with employee, tenants, guests, residents, customers, property report, satellite imagery, council plan, online presence photos

Programme: Shops, rental rooms, guest house

Summary

The former front garden has transformed into a triptych of shopfronts that operate as 'walk-in-facades' along the high street. The front door of the bungalow turned guest-house has disappeared in the front and moved to the back, the entrance is along the driveway. Minimum stay of guests is one hour.

Inventory – Accounting

Rooms:

The property offers nine bedrooms in the guesthouse, three outside, one reception and three shops in the front. There is a kitchen turned walk through entrance, and four or more bathrooms inside the house, three outside.

Boundary Wall:

The street facing boundary wall has merged with the façade of the building into three walk in shops. At the back the wall has been extended by outbuildings from as early as 1923.

Openings:

The front boundary has a vehicular gate that serves as pedestrian access to the house and the rooms at the back. The shops have three entrances altogether. The house has one door and fifteen windows and the back buildings seven windows and four doors.

Service/ space:

Main traditional 'servant' spaces have disappeared, in particular those that entrenched social and racial stratification – the front garden, verandah, the double corridor, kitchen, garage.

Yard:

The yard is operational on the side and at the back and now serves as front of house.

Stuff:

Beds, pillows, and towels. A washing machine in the kitchen instead of a stove .

Extra:

The property was the an early Air B&B in Yeoville, but has since been unlisted. It has an online presence on several booking systems, but one cannot complete the booking. The guesthouse only takes cash payment. One shop in the front used to sell the best Ethiopian Coffee of the area.

Trees: The last tree was replaced by a shaded gazebo before 2019.

Elements – Relating

Site, internal subdivisions, activities and stuff

The guesthouse has spatially re-arranged the usual sequence of arrival in a lodging establishment while keeping the traditional order. The layout makes use of the entire plot, and includes indoor and outdoor rooms likewise, working with explicit public and private thresholds. The hotel's life style services like the sundry shop, eatery, IT corner, hairdresser are all placed in the front, and available to guests and the general public.

Dirty laundry and the short term company of strangers are dealt with in the back, at extra charge. The driveway doubles as the lobby, part of the converted garage is the reception. Strategically placed, it is also the control point between ins and outs of the private

section of the compound. The covered courtyard between the longer rentals outside and the guest rooms inside the bungalow serves as outdoor hall.

Key elements in relation to access, service and space plan

Driveway, courtyard and corridor are the basis of the movements system 'from the back'. The verandah doesn't exist anymore, nor in the front or the back. The front door is literally closed and blocked up. The house is camouflaged. The attempt to disguise is a characteristic the property carried in its original layout with a double corridor that ran on the opposite sides of one wall. One for the public, one more private. One for white people, and one for black.

Skin and transforming void

The concealment of the front façade – the pretty face of the ordinary plan – through a terzet of shops is the most significant change in the context of skin. The void is controlled and simple, it has the shape of an L, with dedicated purpose. Most of the time it remains empty.

Legalities

The building has kept the original structures approved in 1921. In terms of legality, the front structures need to be recorded, and airflow needs to be considered. However, due to the freestanding nature of the house that remains on three sides, this should not be a problem. The guest house charges hourly rates. The accommodation of some short term activities - like sexual services - are not (yet) deemed legal in South Africa. Payments are only made cash, and there are no receipts. As such, there might be shadow business taking place.

Aspiration – Speculating

The property was owned from 1976 -2002 by a man who was born in Italy and whose profession is described as "builder, landlord".

The current owner is from Ethiopia and owns more than one property in the area. The transactional history records three 'zero' transfers in 1976, 2002 and 2008, with a first sale for R450 000 in 2007. The zero transfers indicate inheritance. The recording of the inheritance after the sale here indicates an administrative correction, the claiming back of the property by the wife to pass it over to the children, as she had suddenly found herself co-owning the property with an African couple after the passing of her husband. The 2007 sale to another African couple was bonded to 100% by one of the main South African banks. The subsequent 2015 sale was a sale in execution by auction. As the property is not bonded, the purchase must have been a cash transfer. The price was more than double as high than the previous sale and exceeded the inflation value as well as the municipal evaluation and it still does. This means that the building was purchased above market price, and in cash. The former domestic residence is now thus a 100% mixed use business building, with potentially high daily turn arounds.

Geometry

Void Shape/ Type

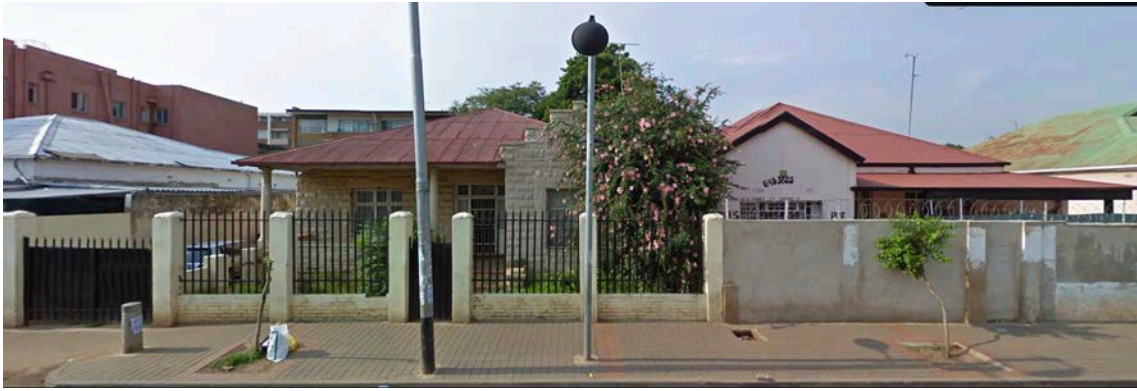
L Shape, for procedural access

Compound Type

Public front and semi-private back, shadow business

Compound Doings: merging, re-scaling, enfolding, yarding





Streetview, Google Maps, 2010



Streetview, Google Maps, 2013

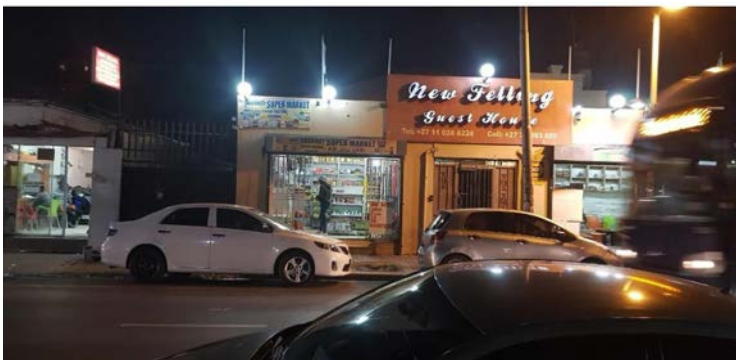
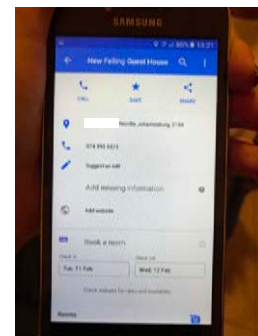
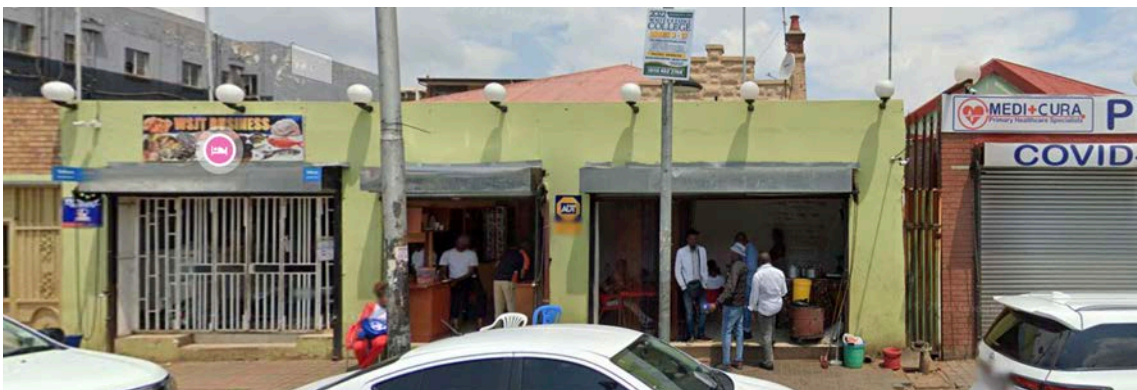


Photo from New Felling Guesthouse website, link disabled, 2019



Online booking form,
photo Saskia Gabrielides, 2019



Streetview, Google Maps, 2022

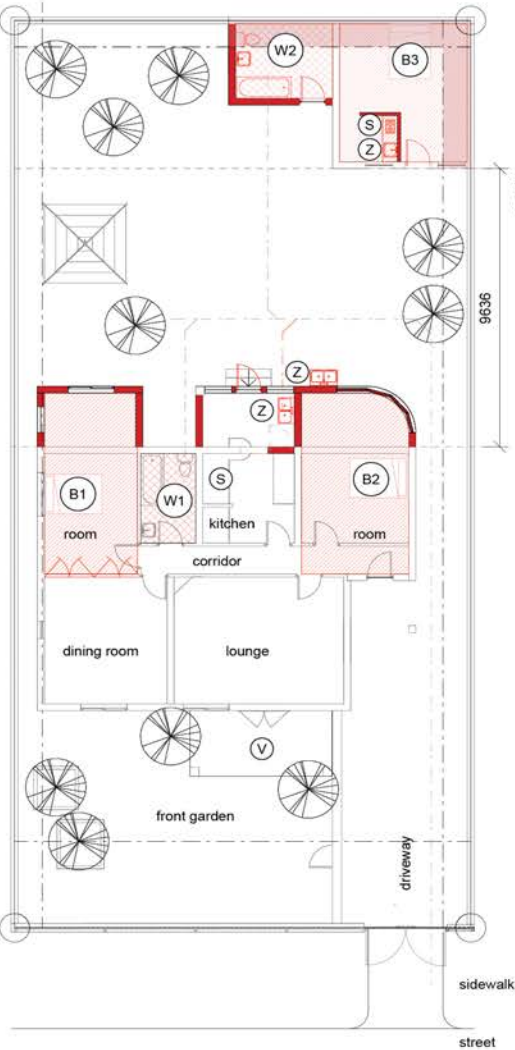
CASE STUDY #7



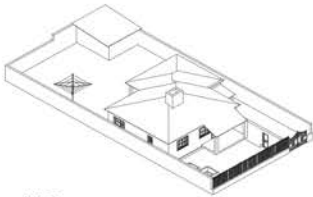
AERIAL
of block from Google Earth photograph, 2020

DATA FOR PROPERTY
FAR = 0.34 (permissible 1.2)
Coverage = 34% (permissible 60%)
Height = 1 storey (permissible 3 storeys)
Additions from original = 50sqm

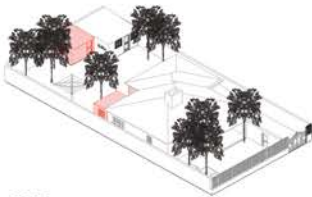
- Index:
- (B) 3 bed
 - (W) 2 enclosed wc's
 - (S) 1 stove
 - (Z) 2 sinks (not including WHB)
 - (V) 1 verandah
- Other: -



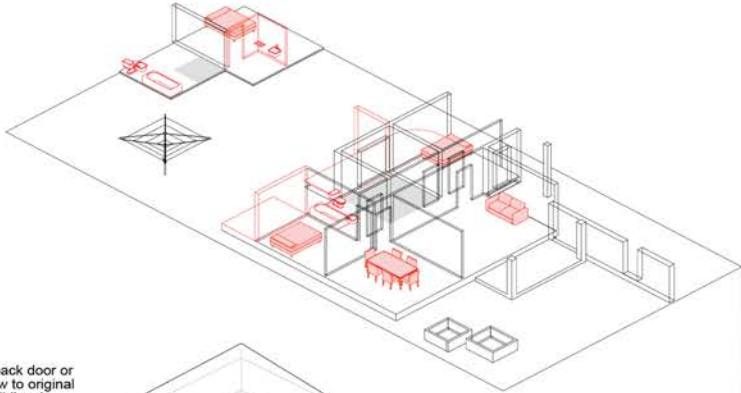
GROUND FLOOR PLAN OF CURRENT PROPERTY



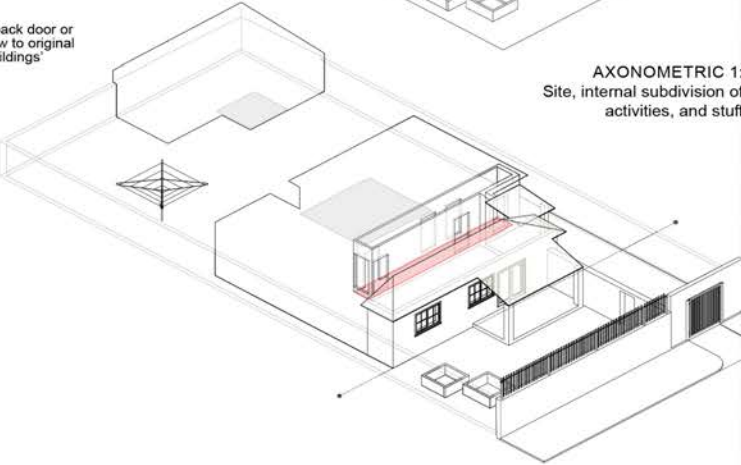
1922
Plot size: 475m²
Bungalow:
Rooms (back): 1
Total solid: 110m²
Total void: 365m²



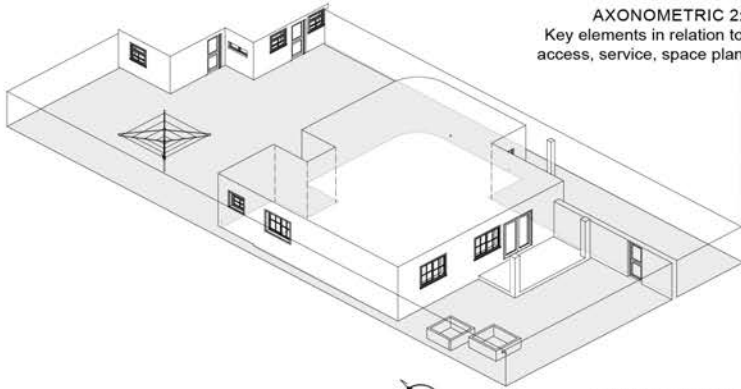
2020
Plot size: 475m²
Bungalow:
Rooms (back + front): 3
Total solid: 160m²
Total void: 315m²



AXONOMETRIC 1:
Site, internal subdivision of activities, and stuff



AXONOMETRIC 2:
Key elements in relation to access, service, space plan



AXONOMETRIC 3:
Skin and transforming void

Single plot description #7

Name: The Widow's House

Sources: Multiple visits over years, discussion with co-owner, property report, satellite imagery, original plan, photos, description

Programme: Private residence for one person, her past and a cat

Summary

The property maintains what family life used to be, with half of the house being actively in use, the other half intact 'as it was', as a repository of memories. Co-owned by mother and son, it is a retirement place for the parent, and at times, a location for commercials by the off-spring film director. Here the house plays itself, with the verandah as a social condenser .

Inventory – Accounting

Rooms:

The main house has four rooms, now furnished as two bedrooms, lounge and dining room plus bathroom and kitchen. The garden unit is a guest studio, with bathroom, kitchen and one big room.

Verandah:

The verandah is in front of the lounge and has been amended in 1945.

Stoop:

The stoep at the back of the house from 1922 had been transformed in 1945 into additional space of kitchen and main bedroom.

Boundary Wall:

The boundary wall in the front is half solid, covered with ivy and extended with palisade – but still look through. The walls to the next door neighbours are low enough to look into each others properties.

Openings:

The street facing boundary wall has a vehicular gate with two doors.

Service/ spaces: The corridor of the main house runs parallel to the street, and the house is accessed through a small covered entry that leads directly onto the passage. The verandah is not linked to the entry. The servant spaces kitchen and bathroom are on the north facing side, together with the bedrooms. The former garage and outdoor room had been transformed into a guest unit in 1985.

Yard:

The open space is divided into a back and a front garden, with grass, many plants and trees. The front yard is adjunct to the living spaces, but south facing.

Stuff:

2 beds, cupboards, shelves, couch, side table, bookshelf, dining suit, framed diplomas, framed family images, books, pots, kettle.

Extra: A fishpond.

People:

Mother with a visiting son.

Animals: A cat.

Trees: Many trees, some of them very high. All are very well maintained.

Elements – Relating

Site, internal subdivisions, activities and stuff

The house has remained as it was after the alteration in 1945 that saw an extension of the main bedroom and the kitchen. The space has continuously been used as family residence, and is now the retirement home of an African lady in her 70s, Sheila* (not her real name). Her son is a film maker, and despite graduating from the Wits Film, Drama and Art History more than two decades ago, his room has remained untouched since many years. It seems almost a sacred space, with his mother's hopes and ideas of the (then) future externalized in space. Similarly, the dining rooms contains many memories of her late husband.

Key elements in relation to access, service and space plan

The key elements operate in principle as originally planned, with a corridor separating bedrooms and living area, parallel to the street. The low occupation of the house translates in it being used half – i.e. the main bedroom, kitchen and bathroom and garden are the principal areas of Sheila's everyday life.

Skin and transforming void

The façade of building and outbuilding have remained as 'originally' planned, with a cat door in the kitchen entry. The outdoor space is equally similar to the original layout, but without connotations of racial discrimination and exclusion. The garden is beautifully manicured and very well maintained.

Legalities

The last structural changes took place in 1985 and was recorded by council. This property is built as planned, and has proof of it.

Aspiration – Speculating

Mother and son purchased the plot in 1998 for a fifth of its current evaluation by council. The neighbouring property, which has one more bedroom but is otherwise quite similar, is on the market in 2023 for R1.4 M, which is ten times as much the purchase price for this property. The investment in this case however, is less monetary than emotional, and an act of socio-cultural affection and care. There has been no switch from use value to exchange value to date. Sheila lived 50 years under apartheid, and was 54 when she could afford AND was legally permitted to be a property owner. In her version of events, her son purchased the property to have a safe place for her to stay when she grew older. The son now looks financially after his mother. The property has been bonded twice by one of the main banks of the country, first with 90% of the purchase value in the year of the acquisition, and then with another 35% of the original purchase price nine years later.

Geometry

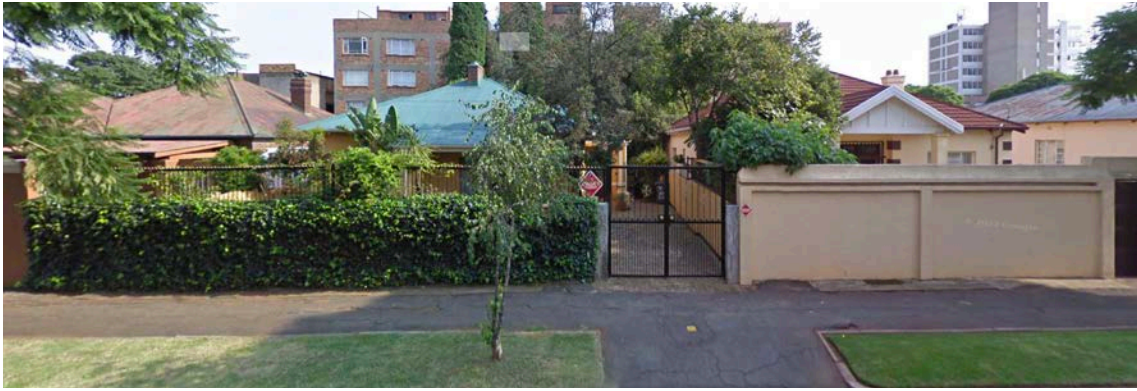
Void Shape/ Type

Back and front garden.

Compound Type

Old age residence

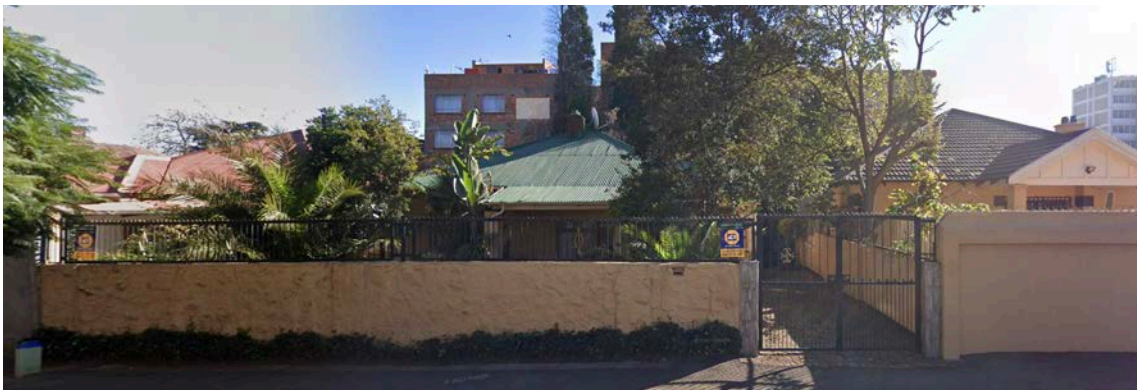
Compound Doings: sleeping, re-scaling (de-scaling)



Streetview, Google Maps, 2010



Streetview, Google Maps, 2013



Streetview, Google Maps, 2022



Verandah staging social cultural gathering for TV Advert, 2013
DStv Advert - Kung Fu, <https://vimeopro.com/user11119637/gerseh-kgamedivideo/66056389>, accessed 11.10.2023

Scaling down:

Plan of the house 'as utilized' in yellow, in the current everyday (2018-2020).
#7 has the lowest occupancy of the series with one permanent resident.

CASE STUDY 8



AERIAL
of block from Google Earth photograph, 2020



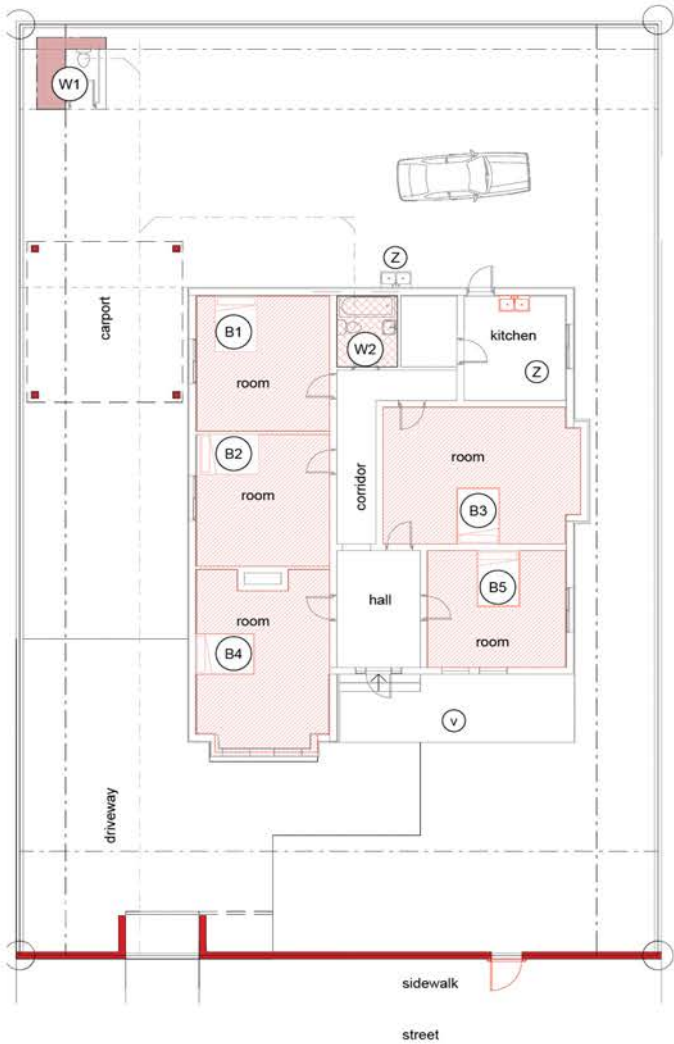
DATA FOR PROPERTY

FAR = 0.3 (permissible 1.2)
Coverage = 35% (permissible 60%)
Height = 1 storey (permissible 3 storeys)
Additions from original = 0sqm

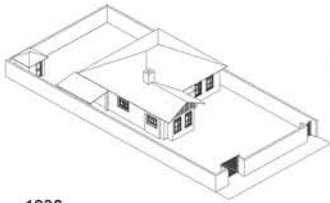
Index:

- (B) 5 beds
- (W) 2 enclosed wc's
- (S) 1 stove
- (Z) 2 sinks (not including WHB)
- (V) 1 verandah

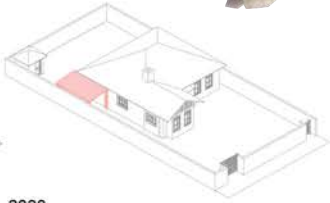
Other: 1x carport



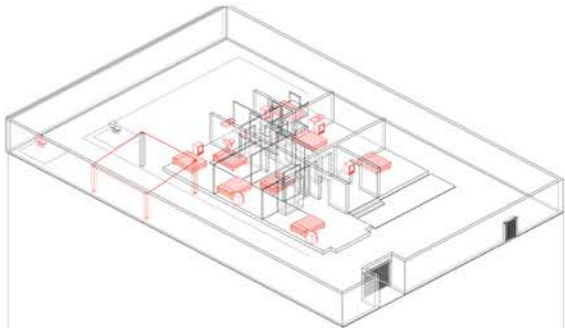
GROUND FLOOR PLAN OF CURRENT PROPERTY



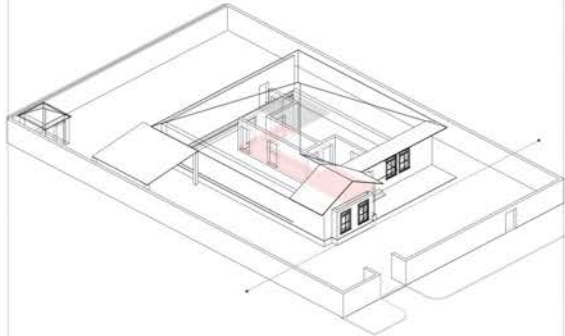
1930
Plot size: 474m²
Bungalow:
Rooms (back): 0
Total solid: 134m²
Total void: 340m²



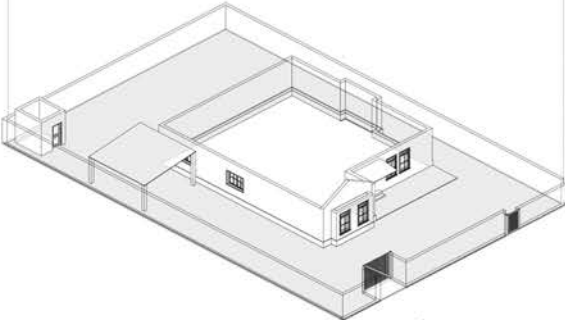
2020
Plot size: 474m²
Bungalow:
Rooms (back + front): 3
Total solid: 134m²
Total void: 340m²



AXONOMETRIC 1:
Site, internal subdivision of
activities, and stuff



AXONOMETRIC 2:
Key elements in relation to
access, service, space plan



AXONOMETRIC 3:
Skin and transforming void

Single plot description #8

Name: The Kingpin's House: Untouched, walled in, taken over.

Sources: Site visit, conversation with real estate agent, property report, satellite imagery, council archive plan, drive by observation

Programme: Residential, seemingly empty

Summary: This property is part of a larger plot puzzle. It looks 'as it was' on a one and a half 495 plot. As a 'Tudor light' bungalow designed by a prominent architectural practice in a projected series of six, it retains past reminiscences of the front garden and back yard layout, and with no visible changes other than 'wear and tear' degradation, and is without permanent residents. Traces of separated lives however are captured through a number of fridges across the rooms. The emptiness and the details of the latest sales transfer feed into a narrative of speculation and crime.

Inventory – Accounting

Rooms: The property comprises of 11 rooms. As per site visit and council plan, there are 3 bedrooms, 1 kitchen, 1 pantry, 1 bathroom, 1 dining room, 1 drawing room, 1 corridor, 1 hall, 1 outside room, and doormat veranda (only a tin roof despite it being planned in drawings). The original designation of programme is still visible in furniture, built in finishes. Open spaces: back yard, front garden, carport laundry line.

Boundary Wall:

The boundary wall is serving the purpose to demarcate the outer boundary of two joint plots which are both of equal size and two thirds of the width of a typical 495 plot, similar in depth.

Openings in Walls:

The front boundary wall has one pedestrian gate, and a gate for car access.

The main house has 2 entrance doors, 1 in the front and 1 at the back. The outdoor room has 1 door. There are 9 doors inside the house and 12 windows in the main house.

Service/ space: The property has a clear 'back and front', as a plot and the house itself.

A small outdoor building reminds one of its origins around the turn of the 20th century between 1900-1908. The structure looks very similar to the council drawings by the architect John Moffat.

Yard: The yard is green in the front and paved at the back and along the driveway.

Stuff : 2 double beds, 1 single beds with identical nightstand, 3 fridges (in bedrooms), very decorative ornaments on ceiling and walls in empty living rooms. TV, laptop, hand-bag, beauty accessories, pots, glasses, dishwashing liquid (in room), pot plant. Magic cube, cell phone, medals on wall. Lots of clothes and laundry, china bags. 2 plate cooker, in kitchen. Sunflower oil, water canister.

Extra: old car body

People: The property was lightly occupied with 6-8 people

Animals: no information

Trees: A tree in the front of house. Pot plants. Grass.

Elements – Relating

The house follows a central passage plan, with a small hall in the entry and double circulation through the corridor and a parallel path in the dining room along the corridor wall– with 2 entries from hall and kitchen/ pantry section. Bedrooms are west of the corridor and shared rooms are on the east. The front veranda has disappeared, only a roof reminds one of its existence. There were building plans approved for an extension in the front (1958) that has not materialized.

Patterns of Aspiration – Speculating

Growth and change over time refers in the case of this property to transactional property value, and relations of debt and profit as a debatable approach to compounding interest. It is a form of knowledge embedded in the bungalow plot that is visible through its initial invisibility in physical space, with a winding paper trail.

The property has a history of being part of a serial portfolio, and started as a form of mini catalogue of two mirrored versions of the same plan. The original drawings by McIntosh & Moffat indicate a larger site development of six identical / mirrored houses on half a block, eight properties, for one lawyer client. The drawings of house and out-building are separated from each other and not in the context of the a plot. The development was speculative and has not materialised as planned, based on a roofscape analysis from satellite photography over time, it looks as if there was a series of three properties that look alike. Parts of the interior of the building is quite styled / art deco.

The property is currently again part of a larger portfolio, that seems driven by debatable aspirations . The sales history shows signs of a switch from it being a family home to it being an transactional investment in 2020. After probably more than three decades in one (white) family, the property was sold twice in two consecutive days to male owners with an African name, with an 18% profit for the 1st buyer. The second buyer bonded the property to 100% of his purchase price through one of the large South African banks. In 2017, the bank took the owner entrepreneur, who headed up a cooperative with other linkages in the area, to court, and the property was on auction due to outstanding bond amounts. In 2020 it was sold for 63% of the 2013 purchase amount to a small group of new owners, a single male and a couple with African names, with the wife having no shares.

The single male owner is a known property practitioner in Johannesburg. He has been accused but was not convicted of ruthless hijacking of vacant properties, disputed sale practices on auctions, and not respecting transfer of ownership. This legally translated into charges of theft, fraud, assault and intimidation. The man has been reported to have deeply entangled relationships with members of the law enforcement and within the city administration. All charges have provisionally been withdrawn. The other owner is a public figure who intended to run for president in Zimbabwe as head of an opposition party.

This property has fluctuated in its transactional value over time , varying between the amounts of R 675,000 (2012), then R 800,000 (2012 one day later) and R 510,000 (2020 unbonded). Albeit a theoretical scenario, if considering inflation as a form of compound value, the sale translates into a loss of 45% for the seller, and the acquisition of a bargain of a similar percentage for the new owners. The over-extension of bonding in unstable contexts, to then enable the acquisition of property under market value through what seems camouflaged as 'legal' - might be a pattern to take note of for further investigation. The study is interested in the shapes and forms that this sort of shadow businesses takes in the physical realm. In the case of property #8, there is nothing to see but a closed house, on a walled off property with a large, empty yard. There is no visible capital invested on ground.

Geometry

Void Shape/ Type

From the outside, basically unchanged since inception, front garden and back yard

Compound Type

Transactional bargain, no investment other than raised boundary wall

Compound Doings: sleeping



Streetview, Google Maps, 2010



Streetview, Google Maps, 2015



Streetview, Google Maps, 2022



Original features from John Moffat, Architect, ca 1901

Photos: Lencho Brynard, ARPL4000A, 2020



Yardspace



CASE STUDY 09

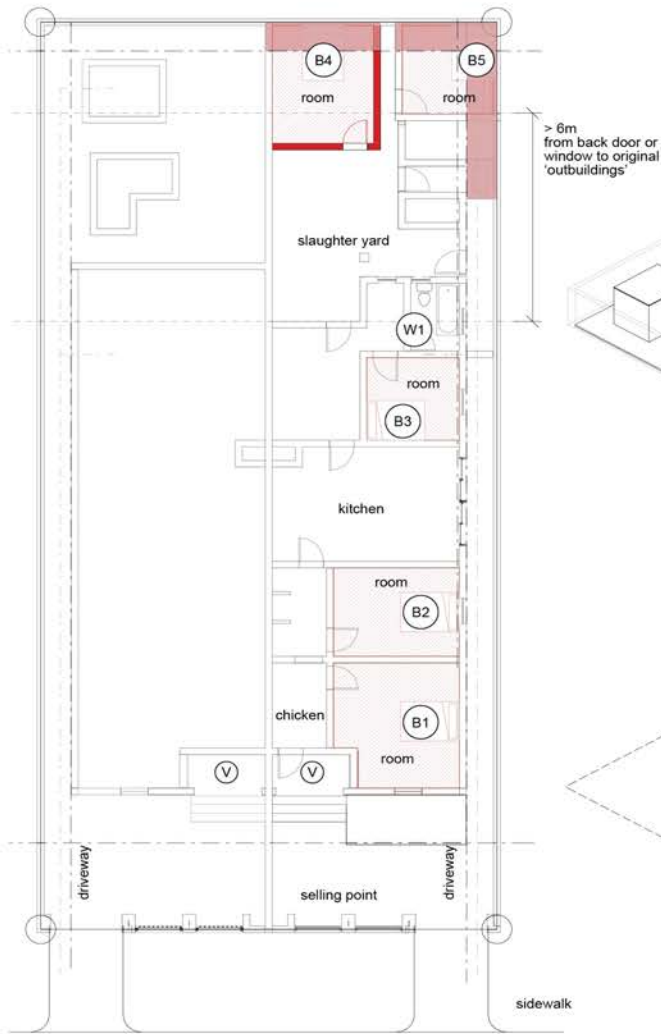


AERIAL
of block from Google Earth photograph, 2020

DATA FOR PROPERTY
FAR = 0.4 (permissible 1.2)
Coverage = 40% (permissible 60%)
Height = 1 storey (permissible 3 storeys)
Additions from original = 0sqm

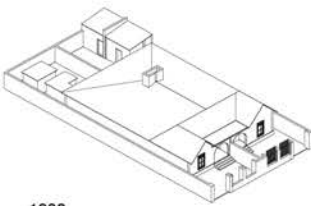
- Index:
- (B) 5 beds
 - (W) 1 enclosed wc's
 - (S) 1 stove
 - (Z) 1 sink (not including WHB)
 - (V) 1 verandah

Other: Area for selling, keeping, slaughtering chickens

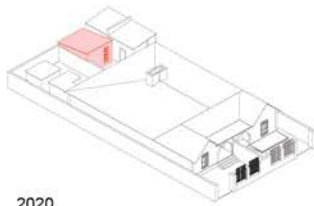


GROUND FLOOR PLAN OF CURRENT PROPERTY

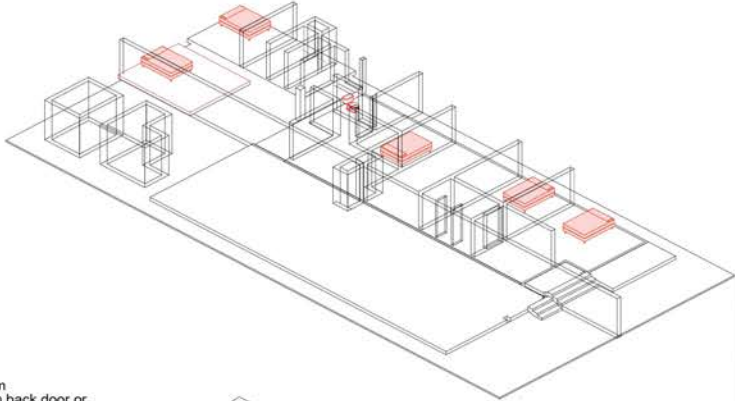
0 5 10



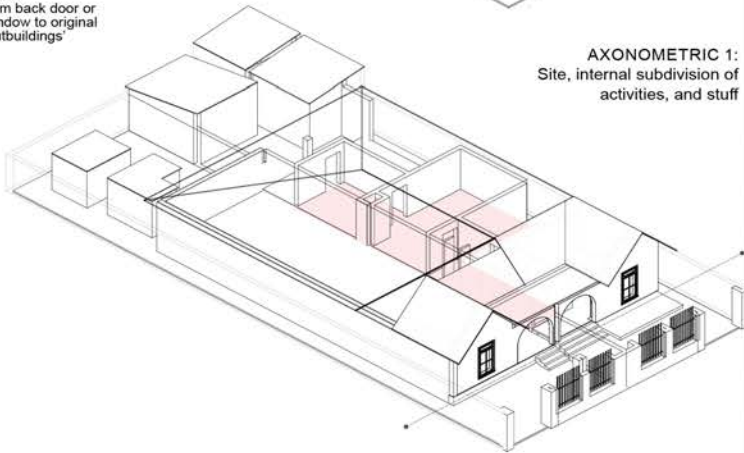
1930
Plot size: 475m²
Bungalow:
Rooms (back): 4
Total solid: 283m²
Total void: 192m²



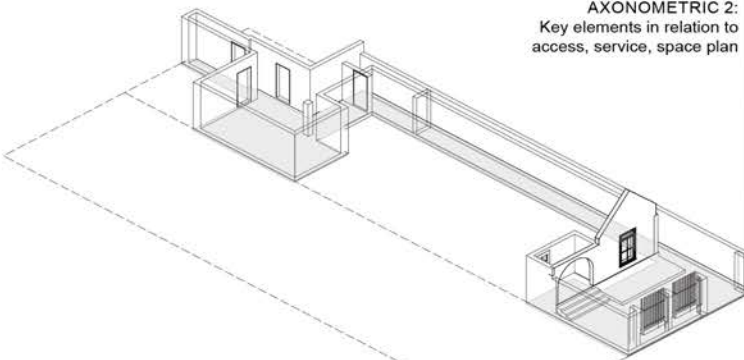
2020
Plot size: 475m²
Bungalow:
Rooms (back + front): 4
Total solid: 283m²
Total void: 192m²



AXONOMETRIC 1:
Site, internal subdivision of
activities, and stuff



AXONOMETRIC 2:
Key elements in relation to
access, service, space plan



AXONOMETRIC 3:
Skin and transforming void

Single plot description #9

Name: Chicken House, Verandah Business, with blue plaque potential

Sources: Site visit, conversation with Chicken Businesswoman, property report, satellite imagery, council archive plan, drive-by observation

Programme: Mixed use: residential, live chicken outlet

Summary: This property is one half of a semi-detached house originally from 1920, designed by architect Harry Veale, and under consideration for a blue heritage plaque. In the everyday, the covered veranda takes centre stage when it becomes the outdoor display area – and accommodation – for a live chicken outlet. The yard turns slaughter house, the kitchen at the back is storing the frozen animals that are ready to go, and the exchange of goods and money take place at the boundary wall.

Inventory – Accounting

Rooms: The property comprises of 14 rooms. As per council plan, there are 3 bedrooms, 1 kitchen, 1 pantry, 1 bathroom, 1 dining room, 1 corridor, 1 hall, 2 verandas, one in the front and one at the back and 3 outside rooms. Open spaces: front yard, back yard, driveway.

Boundary Wall:

The boundary wall serves as counterspace of the chicken outlet, with a handwritten advertisement that is hard to read.

Openings in Walls:

The front boundary wall has one pedestrian gate, and a gate for car access.

The main house has 2 entrance doors, 1 in the front and 1 at the back. The outdoor rooms have 2 doors. There is space for 7 doors inside the house and 6 windows.

Service/ space: The property has a balanced 'back and front', with a veranda at the front turned service/ sales space and a veranda at the back giving access to service rooms inside the house and rooms outside.

Yard: The yard in the front can accommodate a car, the yard space in the back serves to access the rooms and can assist to legalise the chicken outlet if required.

Stuff : Chicken cage, ad page, fridge, freezer.

Extra:

People:. According to interviews in 2020, when the property was up for sale, 2 families were residing in the house, and one person per outdoor room = total number (estimated)?

Animals: chickens

Trees: none

Elements – Relating

The semi-detached structure shares a dividing wall with its twin neighbour. The main aesthetic element is the front façade with its recessed veranda. Its width is determined by the corridor plus one room, until the two merge into one and then split into two smaller rooms next to each other, one of those rooms is a 'walk through'. The former centre 'dining' room is now another room in the line-up of individual units, and the service block at the end turns into a new centre. Due to the 2nd veranda this section can be accessed from the back rooms, so that the property ends up with a new sequence rooms, service space, rooms, service (retail space), the chicken business being part of both. In terms of structure and space layout, the plot as a unit overrides the former back and front hierar-

chy, with the house in the centre.

Patterns of Aspiration – Speculating

After having been sold by a “political/ religious activist in 2006” and being resold in 2008 this property has been with the current owner now for 25 years and hardly any changes are visible, to skin, infrastructure or structure other than the addition of a room at the back, and a coat of paint. The Heritage Register has C rated the property . “C = Good building, part of a significant group and probably contributes to street scene, but possibly only a façade. Don’t touch without consulting the Johannesburg Heritage Foundation. Changes are possible but demolition will be resisted.”

The potential growth in this scenario would be the compounding value of property, as income generating asset, as well as bonding security. The transactional value of this property is positive as going up from sale to sale. However, the profit was higher than the compounding inflation only in 2006. Today, the municipal market value/ estimate is only 55% of the theoretical compounded value of the current owner’s purchase price in 2008. One of the major South African Banks has bonded the property for 100% of the sale price in 2008. The property was on sale in 2020 for R1,100,000 but hasn’t changed ownership since.

The chicken business seems a lucrative enterprise, albeit with R100 per chicken not cheaper than grilled version in the local supermarket, however, freshly slaughtered poultry is a cultural preference for many people in the area . There are strict Public Health Bye-Laws in regards to keeping the birds. Not more than 10 chicken at a time are permitted per erf. A poultry house has requirements that the cage on the veranda does not fulfil this, but a structure in the backyard theoretically could do so (min size of 4sqm, built of brick, stone or concrete, adequate ventilation, cleaning every 48h). Should this not be the case, the chickens are transitional and need to be sold on a daily basis, or killed and stored in the deep freeze, which is as currently practiced.

Geometry

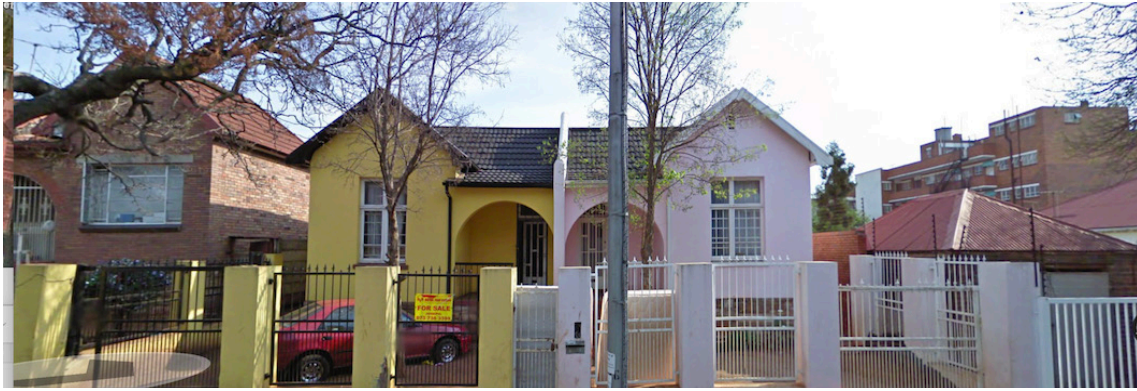
Void Shape/ Type

From the outside, basically unchanged since inception, front nd back yard

Compound Type

Shared co-housing with live chicken business

Compound Doings: merging, re-scaling, yarding



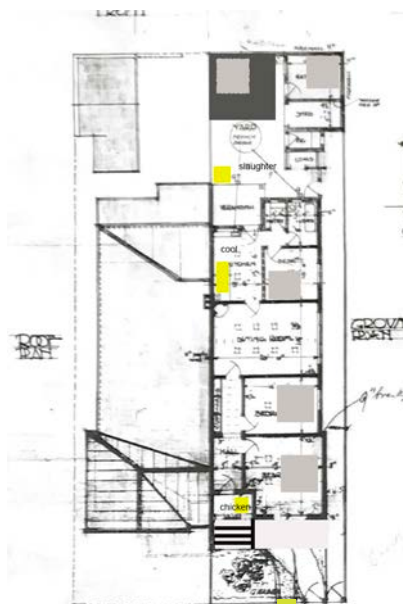
Streetview, Google Maps, 2009



Streetview, Google Maps, 2013



Streetview, Google Maps, 2022



Chicken business afrom back to front.

Part 4: Keeping of poultry

Application 124. The provisions of sections 126(d), (f), (g) and 127(e), do not apply to any person keeping ten or less poultry.

Permit requirement 125

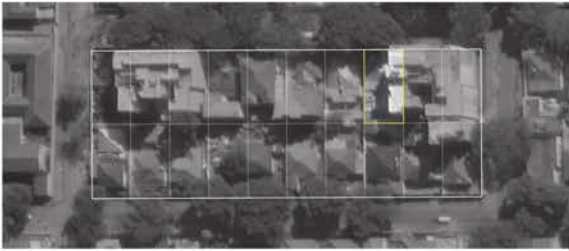
No person may keep more than 10 poultry on an erf in a proclaimed township or 100 poultry on premises zoned for agricultural purposes except in terms of a permit authorising that activity.

CoJ - Bylaws- Keeping of Animals,
Part 1, Application of chapter 118.



Sale sign at gate, by author, 2020

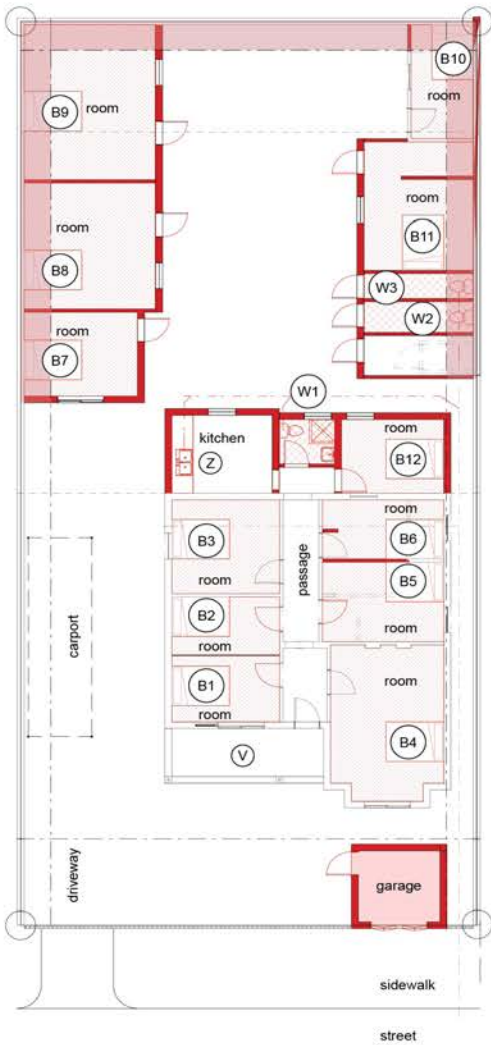
CASE STUDY 10



AERIAL
of block from Google Earth photograph, 2020

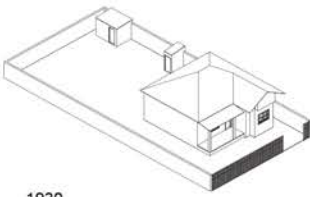
DATA FOR PROPERTY
FAR = 0.6 (permissible 1.2)
Coverage = 56% (permissible 60%)
Height = 1 storey (permissible 3 storeys)
Additions from original = 129sqm

- Index:
- (B) 12 beds
 - (W) 3 enclosed wc's
 - (S) 1 stove+
 - (Z) 1 sink (not including WHB)
 - (V) 1 verandah
 - Other: 1 x garage

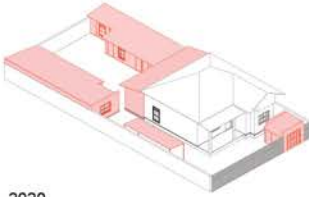


GROUND FLOOR PLAN OF CURRENT PROPERTY

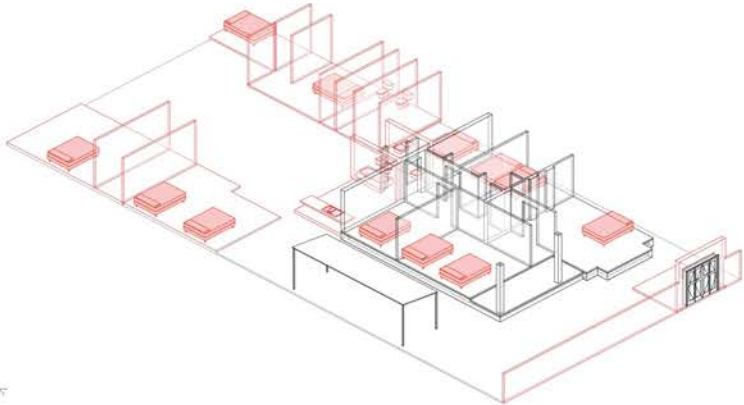
0 5 10



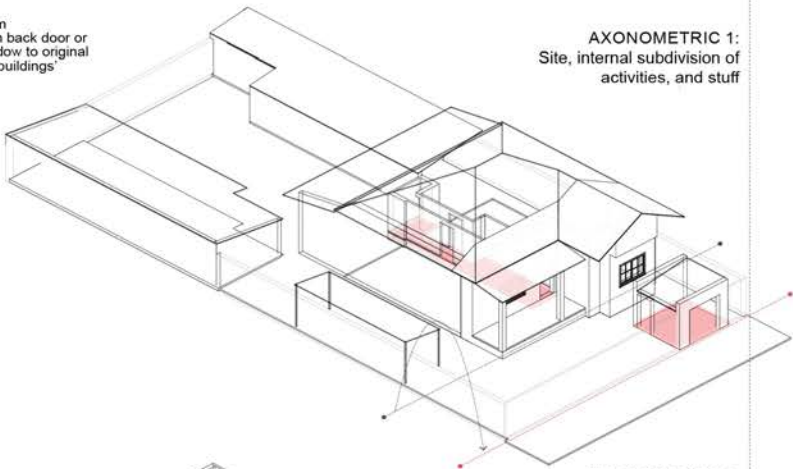
1930
Plot size: 473m²
Bungalow:
Rooms (back): 1
Total solid: 134m²
Total void: 339m²



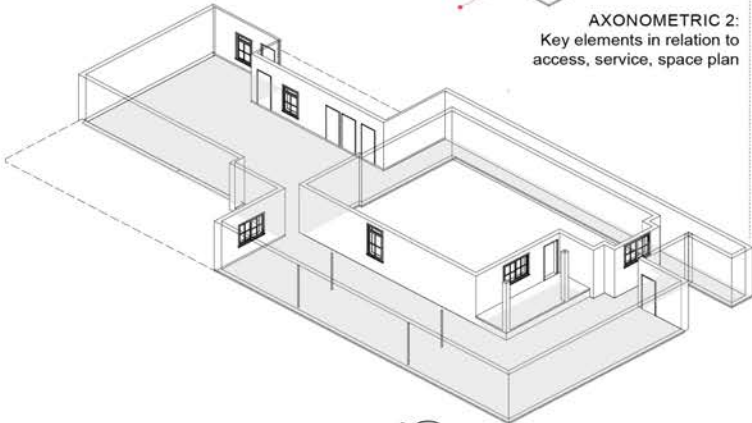
2020
Plot size: 473m²
Bungalow:
Rooms (back + front): 4
Total solid: 263m²
Total void: 210m²



AXONOMETRIC 1:
Site, internal subdivision of
activities, and stuff



AXONOMETRIC 2:
Key elements in relation to
access, service, space plan



AXONOMETRIC 3:
Skin and transforming void

Single plot description #10

Name: 4 room potential: front, back and sideways

Sources: Site visit (outside only), conversation with manager, former resident, former owner, property report, satellite imagery, council archive plan, photos

Programme: Rental room accommodation, shop

Summary

Having started out as a typical four room 'cottage' in the early 1900s, this bungalow property has transformed from a modest suburban dream into a 13-room residential compound with a sensitive access system turning former racial hierarchies and discrimination into degrees of privacy. It is part of a small scale portfolio and managed across neighbourhoods.

Inventory – Accounting

Rooms: The original property had four rooms – type two wide by two deep – a corridor, a veranda and a bathroom plus a WC and 'boys' room at the back. The additions to the house include another bedroom, a lobby and stoep (at the back). After four decades these additions have turned into the current bathroom, kitchen and an additional room. The transformed property now offers seven rooms inside the house, plus bathroom, five rooms outside and a street facing shop.

Boundary Wall: The street facing palisade fence integrates the shop with a gated front and a hole to process exchange of goods and monetary transactions.

Openings: The street facing boundary wall has one car and two pedestrian gates. There is one entrance door into the house in the front and one in the back. There is one entrance into the shop. The rooms at the back all have their individual entrance. There are thirteen windows, one per room, and a shopfront.

Service/ space: The property developed the backyard with domestic accommodation and outdoor WC initially into a suburban garden with pool and garage, then transformed the space into rental accommodation with a central open space. The rooms requiring water infrastructure are bundled at the back of house, front of backyard, and are shared.

Yard: The space in front of the house was originally called 'garden', probably because it is the north facing side of the property. The open space at the back was called 'yard'. The front had, and still has, three access points that are used by different groups of people. Framed by the veranda, it serves now as car parking area and also accommodates the shop. The backyard is shared outdoor space for residents.

Stuff: No privately owned items other than laundry are kept in the shared space.

Extra: Laundry line at the back.

People: One to three people per room.

Animals: none

Trees: None anymore. Two big trees have been removed to make place for rooms.

Elements – Relating

Site, internal subdivisions, activities and stuff

The house has been subdivided into individual units per room, with shared washing facilities. Same at the back. The shop is run independently. The main pieces of furniture are beds. People that are renting know each other but are not related.

Key elements in relation to access, service and space plan

The house has physically not changed, other than use / occupation, with one significant amendment. The main entrance door that opens from the veranda is solely now used by the tenant(s) renting the former dining room with the large bay window (behind the

shop). They enter their room through the hall and have access to the corridor leading to the bathroom. All other tenants in the house must use the pedestrian gate on the western side of the property, formerly allocated to domestic workers to get to the back. The fire safety distance of 1m has been turned into an outdoor corridor.

The tenants of the rooms in the backyard use the former garden east of the house, turned driveway or parking, to access their space. Small screening walls provide privacy to the different entrances.

Skin and transforming void

The eastern and western boundary wall at the back has been extruded into habitable space, the resulting courtyard has entrances facing from three sides. The front of the house has been extended by the self-contained shop.

Legalities

No structural changes since 1960 have been recorded or approved by council. All changes to the potential heritage of the bungalow have been council approved. In principle there should be no problem to get the outbuildings approved in terms of coverage, use and access 'as built' if infrastructure and services comply. There is no information about the legalities of activities within the compound. Officially it is all rented accommodation.

Aspiration – Speculating

The property is part of the larger portfolio of 495 rooming compounds that are trading as transactional assets. The property was purchased in 2005 by a black African property broker from a white female owner, who had moved out in 1993/94, for the amount of R150,000. This is the equivalent of +- R400,000 in 2023, and a low price on today's market. He sold it two years later in 2007 for more than three times the purchase price, to a group of Africans, last names indicate from West Africa. The sale in 2007 was bonded to 99% of the purchase price by one of the major South African banks. During their nine years of ownership the shop and the rooms at the back were added, as rental income-producing units. This indicates a clear switch from use value to exchange value. The property was sold in 2016 with an actual profit of 70% return in capital. In terms of inflation, and purchase value of the currency, however, the sale of the property was for a similar amount than it was bought for. The next owners, also from another African country, kept the property for four years, and did not make major amendments outside of a small upgrade of the 'boys' room. They sold the property with a minuscule cash gain, and a loss in terms of inflation / purchase power of the currency. They owned another property that was purchased by the same legal entity simultaneously. The purchase is bonded by an 'out of bank loan' linked to one of the sellers. The maintenance of the properties is undertaken by the same caretaker. This shows that tenants build a small network that moves between or switches properties when they want to up- or downgrade.

Geometry

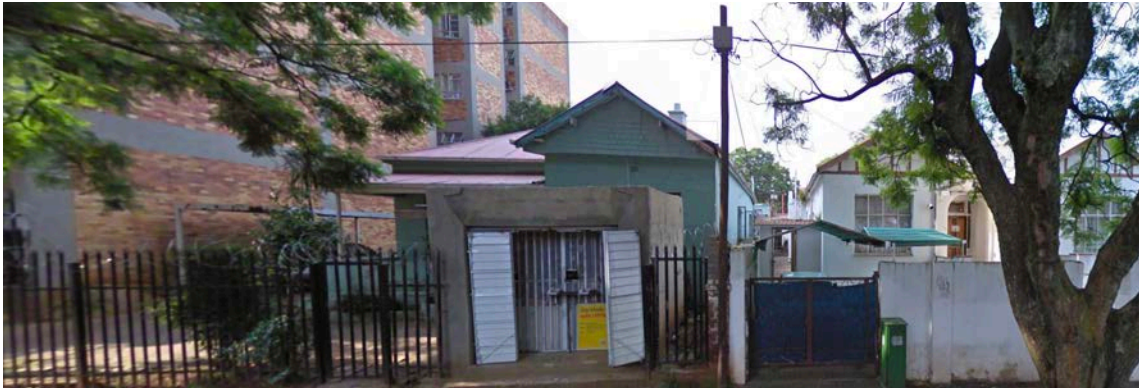
Void Shape/ Type

Three faced courtyard void on half of the property that nearly mirrors the other half as solid. Multiple access routes

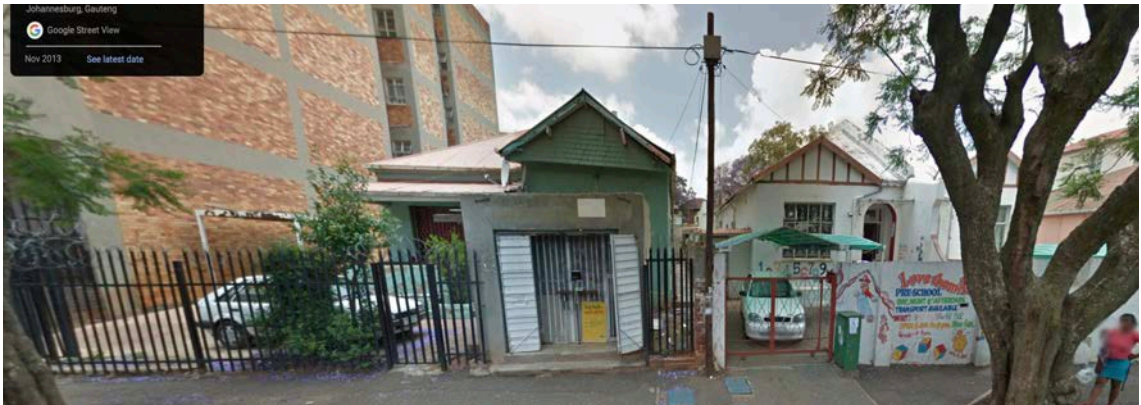
Compound Type

Serviced front space and communal back yard. Rules and regulations of compound network across neighbourhood apply.

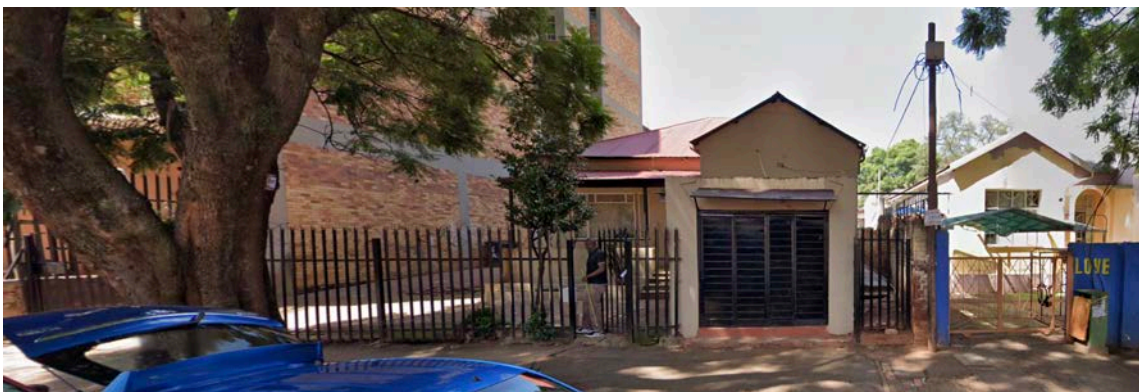
Compound Doings: merging, re-scaling, enfolding, yarding



Streetview, Google Maps, 2010



Streetview, Google Maps, 2013



Streetview, Google Maps, 2022



Collage plan 2022, re-scaling.
Access routes and entry points.

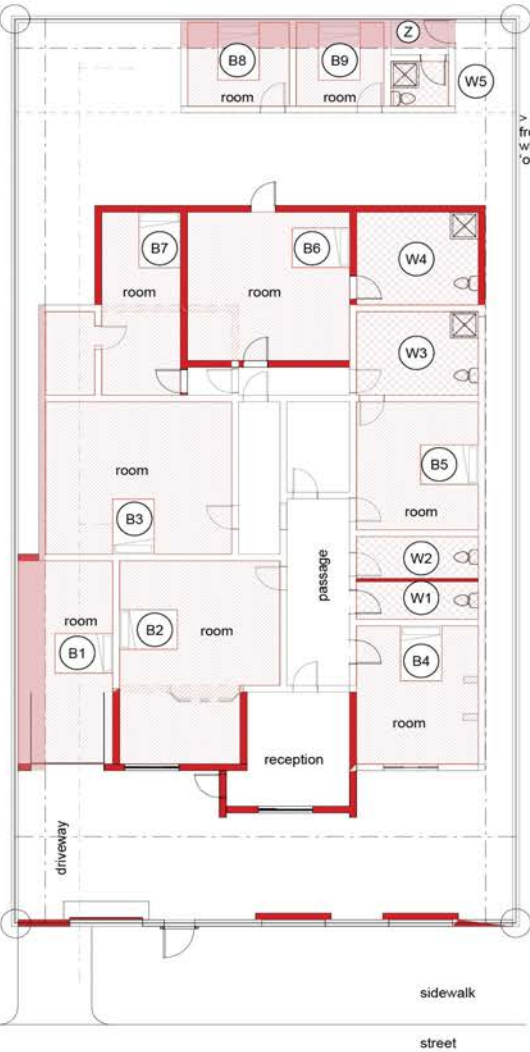
CASE STUDY 11



AERIAL
of block from Google Earth photograph, 2020

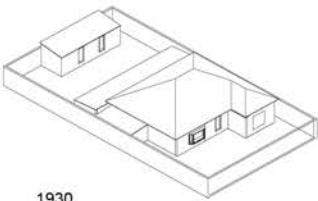
DATA FOR PROPERTY
FAR = 0.6 (permissible 1.2)
Coverage = 65% (permissible 60%)
Height = 1 storey (permissible 3 storeys)
Additions from original = 101sqm

- Index:
- (B) 9 beds
 - (W) 5 enclosed wc's
 - (S) 0 stoves
 - (Z) 1 sink (not including WHB)
 - (V) 0 verandah
- Other: 1 x reception

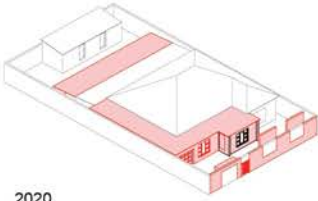


GROUND FLOOR PLAN OF CURRENT PROPERTY

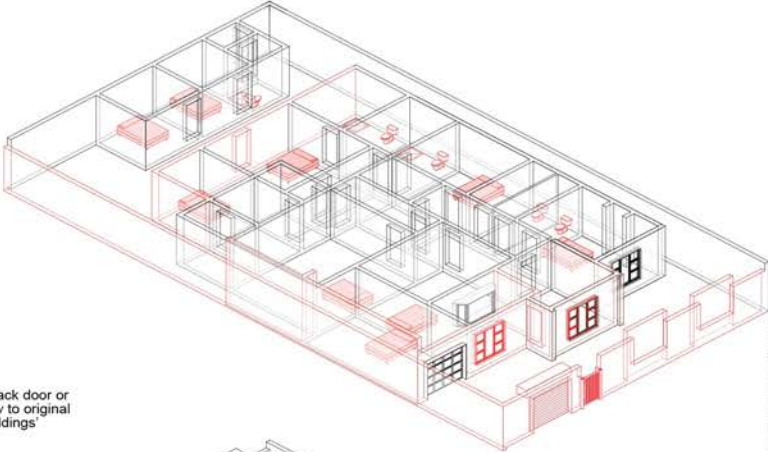
0 5 10



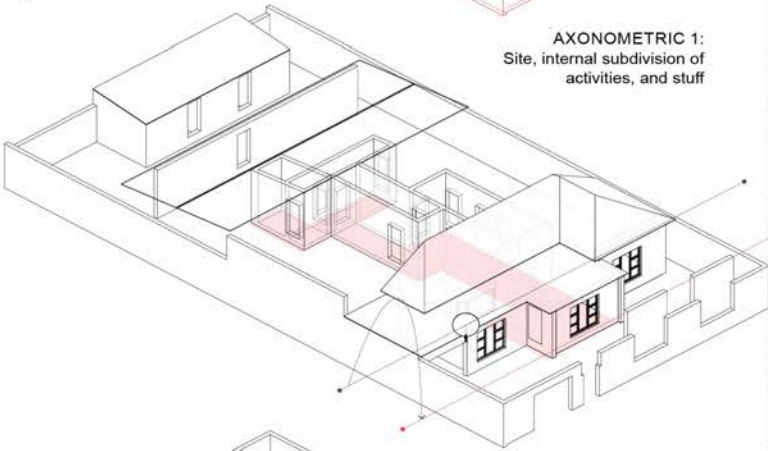
1930
Plot size: 472m²
Bungalow:
Rooms (back): 1
Total solid: 204m²
Total void: 268m²



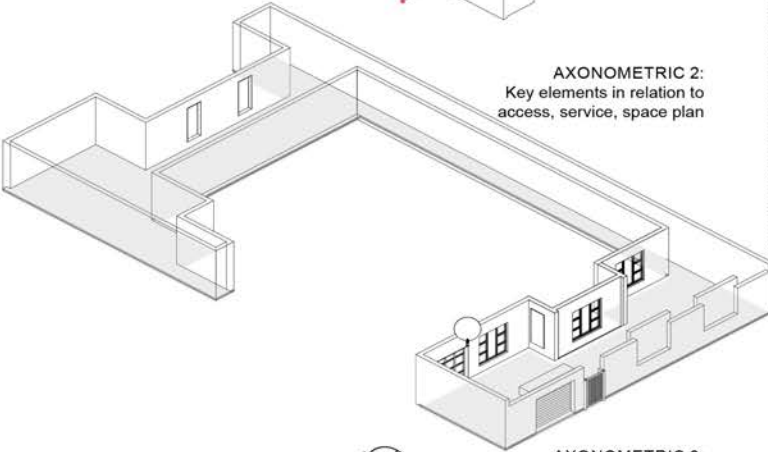
2020
Plot size: 472m²
Bungalow:
Rooms (back + front): 4
Total solid: 305m²
Total void: 167m²



AXONOMETRIC 1:
Site, internal subdivision of activities, and stuff



AXONOMETRIC 2:
Key elements in relation to access, service, space plan



AXONOMETRIC 3:
Skin and transforming void



Single plot description #11

Name: # Phantom verandah

Sources: Drive by, conversation with manager, site visit, property report, satellite imagery, council plan, photos

Programme: Rental rooms

Summary

While the verandah has been slowly replaced over six decades the property has not undergone radical physical change, rather served different programmes over time. It is now part of a larger property portfolio in similar neighbourhoods of an enterprise mainly operating as laboratory.

Inventory – Accounting

Rooms: This property has nine rooms, plus two kitchens three bathrooms, two WCs, one reception, two outdoor rooms, one of them used as parking for cars

Boundary Wall: The boundary wall is a solid brick wall.

Openings: The street facing boundary wall has one car and one pedestrian gate where other than residents seem to have a key. 17 windows. 4 entrance doors.

Service/ space: Back and front are clearly separated. The back is only accessible via fire escape path. The former service space at the back of house has turned into the more appreciated unit as it has its own entrance and bathroom. This is similar to the converted servant outrooms. A former store room serves as shared kitchen (no window).

Yard: There is a front and a back yard. The front serves arrival and parking, the back is shared between the back of house and the rooms.

Stuff: A children toy bike on the roof of the converted garage.

Extra: Laundry line in the yard.

People: An estimated 20 people.

Animals: No information.

Trees: One tree at the back of house have been cut down to make space for rooms.

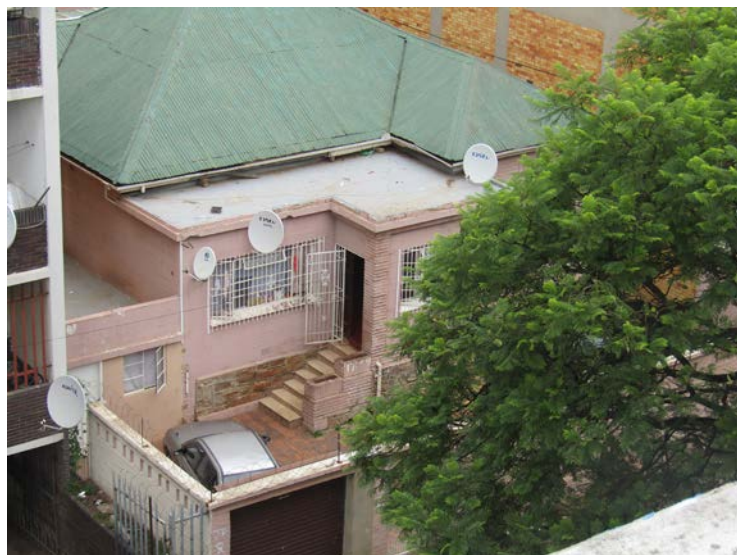
Legalities

Changes to the property have been approved by council till the mid 1980s when the property was donated to an NGO that offers spectacles to low income earners. Afterwards there have been mainly programmatic changes.

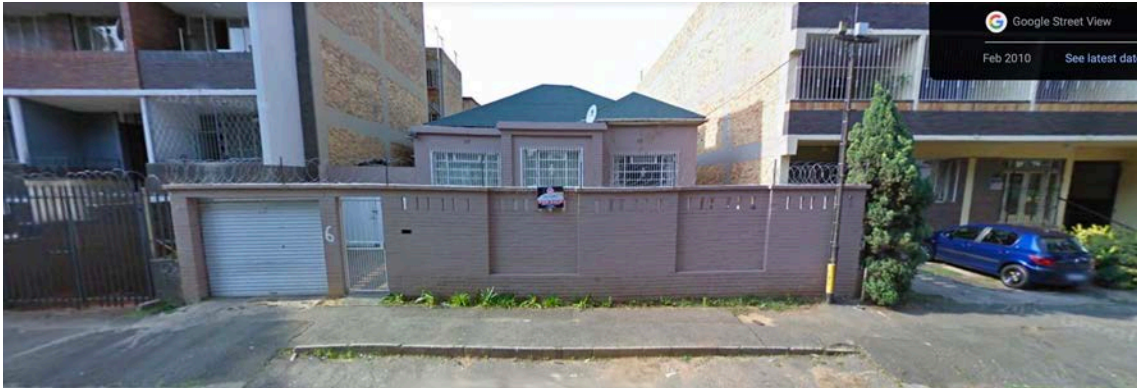
Aspiration

The property is part of a real estate portfolio of a medical laboratory that started post 1994. It is managed by a care taker who resides on this property in the former garage. Being positioned on the edge of Yeoville facing the more affluent suburb of Houghton, it is convenient for tenants with employment in the northern part of Johannesburg. It offers the affordable pricing of Yeoville, and the proximity to areas with more and other opportunities. Very much what the Corridors of Freedom project has been trying to propagate.

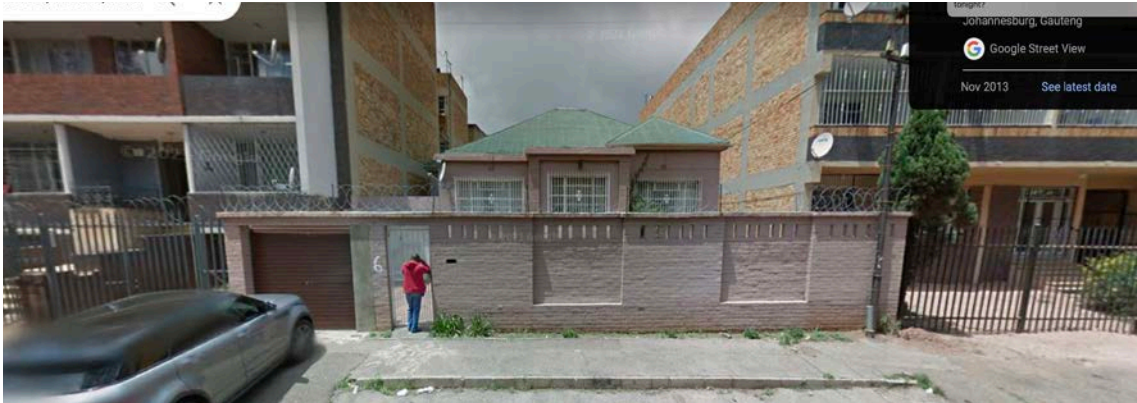
S



Three aerial views onto #11 from roof of St John's View Apartment building, photo Ruvimbo Nyamupanedengu, ARPL4000A 2020



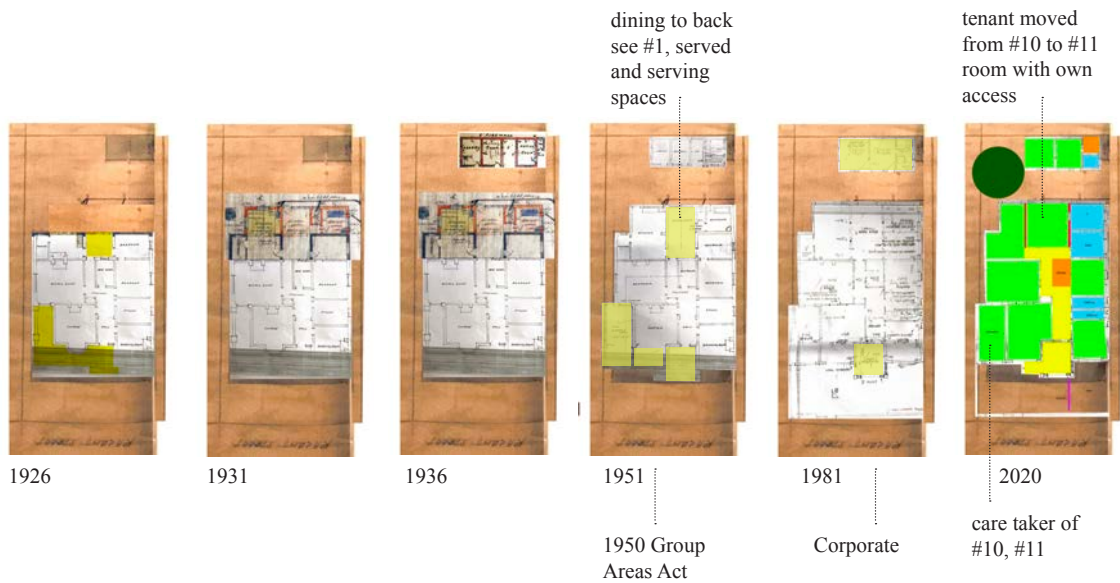
Streetview, Google Maps, 2010



Streetview, Google Maps, 2013



Streetview, Google Maps, 2022



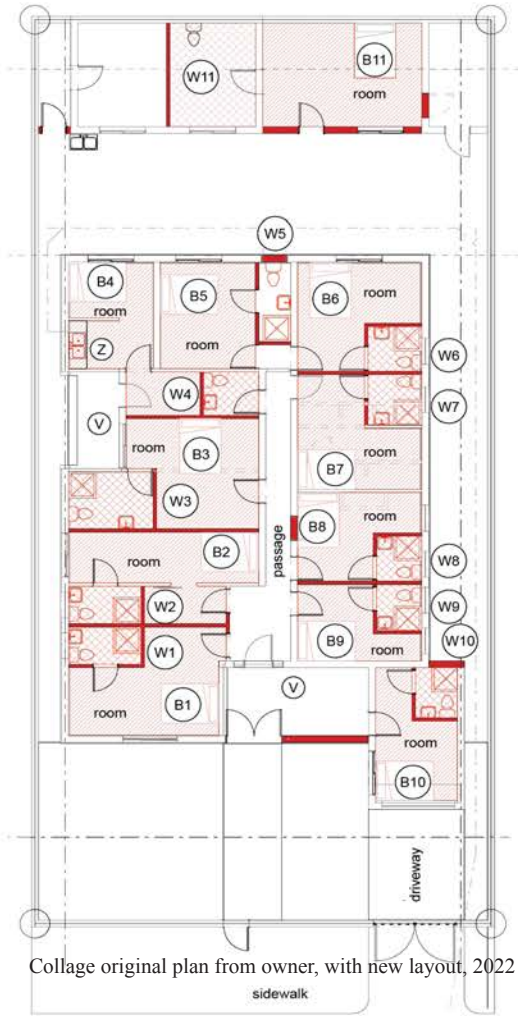
CASE STUDY 12



AERIAL
of block from Google Earth photograph, 2020

DATA FOR PROPERTY
FAR = 0.7 (permissible 1.2)
Coverage = 66% (permissible 60%)
Height = 1 storey (permissible 3 storeys)
Additions from original = 57sqm

- Index:
- (B) 11 beds
 - (W) 11 enclosed wc's
 - (S) 1 stove
 - (Z) 1 sink (not including WHB)
 - (V) 2 verandahs
 - Other: 3 other backyard stores



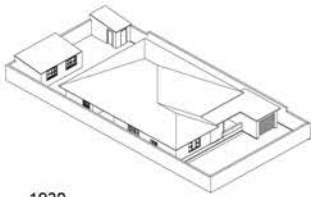
Collage original plan from owner, with new layout, 2022

GROUND FLOOR PLAN OF CURRENT PROPERTY

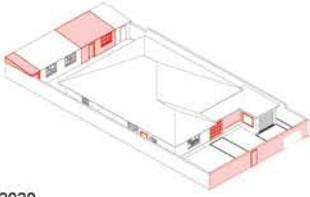
0 5 10



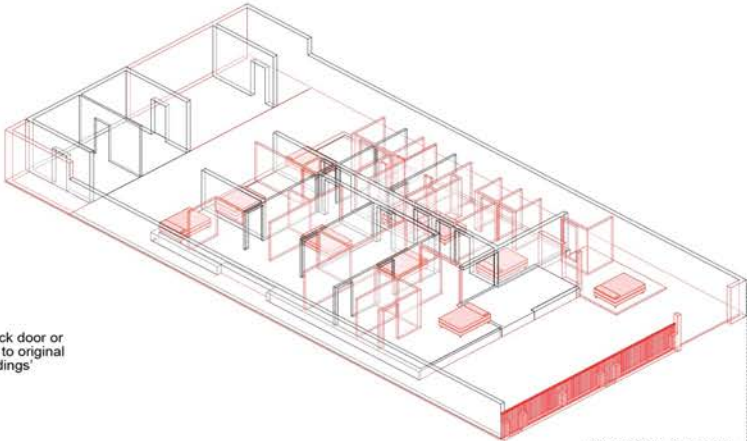
< 6m
from back door or
window to original
'outbuildings'



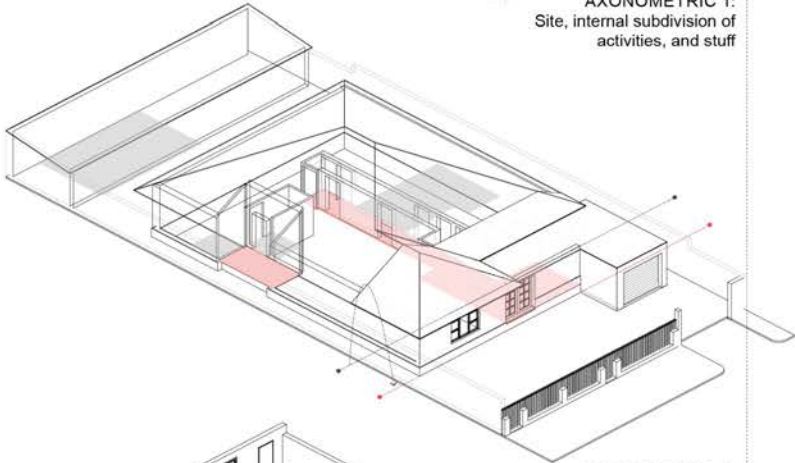
1930
Plot size: 472m²
Bungalow:
Rooms (back): 1
Total solid: 258m²
Total void: 217m²



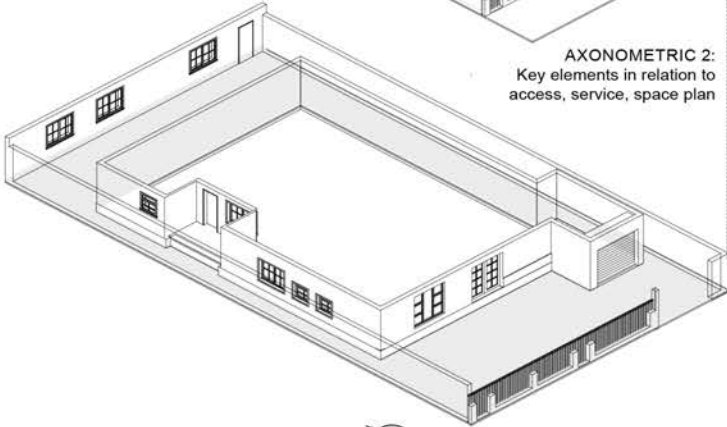
2020
Plot size: 472m²
Bungalow:
Rooms (back + front): 2
Total solid: 312m²
Total void: 160m²



AXONOMETRIC 1:
Site, internal subdivision
of activities, and stuff



AXONOMETRIC 2:
Key elements in relation to
access, service, space plan



AXONOMETRIC 3:
Skin and transforming void



Single plot description #12

Name: Home for Walk-ins, hourlies and Mother's Visits

Sources: Site visit, conversation with owner and manager, property report, satellite imagery, council archive plan, sales ad, photos

Programme: Guest House

Summary

Behind a new high brick wall, the former family residence of a male divorcee has been subdivided into ensuite guest rooms to accommodate visitors from far and close, from 30 minutes to long term stay.

Inventory – Accounting

Rooms: The original property had eight rooms (three bedrooms, dining, lounge, kitchen, pantry, bathroom), a covered veranda and a garage as part of the main house and two rooms plus WC at the back. The transformed house offers ten bedrooms, ten bathrooms, the small original hall, a reduced corridor, no kitchen, no garage. The backrooms accommodate one 'bed, living, bathroom' unit for the manager and family, a laundry room, tool shed and a WC. The back structures have not been amended in the transformation process.

Boundary Wall: The street facing boundary wall was the first and only visible change after change of ownership. In the sales ad the boundary was one of the few low, transparent thresholds remaining in the area.

Openings: The street facing boundary wall has a car and a pedestrian gate. The former garage door is closed off, it is now room #1 and accessible from inside the veranda turned reception. There is one entrance door into the house, the former connection through the kitchen on the west has been closed off. The side door (former kitchen entrance) is now door to room 10, the only one to be accessed from the outside. The back structures have three doors. The original house had 12 windows plus 1 in the garage. The transformed house has two windows in each room plus one in the lobby (veranda). This adds up to a total of 23 windows.

Service/ space: The property has kept the back rooms as service space to accommodate staff and room services. The internal corridor layout that accommodated a more hidden bathroom passage and a second entry through the kitchen have been eliminated.

Yard: There is a small front yard, a back yard and a service alley to connect the two.

Stuff: 10 beds, 10 open wardrobes with hangers, 10 mirrors, 1 table at reception, a TV, a phone, a painting, a chair, a cabinet with African Masks, and some handmade pearl figures from the arts and craft market. The absence of some 'stuff' is notable. No fridge, no kettle, no hotplate in the house.

Extra: Laundry line at the back, and washing machine in utility room. Sheets and towels are changed every day.

People: Changing guests, max two per room, means 20 at an hour per time. 3 main staff.

Animals: none

Trees: none

Elements – Relating

Site, internal subdivisions, activities and stuff

The house has been extended in numbers of, and reduced in terms of purpose of, rooms. It now solely offers bedrooms, each with their own adjoining bathroom. There is no shared space outside of the entrance and the corridor. There are no shared activities amongst the guests other than what happens inside their rooms. The back part of the

property is a designated service area for the front. The front yard serves as parking for cars if required. Plastic chairs against the boundary wall serve a gathering space and observation point. The rooms are spacious and designed with the clean, 'modern' finish of concrete screed, all kept in grey, blue, beige. Original doors have been maintained when possible.

Key elements in relation to access, service and space plan

While the property has physically not changed significantly from the outside, a subtle internal change has actually turned the current layout into an 'one access point only' configuration. The original layout was organised along a west east axis with access to rooms connected to water (bathroom, WC and kitchen) and north-south axis for move between all other rooms. The house was originally equipped with two access points, one on the western side, as service entrance and one on the south, as street facing 'main' entrance. The service stoep on the west, was followed by a walk through kitchen meeting the perpendicular corridor, for the domestic worker to service the house from the inside, without having to – or being permitted to use – the front door. This west-east connection has been interrupted through a 1.5m wide wall, with the former kitchen entrance (now access to room#10) on the one side and a storage space opening to the corridor on the other.

The new 'front door' is designed as a seemingly loose but strictly controlled three-fold security sequence in a straight line from boundary wall, to a closed off veranda turned lobby, to the original hall. The corridor extends the straight line with doors on both sides. The current layout forces everyone to enter, and leave through the 'eye of the needle' front.

Skin and transforming void

The void - the yard - has not transformed in shape or size. The outer wall is higher and screening of views from the street. The 'back to front service division' of the plot has remained. A difference is that the representatives of the owner are situated at the back and in the lobby/ veranda to control access to the centre. The rooms with water connections have multiplied by five, the number of ablutions by ten and run all around three sides of the main building. Windows have also doubled in numbers. New aluminium frames have replaced the traditional steel windows.

Legalities

The internal transformation has been submitted to council for approval for over two years, while being built. No approval or rejection has been issued at the time of the research. The renovations have been undertaken by non-formal contractors or day workers, at the expense of costs and time efficiency. The guest house is taking cash payments and not recording any information of guests. Some of the guests are using the rooms as place of work in the entertainment industry and advertise their services on the internet. Some of these services are illegal in South Africa until the Criminal Law Amendment Bill 2022 is passed .

Aspiration – Speculating

The current owner's aim is to offer secure, affordable and clean accommodation to a variety of different guests from the African context. The rooms are targeting travellers or leisure seekers, with short and long term options, for a monetary return on his investment. He is a marketing strategist below 40 who has ties to the neighbourhood. He went

to school in a nearby suburb while his family lived in an area allocated to black people in the east of Johannesburg under Apartheid. His brother lived in Yeoville and his mother had no place to stay when she visited her sons at the time. His initial idea was to change this for people in similar situations now. In addition to long distance family visits, the property responds to the demands and realities in the area. The intake of guests includes the overflow of visitors of clubs and bars on the main high street, and hourly walk ins. The charge for one hour to one night in a room is R200. The rendered 'service' costs R150 for 30 min, R250 for 1 hour or R500 for a day or a night, and is self-managed, Currently still an illegal activity in South Africa but known to the management. Drugs and guns are not permitted. The rooms currently have an occupancy rate above 60%. The purchase price was eight times higher than the sale 22 years before. With an inflation rate of 201% over that period of time the property has in fact tripled in value. With R930,000 the current owner purchased the property close to the municipal evaluation amount. The property is bonded with 15% above the purchase price by one of the major South African banks. As a guideline, it requires a salary of R40,000 and monthly re-payments of R12,000. To cover the bond without salaries and maintenance, or renovations, each room needs to be rented out for 6 nights per month – 60 room payments in total, off tax. The new owner is interested in purchasing more properties in the area.

Geometry

Void Shape/ Type

Thin run around, it's like the house is standing on a rug with service routes around.

Compound Type

Inverted and individual. Serviced rooms for different length of stay, small scale investor looking to expand his portfolio

Compound Doings: re-scaling, yarding



Streetview, Google Maps, 2010



Streetview, Google Maps, 2022

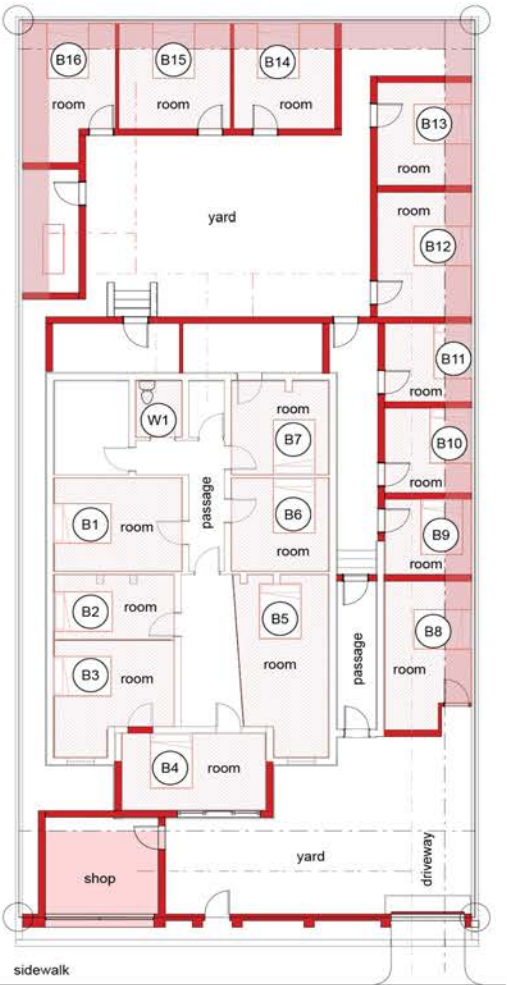
CASE STUDY 13



AERIAL
of block from Google Earth photograph, 2020

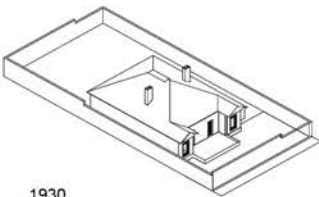
DATA FOR PROPERTY
FAR = 0.6 (permissible 1.2)
Coverage = 64% (permissible 60%)
Height = 1 storey (permissible 3 storeys)
Additions from original = 182sqm

- Index:
- (B) 16 beds
 - (W) 1+ enclosed wc's
 - (S) 0 stoves
 - (Z) 0 sinks (not including WHB)
 - (V) 0 verandah
 - Other: shop

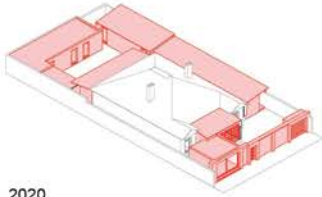


GROUND FLOOR PLAN OF CURRENT PROPERTY

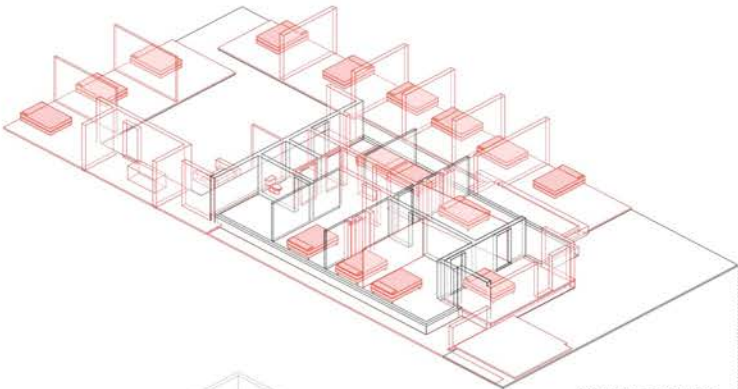
0 5 10



1930
Plot size: 470m²
Bungalow:
Rooms (back): 0
Total solid: 120m²
Total void: 350m²



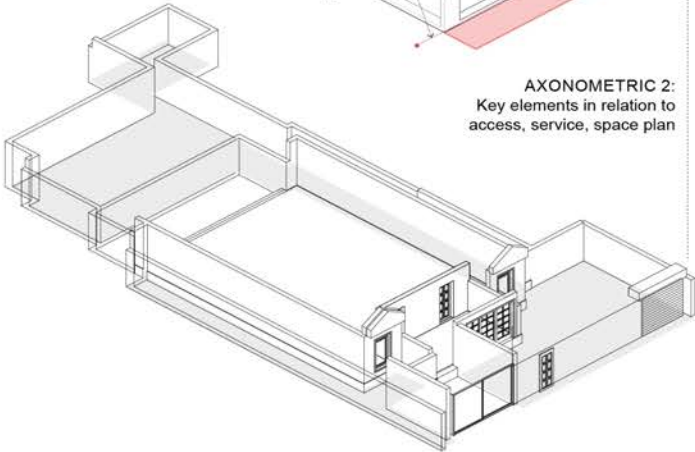
2020
Plot size: 470m²
Bungalow:
Rooms (back + front): 6
Total solid: 302m²
Total void: 168m²



AXONOMETRIC 1:
Site, internal subdivision of
activities, and stuff



AXONOMETRIC 2:
Key elements in relation to
access, service, space plan



AXONOMETRIC 3:
Skin and transforming void

Single plot description #13

Name: More room no trees

Sources: Drive by, property report, satellite imagery, original archive plan, photos

Programme: Mixed use residential and shop

Summary

After a change of ownership in 2007/8, the property successively replaced all of its generous amount of green with a maximum number of outdoor rooms and a shop.

Inventory – Accounting

Rooms: This property has seven rooms, with the potential to share/ subdivide further plus kitchen bathroom, three stoeps on three sides, nine outdoor rooms, WC and washing facilities, a shop in the wall.

Boundary Wall: The boundary wall has been included into rooms on three sides. The street facing boundary extends into a shop.

Openings: The street facing boundary wall has one car and one pedestrian gate and a shop front. The main house has two remaining entrances, one seems closed. Each room that is part of the yard has its own door and one door is on each side of the passage between house and rooms. There are 18 windows.

Service/ space: Back, centre and front of the property are clearly separated with the back being the traditional service space. This separation has been eliminated when rooms moved to the front.

Yard: There is a front and a back yard. The front serves arrival and parking, the back is shared between the back of house and the rooms.

Stuff: Shelves and goods in the shop.

Extra: Laundry line in the yard.

People: No information confirmed. As an estimated maximum without pushing it, the rooms offer space for 16 double beds, translating into 16-32 people.

Animals: No information.

Trees: All trees have been cut down to make space for rooms.

Elements – Relating

Site, internal subdivisions, activities and stuff

The representation is an exploration of possibilities of use, as there was no access to the house on the property. The three stoep layout permits to access the house from the back, the front and the side. It looks as if the front entrance has been closed, and turned into a room and the main entrance is from the side and the back. This can be walk through for all, or divided between different parties. The house can also be used as an extended family residence with 3-4 bedrooms and shared living spaces.

Key elements in relation to access, service and space plan

The property has a short corridor in the centre that is accessed through the kitchen or the former dining room, which is accessed through the entrance stoeps. The rooms inside the house and outside are accessed from the side, through the side stoep and an outdoor corridor. The rooms are at the back connected through the yard.

Skin and transforming void

The void as a figure has two clear centres of nearly equal size, one in the front one in the back. The connection parts can be considered as outdoor corridors. The east elevation of the bungalow has been quasi overwritten by the thickening of the boundary wall into rooms.

Legalities

None of the additions has been recorded at council. The overall coverage is critical.

Aspiration – Speculating

The property was purchased in 2007 by a musician and his wife from the Free State. They sold it to the current owner with 25% return on capital a year later. The transaction was bonded to 107% by one of the major local banks in South Africa. The equivalent of the sale price in today's purchase power corresponds approximately to 1.3 Million Rand and is 1.5 times above the current municipal evaluation. The ambition of the property seems to accommodate as many rooms as possible.

Geometry

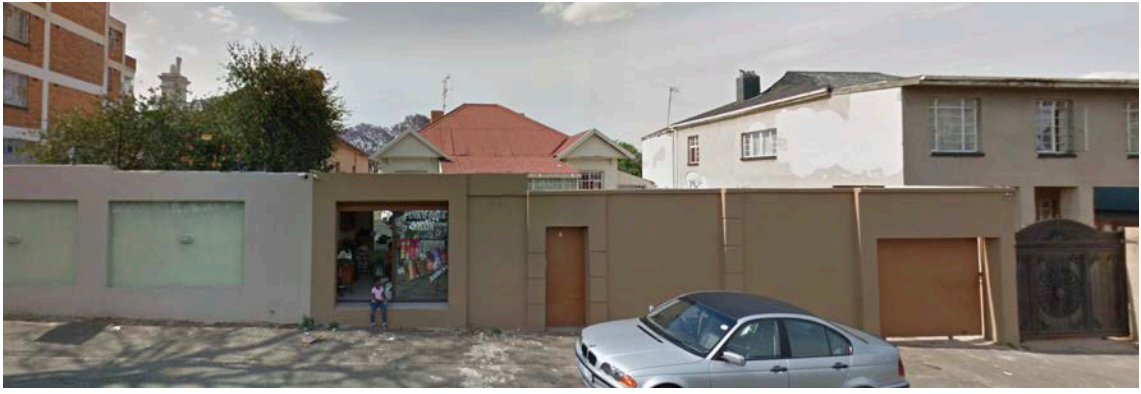
Void Shape/ Type

Back and front yard diagonally opposed.

Compound Type

Rooms for accommodation, shop rental.

Compound Doings: re-scaling, enfolding, yarding



Streetview, Google Maps, 2013



Streetview, Google Maps, 2022



Collage original plan 1904, from Hindson (1987) , aerial view Google Earth , digital hand sketch 2023



Aerial 3D Apple Maps, 2023

CASE STUDY 14

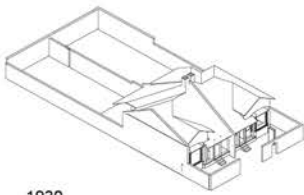


AERIAL
of block from Google Earth photograph, 2020

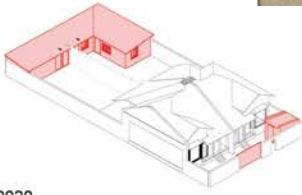


DATA FOR PROPERTY
FAR = 0.4 (permissible 1.2)
Coverage = 61% (permissible 60%)
Height = 1 storey (permissible 3 storeys)
Additions from original = 72sqm

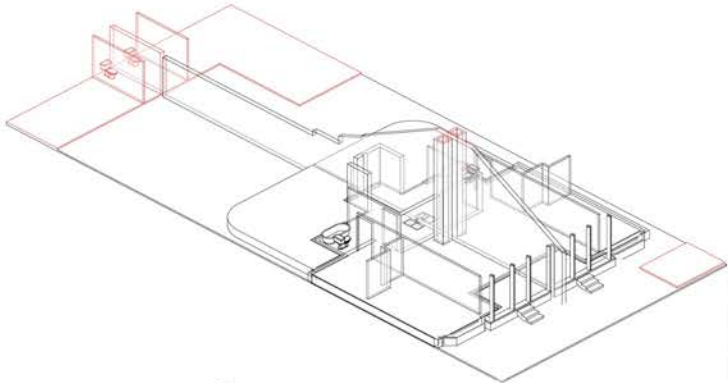
- Index:
- (B) 0 beds
 - (W) 4 enclosed wc's
 - (S) stoves
 - (Z) 2 sinks (not including WHB)
 - (V) 2 verandah
- Other: 9 classrooms or other work rooms



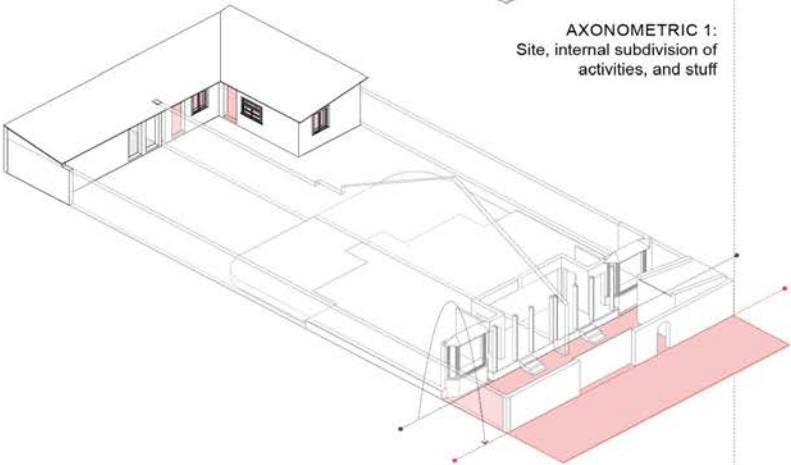
1930
Plot size: 442m²
Bungalow:
Rooms (back): 0
Total solid: 196m²
Total void: 246m²



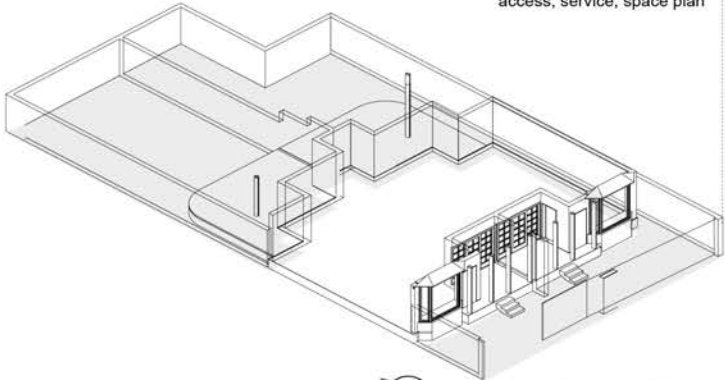
2020
Plot size: 442m²
Bungalow:
Rooms (back + front): 3
Total solid: 268m²
Total void: 174m²



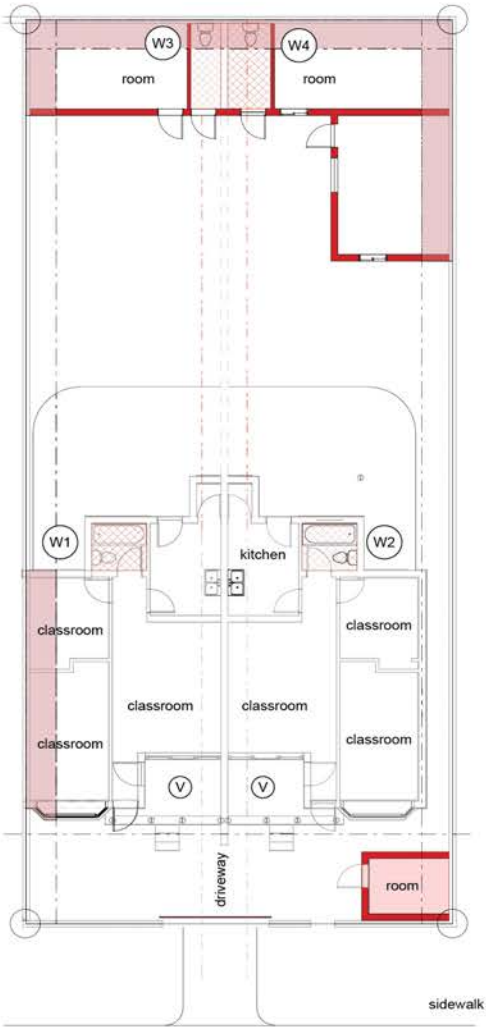
AXONOMETRIC 1:
Site, internal subdivision of activities, and stuff



AXONOMETRIC 2:
Key elements in relation to access, service, space plan



AXONOMETRIC 3:
Skin and transforming void



GROUND FLOOR PLAN OF CURRENT PROPERTY

0 5 10



Single plot description #14

Name: #MakeRoomForHer

Sources: Drive by observation, conversation with manager, property report, satellite imagery, council archive plan, photos,

Programme: Skill centre for migrant women

Summary

The property is part of an international faith-based support network that turns domestic skills into certified professional practice.

Inventory – Accounting

Rooms: This property is two semidetached buildings and outbuildings with a total of two x five rooms, two halls, two verandas, two bathrooms, some outdoor structures, and a tent.

Boundary Wall: The boundary wall carries an ad of the International Network.

Openings: The street facing boundary wall has one car and one pedestrian gate for both semi-detached houses. The western portion of the property is bordered by a servitude and has a gate in that wall. There are 15 windows in total.

Service/ space: The property is a training centre for skills in the beauty/ fashion/ culinary industry. There is no service/ served distinction as in the previous layout.

Yard: The space in front of the house is used as entry and gathering space. The space at the back is for group meetings and further events.

Stuff: There are two laundry lines on each outer side of each semi. One sewing machine per participant. Many plastic tables and chairs. Whiteboards. Mirrors. Cooking forms.

Oven. Laptops. Massage tables

Extra: A tent at the back

People: 15 students in a three months class. After school programme, 35 children/ day.

Animals: none

Trees: Two big trees at the backyard.

Elements – Relating

Site, internal subdivisions, activities and stuff

The house is used as a training centre for migrant and refugee women in the field of beauty, fashion and culinary production and service. In simple terms, they are trained to turn domestic skills, like sewing and baking, into a small scale business. It is happening in a domestic environment, with every room being able to turn into a class room. Due to the twin nature of the houses, programmes can run in parallel. A care taker can be accommodated in one room.

Key elements in relation to access, service and space plan

The original layout of the semis has very little corridor due to a walk through dining/ main room. This remains. The entry from the small 'hall' goes directly into the main room. The original veranda at the back has been closed, and integrated as part of the inside space. A new shared vernada is added, with a set of stairs and serves as threshold and edge of the yard as central meeting point for groups, as well as connecting space between the house and training rooms at the back.

Skin and transforming void

The void as a figure has remained the similar to what is has been since 1919. However, any existing hierarchy has been eliminated.

Legalities

No legal challenges are facing this property other than the immigration status of the woman who receive training. Those challenges are considerable and can be stressful.

Aspiration – Speculating

The international faith based charity bought the property in 2001 from a sister institution for R100,000 which was far below market price. The ambition of this bungalow compound is anchored in programme and accessibility to it, not the value of the house or financial returns. As private property it is sort of institutionalised. It capitalises on the potential as domesticity as a skill set and a currency, the idea of home as a form of labour, and a service with compensation. The aspiration is to improve women's lives, to gain more independence on foreign territory, and be part of an enabling community as a care network

Geometry

Void Shape/ Type Mainly unchanged since inception, back and front yard with the house in-between. A number of shared firewalls across the property do not allow the fire distance pathway such as other properties have.

Compound Type Courtyard as central community room.

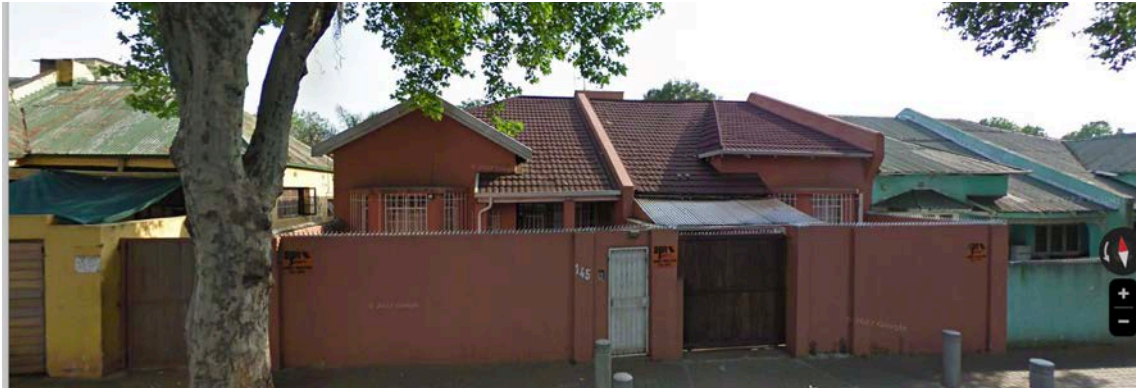
Compound Doings: re-scaling, yarding



Side entrance to back and front yard through service lane, Streetview, Google Maps, 2009



Outdoor communal yard with tent, Aerial 3D Apple Maps, 2023



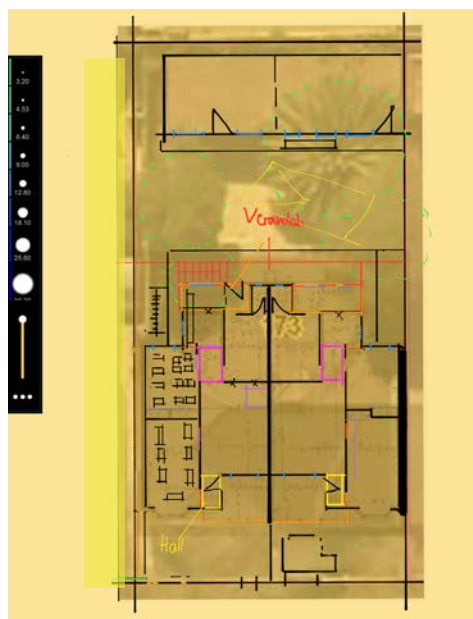
Streetview, Google Maps, 2009



Streetview, Google Maps, 2013



Streetview, Google Maps, 2022



Collage original plan 1919, from Hindson (1987) on aerial view Google Earth (left), and digital hand sketch of transformation (right) 2023

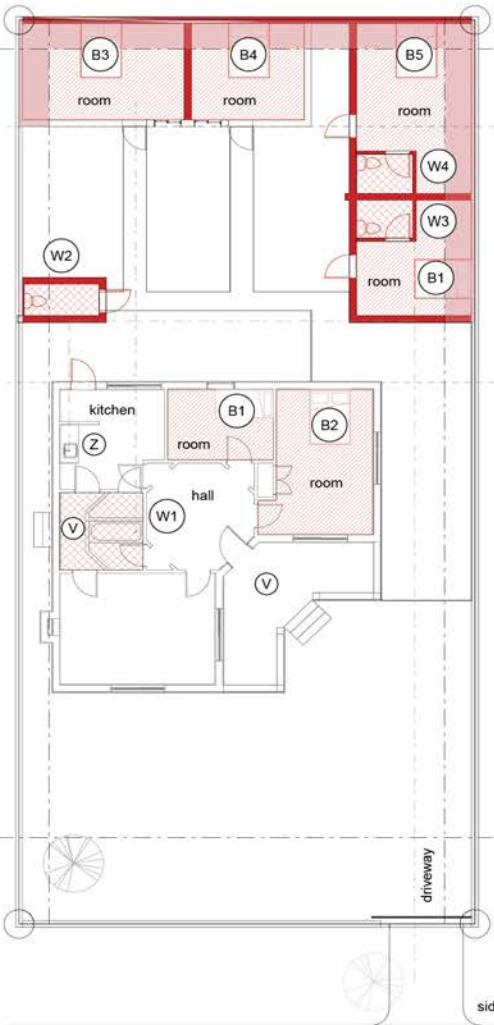
CASE STUDY 15



AERIAL
of block from Google Earth photograph, 2020

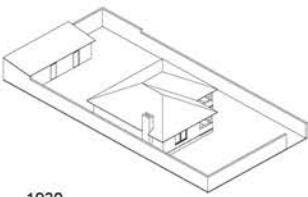
DATA FOR PROPERTY
FAR = 0.4 (permissible 1.2)
Coverage = 43% (permissible 60%)
Height = 1 storey (permissible 3 storeys)
Additions from original = 25sqm

- Index:
- (B) 5 bed
 - (W) 4 enclosed wc's
 - (S) 1 stove+
 - (Z) 1 sink (not including WHB)
 - (V) 1 verandah
- Other: 1 kitchen, 1x room

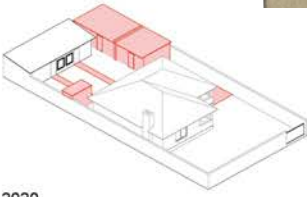


GROUND FLOOR PLAN OF CURRENT PROPERTY

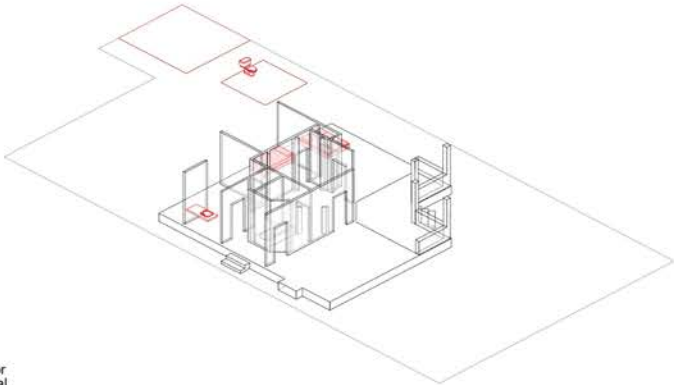
0 5 10



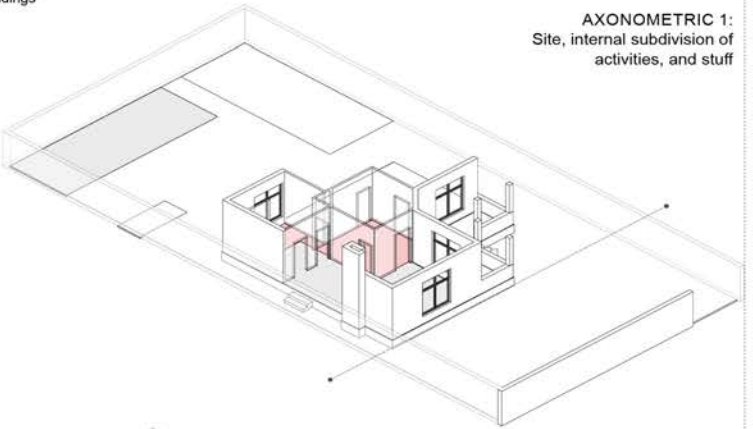
1930
Plot size: 472m²
Bungalow:
Rooms (back): 1
Total solid: 153m²
Total void: 319m²



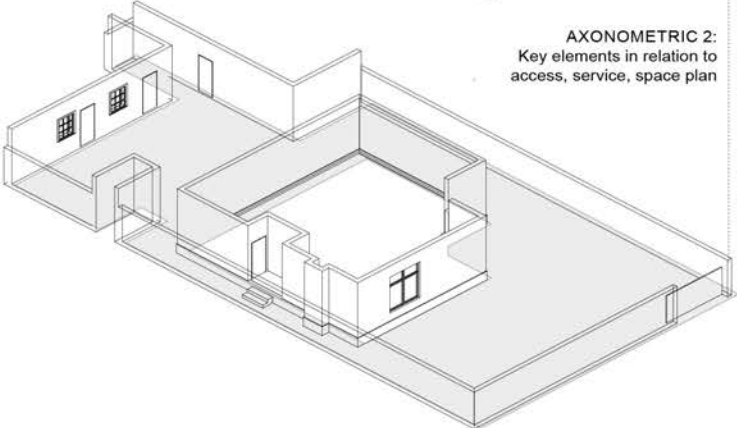
2020
Plot size: 472m²
Bungalow:
Rooms (back + front): 5
Total solid: 178m²
Total void: 294m²



AXONOMETRIC 1:
Site, internal subdivision of activities, and stuff



AXONOMETRIC 2:
Key elements in relation to access, service, space plan



AXONOMETRIC 3:
Skin and transforming void

Single plot description #15

Name: Inside business

Sources: Drive by, property report, owner research, satellite imagery, original plan, photos

Programme: Rented rooms

Summary

The property is offering rental accommodation. Since 1999, it has been sold three times for extremely low amounts across different financial institutions , or employees thereof.

Inventory – Accounting

Rooms: The property has four rooms inside and five rooms outside the main house, at the back. Two bathrooms have been identified.

Boundary Wall: The boundary wall is of precast concrete elements and has not changed over the last decade.

Openings: There is one vehicle gate in the boundary wall. The house has one front door leading on from an open verandah. There were two other doors leading to kitchen and bathroom, it is not known if these are still operational. The house has eight windows.

The outside rooms have their own door and a window.

Service/ space: The air ventilation pipe in the roof indicates that the bathroom is still placed as per original drawing, same accounts for the outhouse, as per satellite image.

The house had an separate side entrance on the western side, along the fire distance line

Yard: The space in front of the house looks unchanged. The space at the back has distinct paths that indicate walking routes to the rooms. Several cars park in a row in the driveway.

Stuff: There is a significant number of satellite DSTV dishes on the East façade facing north. Different satellite connections go to different rooms in the house and outside.

Extra: n/a

People: Moderate estimated of 12-20 people if the house is rented out

Animals: n/a

Trees: Two big trees at the frontyard.

Elements – Relating

Site, internal subdivisions, activities and stuff

Not much is known outside of the subdivision of the plot. with rooms added on the northern and eastern boundary wall by 2012 and 2015.

Key elements in relation to access, service and space plan

The open verandah has remained as main access to the house.

Skin and transforming void

The property had a garden with large trees. These have been replaced at the back and rooms have been added on the northern and eastern boundary wall by 2012 and 2015.

The driveway operates as parking for multiple cars.

Legalities

No information about council approval of the added structures is available.

Aspiration – Speculating

The chain of ownership transfers of this property is worth noting / interrogating. Being

sold twice in 1999 within five weeks, with a first sale from a private person, a clinical psychologist immigrating to England, to one of the main South African banks for R100 (a purchase value of R352 in 2023). The amount could indicate the sale as being part of a practice coined 'R100 Auctions'. These are auctions without reserve prices. A reserve price is a minimum price set by a bank. While anecdotal at this point in the context of Yeoville, this might be the 1990s reacting to absentee landlords, also called 'the white flight'. Speculators could then pick up property for a price that is so low that it is not worth mentioning and re-sale with high profit. In case of #15 the bank then sold the property to a legal entity, property developer/ housing financier for R12000, still a very low price but 119 times higher than the original transfer amount. It is of note that the bank sold the property to the developer entity five weeks BEFORE the private owner sold to the bank, at least on paper. The property developer / housing financier then sold the property after eight years to another property developer / housing financier with a similar name, for a similar amount they bought it for. Six months later, in 2008, the property was sold for a slightly higher but still negligibly different amount to a female African from Johannesburg, a money market specialist at one of the major South African banks. The transformation of the property, addition of rooms, began only a few years later. From a distanced assessment, not too much capital has been invested in the maintenance, or rather upgrading, of the property. Should that be the case, a conservative estimate of R13000 (probably more) rent/ month over by now 25 years adds up to an amount just below four million Rand.

Geometry

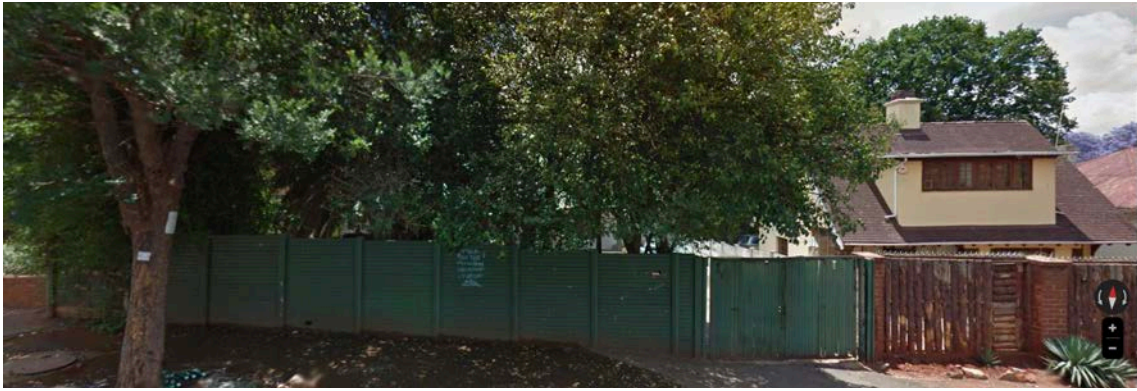
Void Shape/ Type

From the outside, the front has remained mainly unchanged since inception, the back has developed into a fully surrounded courtyard.

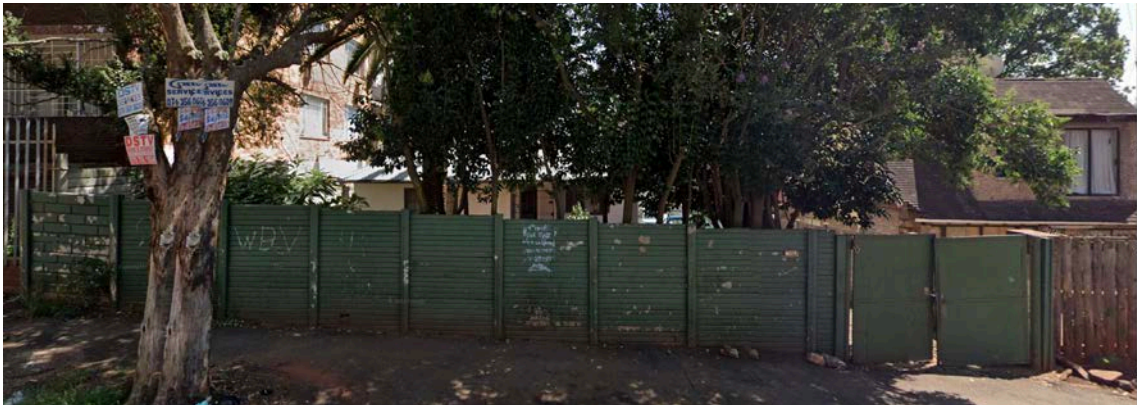
Compound Type

Camouflage: Low key speculation may translate into minimum investment and invisibility to the front.

Compound Doings: re-scaling, yarding



Streetview, Google Maps, 2013



Streetview, Google Maps, 2022



Collage original council plan 1910, from Hindson (1987) on aerial view Apple Maps (left) , and digital hand sketch of transformation over time, traced via Google Earth (right) 2023.



Informed assumption: Numerous satellite dishes along the facade of the house indicate different TV sets, in different rooms, for different TV owner. It is usually a sign for multi unit living. Streetview 2022, Goggle Maps.

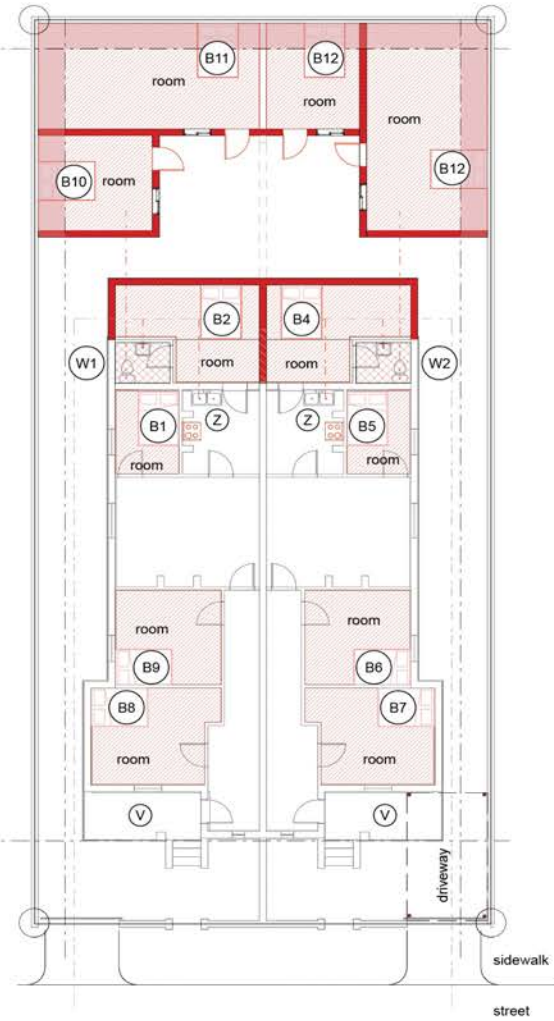
CASE STUDY 16



AERIAL
of block from Google Earth photograph, 2020

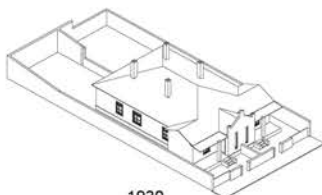
DATA FOR PROPERTY
FAR = 0.6 (permissible 1.2)
Coverage = 58% (permissible 60%)
Height = 1 storey (permissible 3 storeys)
Additions from original = 85sqm

- Index:
- (B) 12 beds
 - (W) 2 enclosed wc's+
 - (S) 2 stoves
 - (Z) 2 sink (not including WHB)
 - (V) 2 verandahs
 - Other: 2x room



GROUND FLOOR PLAN OF CURRENT PROPERTY

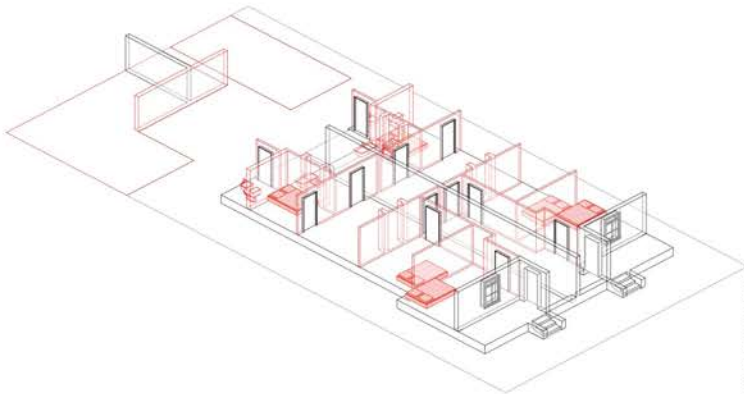
0 5 10



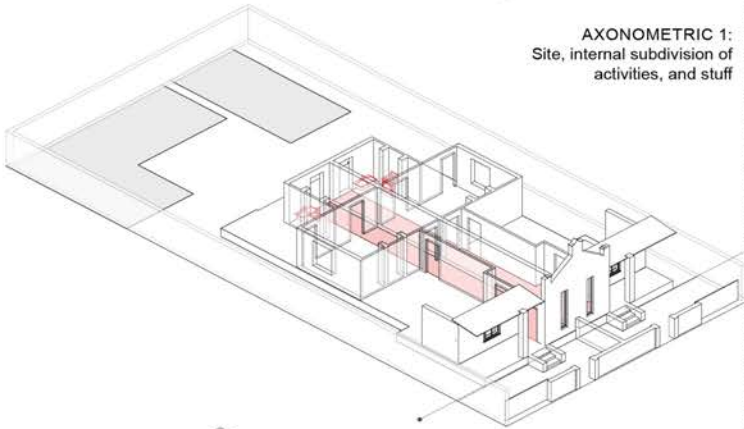
1930
Plot size: 471m²
Bungalow:
Rooms (back): 0
Total solid: 188m²
Total void: 285m²



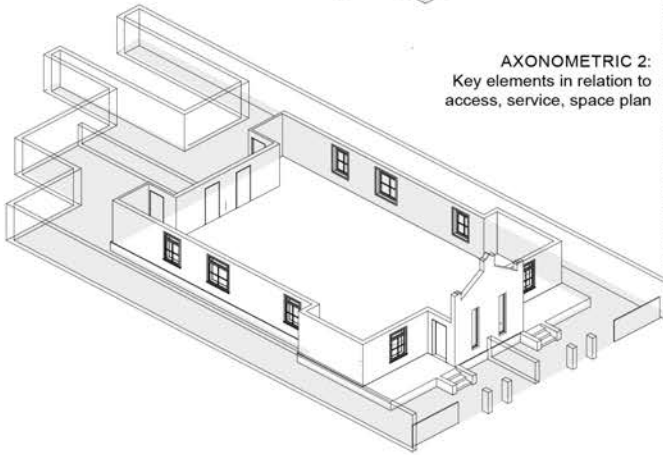
2020
Plot size: 471m²
Bungalow:
Rooms (back + front): 8
Total solid: 271m²
Total void: 254m²



AXONOMETRIC 1:
Site, internal subdivision of
activities, and stuff



AXONOMETRIC 2:
Key elements in relation to
access, service, space plan



AXONOMETRIC 3:
Skin and transforming void



Single plot description

#16

Name: Communal back

Sources: Drive by, property report, owner research, satellite imagery, original plan, photos

Programme: Rented rooms

Summary

While the semi-detached property has similar layouts to a series of other semi-detached bungalows investigated, the two divided front parts have been united as in the back between lately.

Inventory – Accounting

Rooms: The property has four rooms inside each semi-detached side and four to five rooms outside these at the back. Two bathrooms have been identified.

Boundary Wall: The boundary wall is half height and see-through.

Openings: There is one vehicle gate and one pedestrian gate. Both sides have a fire safety access path to the back. There is an entrance door at the front and at the back of each half and six windows on each side.

Service/ space: No information

Yard: The space in front of the house looks unchanged, with parking for one car and a small entry verandah. The backyard is a central communal access space to newly build rooms.

Trees: None.

Elements – Relating

Site, internal subdivisions, activities and stuff. Not much is known outside of the additions to the plot at the back.

Key elements in relation to access, service and space plan

The open verandah has remained as main access to the house. At the back it has been closed.

Skin and transforming void

The courtyard at the back is now shared.

Legalities

No information about council approval of the added structures is available.

Aspiration – Speculating

The property has a relative stable resale value, without much win or loss. Purchased in 2016 for R650,000 and a sale after five years with 30% return on capital might translate in a small gain once the construction at the back is subtracted. The advantage of the semi-detached plus backyard combination are the different options of renting it out or using part of it as owner.

Geometry

Void Shape/ Type

From the outside, the front has remained mainly unchanged since inception, the back has developed into a fully surrounded shared courtyard with U-shaped rooms.

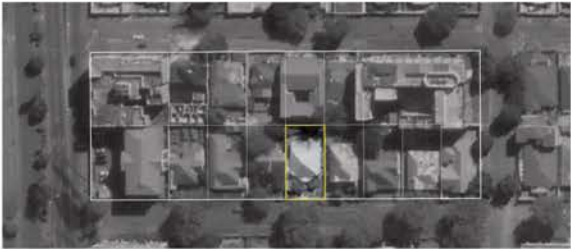
Compound Type

Semi-detached front, united back.

This property offered little information other than property value and similarity to other houses in layout, in close proximity. It is used in this context as part of a spectrum regarding optional and different plot amendments with similar layouts.

Compound Doings: re-scaling, yarding

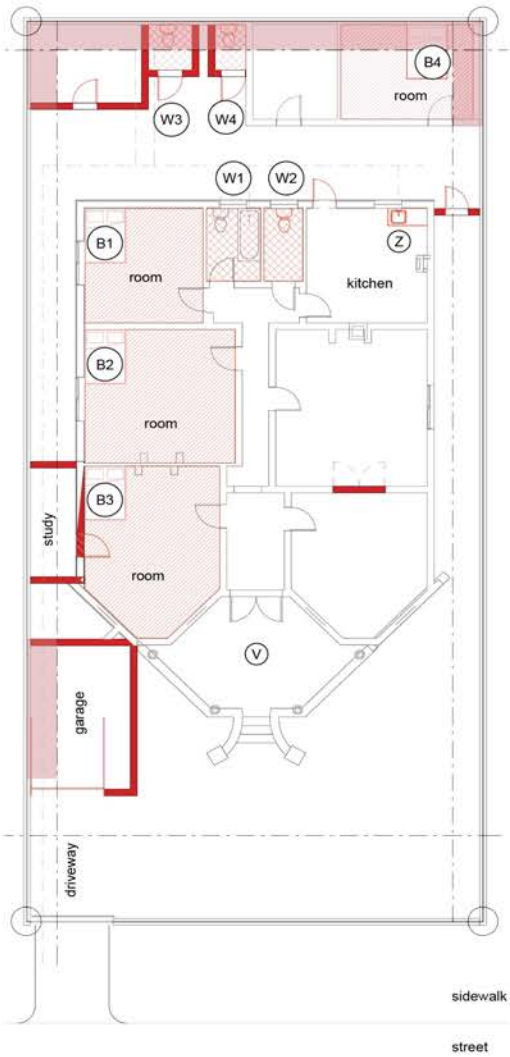
CASE STUDY 17



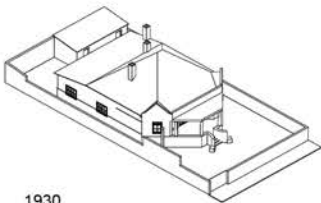
AERIAL
of block from Google Earth photograph, 2020

DATA FOR PROPERTY
FAR = 0.5 (permissible 1.2)
Coverage = 45% (permissible 60%)
Height = 1 storey (permissible 3 storeys)
Additions from original = 24sqm

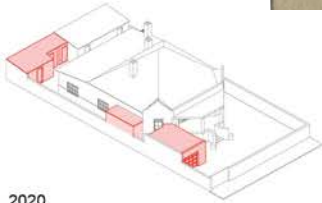
- Index:
- (B) 4 beds
 - (W) 4 enclosed wc's
 - (S) 0 stoves
 - (Z) 1 sink (not including WHB)
 - (V) 1 verandah
- Other: 4x other rooms, 1x study, 1x garage



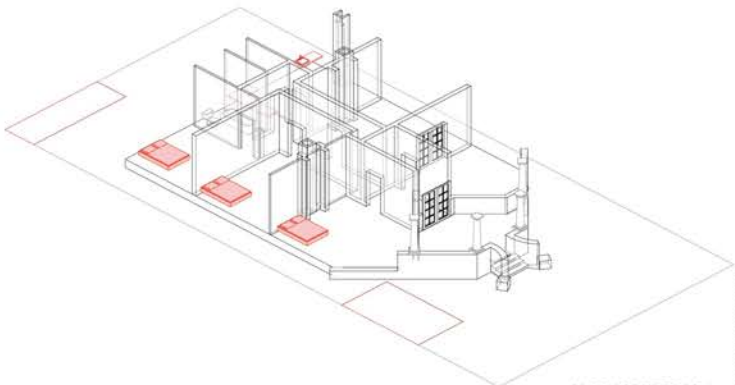
0 5 10



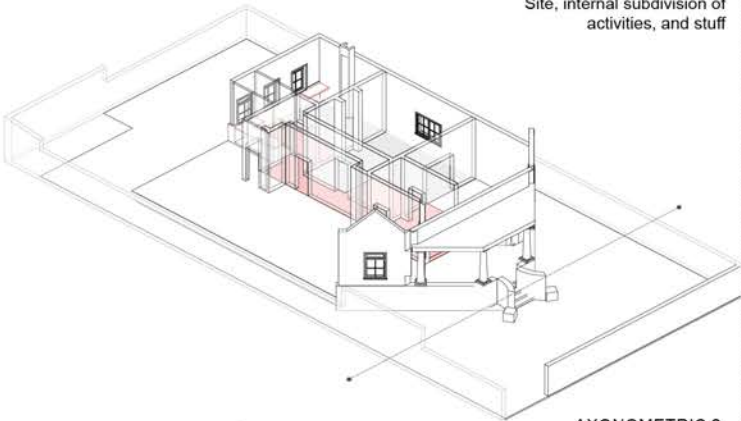
1930
Plot size: 470m²
Bungalow:
Rooms (back): 0
Total solid: 189m²
Total void: 281m²



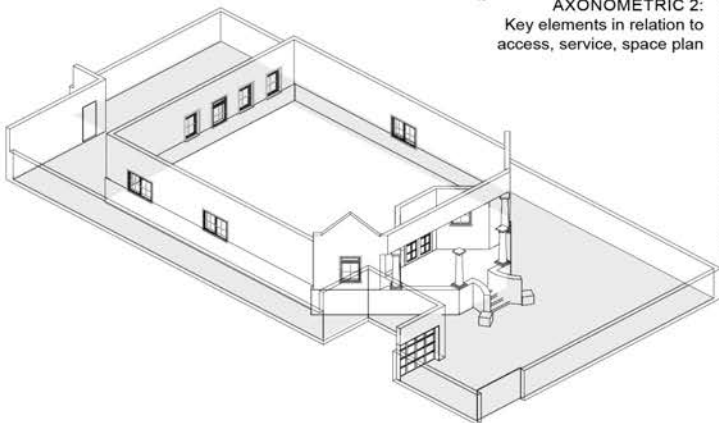
2020
Plot size: 470m²
Bungalow:
Rooms (back + front): 4
Total solid: 213m²
Total void: 257m²



AXONOMETRIC 1:
Site, internal subdivision of
activities, and stuff



AXONOMETRIC 2:
Key elements in relation to
access, service, space plan



AXONOMETRIC 3:
Skin and transforming void

Single plot description

#17

Name: The parents' home, 2nd gen Black owners

Sources: Drive by, visit, discussion with owner, property report, satellite imagery, original plan, photos, description

Programme: Private residence

Summary

The property is the only one of the collection that is inhabited by the 2nd generation of a Black family, where the now owners grew up in the area and the house.

Inventory – Accounting

Rooms: The property has six rooms inside the house plus a small added-on study at the rear, a bathroom, a verandah and a garage. Outside are one bedroom with pantry, two single WCs, one room with a stone sink and two taps, one guestroom.

Boundary Wall: The boundary wall is closed off and high.

Openings: There is one car gate with an integrated pedestrian gate in the street facing boundary. The house has two entrance doors, one in the front and one at the back. The outdoor rooms and WCs each have a door, five in total. There are 17 windows, 14 in the house and three at the back.

Service/ space: The former service space is currently used by house pets.

Yard: The space in front of the house looks unchanged, and is used for braais and get togethers. The east passage is blocked by the garage and the added study. The back is used as utility space of the everyday.

Stuff: n/a

Extra: n/a

People: 2, at maximum 5.

Animals: two dogs one cat.

Trees: Several trees on the property.

Elements – Relating

Site, internal subdivisions, activities and stuff

The house has remained as it was, and has been home for a family of five for the last 25 years. The east wing of the house serves as bedrooms, and the west wing has kitchen, dining, lounge – from north to south. The bathroom is in its original location between bedroom and kitchen.

Key elements in relation to access, service and space plan

The open verandah has remained as main access to the house. A small hall opens to lounge and main bedroom to continues as corridor, with the bathroom at the end.

The house is symmetrically laid out. The backrooms served as guestroom and are not accommodating pets.

Skin and transforming void

The yard is as it was – a wrap around void with differing depth.

Legalities

No change outside of the study have been implemented since inception.

Aspiration – Speculating

The property is a family home and has been inherited by three sons after their parents' recent passing. The father was a re-knowned environmental journalist for the national broadcaster and politically active as member of the governing party since 1994. He was injured by an exploding bomb in Lesotho in 1979 under the apartheid administration according to the Truth and Reconciliation Commission report. The property was bought in 1998 for R143 from the then owner, a bond of R129 was approved by one of the major South African Banks. The heirs are planning to keep and stay in the house, and would like to upgrade the back into double story rentable units.

Geometry

Void Shape/ Type

From the outside, the front has remained mainly unchanged since inception, the back has developed into a fully surrounded shared courtyard with U-shaped rooms.

Compound Type

Semi-detached front, united back.

Compound Doings: sleeping

“I will not have any problem with people planning whatever venture in and around the community for as long as it is for the benefit of the community and not for its destruction. The establishment of a gambling facility is not a bad thing for as long as it will be monitored and run according to the laws and regulations that govern gambling in South Africa. That would be a plus for Yeoville if – and only if – the tax revenue received by the municipality will be utilised for developmental projects that would be meant to improve the image of the area. As more people frequent the shopping area, strong law enforcement needs to be beefed up to protect the community against whatever eventualities arise that might inconvenience the community. This is my point of view. And thanks for the opportunity to debate the issues that affect the people in the area.”

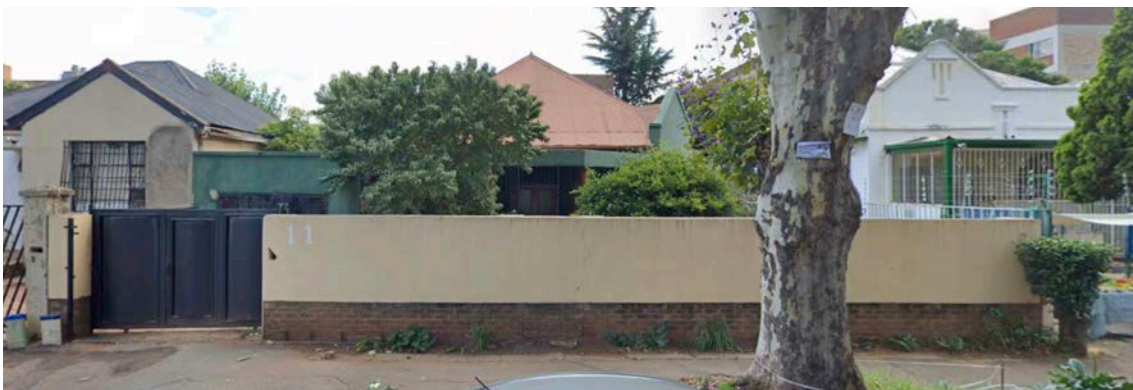
Now deceased owner of #17 on the prospects of facilitating gambling in the area.
Yeovue news, 16.12.2010 Volume 3 No 26, p2-3



Streetview, Google Maps, 2010



Streetview, Google Maps, 2013



Streetview, Google Maps, 2022



Two dogs and one cat inhabit much of the back rooms.

Collage original council plan 1906, from Hindson (1987) on aerial view Google Earth (left) , and digital sketch to update 'as built' drawing 2023 (right).

CASE STUDY 18

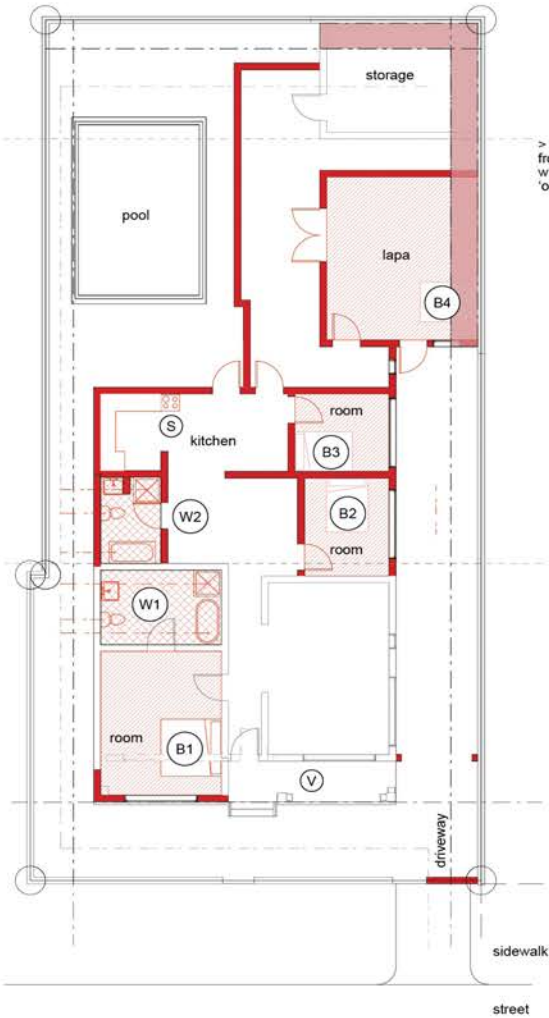


AERIAL
of block from Google Earth photograph, 2020

DATA FOR PROPERTY
FAR = 0.5 (permissible 1.2)
Coverage = 53% (permissible 60%)
Height = 1 storey (permissible 3 storeys)
Additions from original = 134sqm

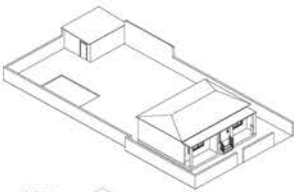
- Index:
- (B) 4 beds
 - (W) 2 enclosed wc's
 - (S) 1 stoves
 - (Z) 0 sink (not including WHB)
 - (V) 1 verandah

Other: empty pool, 1 x lapa, 1 x storage space, 1 x kitchen

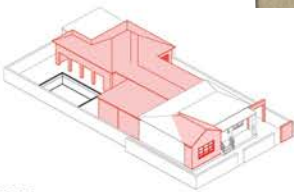


GROUND FLOOR PLAN OF CURRENT PROPERTY

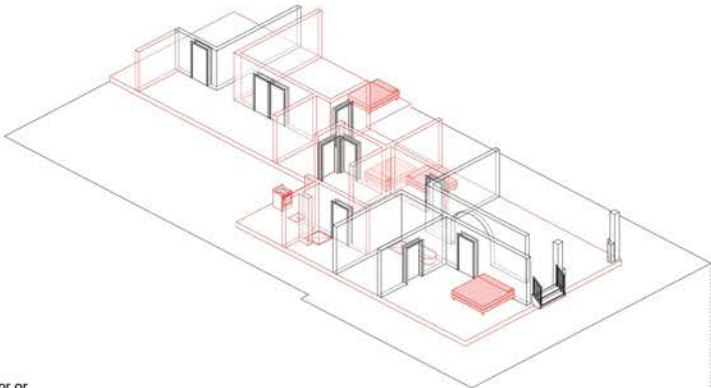
0 5 10



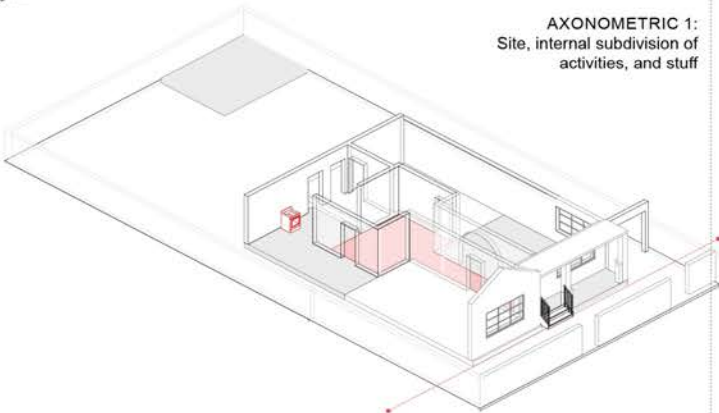
1930
Plot size: 445m²
Bungalow:
Rooms (back): 1
Total solid: 99m²
Total void: 346m²



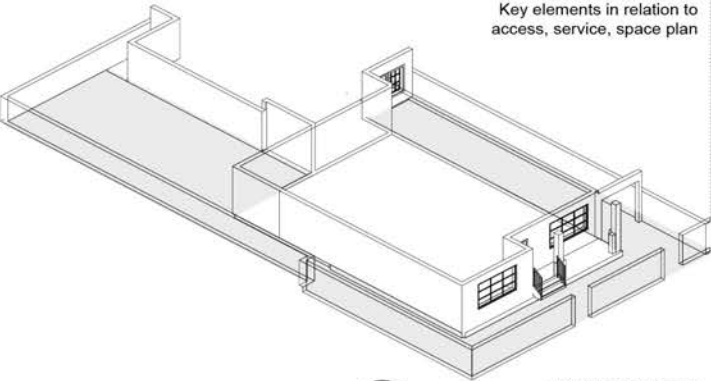
2020
Plot size: 445m²
Bungalow:
Rooms (back + front): 15
Total solid: 233m²
Total void: 212m²



AXONOMETRIC 1:
Site, internal subdivision of
activities, and stuff



AXONOMETRIC 2:
Key elements in relation to
access, service, space plan



AXONOMETRIC 3:
Skin and transforming void

Single plot description #18

Name: It's a lifestyle, or it isn't (anymore)

Sources: Site visit, drive by, property report, satellite imagery, original plan, photos, sales description

Programme: Family residence

Summary

The property emulates suburban life of a past that might not return. The back of house is distinctively different from most in the neighbourhood, with a pool and a lapa to entertain. The life style it advertises has, however, not found a buyer, to date.

Inventory – Accounting

Rooms: The property had five rooms inside the house, three of them bedrooms, plus kitchen, scullery and two bathrooms. Outside is one entertainment (Lapa) and one storage room.

Boundary Wall: The boundary wall is made of precast concrete covered with fake brick.

Openings: There is a pedestrian gate and a vehicular gate.

Verandah: The verandah of the house is open and used as entry, it used to run in front of the entry north façade, but was half absorbed by what is now used as main bedroom. It has fake rock as base of the columns.

Service/ space: The servant rooms are placed at the back of the house and along the east façade.

Yard: The yard is split in two. A front to arrive at and a back to relax in. They are connected through a gate along the fire distance line, and the entertainment room that can be accessed from the driveway and the backyard.

Stuff: beds, sofas, cushions, table, chairs, pictures, washing machine, TVs, pendants, toaster, bread container, kettle, blender, shoes, bags, toys, dog houses, vases, cupboards, liquor at bar, pots, microwave, hotplates.

Extra: pool (no water) and built in braai. Lapa with grass roof.

People: a nuclear family of four

Animals: two dogs for security purposes

Trees: no green no tree no grass

Elements – Relating

Site, internal subdivisions, activities and stuff

The house is furnished and used as a family home, with bedrooms for parents and two children, and shared living and dining room and kitchen. There is a guest room in the Lapa, but no staff accommodation. Parking for two cars.

Key elements in relation to access, service and space plan

The house continues to serve as a single family residence, and the verandah and the corridor have remained as they were. The cooking/ eating area have been extended at the back as walk through rooms. The dining area has no natural light. The property is without domestic 'servant' space, servant being a person, or dedicated space in the kitchen/ scullery area that is dedicated for service of others.

Skin and transforming void

The front and back might have switched places, with many properties using the front for a representational garden and the back as utility space. Here the front is utility – parking – and the back is relaxation and entertainment. What often is the back 'stoep' to extend

kitchen and utility work, is a closed room that connects the kitchen and the lapa. The lapa as indoor outdoor room is connected to the parking, the house and the pool/ entertainment area.

Legalities

The additions have not been recorded at council.

Aspiration – Speculating

The property was purchased by the first Black owner in 2013, after being flipped within a short amount of time. The middle man made 40% return of capital on the price paid. It was a quick return – both purchases carry the same date. Before that the property stayed eleven years with the same owner and doubled in sale value, but not in purchase value when taking inflation into consideration.

The property seems to have undergone renovations at a time where tiles were valued higher than wooden floors and fake rock was in vogue. The original elements of the bungalow have been modernized over time, as much as the backyard transformed according to aspirations of the a life with free time and leisure. This seems to present a challenge in selling in the current climate, when water is scarce, municipal service provision is breaking down, and properties are subletting to fund their maintenance. The current (and first Black) owner has been disappointed with the area and seen a decline in his property value due to crime, five years into living there. He invested nevertheless and renovated the interior of the house extensively. Five years later the house was on the market for double the price he paid ten years earlier, with no success in selling to date. The lifestyle it offers is not the lifestyle that seems ‘in demand’ in the context, at the time of sale.

Geometry

Void Shape/ Type

Wrap around void in the front, with driveway, entrance, fire distance sequence and more generous space in the back.

Compound Type

Pre-compound state, still a nuclear family house. The current amendments do not favour compounding development.

Compound Doings: sleeping



Streetview, Google Maps, 2009



Two dogs roam the yard for safety to not pay a private security company.

Streetview, Google Maps, 2023

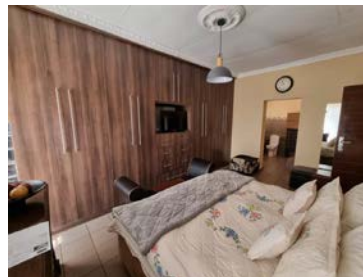
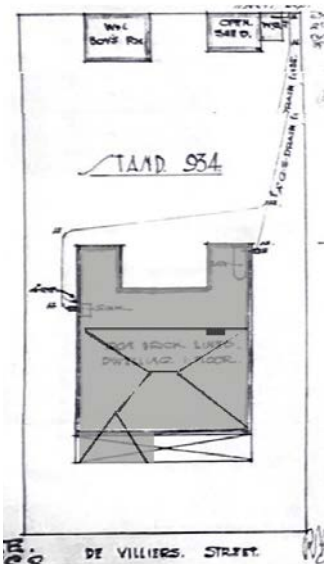


Photo: Mohammed H Tarmahomed, 2018

Interior renovation of bedroom, left 2019 (ARPL4000A), right sales advert image from Lifestyle Property group, accessed 2.8.2023, <https://www.privateproperty.co.za/estate-agency/lifestyle-property-group/sale-listings/12532?suburblds=315> link now disabled.



From left to right: Collage of roof onto original council plan (1910), reconstruction of original plan on aerial view Google Earth and 'as built' sketch from 2018.

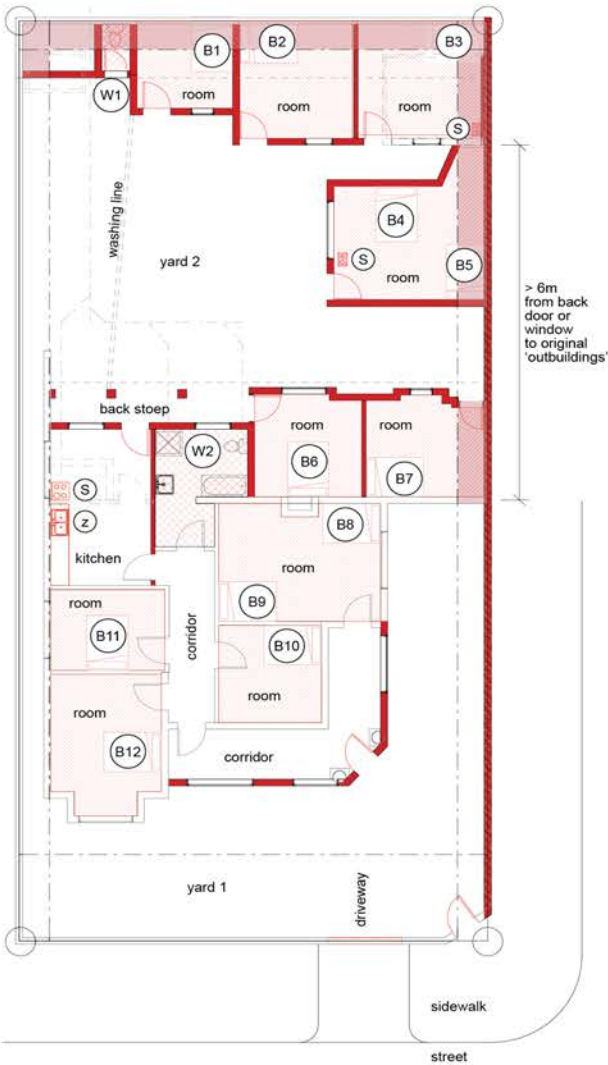
CASE STUDY #19



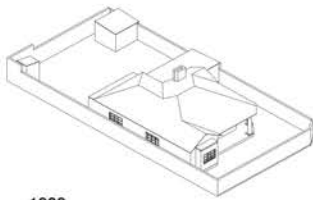
AERIAL
of block from Google Earth photograph, 2020

DATA FOR PROPERTY
FAR = 0.51 (permissible 1.2)
Coverage =51% (permissible 60%)
Height = 1 storey (permissible 3 storeys)
Additions from original = 117sqm

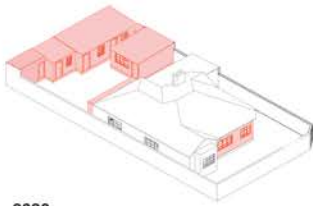
- Index:
- (B) 12 bed
 - (W) 2 enclosed wc's
 - (S) 2 stoves
 - (Z) 1 sink (not including WHB)
 - (V) 1 verandah
 - Other: -



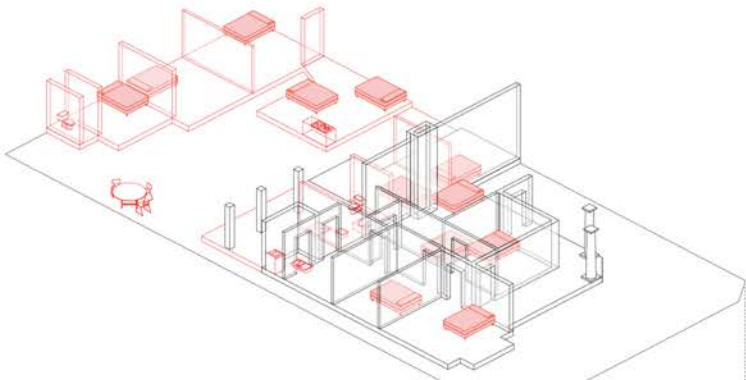
GROUND FLOOR PLAN OF CURRENT PROPERTY



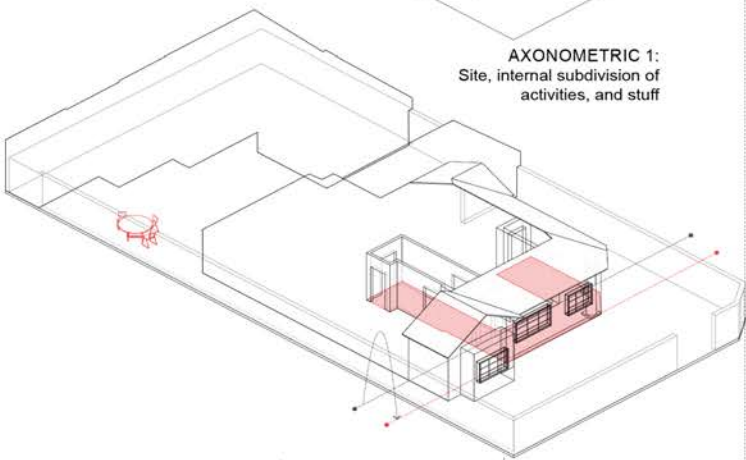
1909
Plot size: 495m²
Bungalow:
Rooms (back): 1
Total solid: 135m²
Total void: 360m²



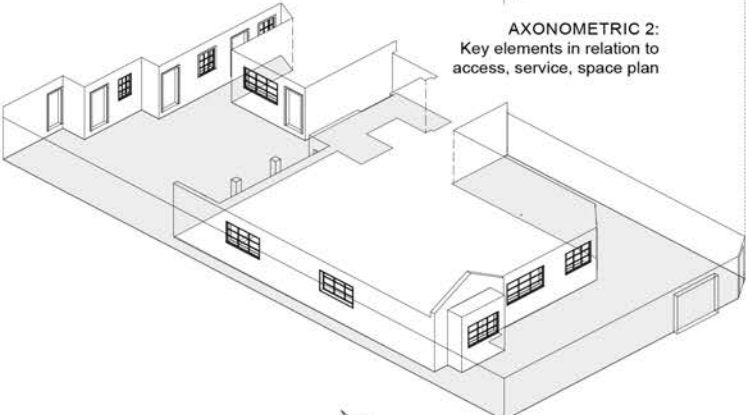
2020
Plot size: 495m²
Bungalow:
Rooms (back + front): 12
Total solid: 252m²
Total void: 243m²



AXONOMETRIC 1:
Site, internal subdivision of activities, and stuff



AXONOMETRIC 2:
Key elements in relation to access, service, space plan



AXONOMETRIC 3:
Skin and transforming void

Single plot description #19

Name: Corner community, divided

Sources: Site visits across years, conversation with residents, property report, satellite imagery, council plan, photos

Programme: Rental rooms

Summary

From the small original 'villa' in 1909, the bungalow on the corner plot has been transformed into a rent-a-room compound where house and backrooms share a yard and sanitary infrastructure, yet are able to operate as two independent entities at the same time. The residents use the street as an extension of their living space and participate actively in neighbourhood socialites.

Inventory – Accounting

Rooms: The property has six rooms inside the house and four rooms outside. One bathroom and a kitchen inside the house, and a water tap and a toilet outside.

Verandah: The verandah is a 90 degree corner wrap around, and has been closed off.

Inside two doors go into the former dining room and the corridor of the house.

Stoep: The house has a stoep at the back as a threshold between kitchen and courtyard. This was part of an addition in 1952, and it is still in use as occasional entry for the residents in the house, and access to the shared courtyard.

Boundary Wall: The boundary wall has two portions that follow the internal division of the plot. An early, if not original, section has decorative 'see through' elements around the 'front', and a higher closed-off part at the back. That part displays its incremental construction over time through a mixed materiality.

Openings: The wall has currently two openings. The original pedestrian entry at the junction of the corner, and a vehicular gate that was added to the northern side between 2013 and 2017. The garage door from 1952 was walled off in 2013.

Service/ space: Kitchen and bathroom have remained in their initial position. The outdoor toilet is still where it was placed in 1924. It is shared amongst the residents in the rooms.

Yard: The yard is split in two, the front as access and parking space, the back as shared space for the rental units and back of house for the bungalow.

Stuff: Beds, curtains, laundry line. Plastic chairs, buckets, crates. Outdoor furniture.

Extra: Sidewalk hang out

People: 16 at the time of the visit.

Animals: n/a

Trees: No trees are left.

Elements – Relating

Site, internal subdivisions, activities and stuff

The overall layout of the plot has not changed significantly since 1924, with outdoor rooms moving along the same boundary line and an additional structure on the western side at the back. The property has remained purely residential with a switch from use value to exchange value / income generation, at least since the last change of ownership in the early 2000s. The subdivision of the plot is personal – the family of the owner lives in the house, with extended relatives and the 'outdoor house' is rented to tenants. According to residents, the owner only lets to 'locals', in average two people per room. This selection criteria has led to tense dynamics amongst neighbours, with some of them being entrepreneurs from other African countries.

Key elements in relation to access, service and space plan

The verandah is internalised and no longer the threshold of arrival that as planned. The indoor bathroom and kitchen are only shared amongst the residents in the house. All residents on the plot use the same entrance in the front, the tenants of the rooms at the back use the path that results from the fire distance at the eastern side as access passage to the yard that connects their units.

Skin and transforming void

The southern part of the property 'behind' the house, has been removed from the public eye latest since 1952, and remains hidden, with a higher boundary than the front part. The front part seems more porous, with door and gate often open. The tenants who are not working during the day spend a lot of their time outside the yard, directly outside of the property at the street corner or at the at the shop across the road, with an eye on 'their' entrance. The open spaces both in the back and the front have a kind of triangle shape, rotated by 90 degrees, as is the arrangement of rooms along the direction of the respective passages. The garage turned into rooms separates the two sections. Access to the part 'behind' is via the outdoor fire distance passage. This is despite the possibility of a separate entrance on the western boundary wall which would lessen the control over the comings and goings on that side. Cars park in the front. It's like having two houses – one closed and one open, on one property with a single shared entrance.

Legalities

All changes on the property till 1952 have been approved by council. The first subsequent extension in 2012/13 basically re-built the outdoor room (1) from the original in 1909, that had been removed from the public eye in 1952. It moved from its location on the boundary line along the sidewalk inside the property, two years after the Group Areas Act (1950). The second extension is new, and not recorded. The current structures are within the zoning limit of six units. The provision of sanitary rooms for the back of the property is limited to one WC and one tap outside.

Aspiration – Speculating

The property's past shows characteristics of it being 'flipped' – this means its capacity 'to make money quickly' for a middleman, indicated through fast consecutive sales. Although in this case, it did not make capital returns. Tracing back, the link between the five of the six transactions that are listed on the property report from one of the largest property search portals in South Africa is the connection to one of the main South African Banks, and a number of entities it merged with. The first three purchases are bonded. The three registered bonds in 1993, 1995 and 1997 for R96, R79 and R93 are with NBS Bank Ltd. NBS is short for the Natal Building Society, established in 1882. In 1998 it merged with Boland Bank to NBS Boland. In 1999 NBS Boland merged with BoE Holdings Limited. BoE was the fourth buyer of the property in 2000. BoE ceased to exist in 2002 and merged with Nedbank. The property sold in 2002 to a female individual who works for a construction company, a conglomerate that is banking with Nedbank. She sold the property two weeks before she owned it on paper to the current owner. So instead of being a "flipper", it might be part of a larger (and abandoned) investment portfolio of the bank. This is an important possibility considering the rumours of redlining, or disinvestment in the area by major banks. On paper, the property has changed owners six times between 1993 and 2002, divided into two sets of three sales that took place very close to each other. The first set was priced R107, R85, R93, the second R 46,000, R75,000 and R135,000. The first amounts can be considered as zero in terms of real estate value,

the second amounts are considerable higher, yet still low on the spectrum of the market. The sellers and buyers range from a female with an Afrikaans last name to a male with an African last name, on to a clothing company for uniforms in the first set of transactions. The 2nd set involves the clothing company selling to a banking group in 2000, the year it was placed under liquidation as per court order. The group ceased trading in 2002, when a female active in the building industry and the current owner, a female with an African last name both concluded their purchases. As per official records, the current owner bought the property two weeks before the flipper herself purchased it from the bank.

This amount of detail lays out the history of a house, that, most possibly, has been used as trading asset - unsuccessfully though - and not as home. During the time of flipping owners, there has been no visible investment on the grounds, but signs of deterioration. The first aerial satellite image on the CoJ site in 2000 shows the same structural configuration than then approved council plans in 1952, albeit without roofs on the outdoor structures. This changed in 2006. Around 2012 more rooms outside appear, along the southern boundary wall, completed in 2013. Another structure along the western boundary joins in 2014. The conversion of the garage to rentable rooms took place after 2009 and was complete in 2013. The property offers accommodation at a lower cost than others in the neighbourhood. This attracts tenants with less disposable income, and often no work. Despite being good clients in their corner shop, the entrepreneurial success of their neighbours, is met with comments related to their 'being from elsewhere', taking up jobs and not being welcomed in S Africa. Their own, unfulfilled aspirations were captured and publicly shared when they participated in the Rosettenville group action "I wish" (2014) as part of the Inside Out project, a public art project initiated by the French artist JR (2011).

Geometry

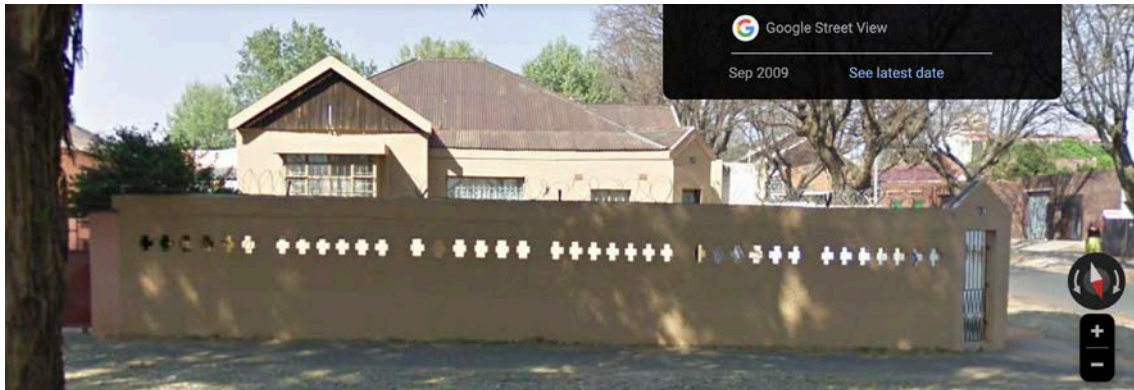
Void Shape/ Type

Back and front 'house' with communal outdoor rooms.

Compound Type

Rental accommodation and extended family residence.

Compound Doings: merging, re-scaling, yarding



Streetview, Google Maps, 2010



Streetview, Google Maps, 2013



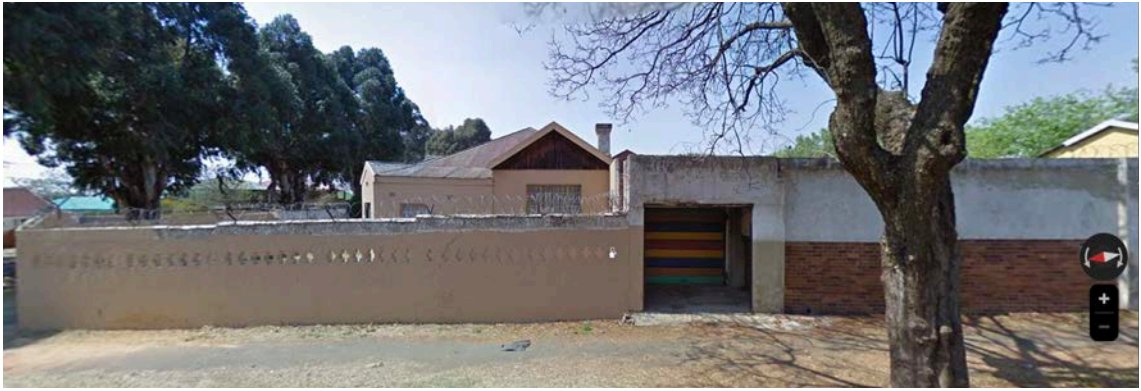
Council plan 1909



Council plan 1952



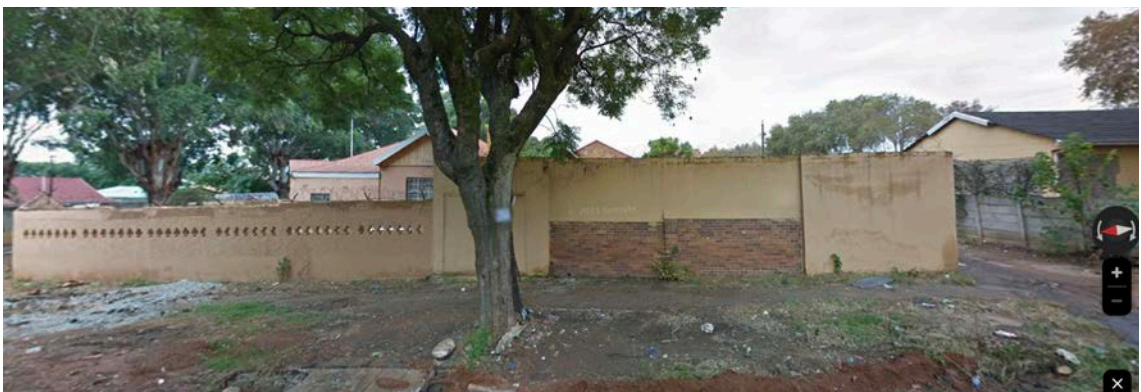
Photos Yard, ARPL4000A 2019



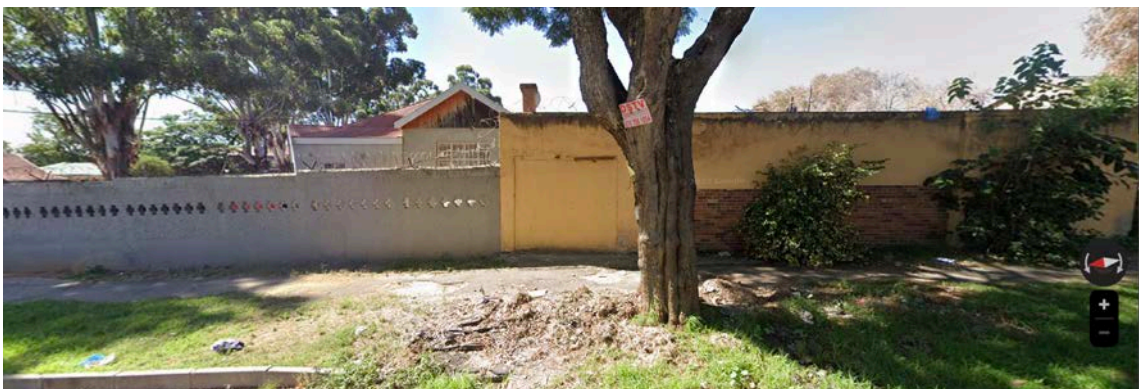
Streetview, Google Maps, 2009



Streetview, Google Maps, 2013



Streetview, Google Maps, 2017



Streetview, Google Maps, 2022

CASE STUDY 20



AERIAL
of block from Google Earth photograph, 2020

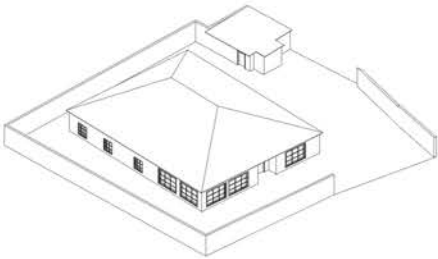
DATA FOR PROPERTY

FAR = 0.7 (permissible 1.2)
Coverage = 68% (permissible 60%)
Height = 1 storey (permissible 3 storeys)
Additions from original = 234sqm

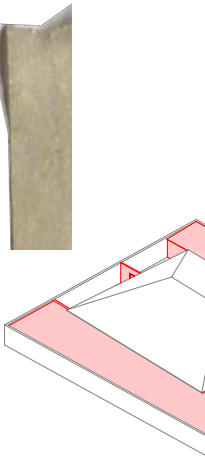
Index:

- (B) bed
- (W) 3 enclosed wc's
- (S) stoves
- (Z) sink (not including WHB)
- (V) verandah

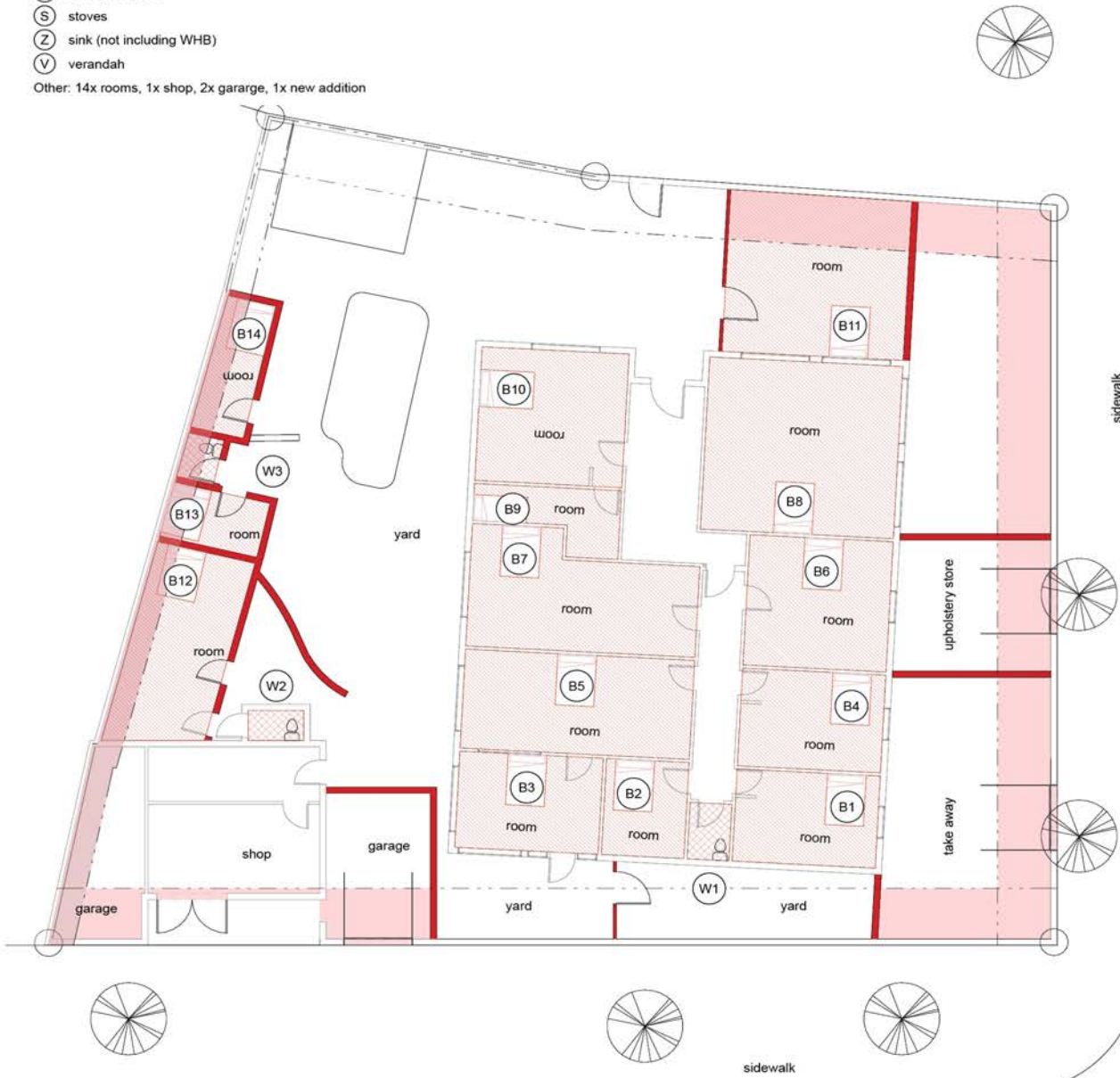
Other: 14x rooms, 1x shop, 2x garage, 1x new addition

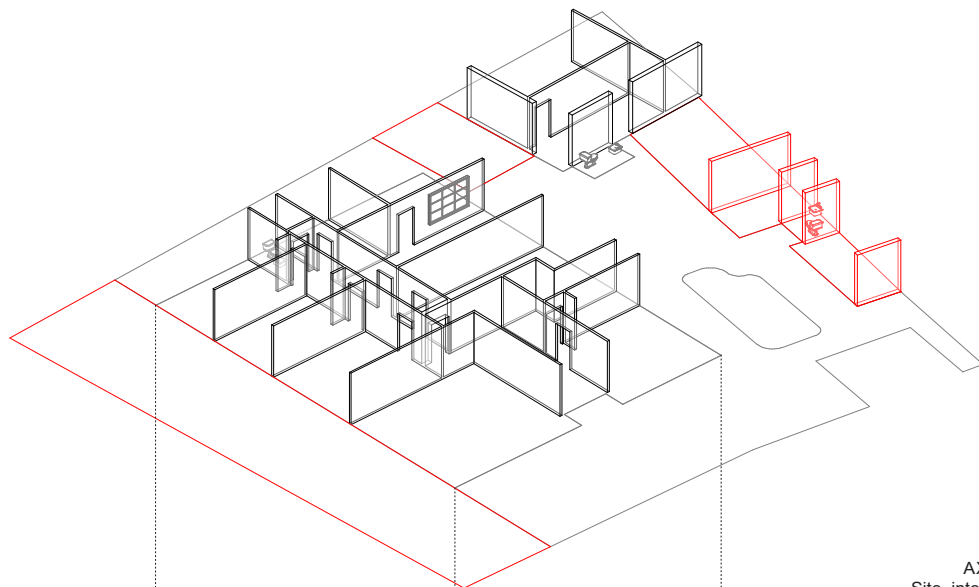
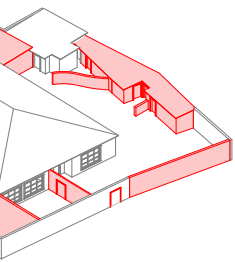


1930
Plot size: 931m²
Bungalow:
Rooms (back): 4
Total solid: 365m²
Total void: 566m²

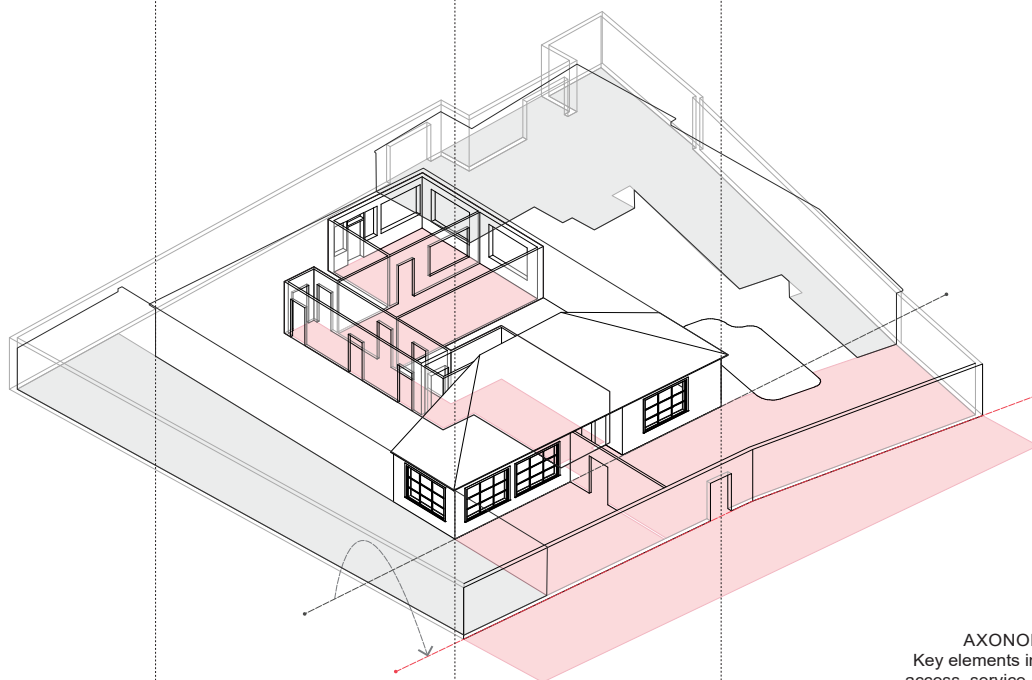


2020
Plot size: 934m²
Bungalow:
Rooms (back + front): 14
Total solid: 629m²
Total void: 302m²

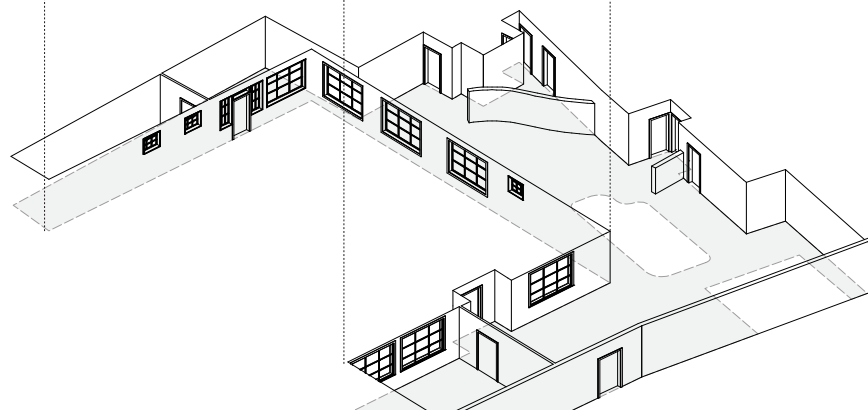




AXONOMETRIC 1:
Site, internal subdivision of
activities, and stuff



AXONOMETRIC 2:
Key elements in relation to
access, service, space plan



Single plot description #20

Name: Family business, wrapping up

Sources: Site visits across years, conversation with owner, and his brother, former owner, residents, tenants, property report, satellite imagery, council plan, photos

Programme: Rental accommodation, several different types of businesses, street facing and internal

Summary

The former freestanding bungalow is unrecognizable from the outside after numerous layers of 'wrappings' around the original built form. After a recent change of ownership these changes have now reached the boundary wall. A number of small scale businesses set up a mini activity street. This property and the one across the road are running small shops developed by two brothers from Ethiopia and their larger network. The brother 'on the other side of the road' has been running his small convenient store for some years.

Inventory – Accounting

Rooms: The property offered six rooms, a shared kitchen, two bathrooms and a closed off stoep as seventh room inside the house. This was before the recent amendments.

Gthe aim of the new owner was a minimum of ten rental units. Outside along the northern boundary wall are two new existing businesses, and space for residential units, new businesses in converted garages, and a large roofed structure covering the former pool that could accommodate anything from a mechanic workshop to rental accommodation.

Verandah: The originally L shaped verandah on the north western edge became part of the lounge/ former drawing room in 1984, when the house extended itself along its edges into a rectangular box.

Stoep: In exchange for the verandah, a stoep was added on the south east corner that has been closed off over time and turned into an indoor room, entrance, meeting space, with direct access to the kitchen.

Boundary Wall: On the plans of 1904, the boundary demarcation was specified as wire fence, a material detail that became later part of the title deeds in some suburbs (1913, Report of the Transvaal Leasehold Township Commission). The outdoor rooms and, at the time, horse stables, were screened off on the South East corner by an internal boundary. This division has been maintained until 2019, when the current owner started to repurpose the space for business. The boundary wall all around the property has since then increased in height so that views into the property are avoided.

Openings: A number of openings are puncturing the boundary, with two main purposes: access and business. On the eastern boundary, there are two garage doors turned shop fronts, slightly recessed, a pedestrian gate and a vehicular gate. On the western side the the pedestrian 'main entry' gate leading to the front door has been replaced by a vehicular gate. The north façade now has two walk in 'holes' in the wall holding space for businesses.

Service/ space: The servant space of the house, inside and outside, was located in the south east of the property, originally. The 'main' entrance (and verandah) was diagonally opposite, north west. Until 2019 it remained this way, in principle except that the back entrance turned 'main' in terms of usage and activities, for cars and pedestrians. With the owner having very little disposable income, service space turned garage business became the financial lifeline to keep the main house running.

Yard: The property is on two stands with an a-typical layout, that is not rectangular and has three street edges. The original bungalow sits in the centre, the outdoor rooms nest on the south eastern side. They housed first horse stables and accommodation, then ga-

rages and accommodation and change rooms for the added pool, then shops and accommodation. Before the recent changes, the open space wrapped around the house as: an (unutilised) front garden on the north, a (mostly closed) entrance zone demarcated by flowers on the west, a (very active) back entrance on the east, and a (productive) service yard, next to, but separated from remains of an entertainment area around an (empty) pool space on the south. At the western edge of the pool, what looks like broken furniture stored under a canvas, waiting to be disposed, was actually a upholstery service, as rent-a-yard space. After the new additions 2 passages along the house and some open space on the eastern and western side in front of both entrances are left. The rest is covered.

Stuff: Beds, tables, chairs, laundry line, broken furniture, hair, chicken, plastic waste, crates, potplants

Extra: Hairdresser, Take Away Kota

People: 10 at the time of sale, now more

Animals: n/a

Trees: No trees are left.

Elements – Relating

Site, internal subdivisions, activities and stuff

The activities inside the building are based on information from before changes were implemented, and later confirmation of that information through readings from 'the outside' – like an advertisement for accommodation on the boundary wall. This plot does not operate anymore on the scale of a house on a plot, and the internal subdivisions and activities relate to the plot as an entity. It began with the previous owner having very little disposable income, and renting out the garage for business to the current owner as the financial lifeline to keep the main house running.

Now two rather large and long structures cover the entire former front garden and most of the former 'backyard'. They are used from both sides, inside and outside the property. Several businesses are operational: a hairdresser (remaining in the former garage), a Suzuki car repair service (new, in former garage and yard), a re-opened restaurant (as an extrusion of the boundary wall on the north east street corner, opposite the spaza shop that is run by the owner's brother and frequented by the tenants of #19), and an upholstery service next to the restaurant in the northern boundary wall. This is the business from the pool edge under the canvas. In addition, self-contained units are rented out for residential accommodation.

Key elements in relation to access, service and space plan

The most significant element in this case is the boundary wall, that has thickened on the northern and southern side to the extent that it has taken over the yard. The new development is in parallel with the existing layout of rooms and corridor inside the house. Original elements like the verandah, bay windows have disappeared and are of no significance for the current compound life. Everything on the property is income generating and at service, in one way or another.

Skin and transforming void

The 'skin' of the bungalow has transformed in 1984 to its current form. The building expanded its outline all around to increase room sizes by a meter or so. It turned into a self-centred rectangle with a 'flat' façade that has not relation or interaction with the yard space. These changes had an effect on the life in the yard. While the building turned

inwards in terms of everyday life, the yard turned outwards and more independent. It started to support the building, and not from a subservient position, to then turn into a building itself. In the end, it is not only the bungalow that disappeared, but the yard as well. Everything kind of merged into one big superstructure.

Legalities

The property has no recorded business rights, nor have any of the considerable additions since 2019 been approved by council. If all the new structures are closed spaces, the permitted coverage is exceeded. For the building on the southern portion of the land to be safe for habitation, the coverage of the pool (now floor) might need a structural check-up.

There are two owners, the one officially on record and the shadow owner who is actively running the place. The shadow owner is on a restricted permit in the country that does not allow him to purchase property. He lives in a rented room on the adjoining property. The tenants from #19 expressed their dislike of 'foreigners as successful landlords', while consuming from the (foreign) brother's spaza shop - and threatened to report them.

Aspiration – Speculating

The property is part of a long term plan of a male from Ethiopia. He is a qualified educator with a NQF level 8, but is not permitted to work due to immigration issues. He is a 'shadow owner', means he generated the funds and managed the property but is not recorded as official owner. He earmarked this property, with his brother having set up the small convenient store opposite, and started as tenant of one converted garage. With time, he used existing networks to generate funds, based on a business plan he developed. He decided to continue to stay in a small room on another neighbouring property, because his rent there was less than what he intended to charge for his units. The purchase price with R1million matched the municipal evaluation, and the seller made considerable profit, with more than 400% capital gain in relation to her purchase price in the year 2000 and 200% considering inflation. No bond has been recorded for this purchase, suggesting a cash sale. The official buyer in 2018, from the same country than the shadow owner, is also recorded as bondholder in 2000, when the former owner, a female with a Portuguese last name bought the property. The property was bonded to 75% by one of the major South African Banks. It remains unclear if the current owner actually financed the former owner,

Geometry

Void Shape/ Type

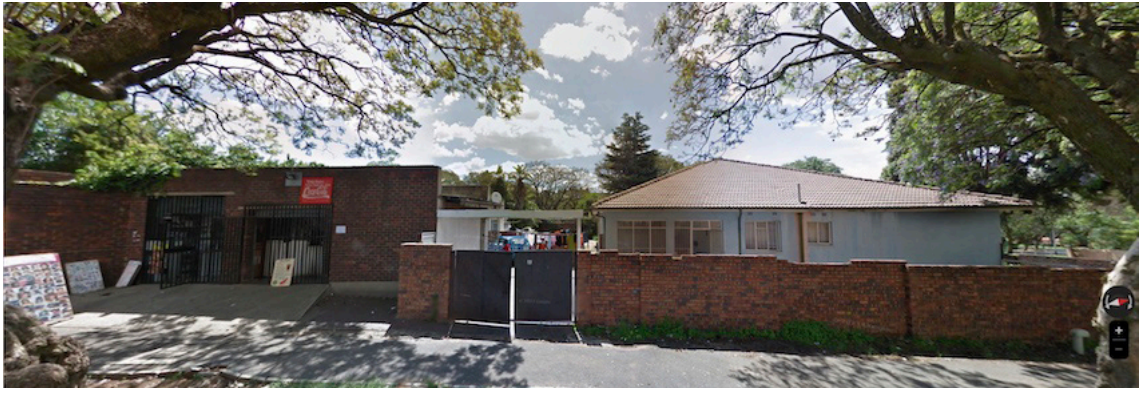
Reduced to the min - outdoor utility entrance - is that the new 'verandah'?

Compound Type

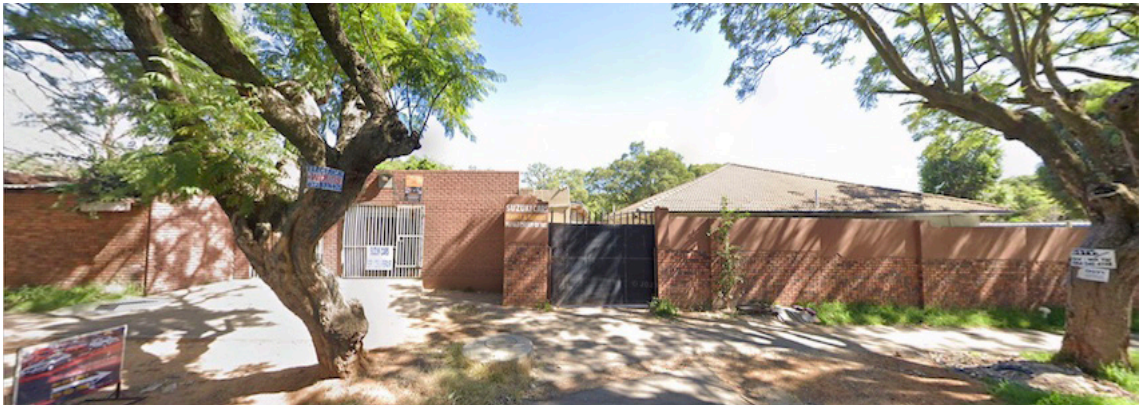
Convolutd super compound, mixed use.

Compound Doings: merging, re-scaling, enfolding, yarding

The property has quite radically changed after recordings on site in 2018-20 when the current status quo was an aspiration we discussed but was not yet build. The plot description is looking at the current situation, yet with limited information about the inside of new additions in 2023. The drawings are not yet updated.



Streetview East, Google Maps, 2013



Streetview, Google Maps, 2023



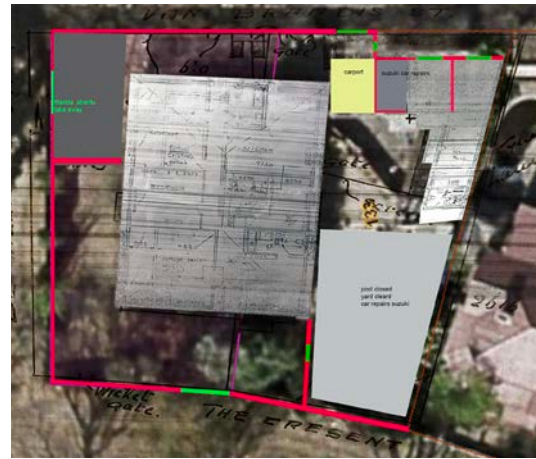
Streetview North, Google Maps, 2009



Streetview, Google Maps, 2022



1904



2021, April



1924



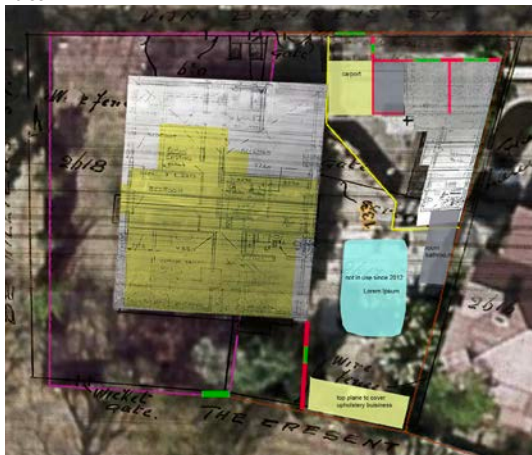
2021, July



1985



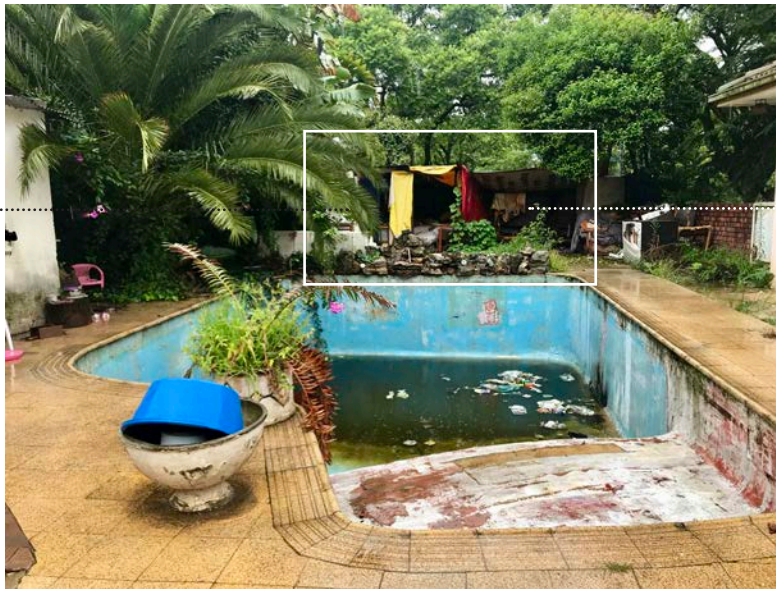
2023



2010-2019



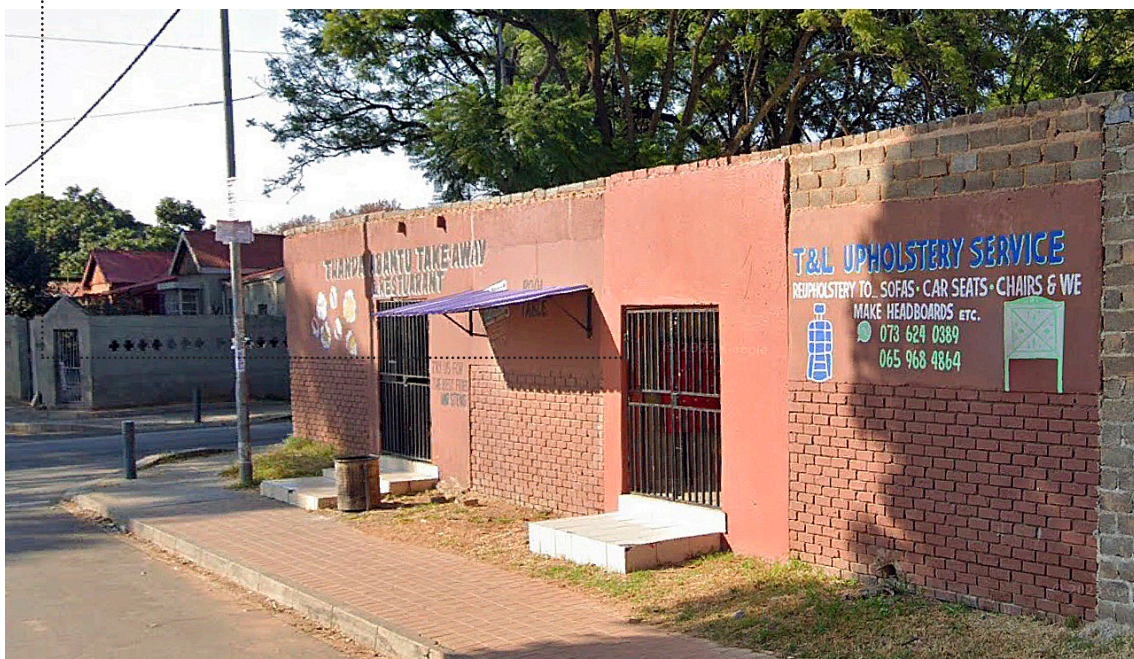
Super Compound



Upholstery service
outdoors 2019



Upholstery service
outdoors 2019, detail



Wealth Creation

Upholstery service
moves into shop 2020

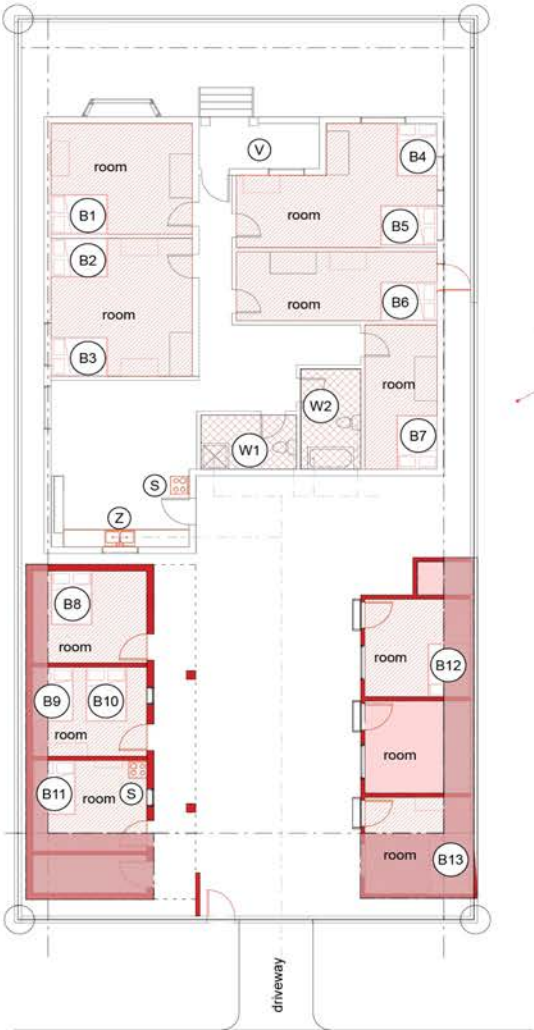
CASE STUDY 21



AERIAL
of block from Google Earth photograph, 2020

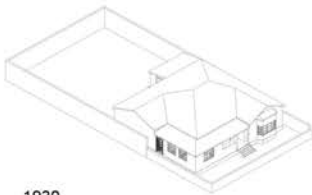
DATA FOR PROPERTY
FAR = 0.6 (permissible 1.2)
Coverage = 61% (permissible 60%)
Height = 1 storey (permissible 3 storeys)
Additions from original = 92sqm

- Index:
- (B) 13 bed
 - (W) 2 enclosed wc's
 - (S) 2 stoves
 - (Z) 1 sink (not including WHB)
 - (V) 1 verandah
 - Other: 3x rooms

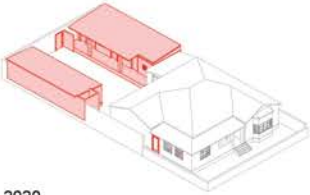


GROUND FLOOR PLAN OF CURRENT PROPERTY

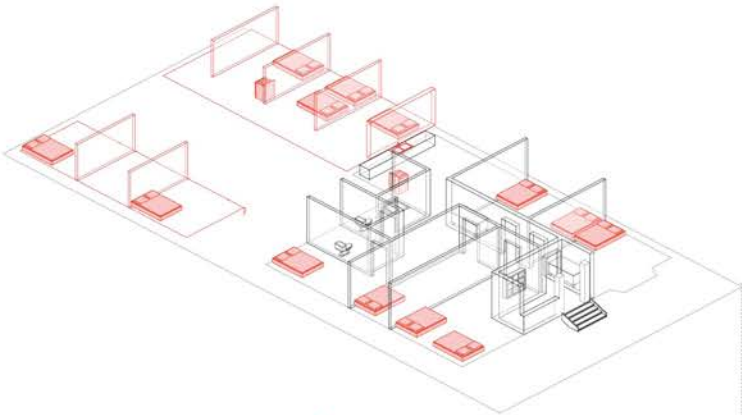
0 5 10



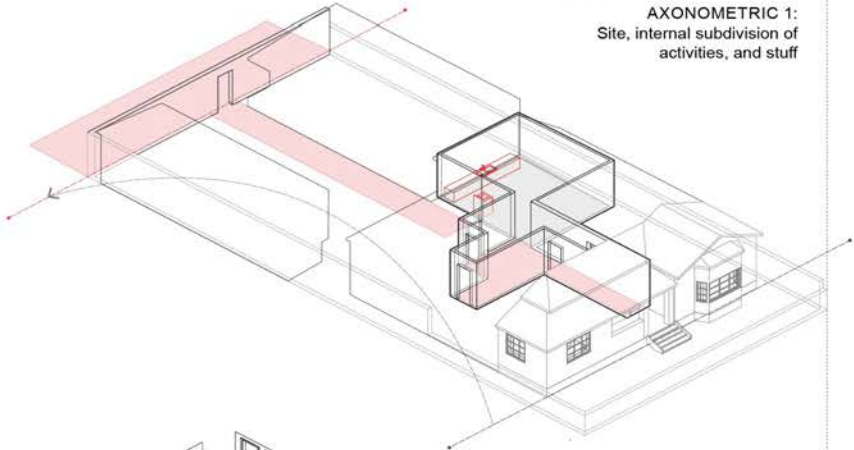
1930
Plot size: 471m²
Bungalow:
Rooms (back): 1
Total solid: 180m²
Total void: 291m²



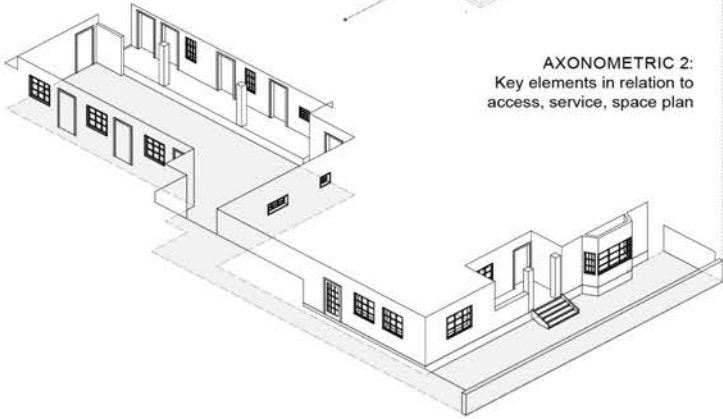
2020
Plot size: 471m²
Bungalow:
Rooms (back + front): 16
Total solid: 272m²
Total void: 199m²



AXONOMETRIC 1:
Site, internal subdivision of
activities, and stuff



AXONOMETRIC 2:
Key elements in relation to
access, service, space plan



AXONOMETRIC 3:
Skin and transforming void

Single plot description

#21

Name: My brother's keeper, backyard history

Sources: Site visit, drive by, property report, satellite imagery, original plan, photos, sales description

Programme: Residential, extended family in the house, rental outside

Summary

While the house has physically remained in essence what it was since inception, the property has amended the use of its backyard from service, to leisure to rental accommodation. The physical structures have been re-used and extended slowly but continuously over the last hundred years, with visible traces of the past remaining.

Inventory – Accounting

Rooms: The property has five rooms inside, bathroom and kitchen and six rental units outside, with separate kitchens and a shared waterpoint.

Boundary Wall: The boundary wall of the corner property, with a service alley at the back, has three different heights. Very high at the back, medium height at the back part of the house next to the vehicular entrance, and low in front and around the (closed off) verandah. The former boundary wall between garage and back of house (1972) was recessed and is now the yard facing façade of outdoor units.

Openings: There is a pedestrian gate leading to the 'main' entry across the verandah, another pedestrian gate around the corner to the other edge of the verandah (now closed) and a vehicular gate with a pedestrian inbuild door next to the latter. There is no paved driveway going from the street to the gate, it is a public grass strip.

Verandah:

The verandah of the house wraps around the north east façade and has been partly closed off at time of the site visit in 2019. Images for google maps show that it is fully closed off in 2023. The verandah of one portion of the outdoor units was planned in 1972 as part of the play room and is still in operation.

Service/ space: The 1911 the property had an outdoor toilet at the far south west corner, next to accommodation for domestic workers, accessible from the sanitary lane. This toilet is the location of today's shared waterpoint of the units at the back. The kitchen has been extended in 1945, and replaced and outdoor stoep it has its own entrance, from the backyard and the street through the vehicular gate, if so required. The domestic room was replaced in 1972 by a playroom with verandah, explicitly not for dwelling purposes, and a garage at the south east corner. This was marked as 'not constructed to date' on the council plans.

Yard: The yard is split in two. A front that is linked to the access to the main house and not further utilised, and a back that is shared space between the outdoor units, for laundry, parking and access to the shared waterpoint .

Stuff: laundry line, shoes, bins, satellite dishes

Extra:

People: 16 at the time of the site visit.

Animals:

Trees: There is one tree in the 'front garden' of the property

Elements – Relating

Site, internal subdivisions, activities and stuff

The house has remained similar to its original plan, with single individuals in rooms

sharing kitchen and bathroom. They are the brother of the owner and his friends, The back units are rented out per family. They have a similar size than the rooms inside the house.

Key elements in relation to access, service and space plan

The front verandah of the house is used for habitation, the back verandah has become the shared kitchen. The verandah of the backrooms is still entry threshold and social meeting place, particular when it is raining. The yard at the back is communal space and outdoor corridor, with different destinations. The units at the back share one WC and one bathroom.

Skin and transforming void

The boundary wall at the back has thickened and turned skin/ façade of the units on the eastern side. The yard has an L shape, combined with a thin U around the front of house.

Legalities

Parts of the additions have not been recorded or approved at council. The converted playroom is now used for habitation.

Aspiration – Speculating

The property was purchased by the first owner with an African last name in 2011, who started construction the outdoor units on the east in 2012. He owned more than this property in the area, at least one of those went on auction. The current owner, a financial credit controller, purchased the plot in 2016 with an African female, slightly above council evaluation and bonded to 95% by one of the major South African banks. Both owners were in their early 30s at the time of transfer. His brother is a student and makes use of the house as a residence.

Geometry

Void Shape/ Type

L Shape at the back, thin U in the front – connected.

Compound Type

Rented unites with extended family in the house.

Compound Doings: re-scaling, yarding



1911



1945



1972



2019

Collage original plans on aerial Google Earth



View inside yard, ARPL4000A2019



Streetview North, Google Maps, 2013



Streetview North, Google Maps, 2023



Streetview East, Google Maps, 2009



Streetview East, Google Maps, 2023

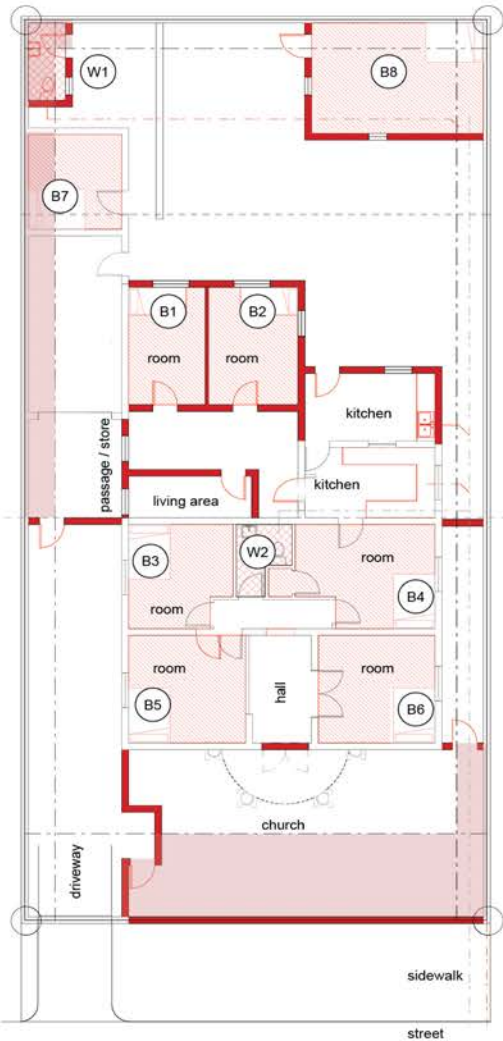
CASE STUDY #22



AERIAL
of block from Google Earth photograph, 2020

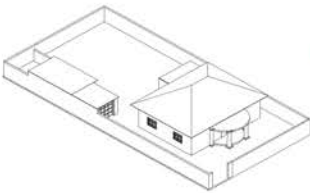
DATA FOR PROPERTY
 FAR = 0.65 (permissible 1.2)
 Coverage = 65% (permissible 60%)
 Height = 1 storey (permissible 3 storeys)
 Additions from original = 176sqm

- Index:
- (B) 8 beds
 - (W) 2 enclosed wc's
 - (S) 1 stove
 - (Z) 1 sink (not including WHB)
 - (V) 0 verandah (has been converted to church)
- Other: 1x church

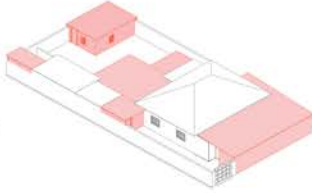


GROUND FLOOR PLAN OF CURRENT PROPERTY

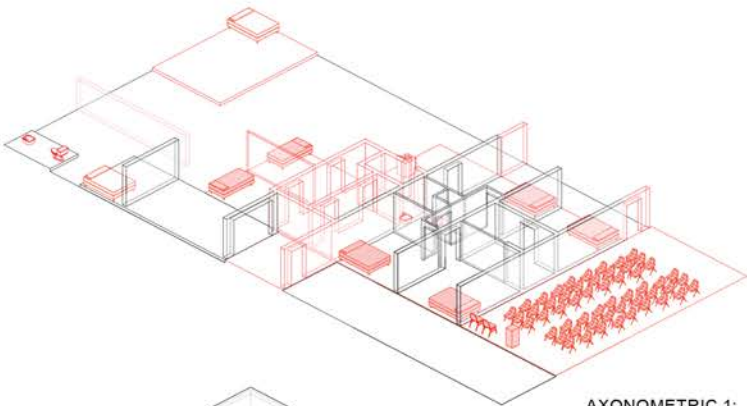
0 5 10



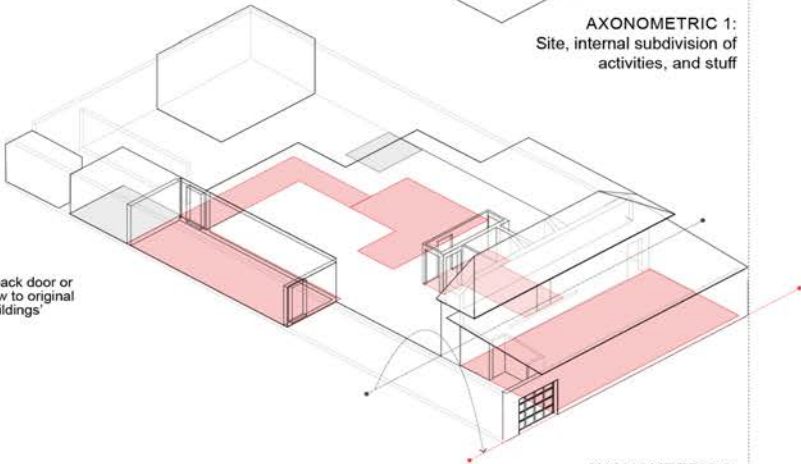
1937
 Plot size: 476m²
 Bungalow:
 Rooms (back): 1
 Total solid: 133m²
 Total void: 343m²



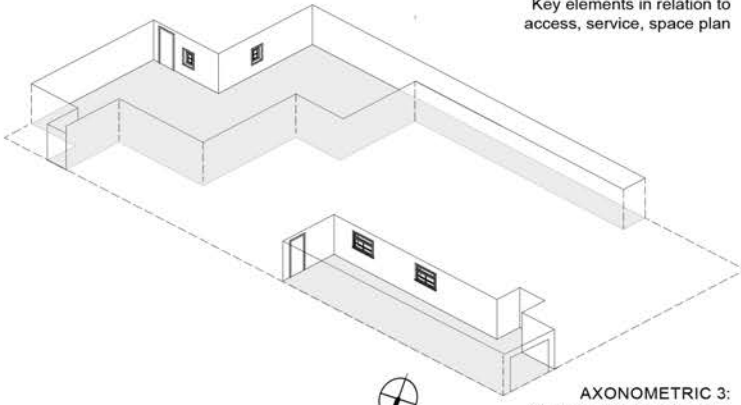
2020
 Plot size: 476m²
 Bungalow:
 Rooms (back + front): 8
 Total solid: 309m²
 Total void: 167m²



AXONOMETRIC 1:
 Site, internal subdivision of activities, and stuff



AXONOMETRIC 2:
 Key elements in relation to access, service, space plan



AXONOMETRIC 3:
 Skin and transforming void

Single plot description #22

Name: Structures of Belief

Sources: Site visits, conversation with owner, property report, satellite imagery, council plan, photos

Programme: Private residence, accommodation, church

Summary

The property develops a unique form of leasehold. While the owner of the property lives in the bungalow residence with his family, the space around, back and front, is leased by the church and its community. The pastor and his family live behind the house and share an entrance with the owner: through the kitchen.

Inventory – Accounting

Rooms: The property offers six rooms, a shared kitchen and a bathroom, inside the house, two of those rooms were added to the original four room house. One outdoor room serves as storage room and a toilet in the backyard. A large room for a church congregation is the new front of house, up to the boundary line.

Verandah: The verandah was a significant feature of the property that was removed in 2018 and replaced by a church, that reaches from the façade of the building to the boundary wall. The back verandah became part of the kitchen in 1952.

Boundary Wall: The street facing boundary wall is part of the church room. The north facing boundary wall along the driveway is one with the garage and the storage room.

Openings: The entrance to the property is through the vehicular gate onto the driveway. Access to the house is past the northern boundary wall into the garage through a door into the garden, that leads to the kitchen door. There are ten windows and three main doors to access the buildings – the church door, the garage door and the kitchen door. The storage room has its own door.

Service/ space: Rooms with access to water are placed along the original eastern façade of the bungalow that faced the garden. The kitchen was an extension in 1952 and is now the main shared entrance to the house, of both, owner and tenants.

Yard: The yard that is left is in the back, to be accessed through the garage, and is used by the congregation if so desired, or required.

Stuff: Beds, kitchen table, a lot of plastic chairs. Two chairs that are big and signify authority.

Extra: The church.

People: Two nuclear families, 8 people and a full congregation.

Animals: n/a

Trees: No trees are left.

Elements – Relating

Site, internal subdivisions, activities and stuff

The communal spaces – church and garden, literally surround the domestic part of the property. The owner lives in the house with his family – as it was, only his entrance is through the back, and his living room and hall don't have natural light anymore as the church is directly attached to the house. The pastor lives with his family in the additions from 2005. Kitchen as entrance is shared, but not as cooking space.

Key elements in relation to access, service and space planning

The verandah has ceased to exist, corridor and hall are disconnected from arrival. They have been replaced by the driveway and the garage. The entrance through the garage is

independent from the house so that the garden can be adjunct to church. The outdoor toilet serves as shared ablution. The fire protection set-back on the southern site of the house is blocked by the church. In case of a fire the people in the house only have the door in the garage to get off the property. Should the fire start in the garage they are trapped and cannot leave without danger.

Skin and transforming void

The void is discontinuous due to the placement of the church and diminishing in size as new rooms are being build. The front façade of the building, the church and the boundary wall merge into one structure.

Legalities

There is no building permit for the church, not is there a permit to practice and congregate. The owner (at the time of the investigation) has a building plan with a 'spaza stamp' that seeks permission for the extension of the existing building by a 'lounge' (aka church). The current zoning does not include a religious building on site. That drawing omits the residence of the pastor added in 2005. The drawing does not apply the required professional conventions, and is signed by Johannesburg Water. It is not part of the drawings Johannesburg Council has on file.

Aspiration – Speculating

The owner of the property at the time when the research was conducted, bought the property in 2017 from a 'flipper' who made a significant profit in a day – with 67% capital gain of the price he paid to a legal entity. The purchaser paid above council evaluation, so not under value, and as new property owner he had ambitious plans. In addition to the special leasehold arrangement from 2018 when the church was added, he planned to add six more rental units and go double story. However, he was taken to court by a trustee of the SA Home Loans Guarantee Trust (SAHL Trust) and the property was auctioned in 2022 for a reserve price of R800,000. It was sold three months later for 25% more – R 1,000,000 to a 27 year old female with an African name, who has marked herself as 'looking for work' on a professional online network. The purchase is bonded 100% by one of the major African banks. The church continues to worship at the property. Construction for two more rooms has started at the back. The property is turned into a place of faith, in parallel to the residence. It is a community gathering space that is a lucrative income generator at the same time.

Geometry

Void Shape/ Type

Driveway corridor with eye of the needle entry to shared backyard

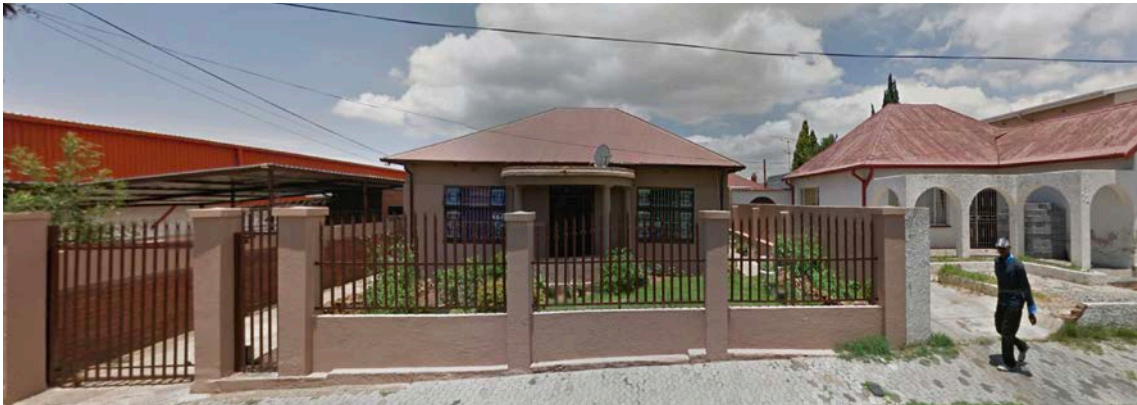
Compound Type

Place of faith, in parallel to private residence, a community gathering space as lucrative income generator.

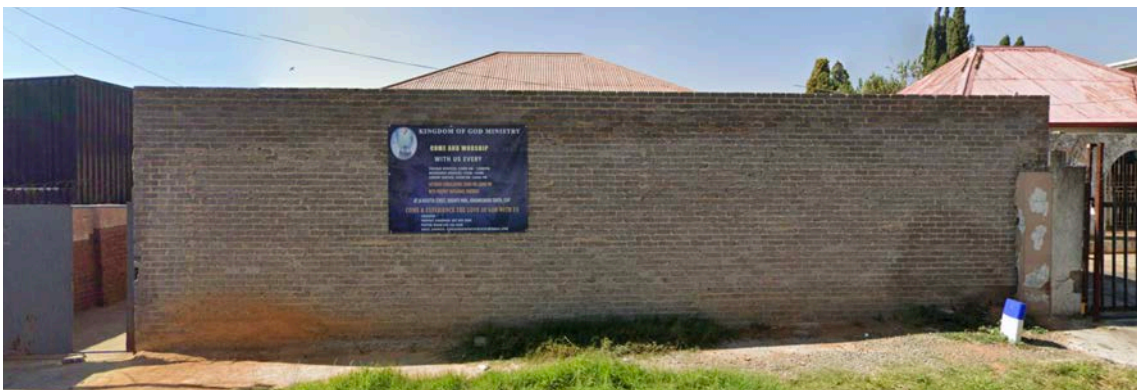
Compound Doings: merging, re-scaling, enfolding, yarding



Streetview North, Google Maps, 2009



Streetview North, Google Maps, 2013



Streetview East, Google Maps, 2023



Collage of original council plan on aerial view Google Earth (left) and 'as built' sketch from 2018 (right). In the centre the take over of the former yard by the church with indoor and outdoor activities.

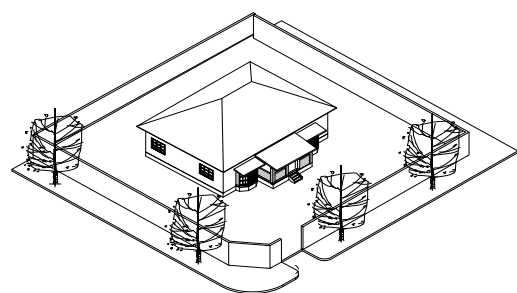
CASE STUDY #23#24



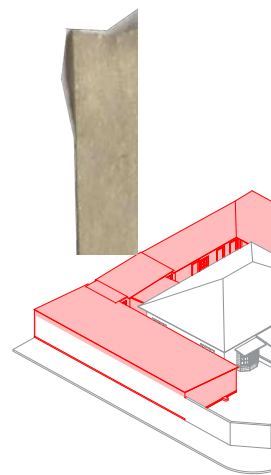
AERIAL
of block from Google Earth photograph, 2020

DATA FOR PROPERTY
FAR = 0.5 (permissible 1.2)
Coverage = 50% (permissible = 60%)
Height = 1 storey (permissible 3 storeys)
Additions from original = 84sqm
Index:

- (B) 17 beds
- (W) 2 enclosed wc's
- (V) 1 verandah



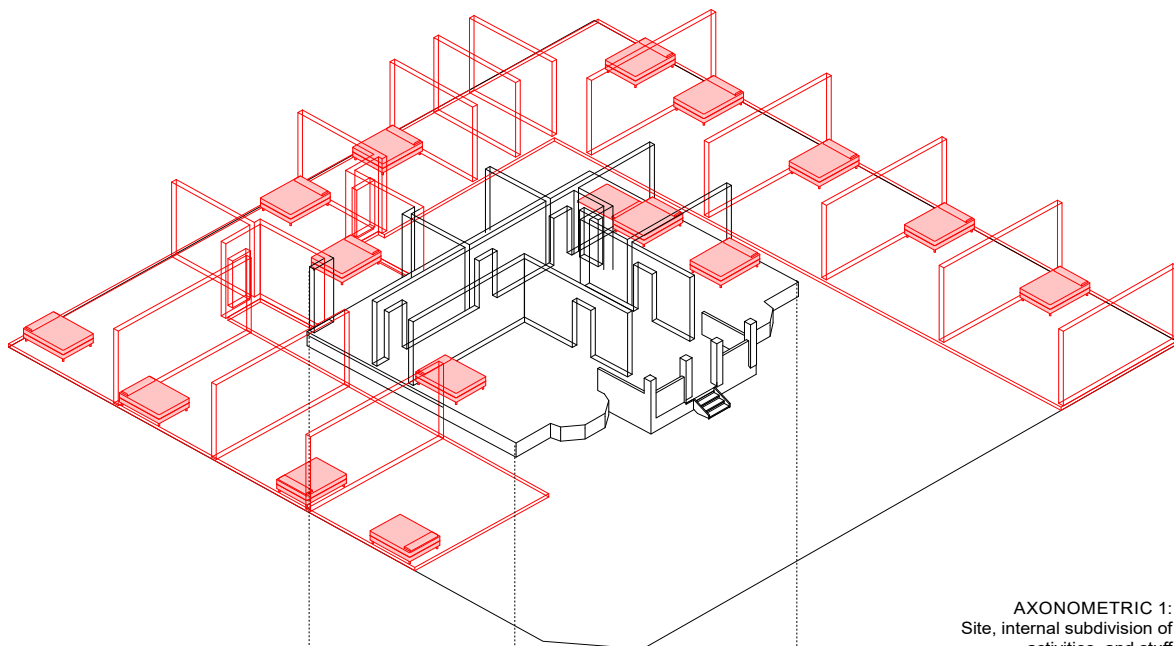
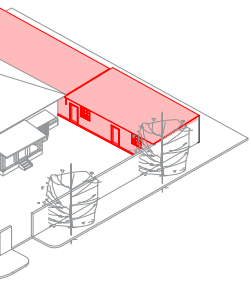
1930
Plot size: 495m²
Bungalow:
Rooms (back): 1
Total solid: 161m²
Total void: 334m²



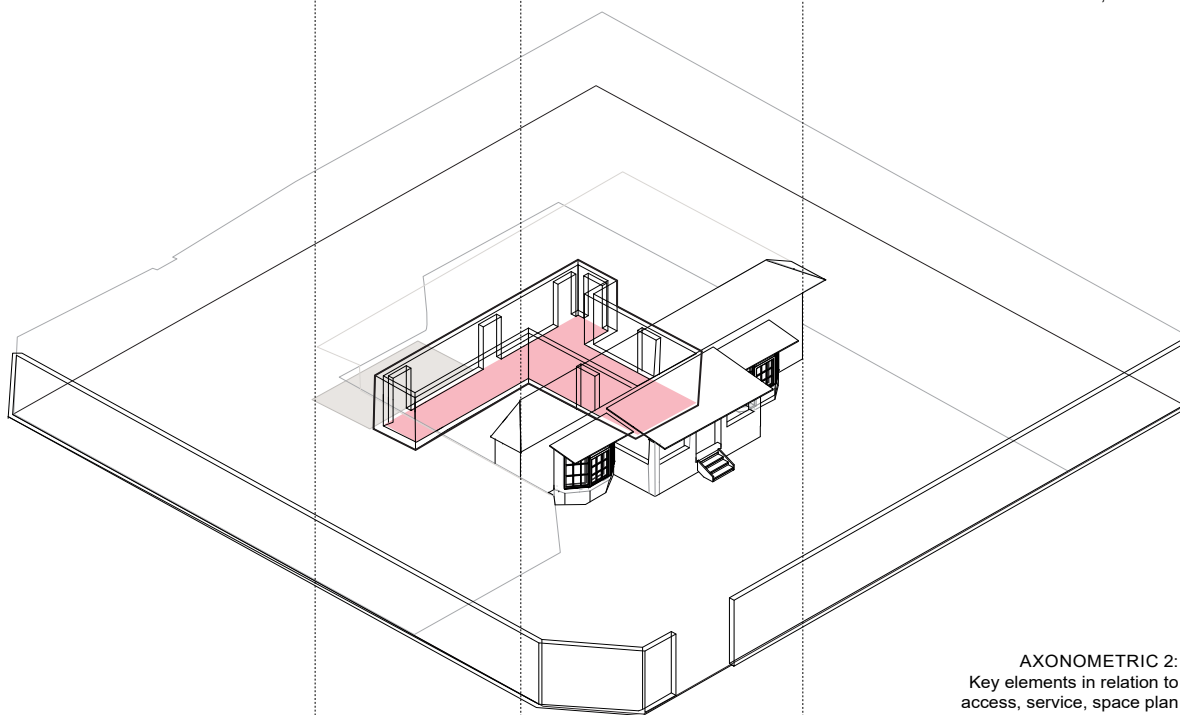
2020
Plot size: 495m²
Bungalow:
Rooms (back + front): 11
Total solid: 245m²
Total void: 250m²



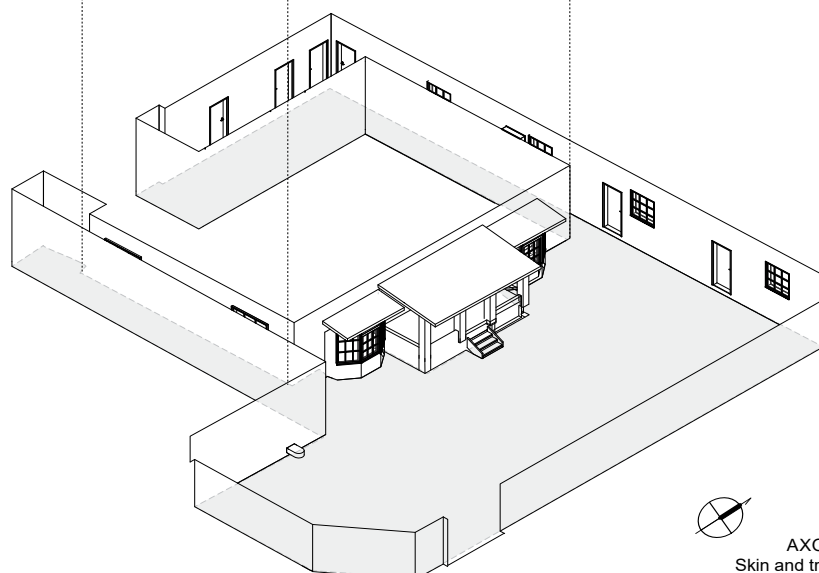
GROUND FLOOR PLAN OF CURRENT PROPERTY



AXONOMETRIC 1:
Site, internal subdivision of
activities, and stuff



AXONOMETRIC 2:
Key elements in relation to
access, service, space plan



AXONOMETRIC 3:
Skin and transforming void

Single plot description #23 +24

Name: Cottages, bedrooms and a yard

Sources: Site visit, conversation with tenants, property report, satellite imagery, council plan, drive by

Programme: accommodation, work from yard

Summary

The property on two stands, and on a corner, belongs since 2020 to different owners, with the one plot being 90% covered with rentable space and the other one with 75% yard. One of them is a mechanic who works on the cars in the yard.

Inventory – Accounting

Rooms: The property advertises cottages with built-in toilets and bathrooms and big bedrooms. Available are nine cottages, and eight rooms.

Verandah: The verandah is the entry for the rooms in the bungalow. It is still open, and gated.

Boundary Wall: The boundary wall is made of prefab concrete and extended by palisade fence and barbed wire. On the southern side, the additions seem like a boundary wall themselves, and 'turning away' from the sidewalk, there is no interaction.

Openings: The east facing boundary has a vehicular gate.

Service/ space: A path all around the bungalow serves as outdoor corridor to access the outdoor units. A shared basin at the back serves to wash laundry. The laundry line is north facing in the front yard next to the entry gate.

Yard: The yard covers a bit less than half the property. It is used to repair cars.

Stuff: Rooms are unfurnished.

Extra: High, low key security measures. All windows are gated, and sections of the property are fenced off.

People: 17-43

Animals: not permitted

Trees: no trees are left

Elements – Relating

Site, internal subdivisions, activities and stuff

The property is fully residential, with the yard serving as mechanic workshop, and parking. The division is between rental units inside and outside the house. The outdoor units outnumber the rooms in the house, they are nearly twice as many. The units are spacious in comparison to other offered in the neighbourhood.

Key elements in relation to access, service and space plan

The property is laid out to support the independence of the units as individual homes, each entrance is marked with a little cantilevering roof. The yard takes over the social role that the verandah previously held: threshold to private spaces, meeting point. There is minimal open space at the 'back of house' and a domestic utility programme like the laundry line, or car park, have moved to the front.

Skin and transforming void

The front yard has is the biggest space as single unit on the property, and has the shape of a rectangle. All other open space are open walkways to units. The plot is very densely built up on the western plot and nearly not all on the eastern, street facing part. The solid form seems to have merged into one organized mass with an entry hall in the open. The

interaction with the street is close to zero, the façade on south facing street edge appears defensive and hostile with no public interaction.

Legalities

The property as built does not have council approval. With twelve dwelling units permitted, the house would need to count as one – as it currently (wrongly) does, in order to come close to legally approvable numbers.

Aspiration – Speculating

The owners are small scale developers from West Africa. The units are spacious, and the monthly rent is not low at R3500. A deposit is required, a detail that is not common in the area. The property actively seeks tenants through multiple formats of advertisement, from printed flyers on the public renting wall, to a phone number on the gate, to online listing on various platforms. The split of the plots between two married couples is a new division of ownership, a first in the history of the property since 97 years. The sale of half the land (and house) for a slightly higher amount in 2019 than they paid for the full estate, after four years, is 200% capital gain, at least on paper. This is after considerable investment in the property, all the new structures to rent were constructed since 2015. There is no information about how and if the fixed assets are shared, and if rental income is divided. The property was bonded by with 25% by one of the major South African Banks in the 2015 sale. It seems the 2015 buyers live in West Africa and the 2019 buyers originate from there, but reside in Johannesburg.

Geometry

Void Shape/ Type

Rectangle 'doormat' with wrap around corridor

Compound Type: cottages and a car repair, mixed used

Compound Doings: merging, re-scaling, enfolding, yarding

Advert on community wall as initial point of entry to property



Photo: Ural Chetty, ARPL4000A, 2020

One Bedroom Cottage
Van Hulsteyn St,
Kenilworth

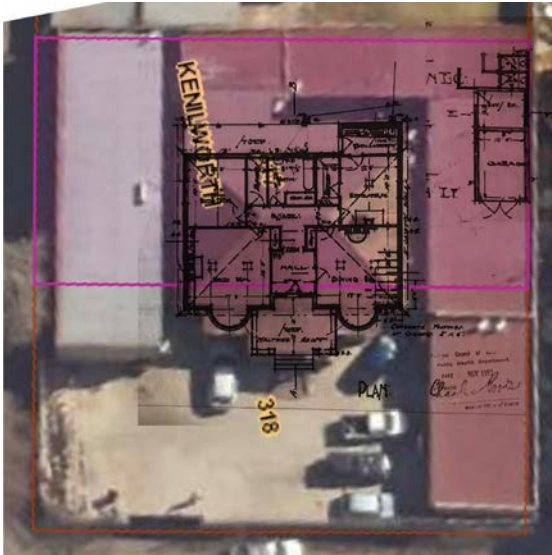
R 3 200 For Rent

🛏 1 🚿 1

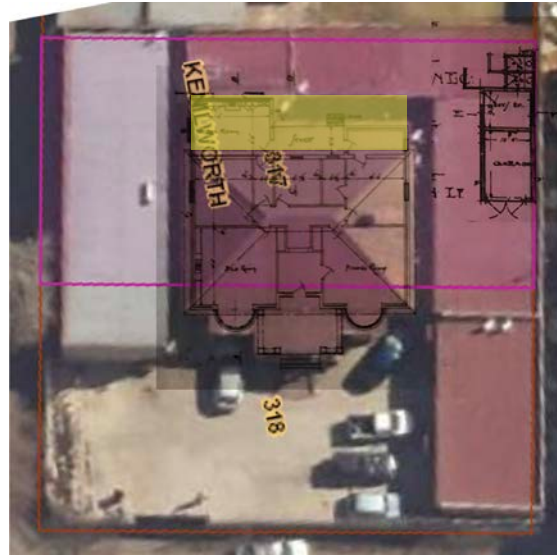
One Bedroom cottage for rent, situated Van Hulsteyn St, Kenilworth, JHB South, prepaid electricity. Deposit R3200 + R3200 Monthly Rentals, Van Hulsteyn Street Cnr Sheffield, Kenilworth, Johannesburg South, to view Call or whatsapp Mr. Patrick @ 📞 078... view more (tel:0783167113)

Category:	Property - Residential Properties - Other Residential Properties
Furnished:	No
Pets Allowed:	No
Land Area/Erf Size:	89 m²
Floor Area:	89 m²
Levies:	R 3 200.00
Region:	Gauteng - Johannesburg South

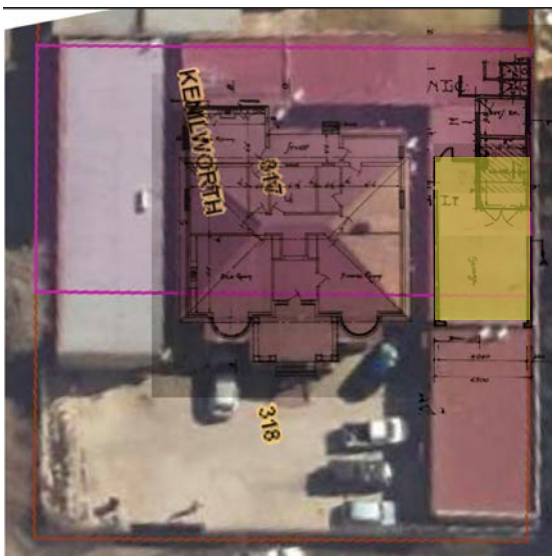
Online Advert later in time, reduced price



Collage of council plan 1923 overlaid with Goggle Earth image, 2023



Collage of council plan 1930 overlaid with Goggle Earth image, 2023



Collage of council plan 1930, 1990 overlaid with Goggle Earth image, 2023



Digital sketch of added units after 2015 recorded on Google Earth, 2023



Photos: Ariella Gimpel, ARPL4000A, 2020



Plot of owner A houses the yard, two units at the northern edge, one at the eastern edge, and the entrance of the bungalow. No information how the shared ownership of one structure on two plots is handled

2015

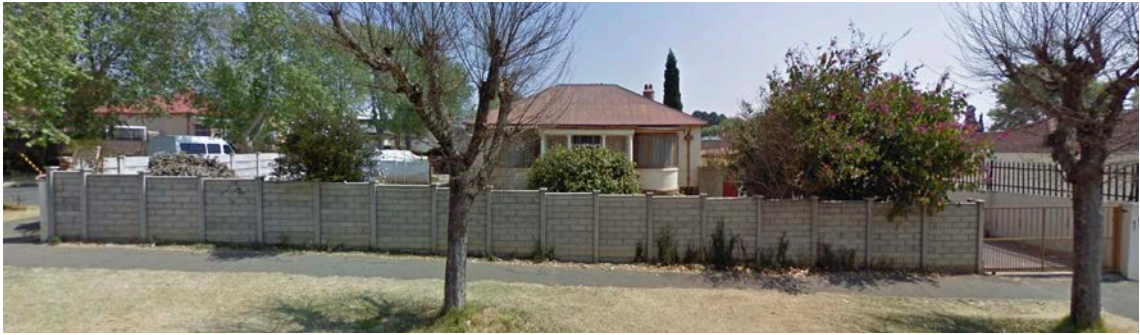
change of ownership
switch to exchange value
initial investment

- 1- existing garage/ outbuilding repurposed as cottages 10/2015
- 2 - construction of two additional units northern edge 11/2015
- 3- construction of additional units back of house 12/2015
- 4- construction of fours additional units southern edge street facing 5/2016

2019

change of ownership of ONE plot. owner A (since 2015) keeps the eastern plot, with mainly yard, few units and the entrance area of the house, owner B owns the western plot with the bulk of built structure.

B
A



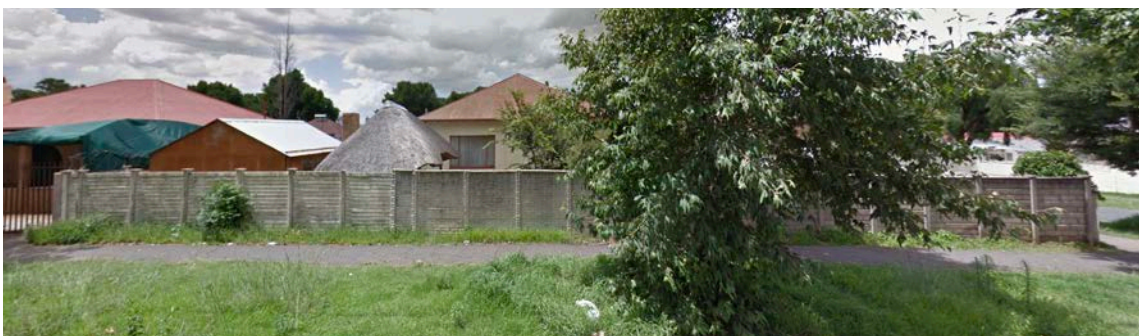
StreetviewEast, Google Maps, 2009



Streetview East, Google Maps, 2013



Streetview South, Google Maps, 2009



Streetview South, Google Maps, 2013



Streetview South, Google Maps, 2022

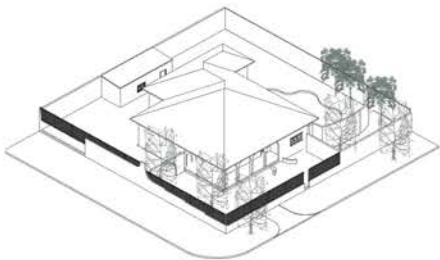
CASE STUDY 25



AERIAL
of block from Google Earth photograph, 2020

DATA FOR PROPERTY
FAR = 0.8 (permissible 1.2)
Coverage = 53% (permissible 60%)
Height = 2 storey (permissible 3 storeys)
Additions from original = 347sqm

- Index:
- (B) 26 beds
 - (W) 26 enclosed wc's
 - (S) stoves
 - (Z) sink (not including WHB)
 - (V) 1 verandah (partially absorbed/enclosed)

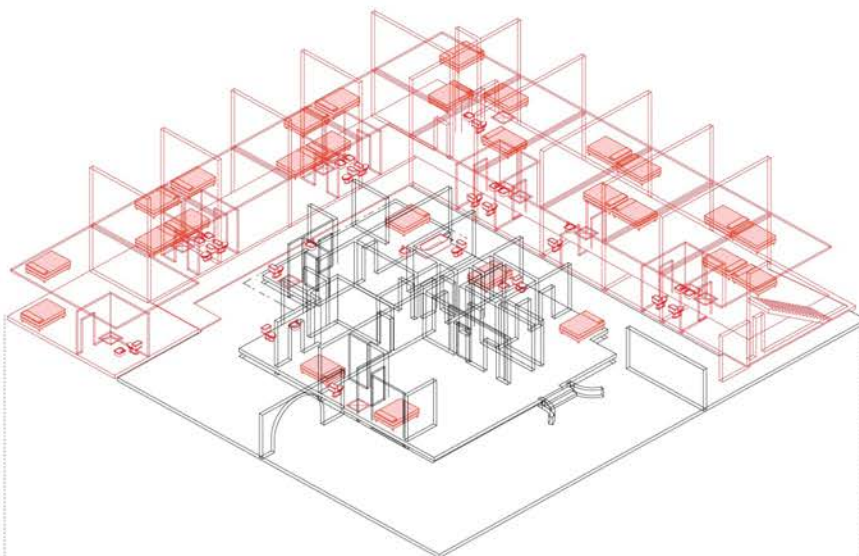
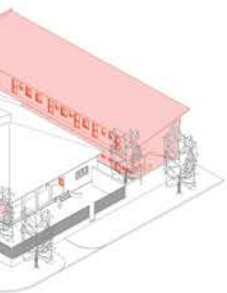


1930
Plot size: 984m²
Bungalow:
Rooms (back): 3
Total solid: 408m²
Total void: 576m²

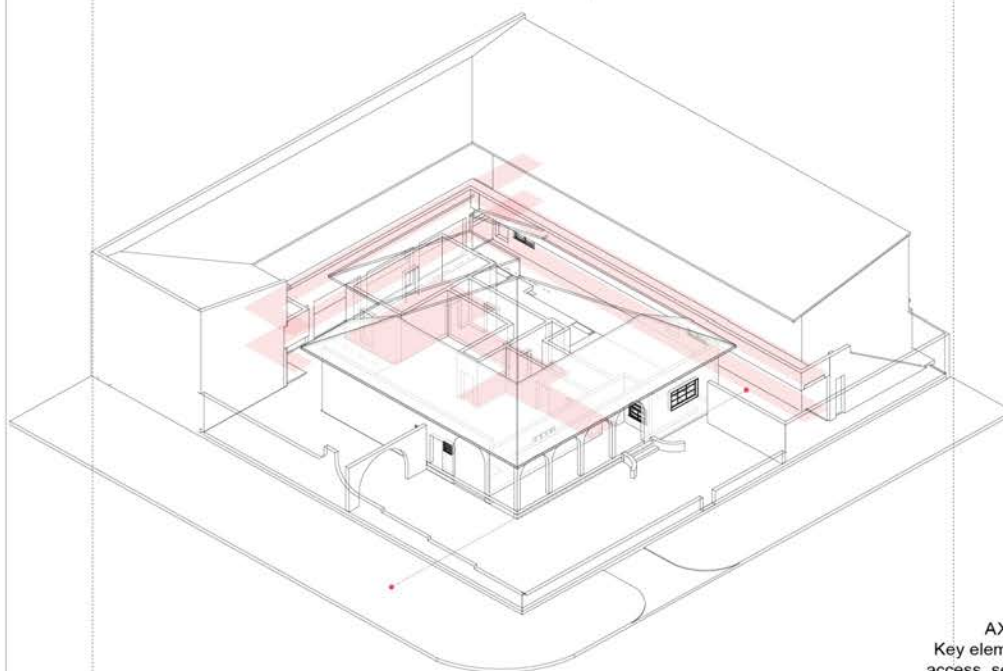


2020
Plot size: 984m²
Bungalow:
Rooms (back + front): 26
Total solid: 805m²
Total void: 179m²

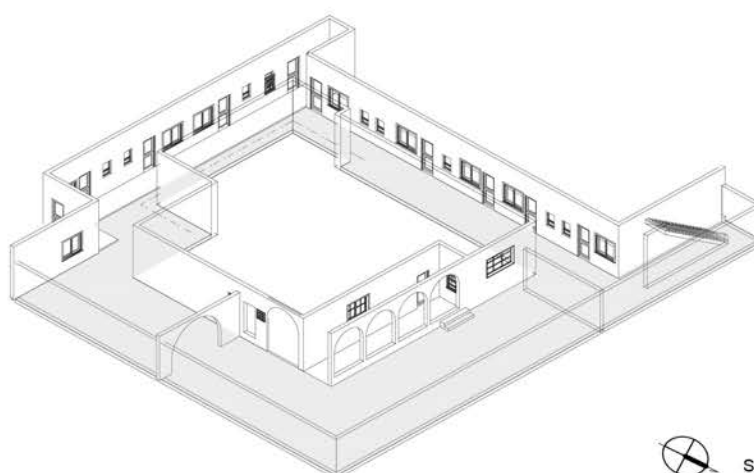




AXONOMETRIC 1:
Site, internal subdivision of
activities, and stuff



AXONOMETRIC 2:
Key elements in relation to
access, service, space plan



AXONOMETRIC 3:
Skin and transforming void

Single plot description #25

Name: Doubled up and subdivided

Sources: Site visit, conversation with tenant, property report, satellite imagery, council plan

Programme: accommodation, self-contained micro apartments

Summary

The property on a double corner stand makes use of the land around the bungalow and develops a two story walk up building with micro apartments, in addition to subdividing the bungalow into separate units with access from the outside. The residents share little more but the walkway to their unit. The yard turns into ghost space for bins, and cars.

Inventory – Accounting

Rooms: The property houses 22 micro units, in a new double story structure from 2016, all with own bathroom and kitchenette and 5 units inside the house, to be accessed from the outside, also with own bathroom and cooking facility.

Verandah: The verandah is the entry for one bungalow unit. One side of the original wrap around shape from 1910 became part of the room behind in 1980.

Boundary Wall: The boundary wall is a fence and see through along the street corner. The other edges are covered by the new two storey walk up.

Openings: The North facing boundary has a pedestrian and a vehicular gate.

Service/ space: While the corridor inside the bungalow has been eliminated, units at the back have a long outdoor corridor that connects them.

Yard: The yard front to access multiple units, park cars and keep bins.

Stuff: Beds, tables, microwaves.

Extra: House rules.

People: 27-68, 2 max per unit, some larger units permit 3.

Animals: n/a

Trees: 3 new trees have been planted

Elements – Relating

Site, internal subdivisions, activities and stuff

The property is solely residential, other than tenants working from home. All units are independent from each other, and lined up in a row. The yard is not framed to accommodate communal meetings or social encounters. A tenant confirmed that people prefer to be in their own place. The small units remind one of hotel rooms.

Key elements in relation to access, service and space plan

The key elements of the past do not play a major if any role on these grounds. There is no planned relation between the different build portions.

Skin and transforming void

The yard has been reduced to purely infrastructural purpose. A tenant mentioned that this more 'sterile' appearance is initially appreciated by many who associate yard and rooms with dirt and noise until they lack social interaction. The property borders a major road with a degree of street life, and manicured public space that offers possibilities of encounter.

Legalities

The property as build does not have council approval, or at least there was no trace of it

in the council archives. The owners, a couple from a nearby township in the South West, were not willing to give further details. The properties' two erfs have been merged in 2019 and renamed. Whilst this is an administrative formality, it is significant to move away from the original erf numbers with them being one of the few constants in referencing and finding/ coding property since the inception of Johannesburg.

Aspiration – Speculating

The design of the new section looks similar to renderings the City of Johannesburg has published in the context of its attempt to campaign for densification other than incremental small scale change. The owners are considered small scale developers such as the city appears to hope to convince to invest in this and similar areas. According to one tenant who is related to the owners, the intention here was to offer slightly upgraded accommodation for people with family in the South, and to make a significant amount of income. The rental income per month (excluding costs) exceeds the salary of a university lecturer.

Geometry

Void Shape/ Type Utility L

Compound Type Urban living in the suburb

Compound Doings: re-scaling, yarding



Collage of council plan 1910 overlaid with
Goggle Earth image, 2023



Collage of council plan 1916 overlaid with
Goggle Earth image, 2023

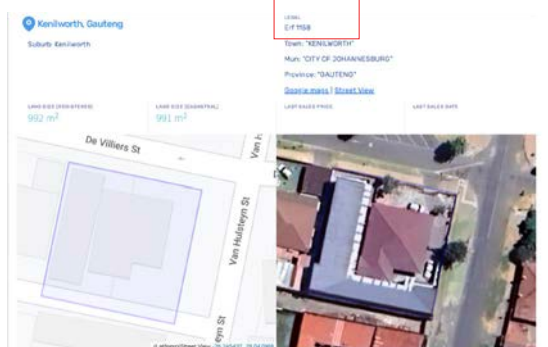


Collage of council plan 1980 overlaid with
Goggle Earth image, 2023



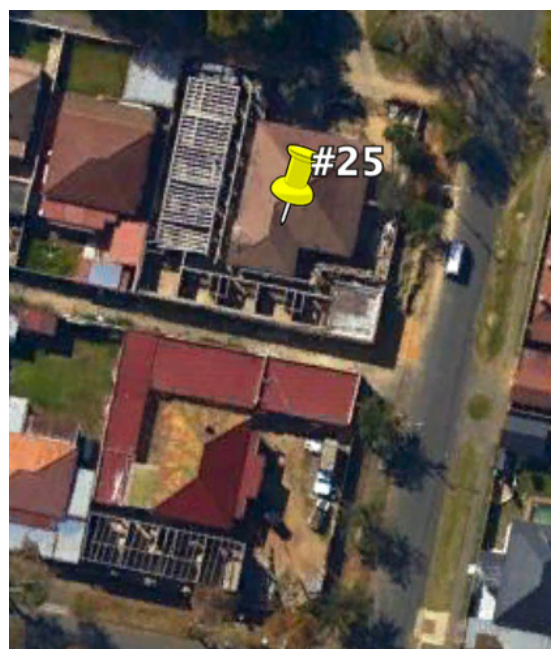
Digital sketch of added units 2016 recorded
on Google Earth, 2023

Lightstone Property Report 2019

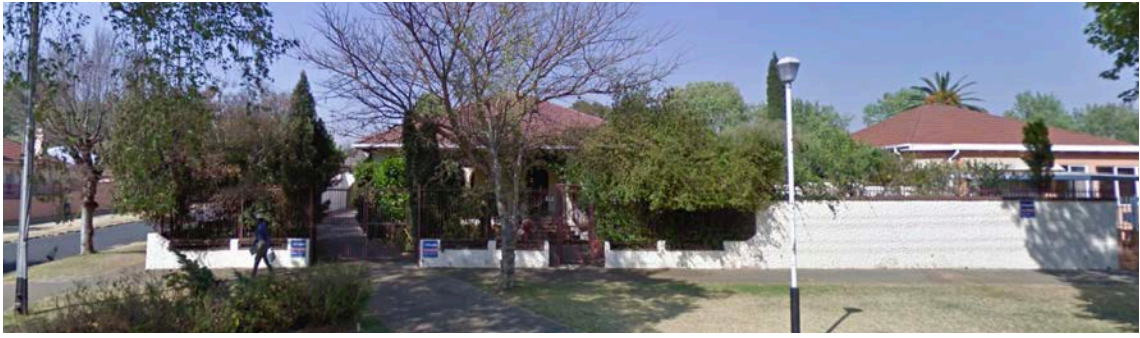


Property24 Property Report 2013

Property report details from 2013 and 2019 - the property was initially registered as two plots, see 2013 bulk transfer. In 2019 the property got a new erf number, that has merged the properties into one. This is differing from the neighbouring property, where different owners divided the plots.



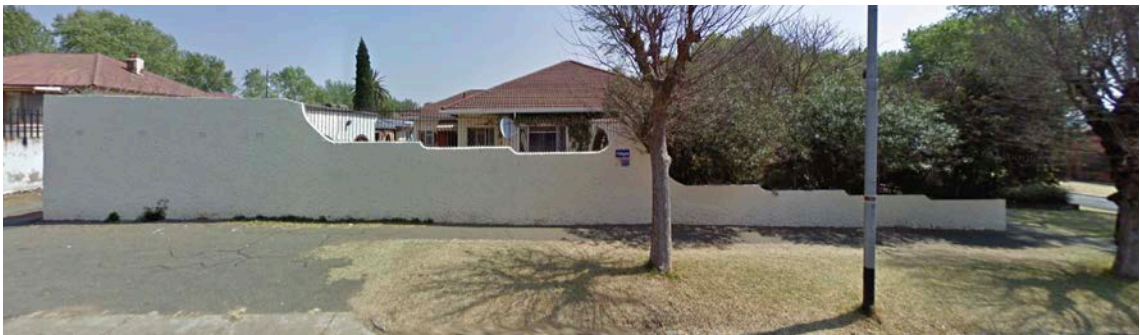
Construction process 2016 recorded on Google Earth, 2023



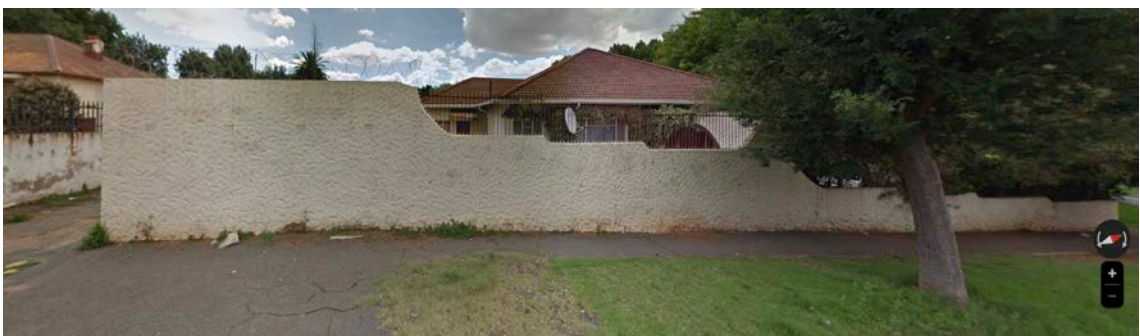
Streetview North, Google Maps, 2009



Streetview North, Google Maps, 2023

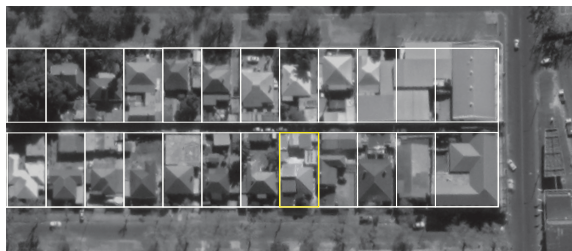


Streetview East, Google Maps, 2009

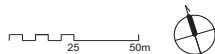


Streetview East, Google Maps, 2013

CASE STUDY #26



AERIAL
of block from Google Earth photograph, 2020



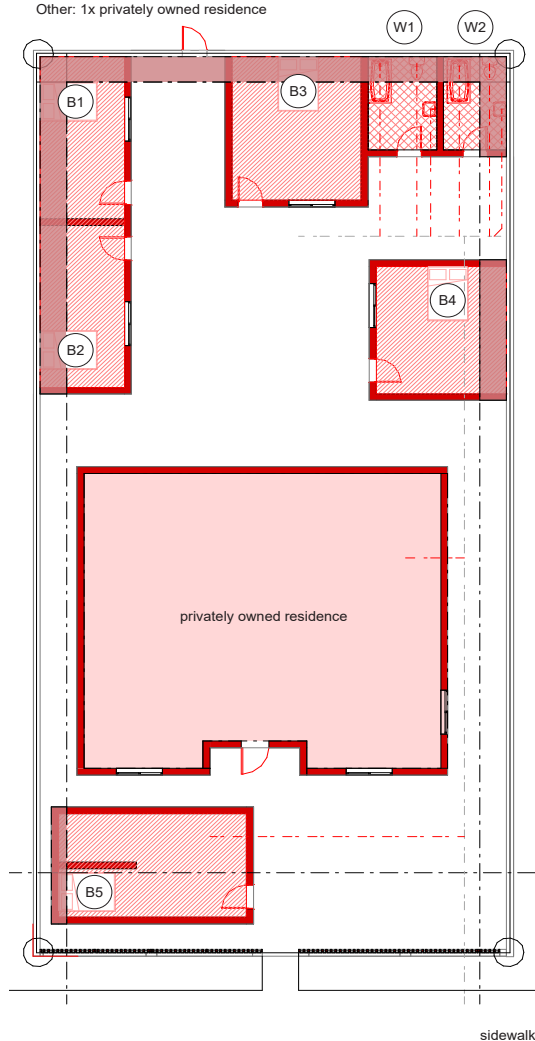
DATA FOR PROPERTY

FAR = 0.5 (permissible 1.2)
Coverage = 52% (permissible 60%)
Height = 1 storey (permissible 3 storeys)
Additions from original = 262sqm

Index:

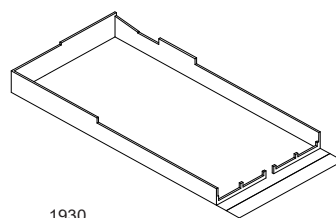
- (B) 5 bed
- (W) 2 enclosed wc's
- (S) stoves
- (Z) sink (not including WHB)
- (V) verandah

Other: 1x privately owned residence

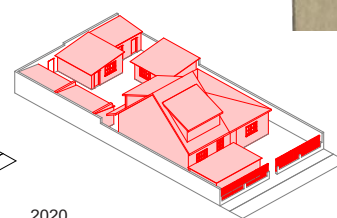


GROUND FLOOR PLAN OF CURRENT PROPERTY

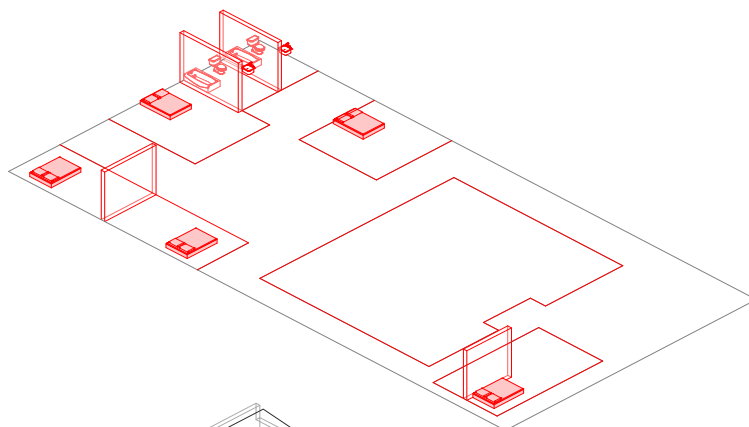
0 5 10



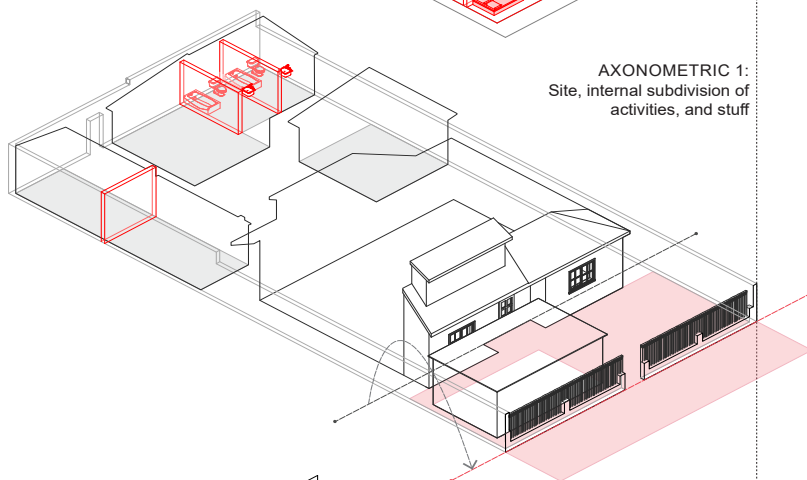
1930
Plot size: 500m²
Bungalow:
Rooms (back): 0
Total solid: - m²
Total void: - m²



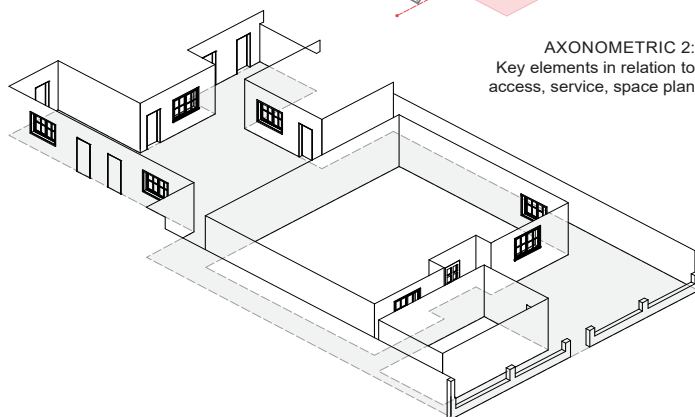
2020
Plot size: 500m²
Bungalow:
Rooms (back + front): 7
Total solid: 262m²
Total void: 238m²



AXONOMETRIC 1:
Site, internal subdivision of
activities, and stuff



AXONOMETRIC 2:
Key elements in relation to
access, service, space plan



AXONOMETRIC 3:
Skin and transforming void

Single plot description

#26

Name: Half House xyz

Sources: Site visit, conversation with owner, property report, satellite imagery, council archive plan, drive by observation

Programme: Residential, owner and tenants, home businesses

Summary: This bungalow started as half a house, cut into 2 parts across the ridge of the roof and has developed into a double story, with a backyard cluster of rooms moving to the front.

The preparation needed to add half a house is more sophisticated than others as it includes structural engineering from the beginning, not only when the roof opened up. The subdivision of the plot reminds one of the design of squares that make people cross the void and not only walk along the facades.

Inventory – Accounting

Rooms: The property comprises of 19 rooms. As per site visit and council plan, there are 3 bedrooms, 1 kitchens, 1 dining room, 1 pantry, 2 bathrooms, 2 corridors, 1 staircase inside the house, 6 outside rooms (5 at the back and 1 in the front), 2 outside toilets, 2 bathrooms. Open spaces: back yard, laundry space, veranda

Boundary Wall: The external boundary wall from the street side merges with the latest addition in the front, through its materiality with a camouflage effect in concrete grey. It has one pedestrian gate, no car access. The property has a service alley at the back as possible entrance for people with no car access into the yard.

Openings in Walls: The front boundary wall has one pedestrian gate at the front and the service alley at the back. The boundary wall had a gate with entrance for cars into the yard, which has given way to a door due to an additional room for rent.

The main house has 3 entrance doors, 1 in the front and 2 at the back. The outdoor rooms have each their own door, 6 in total. Shared sanitary rooms have access through 2 doors. One unit is ensuite. There are 12 doors inside the house. The double access in the back through the stoep gives independent access to kitchen and (bed) room, just like the lounge turned entrance gives access to 4 rooms now if one includes the staircase as vertical connection to the top floor. 12 windows in the main house, and 6 outside, some are very big with burglar bars.

Service/ space: The property has, a clear 'back and front' history, as a plot and the house itself. It was initially serviced through a sanitary lane at the back. The first structure was built as 'half a house' in 1925 for a male owner with Anglo-Saxon last name. The 'house' then had no kitchen or bathroom. The plan indicates a French drain towards the back of the property on the northern side. The last recorded 'waterways' still indicate the position of the drain to then move diagonally across the property when service rooms (bathroom and kitchen) were added as the other half to the house in 1938. In 1985 water was taken a floor up to a roof extension with 2 bedrooms and 1 bathroom. The latest additions in the yard along the boundary line have services as extensions of the existing 'waterrooms' on the compound. Hot water is from geysers. There is an outdoor sink.

Yard: The yard is divided into three parts, back, centre and front. The access from two sides supports the logistics of the owner's and tenants' parallel lives without too many overlaps. The backyard has three indoor structures, a first domestic room at the northern edge along the boundary wall (1925), a garage plus WC plus domestic room (1938) along the western wall, another room along the eastern wall (ca. 2017). The backyard had thus

three 'outdoor' rooms, plus a car parking space turned accommodation, a sheltered open space in front of shared bathrooms, and a centre to move across, hand laundry. The centre of the plot is taken up by the house with only fire distance walkways next to the boundary, blocked on each side by a wall to stop walk throughs. The front appeared like a typical front garden until an ensuite extension joined the compound along the south (front) boundary in 2020. In the eyes of the owner, the property is now complete (ARP-L4000A, 2020), Google Earth shows further more recent development than the surveys. Stuff: Everything outside is kept empty and clean, paved and sealed. Lots of building material, sand, door gates, window frames. A full laundry line with a lot of blankets. Childrens' toys, shoes, flip flops outside the doors, in the yard. A washing machine outside the ablutions. Brooms. No car entry anymore.

Extra: staircase to 2nd floor

People: Reportedly (from survey), the owner with family live inside the house that has 3-5 bedrooms depending on use. The outdoor rooms hold space for 6 double beds in 6 rooms. This translates to an estimated moderate capacity of 7-22 people.

Animals: no information

Trees: A tree in the front of house. Pot plants.

Elements – Relating

This north - south orientation, middle block plot is of typical 495 proportions, with an adjunct sanitary lane in the north. This layout provides double access points, in the past for people of different race, in the present for owners and tenants. This bungalow compound started as 'half a house' with only an outside-in veranda and three rooms. A lounge of the same size than the veranda in the centre, bordered by two slightly larger, but equally sized rooms on the left and the right, designated as bedroom and living room. The lounge had four doors, one on either side and served the 'distributor', i.e. it had corridor qualities. The second half had the exact same outline measurements than the first one, due to the symmetry of the roof, and a small stoep, also half in and half outside. This gives the house a kind of cross like corridor arrangement. That, if so desired or required, would permit 6 relatively independent rooms as rental units inside the house, with some sharing of amenities. The arrangement of outdoor rooms is towards a large "central" open space, with no explicit relation to the house. The boundary wall has reduced its openings and transparency and has no programmatic connection to the sidewalk. The compound is thus turning inwards and upwards.

Patterns of Aspiration – Speculating

The sales history of the property shows signs of a switch from it being a home to it being an income generating investment. After probably more than three decades in one (white) family, the property was sold to a black couple in 2006, a photojournalist and a news publisher for R 550,000. Their residence was also the address of their news publication. They had some incident with the local authority shortly after the purchase, when the husband was arrested by Metro Police under the suspicion of being a 'foreigner and a terrorist' while wearing his Muslim attire. They sold the house in 2012 for more than 20% under the bond value of R 520,000 (with one of the major South African banks) for R411,000 to a real estate agent who seems to have acted as a "middle man" as the property was sold less than a month later with +-45% profit for R600 000 to a black African female. The property is currently bonded with a 10% deposit for R540,000 by another major South African Bank, who put it on auction in 2016 due to outstanding bond amounts - it seems with no success, as the owner remains the same on paper.

Despite its structural sophistication, this property has lost transactional value over time . The equivalent of R 550,000 in 2006 in 2012 would be just below R 800 000 considering 44,79% inflation in these 6 years. Instead, the 1st sale is close to half of that amount, and the 2nd one 25% less. This does however not mean that the real value has lessened, only that the owners accepted a low offer, for whatever reason. The municipal value increased from R 905,000 to R 1,120.000. Street transfers in close proximity have been higher, up to R 1,450,000 for similar property.

Feasibility study of a broad and conservative income: rental of 6 large rooms= 5x R2500 plus R3500 = R 16,000 income minus R 2000 expenses = R 14,000 per month

With an interest Rate of 12% over a 20 year bond, the monthly pay bond payment would be R 5945

Satellite photography on the CoJ's GeoLIS website shows no change on the yard till 2015, then one more room in the backyard by 2017, plus two more in 2020, one in the back and one in the front. None of these post 2015 changes have been recorded or approved by council, although they do not break major legislation in putting life at risk. Albeit unconfirmed, the increase in rental stock might be linked to the coverage of the bond. The additions seem well built and maintained.

Geometry

Void Shape/ Type

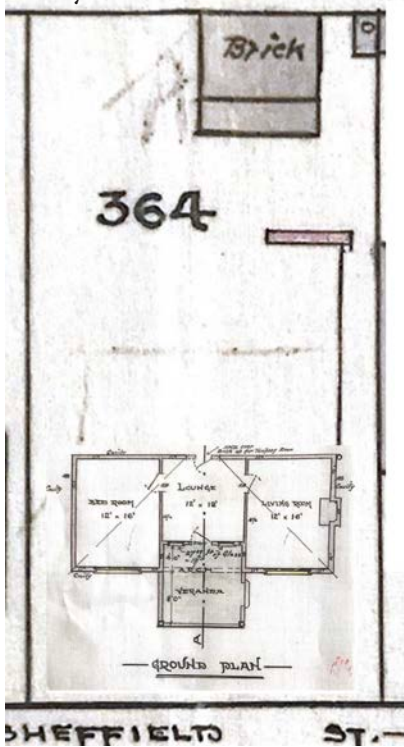
A windmill square at the back

Compound Type

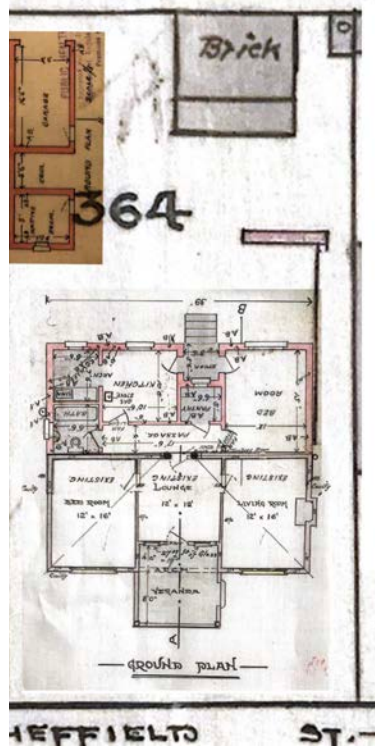
House private rooms rented.

Compound Doings: re-scaling, enfolding, yarding

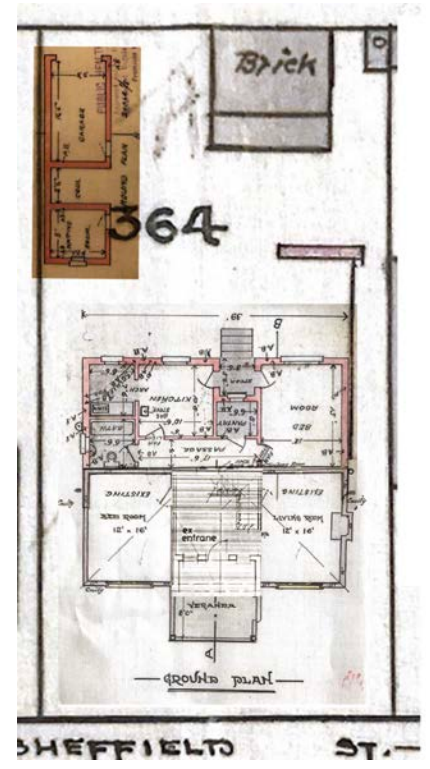
alley



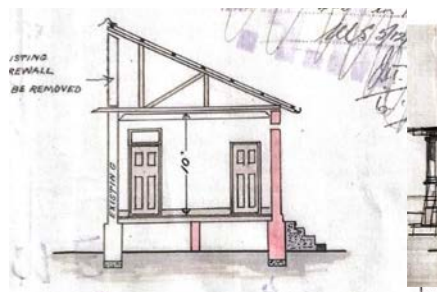
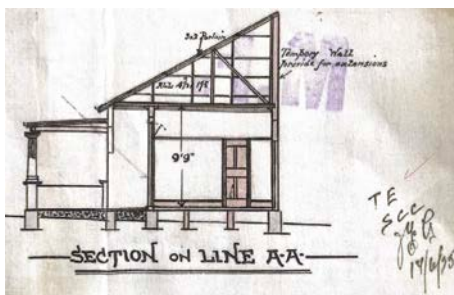
Council plan 1925



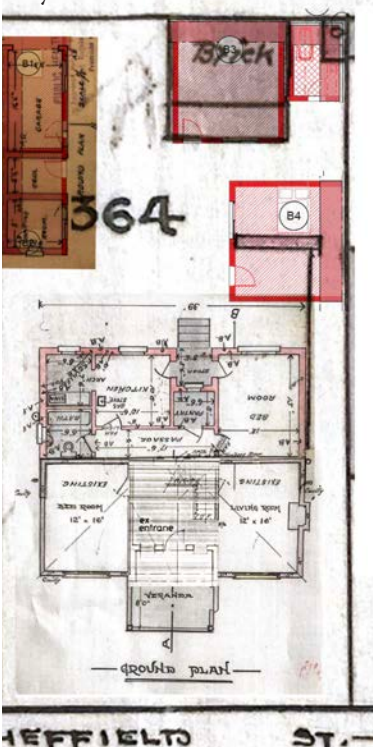
Council plan 1925, 1938



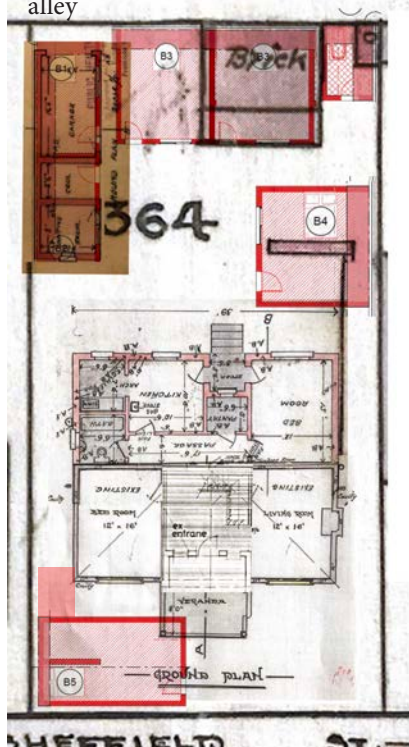
Council plan 1925, 1938, 1981



alley



Collage Council plan 1925, 1938, 1981,
added structure 2017



Collage Council plan 1925, 1938, 1981,
added structure 2020

Life along the boundary wall:
new front unit



Photo:
Ariella Gimpel, ARPL4000A 2020



Streetview, Google Maps, 2009



Streetview, Google Maps, 2013



Streetview, Google Maps, 2023

Enfolding thresholds



Photo:
Ariella Gimpel, ARPL4000A 2020

CASE STUDY #27

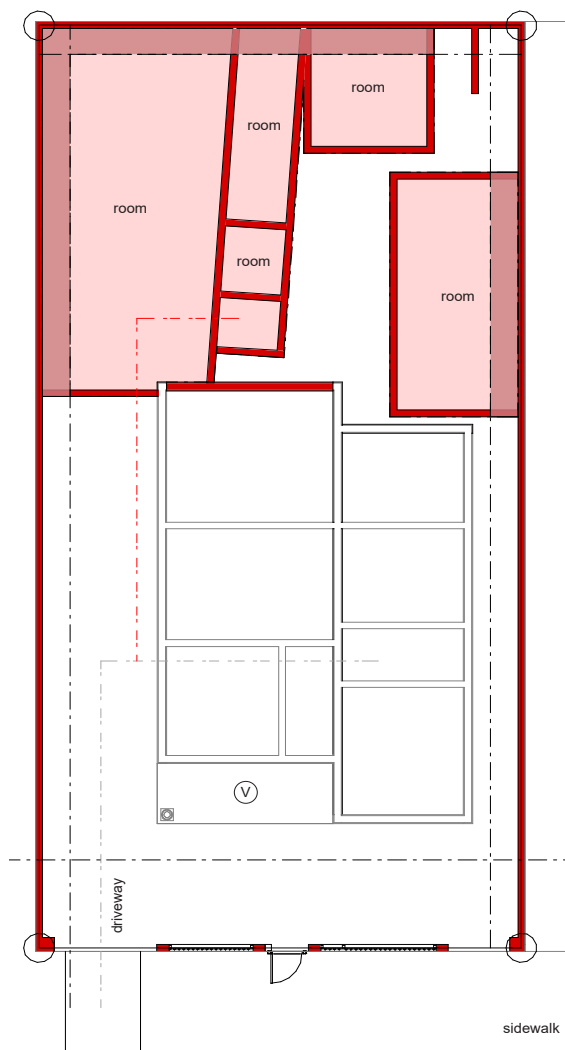


AERIAL
of block from Google Earth photograph, 2020

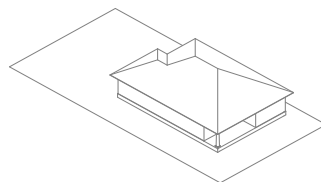


DATA FOR PROPERTY
FAR = 0.6 (permissible 1.2)
Coverage = 62% (permissible 60%)
Height = 1 storey (permissible 3 storeys)
Additions from original = 147sqm

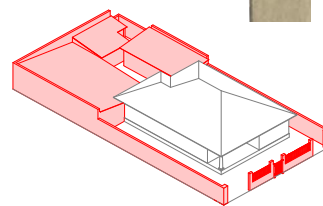
- Index:
- (B) bed
 - (W) enclosed wc's
 - (S) 0 stoves
 - (Z) sink (not including WHB)
 - (V) 1 verandah
- Other: 5x room



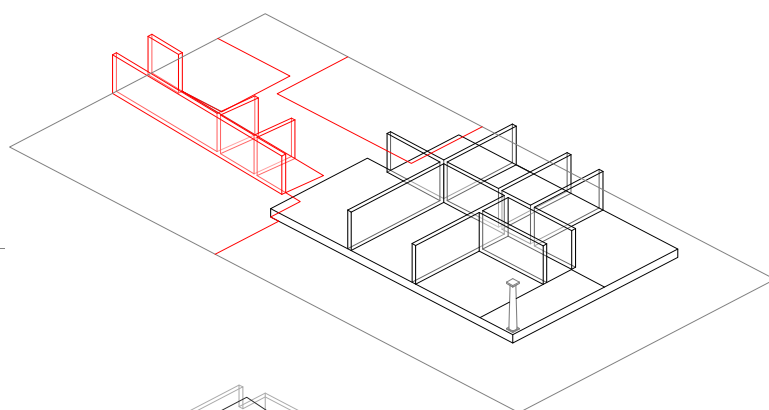
GROUND FLOOR PLAN OF CURRENT PROPERTY



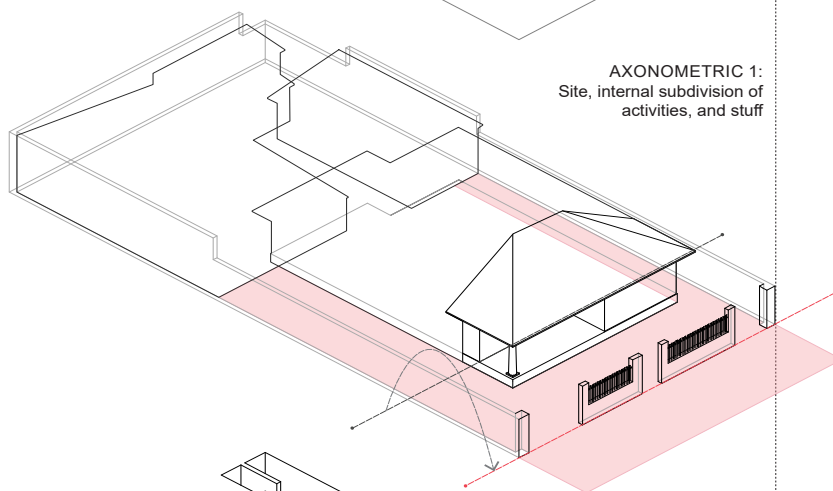
1930
Plot size: 490m²
Bungalow:
Rooms (back): 0
Total solid: 147m²
Total void: 343m²



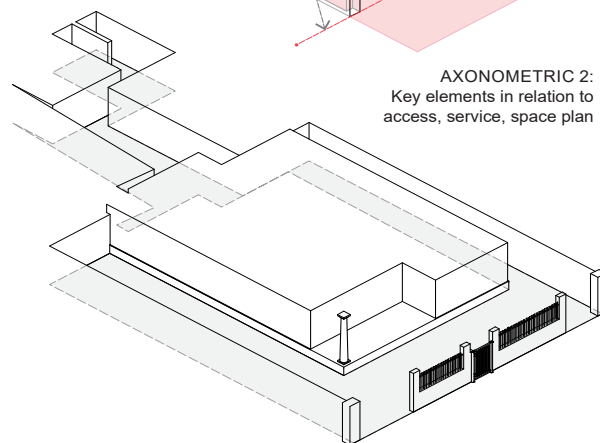
2020
Plot size: 490m²
Bungalow:
Rooms (back + front): 5
Total solid: 303m²
Total void: 187m²



AXONOMETRIC 1:
Site, internal subdivision of activities, and stuff



AXONOMETRIC 2:
Key elements in relation to access, service, space plan



AXONOMETRIC 3:
Skin and transforming void



Single plot description #27

Name: Nothing without a roof

Sources: Site visit, drive by, property report, satellite imagery, original plan, photos, sales description

Programme: Residential, rental rooms

Summary

A fire destroyed the roof and everything but the walls of the original house in 2011, with the backyard structures remaining intact. While that half of the plot operated as usual the other half stayed skeletal. The roof is one of the few elements that remains unchanged in most of bungalow transformations. After a decade of ruination, the property was flipped. With a new (flat) roof it sold for three times as much as its asking price two years prior.

Inventory – Accounting

Rooms: The property had five rooms inside the house plus kitchen and bathroom. Outside are seven units, and sanitary service rooms.

Boundary Wall: The boundary wall is fully closed off along the southern and half of the eastern side, shielding off the back of the property. The northern and eastern side around the 'front' is half solid half palisade.

Openings: On the northern side, street facing, there is one car gate and a pedestrian gate. The street facing façade has an entrance door and two windows, that have been reinstated. In total there are two doors and eight windows in the skin of the house and eight doors and nine windows in the back rooms.

Verandah: The verandah of the house is open and covered, and serves as entry threshold. It has been reinstated.

Service/ space: The servant rooms with water connections were located on the western side of the house. There was no passage or corridor indicated in the original plan. From the hall three rooms are accessed, to lead to the dining room that has a 'walk through' area leading to the other three rooms. The backyard builds up on the original configuration and begins with converting a garage into accommodation, together with more rooms.

Yard: The yard is split in two. At the back the void is central, in the front it runs along the edges. The fire distance to the neighbour is the path from back to front.

Stuff: laundry line, buckets, basins, a chair, brooms, satellite dishes

Extra:

People: estimated capacity 12 at the back, 2-10 in the house.

Animals: n/a

Trees: One cut off tree. front

Elements – Relating

Site, internal subdivisions, activities and stuff

At the time of the investigation, the site was only used at the back, as rental accommodation. The central yard was shared, and used to cleaning purposes.

Key elements in relation to access, service and space plan

The ruined house over a decade did not stop the back from functioning. It kept the property alive, and most probably safe. The driveway was used for parking, the path on the western side as access, and the waste was collected upfront. Nothing else from the front played a role in the everyday of the back.

Skin and transforming void

For a significant amount of time, the building turned into a void, a space that was open to sky, albeit not meant to be. This triggered the idea of 'what if the bungalow disappears and is re-instated as a central yard' as a type that is being tested in many variations at the back of the 495 properties throughout the neighbourhood. The current owner decided to re-build what was there before, in terms of envelope and floor area.

Legalities

The additions have not been recorded or approved at council. The new roof scape has not been recorded.

Aspiration – Speculating

The property did not sell for eight years, and then when it did for a bit more than half of the council evaluation. The intermediate owners, two married medical practitioners with an African last name from West Africa, and active church members in the area, "flipped" the damaged carcass by fixing it back to its old self, as far as that was possible, within a limited budget. This paid out for them, as their capital gain was double the amount they paid for it (neglecting the admittedly significant repair costs), and puts the property close to the top of the pricing across the samples. What remains open is to understand the choice or the motivation of the buyer, a male also from a West African country, when comparable properties were far below his offer for purchase. This is in particular with the neighbouring property operating as a taxi headquarter, possibly not most desirable in close proximity.

Geometry

Void Shape/ Type

Central void at the back, U-shape at the front.

Compound Type

Back and front can co-exist in parallel without (much) interference. The house can be a family residence or shared.

Compound Doings:re-scaling, yarding

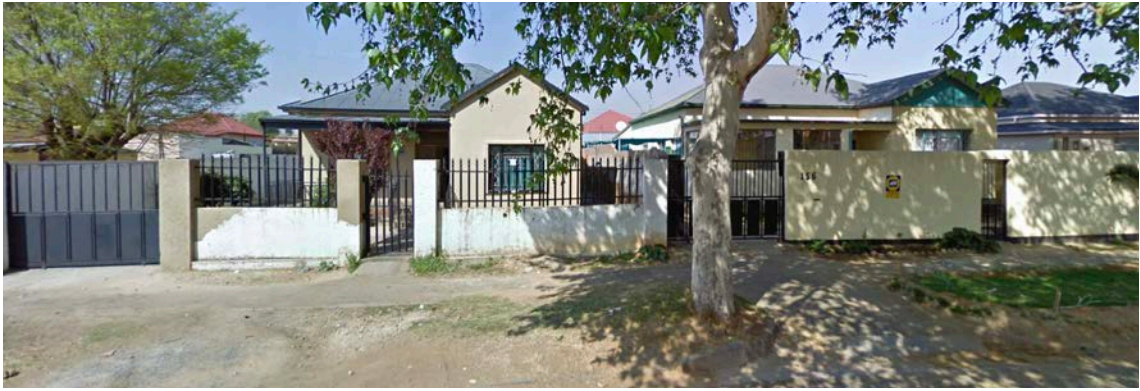


Property24 Sales Advert 2019, link disabled

Streetview East, Google Maps, 2009



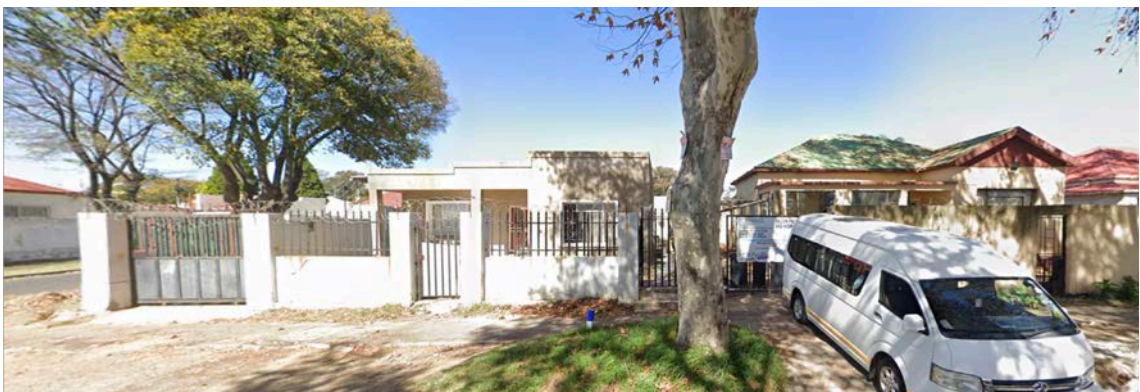
Streetview East, Google Maps, 2013



Streetview, Google Maps, 2009



Streetview, Google Maps, 2017



Streetview, Google Maps, 2023



1912



1923



1961



2000



2006



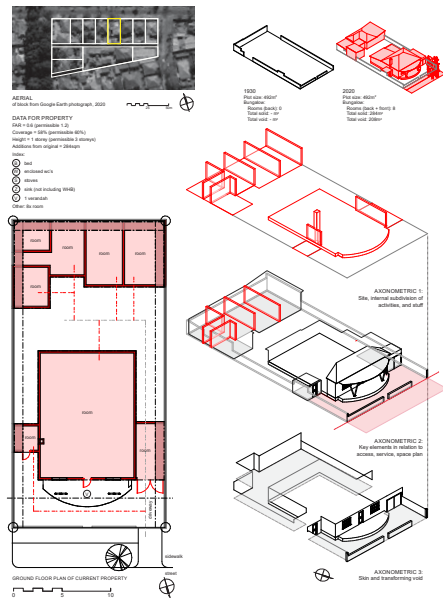
2009



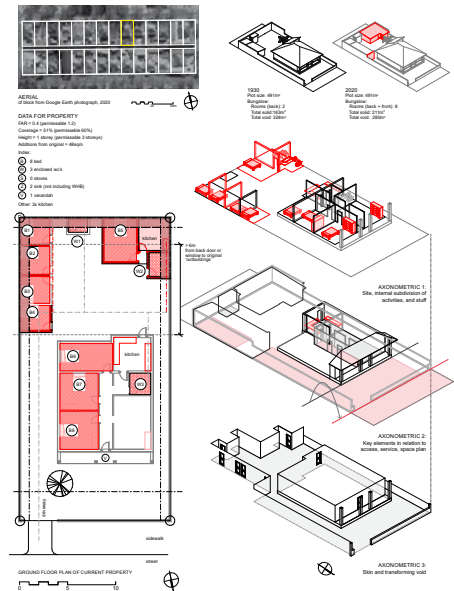
2012

Collage overlays of city council drawings, aerial
Google Earth photo, digital sketch, 2023

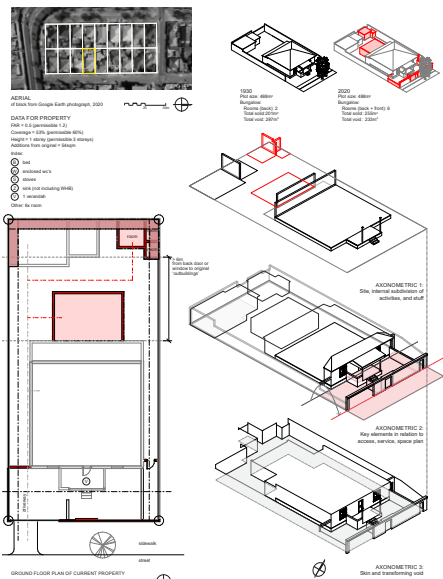
PATTERN 28 — 32 CHURCH



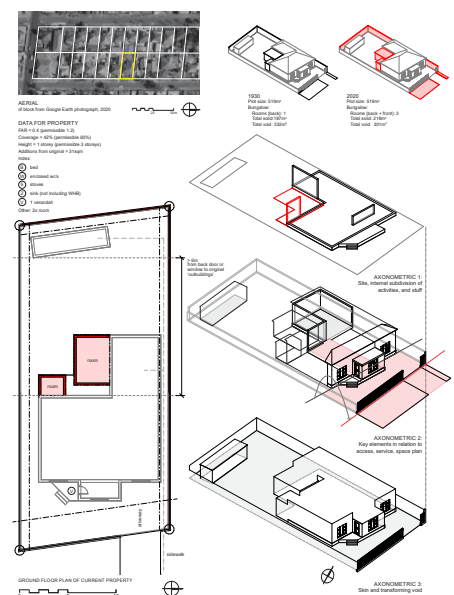
PATTERN 29 — 130 DE VILLIERS



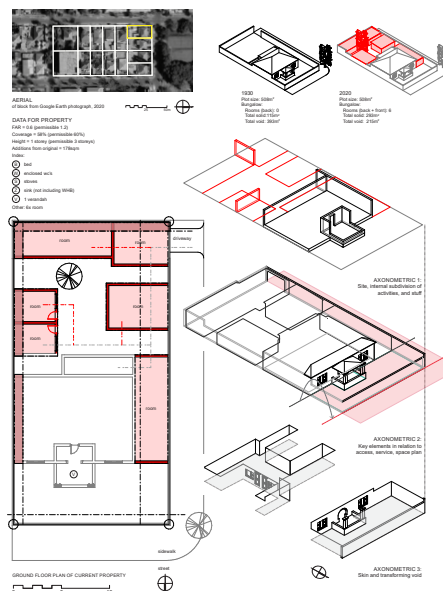
PATTERN 32 — 11 BOUQUET



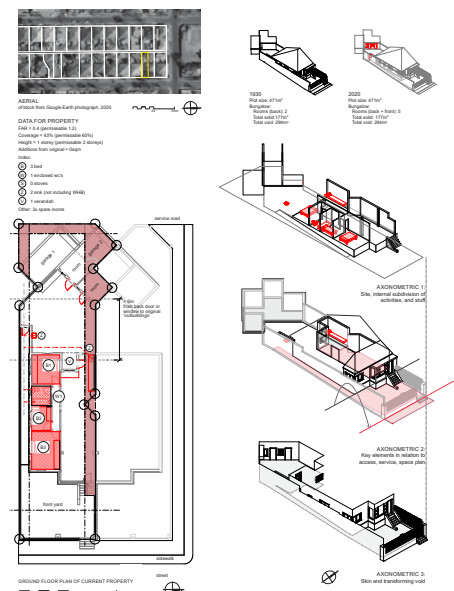
PATTERN 33 — 65 MABEL



PATTERN 34 — 126 MABEL



PATTERN 35 — 73B LAWN



Single plot description #28

Name: Living in ruins

Sources: Drive by, walk in, property report, satellite imagery

Programme: Residential, owner and rental rooms

Summary

The dwelling has been gutted by a fire only three years after the current owner did purchase the property in 2007. It has been on auction since (2012), but did not sell. People continue to live in the ruins of the damage and repair the structure bit by bit.

Single plot description #32

Name: Auto electrical

Sources: Drive by, sales agent, property report, council drawings, satellite imagery

Programme: Residential, owner and rental rooms, business address

Summary

The owner is renting rooms at the back and has a notably differentiated access system in the front. He has a car repair service 'on call' - and drives to his clients to fix the cars at their places.

Single plot description #34

Name: Ann's Day Care

Sources: Drive by, council drawings, sales agent, property report, satellite imagery

Programme: Residential, owner and child care service

Summary

The owner of the corner property has been running a child care service at the back for a while that did suffer under the pandemic. She tried to sell her house but it is off the market now.

Single plot description #29

Name: 2nd income

Sources: Drive by, site visit, interview property report, satellite imagery

Programme: Residential, owner and rental rooms

Summary

The owner of the property is renting out rooms to generate income and lives with his family inside the main house.

Single plot description #33

Name: Nothing to see

Sources: Drive by, sales agent, property report, council drawings, satellite imagery

Programme: Residential, owner and rental rooms

Summary

The current owner of the property is sharing the house with tenants, and has not changed the yard outside of one additional room that took three years to build. The front yard is full with parked cars. They seem to relate to the property next door, where the house burned down and cars are stored, or traded.

Single plot description #35

Name: Zigzag Boundary

Sources: Drive by, sales agent, property report, satellite imagery

Programme: Residential, rental rooms

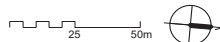
Summary

The property is a semi-detached with a very particular layout at the back, that allows comfortable parking from a narrow alley. The property is relatively frequently on sale. While it was used by the owner themselves before it now has been subdivided into rooms.

CASE STUDY #30



AERIAL
of block from Google Earth photograph, 2020



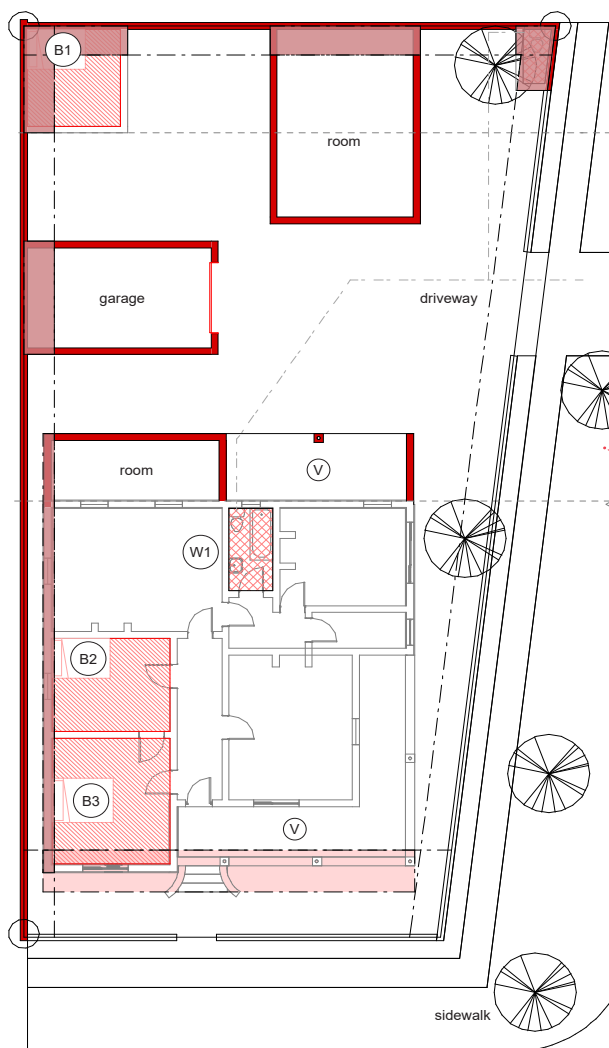
DATA FOR PROPERTY

FAR = 0.5 (permissible 1.2)
Coverage = 51% (permissible 60%)
Height = 2 storey (permissible 3 storeys)
Additions from original = 85sqm

Index:

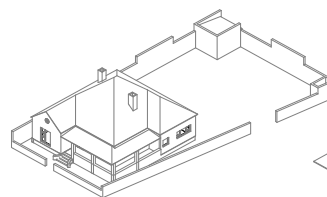
- (B) 3 beds
- (W) 1 enclosed wc's
- (S) 0 stoves
- (Z) 0 sink (not including WHB)
- (V) 2 verandah

Other: 2x rooms, 1x garage

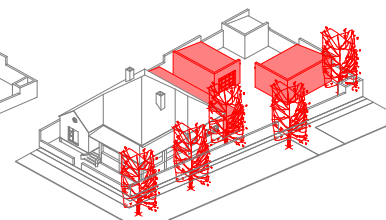


GROUND FLOOR PLAN OF CURRENT PROPERTY

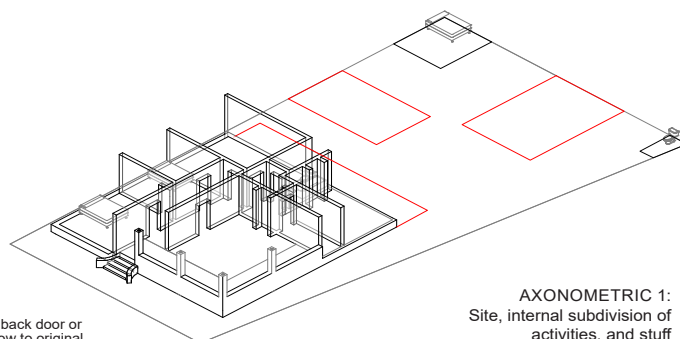
0 5 10



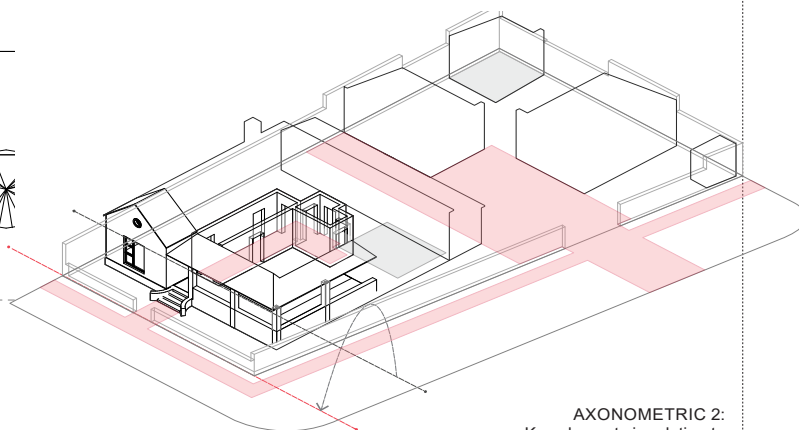
1930
Plot size: 484m²
Bungalow:
Rooms (back): 2
Total solid: 162m²
Total void: 322m²



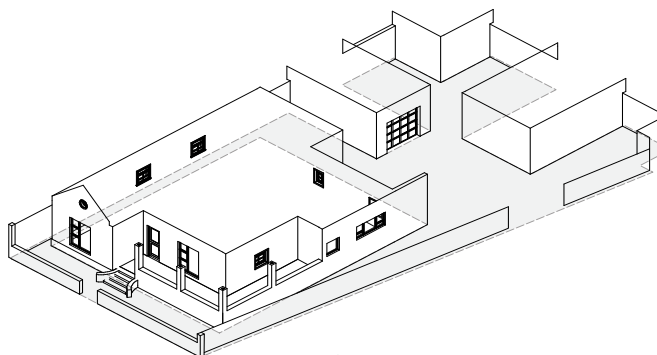
2020
Plot size: 484m²
Bungalow:
Rooms (back + front): 3
Total solid: 247m²
Total void: 237m²



AXONOMETRIC 1:
Site, internal subdivision of
activities, and stuff



AXONOMETRIC 2:
Key elements in relation to
access, service, space plan



AXONOMETRIC 3:
Skin and transforming void

Single plot description #27

Name: Whose heritage?

Sources: Site visit, drive by, property report, satellite imagery, original plan, photos, heritage report

Programme: Residential, rental rooms, some small scale indoor business

Summary

The property from 1915 has been in 2004 by a group of small scale investors, and not changed or developed much since. In 2016 the building was listed as potential site of significance in a heritage report that was conducted in the context of the Corridors of Freedom projects. The heritage assessment discusses the significance of the property on an urban scale, but not in relation to its current performance. It solely looks at the conservation of values of a past with, at times, questionable heritage. They generally recommend to *“retain and restore all the original materials, doors, window panels and other original features of the buildings if alterations are intended for the building”* (tsica heritage report, 2016). It seems highly unlikely that the current owners or residents will follow, or even know about these strategies. Although this is not further discussed in this research, it is an important factor to keep in mind.

Inventory – Accounting

Rooms: The property had five rooms inside the house plus kitchen and bathroom. Outside are two rooms.

Boundary Wall: The boundary wall is low in the front part of the house, with missing elements and higher at the back.

Openings: There is a pedestrian gate leading to the house and a vehicular gate leading to the yard.

Verandah: The verandah of the house is open and covered, and serves as entry threshold.

Service/ space: Kitchen and bathroom were located at the yard end of the house, west facing, and this has not changed.

Yard: The yard is mainly at the back, and seems to be utilised for sorting goods or recycling.

Stuff: bags and containers in yard.

Extra:

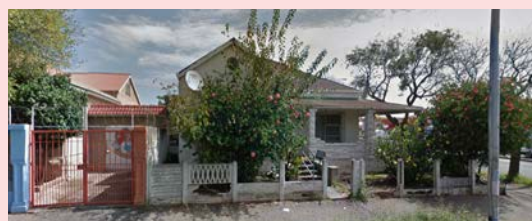
People: estimated capacity of 10 people sharing.

Animals: n/a

Trees: 3 trees in front of the house. Compound Doings: re-scaling, yarding



Streetview, Google Maps, 2009



Streetview, Google Maps, 2017



Rosettenville Precinct Heritage Impact Assessment & Conservation Management Plan Report Phase 3, tsica heritage consultants & Clive Chipkin, Jacques Stoltz, Piet Snyman, Ngonidzashe Mangoro, Johann le Roux, 2016 for the CoJ, JDA https://www.theheritageportal.co.za/sites/default/files/notice%20attachments/HIA%20%26%20CMP_Rosettenville%20Precinct_Vol1.pdf, accessed 11.10.2023

CASE STUDY 31

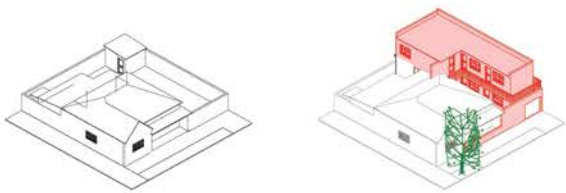


AERIAL
of block from Google Earth photograph, 2020



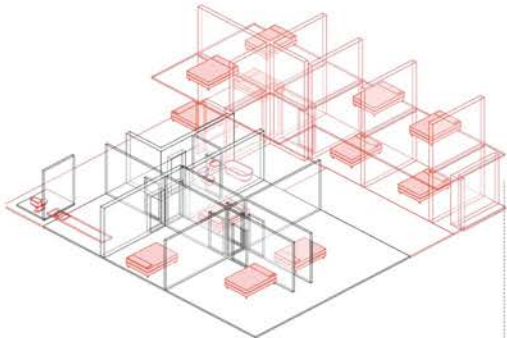
DATA FOR PROPERTY
FAR = 0.9 (permissible 1.2)
Coverage = 70% (permissible 60%)
Height = 2 storey (permissible 3 storeys)
Additions from original = 75sqm

- Index:
- (B) bed
 - (W) enclosed wc's
 - (S) stoves
 - (Z) sink (not including WHB)
 - (V) 1 verandah
- Other: 5x room

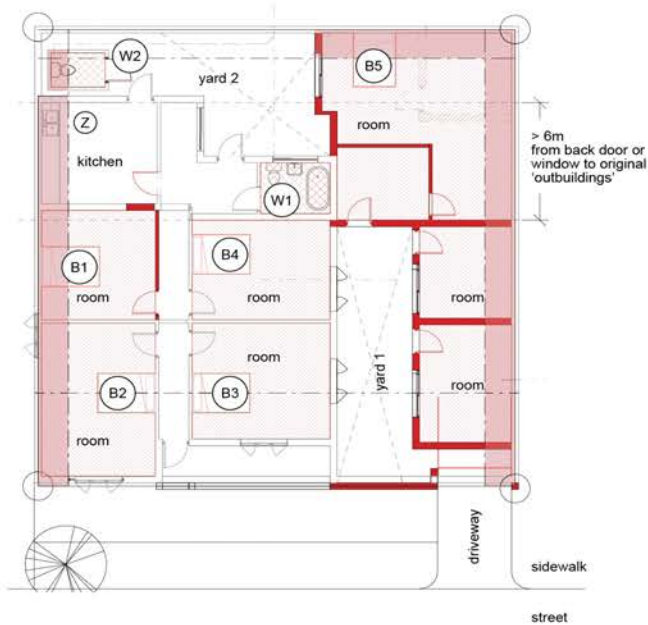


1930
Plot size: 250m²
Bungalow:
Rooms (back): 1
Total solid: 134m²
Total void: 116m²

2020
Plot size: 250m²
Bungalow:
Rooms (back + front): 5
Total solid: 174m²
Total void: 76m²

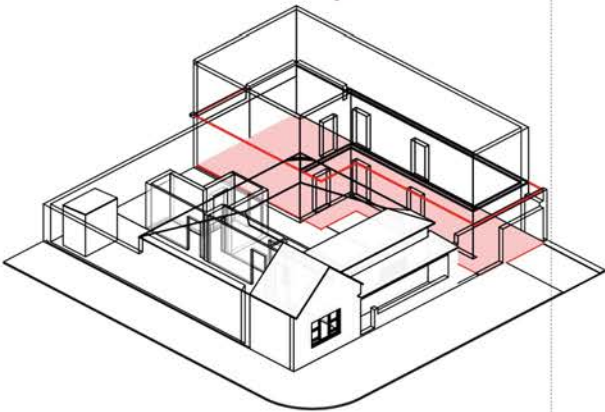


AXONOMETRIC 1:
Site, internal subdivision of activities, and stuff

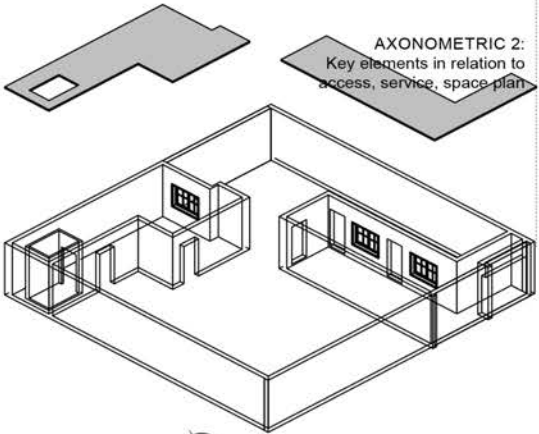


GROUND FLOOR PLAN OF CURRENT PROPERTY

0 5 10



AXONOMETRIC 2:
Key elements in relation to access, service, space plan



AXONOMETRIC 3:
Skin and transforming void

Single plot description

#31

Name: half stand, full house

Sources: Drive by, property report, satellite imagery, original plan, photos, description of SIE (Sale in Execution)

Programme: Residential, rental rooms, apartments, educational services

Summary

The property is on half a stand, but built up to the extent that the footprint resembles that of a single house on a typical 495 plot. It talks about the development of a four room house into a multiple room compound on minimal space.

Inventory – Accounting

Rooms: The property has four rooms inside the house plus kitchen and bathroom. Outside are six to eight units on two floors.

Boundary Wall: The bungalow sits directly on the edge of boundary, the wall of building doubles up as most of the boundary wall. This is on the northern side that is street facing and on the east, along the service alley. Subsequent additions merge with the west boundary and one third of the southern edge.

Openings: On the north, there is one car gate with an integrated pedestrian gate in the street facing boundary. The original sitting room is facing the street through a large window. The adjoining original dining room has a window facing the alley east.

Stoep:

The stoep of the house is open and screened with burglar bars, directly next to the sidewalk, as open 'hall' or sitting area. It has integrated flower boxes, and a bird feeder.

Service/ space: The service space of the house faces the backyard with kitchen and two bathrooms, the 'service' space of the yard runs like an L of similar dimensions around the four rooms (of the house).

Yard: The open space seem to have more of a utilitarian history than being leisure or aesthetically driven. By now, open to sky, two 'passages' exist of +- 10 sqm each, one running north-south and one east-west.

Stuff: plastic chairs, bird feeder post box, flower boxes, bin, clothes over wire fence

Extra: Educational services offered via online platform.

People: estimated capacity 12-30

Animals: n/a

Trees: No trees are on the property, but two directly in front

Elements – Relating

Site, internal subdivisions, activities and stuff

Due to the limited size of the plot, and the scale of a room and/or the furniture remaining relatively constant, the site and the house have merged into one entity if one looks at the plan (and ignores the roofing). The internal subdivision are therefore related to the plot, with three rows of rooms, or units, depending on how they are connected. The units outside seem to take on a similar size than the rooms inside, most possibly with added infrastructure (bathroom).

Key elements in relation to access, service and space plan

From the outside, the verandah of the house remains a dominant element. It shows its urban ability here to connect, sitting picture perfect on along the sidewalk, with two

chairs and a table inviting people inside as well as passers-by to communicate across thresholds. It is finding its balance, or counterpoint, in the vehicular gate that is equally visible and serves as entry to the outdoor units, with an indoor point of arrival, in line with the verandah. The indoor corridor separates the rooms from each other and permits them to move to the back. It runs in parallel with the former driveway and the 1st floor walkway that provide access to the outdoor units.

Skin and transforming void

While the void seems to have disappeared, it has actually been repurposed, and integrated into a tight system of use. There seems to be no superfluous space on this property, without giving the impression of confinement. It is more so that the indoor space 'borrows' from the outdoor room if required. The skin equally merges building and boundary, as discussed previously. The face brick double story extension overviews the yard and the sidewalk. The quality of the built work seems superior to many other additions in this and other areas.

Legalities

The additions have not been recorded or approved at council. Former additions were submitted 'as built' – that means they were constructed before the drawing were issued. Signatures and stamps on the council submission show that it took four years, from 1980-1984, to complete this process. The coverage at this point will probably exceed the permitted limited. The lack of documentation did not seem to be an issue when looking at the most recent transfer, that was bonded to 100% by a major South African Bank, and at the high sale price too.

Aspiration – Speculating

With R6600/sqm the property has the highest purchase/ per sqm price of the collection. It is currently listed as 'Sale in Execution' and will be offered for purchase at a Sheriff auction, only three years after the latest sale (for R800,000-R1,500,000). The actual sale price of R1,650,000 was thus three times over the municipal evaluation at the time. The two other sales listed in 1993 and 1998 are so low with R120 and R160 that they are negligible costs. The trajectory of the sale ethnicity is not unusual for the area, or revealing more details about the driving force behind the purchase, and none of the owners has been traceable. From a male with a Portuguese last name, it went to the male with a British last name back to a male with a Portuguese last name and a female with a last name that is most used in West Africa. They owned the property when the extensions were built. The latest male owner's last name is also frequently used in West Africa, but in another country. At this stage, it remains unclear why the property traded at this high price. It is most possibly not due to its remarkably efficient use of space, and well planned layout. Unless the rooms are rented out to multiple tenants each at the same time, the turnover is not very high, simply because the property is half (or a quarter of) the size of others. This is a property was for sale in 2020, and 'on site' visits collated with the national pandemic lockdown.. In September 2023, the property has been advertised as 'Sale in Execution' by one of the major South African banks.

Geometry

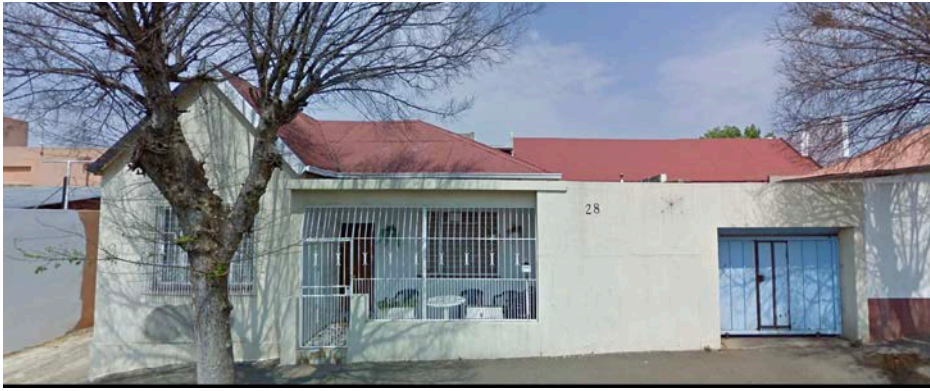
Void Shape/ Type

Disappearing void, with two disjointed open to sky 'rooms' remaining.

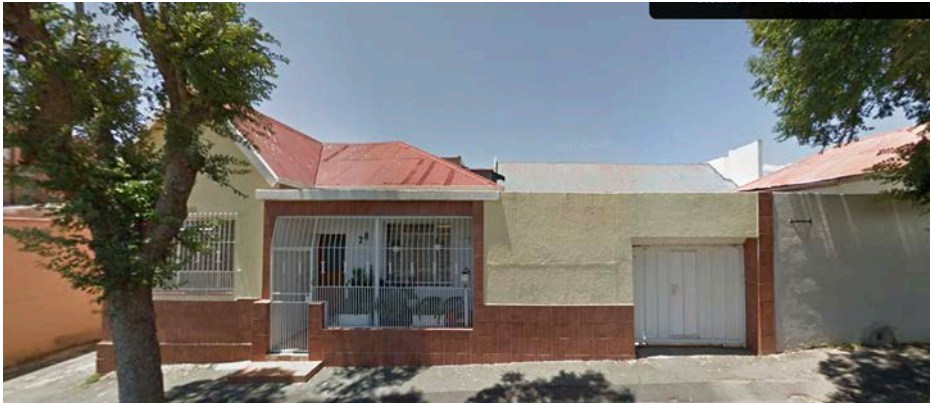
Compound Type

Plot turns house, with internal and external passages.

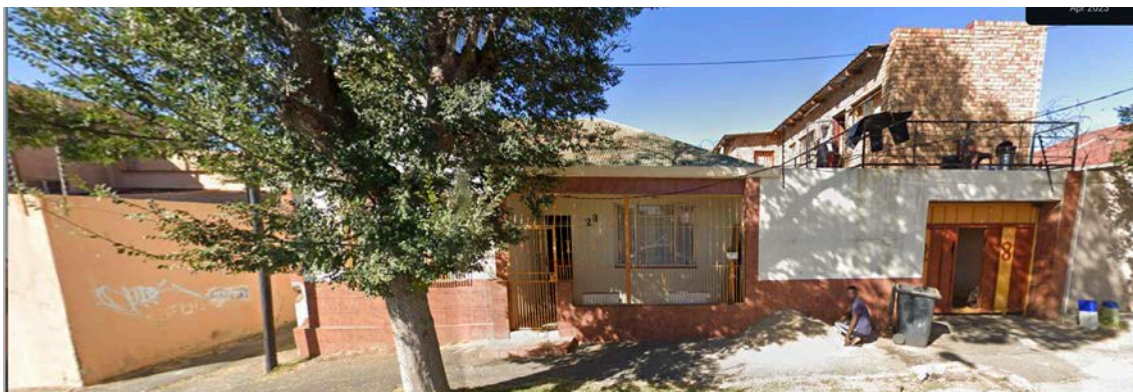
Compound Doings: re-scaling, enfolding, yarding



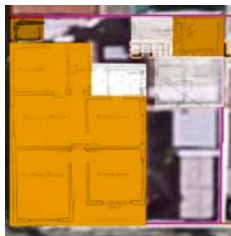
Streetview, Google Maps, 2009



Streetview, Google Maps, 2013



Streetview, Google Maps, 2023



early 1900s



1984



1984 exterior



2000-2015



2019

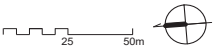
Collage of council drawing, with aerial Google Earth and digital sketch, 2023



CASE STUDY #36



AERIAL
of block from Google Earth photograph, 2020

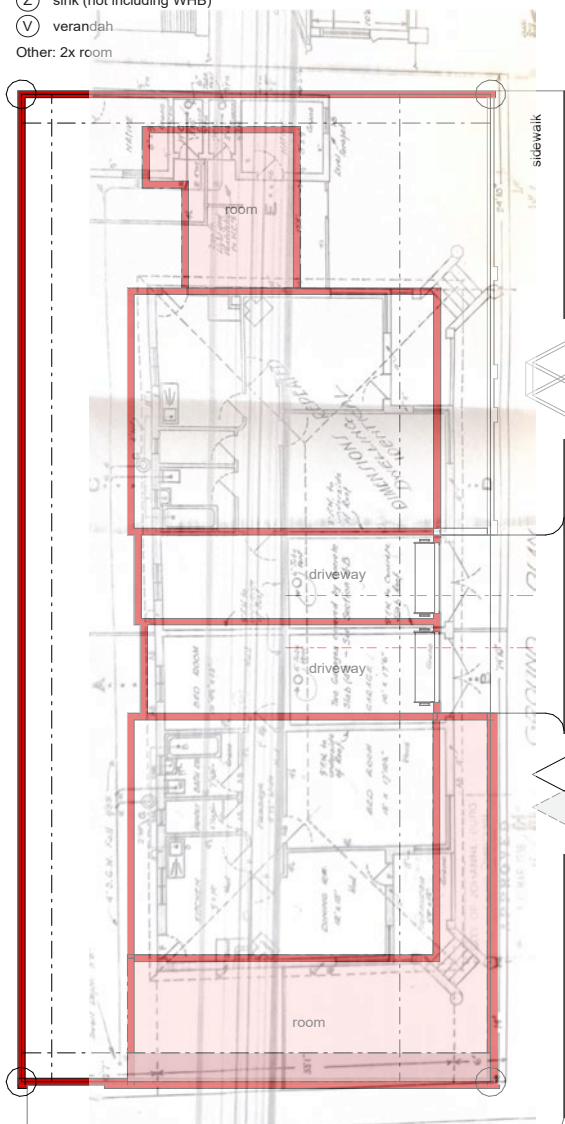


DATA FOR PROPERTY

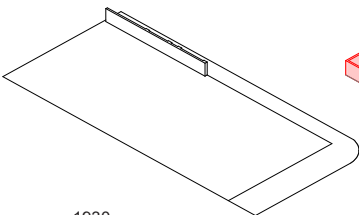
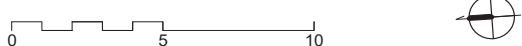
FAR = 0.5 (permissible 1.2)
Coverage = 51% (permissible 60%)
Height = 1 storey (permissible 3 storeys)
Additions from original = 271sqm

Index:

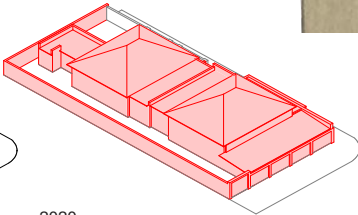
- (B) bed
- (W) enclosed wc's
- (S) stoves
- (Z) sink (not including WHB)
- (V) verandah
- Other: 2x room



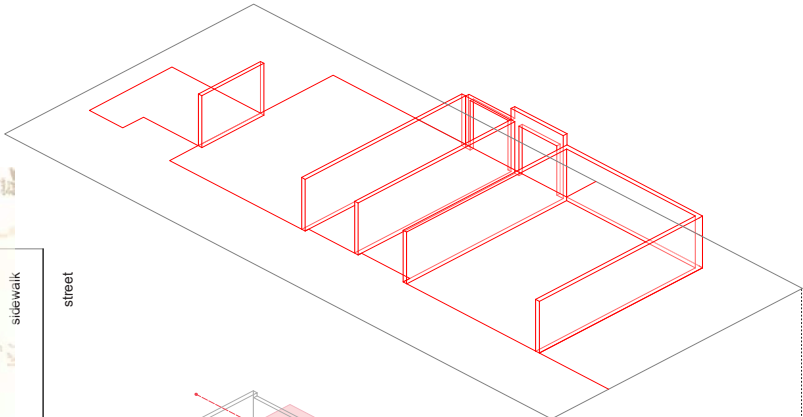
GROUND FLOOR PLAN OF CURRENT PROPERTY



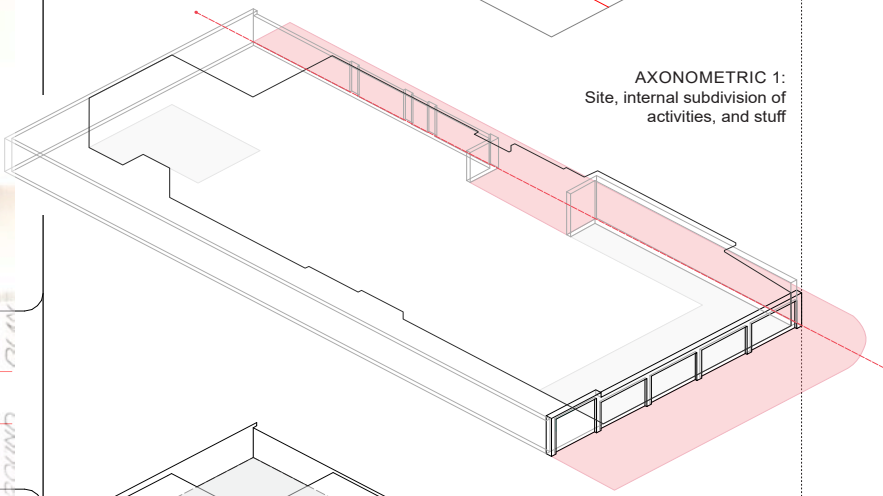
1930
Plot size: 532m²
Bungalow:
Rooms (back): 0
Total solid: - m²
Total void: - m²



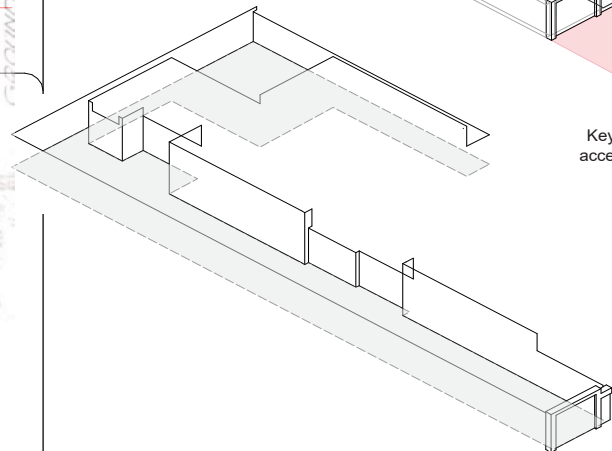
2020
Plot size: 532m²
Bungalow:
Rooms (back + front): 2
Total solid: 294m²
Total void: 200m²



AXONOMETRIC 1:
Site, internal subdivision of
activities, and stuff



AXONOMETRIC 2:
Key elements in relation to
access, service, space plan



AXONOMETRIC 3:
Skin and transforming void

Single plot description

#36

Name: House G, dizygotic twinning

Sources: Sale portfolio, property report, satellite imagery, council archive plan, drive by observation

Programme: Mixed used

Summary: Two initially near identical semi-detached houses on a corner stand have transformed the available outdoor space around them in different ways. One is now in hiding and one looks as it was originally.

Inventory – Accounting

Rooms: The property comprises of approximately 23 rooms. As per sales advertisement and council plan, there are originally 4 bedrooms, 2 kitchens, 2 dining rooms, 2 pantries, 2 bathrooms, 2 roofed veranda rooms, 2 corridors, 2 garages, 2 outside rooms, 2 outside toilets, 1 new garage turned shop, 1 new added outdoor structure in the front and on the western property and one on the eastern property.

Boundary Wall:

The external boundary wall now has 5 doors and 4 garage gates. There are 2 additional internal outdoor walls on one the east property There is a small boundary wall in the north facing open stretch of land between both halves.

Openings in Walls:

The built structure of the main house has 4 entrance doors, 2 along the street, 1 at the back and one on the short side, facing the outdoor rooms. The outdoor rooms have a minimum of 2 doors. There are 12 doors inside, plus 1-2 potential extra ones to the garage. 10 plain windows that have remained unchanged in the North (back), 4 corner windows of which 2 are invisible in the front.

Service/ space: The waterways run along the back of the property, feeding the north facing bathrooms and kitchens to then turn along the east side to the neighbouring plot. 1 missing yard? tap. Kitchen looks as if used as work space for a tailor.

Yard: The West Semi has a north facing driveway. The East Semi has a north facing service alley, and a south facing front yard as pedestrian entrance and car park. Outdoor rooms in the East have a separated open front space. There are 4 sets of steps that keep moving places.???

Stuff : cupboards, standing and hanging, countertops, desk, chair, broken cupboard, laundry line, bird feeder, fridge, sinks (no tap), bath tub, electric fire place, sewing machine, shelves as storage and display to sell many everyday goods in Spaza shop

Extra: white curtains, at times with red lining, wooden floors, pressed ceilings

People: no information, but the houses hold space for 6-8 double beds (one bed per room), which translates to 12-16 people.

Animals: no information

Trees: no visible planting

Elements – Relating

The south-west facing corner plot is 545 sqm 10% larger than the typical 495 plot, with an approximate similar width and 5 m more length. The footprint of the original structure that houses two semi-detached buildings on the plot does not leave void as in-between space, other to the outside rooms on the east???. The open space of the property is a wraparound band of 2-4 m wide, with entrance in the front and service access at the back. The original corridor is kept to a minimum size as not directly accessed but through two different rooms along the short sides of the overall structure, perpendicu-

lar to the corridor: in the front from the (originally called) dining room and at the back from the kitchen. This change in direction divides the plan into semi-public (or shared) and more private rooms.

Depending on the social life on the residents, or workers, the kitchen might turn into entry/ hall, and the original dining room can be rented out as room with independent access. The veranda is a roofed outdoor room, with pressed ceilings, that serves as entry, and takes over the role of a hall, albeit with no connection to the corridor. The west veranda is currently invisible, it has been covered by a roofed wall extension that borders the sidewalk with no recess. The two adjoining (dining and bed) rooms have large corner windows, and it is not clear how they get light and air after the additions. The other veranda appears as planned, access differs from original council drawings. Original front access runs 'around the corner' with a 90 turn as opposed to western site on the corner. Both parts of the property seem to have changed little and are nearly identical inside, but have developed two different edge conditions and yard layouts. The shared wall of the semis is separating two garages that have both other uses than parking cars. A third 'garage' has been added on the street facing edge of the west part of the property. The new 'garage' has been turned into a convenience store, a current version of the traditional Spaza corner shop.

Patterns of Aspiration – Speculating Growth and change over time

The major physical change to the property is the spaza shop on the corner and the 2nd façade in front of the adjoining western semi. As a result, the boundary wall of that one portion has thickened along the street edge towards the inside, to the extent that it has become the 2nd skin of the house, not structurally but as income generator. It has merged with the internal and a newly attached garage into a series of indoor and outdoor trading spaces – as holes in the wall or walk in, the new wall also serves as advertisement. The other eastern semi has developed a semi secluded cluster of rooms as independent rental entity at the former 'back of house', and turned the front garden into a utility yard, where cars park.

While the original plans from 1938 were for a male lawyer with an English last name and showed one roof for the overall structure, the current houses have separate roofs and so do the garages in the centre of the layout. This is a visible process of subdivision.

As an exception to many other properties in the catalogue, the addition of the 'garage' actually had building approval in 2008, and is filed by the City of Johannesburg. At a close look, the plan does indicate that the 'garage' was not intended for parking cars as the width of the opening is not large enough to let a car through, nor does the curb of the road at the corner. The owner's name is a first name only, and there is no professional recorded on the document as responsible for the drawing. Aerial photos show that the structure in fact changed, being implemented years before the council submission. While the approval number is valid, the document does not comply with official requirements, not of new structures nor of 'as built' record.

The property as a whole was last sold in 2020 to a female individual with an African name, at the time 29 years old, for R 825,000. The sale portfolio did not mention the business on the plot, but did include images showing the spaza shop. The property was sold as 'tenanted', however only the former outbuildings looked occupied as residence. The kitchen in the semi that is close to with the spaza shop seems to operate as a tailoring place. The semi legitimate business side of the property, and the relative solid condi-

tion of the structure, might weigh in as deliverability factor in terms of financing.

One of the major South African banks has bonded the purchase at 67% (R 560,000) of the purchase price. The property was sold twice in 1996 within five weeks for R 130,000 and R 160,000. That is an increase/ gain of an estimated 25% within six weeks and circa 500% in 24 years when calculated on the basis of the straight amounts. However, the inflation rate between 1996 and 2020 is estimated with 252,18%, with an average annual inflation rate of 5,39% in this period. The compound interest calculated backwards, with the inflation rate taken as interest, gives us the 2020 time value for the seller of the R160,000 as R 563,482. This reduces the relational gain of the seller to R 261,517 (a theoretical 46% of the initial investment over 24 years, without inflation). In the municipal evaluation role the property has increased significantly over 5 years from R 785,000 to R 1,365,000 – i.e. by 173%.

Feasibility study, broad and conservative

Income: rental of 8 rooms, plus shop = $8 \times R2000$ plus R5000 = R 21000 per month

Expenses: R 6000

Interest Rate: 12%

20 Years

Max bond amount: R572162

Monthly pay back: R 6300

The work and living arrangements are essentially responding through built form to contextual demand and supply. On the intersection of two streets the former front garden has transformed into a productive zone offering household goods, cellular recharge and traditional take away food – Kota - to what looks like mainly pedestrian clientele. The sidewalk as a public void with the street as a feeder are becoming a functional part of the new compound residence. The boundary wall becomes an accessible trading space with different degrees of porosity. At the diagonally opposed back the former domestic quarters have been extended a bit, and separated into a semi-independent rental unit if required.

Geometry

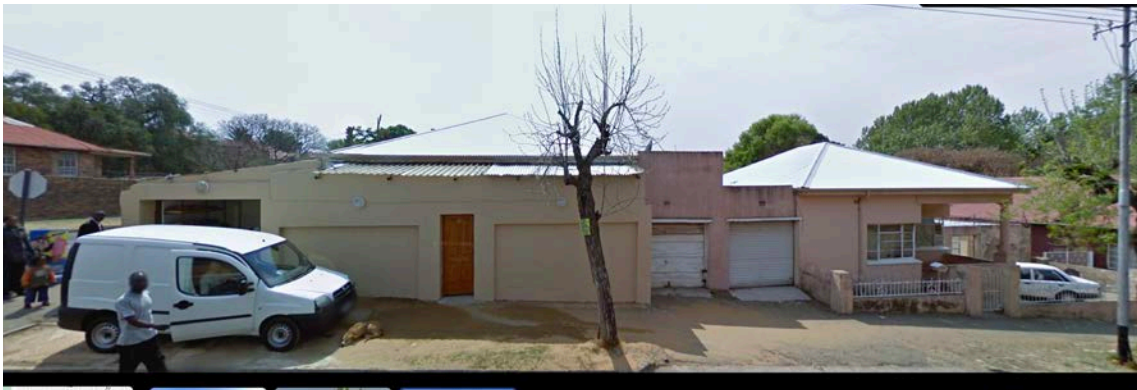
Void Shape/ Type

One sided void as intersectional space. One sided extruded, live (or work) in façade

Compound Type

Work-house and Live-house

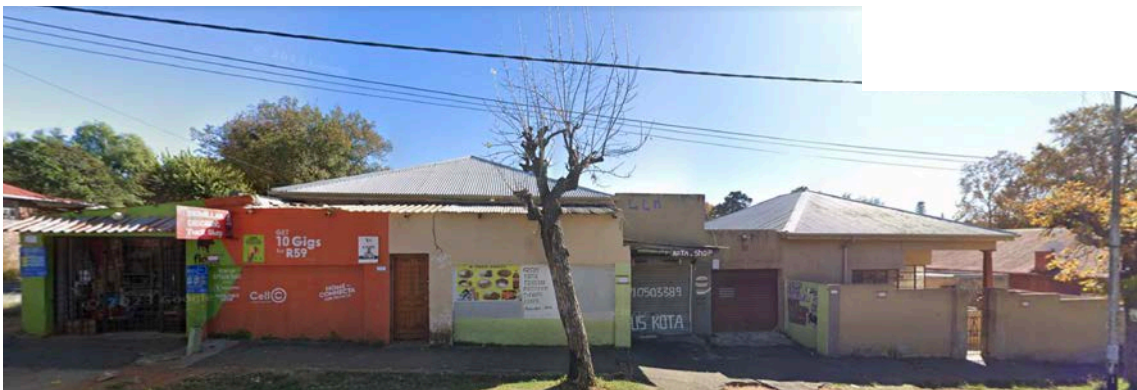
Compound Doings: re-scaling, enfolding, yarding



Streetview, Google Maps, 2009



Streetview, Google Maps, 2017



Streetview, Google Maps, 2023

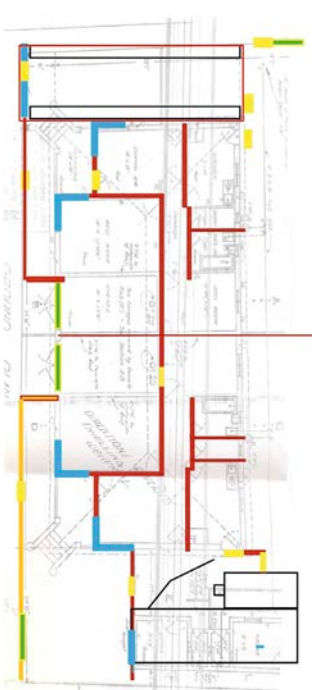
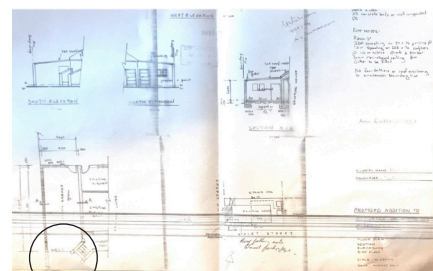


Photo from sales advert of shop, 2020



Approved council drawing 2008 for garage addition

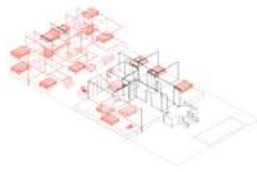
Council drawing 1938 and digital sketch, 2023

AXONOMETRIC # 1

Site, internal subdivision of activities, and stuff



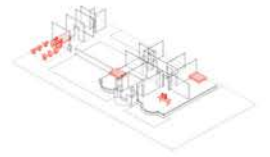
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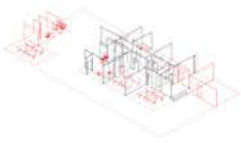
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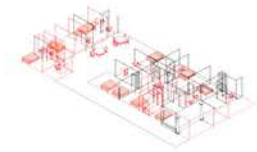
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#4



#5



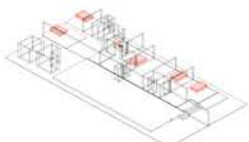
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#7



#8



#9



#10



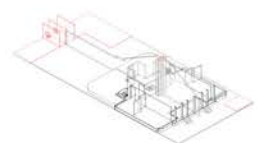
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#12



#13



#14



#15



#16



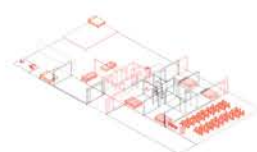
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#18



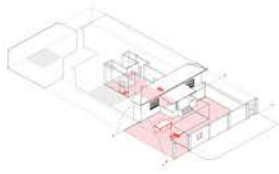
#19



#22

AXONOMETRIC # 2

Key elements in relation to access, service and space plan.



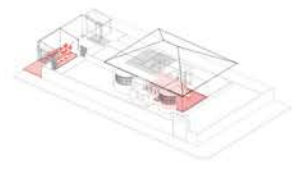
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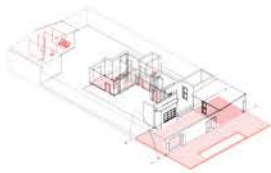
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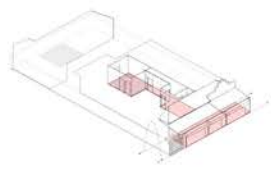
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#4



#5



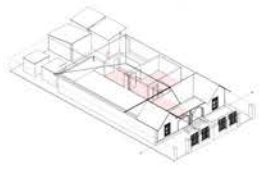
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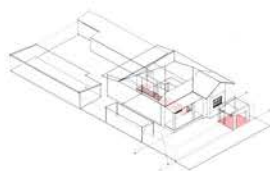
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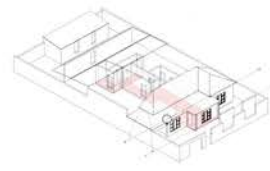
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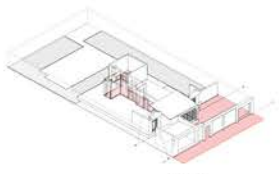
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#11



#12



#13



#14



#15



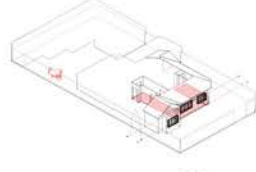
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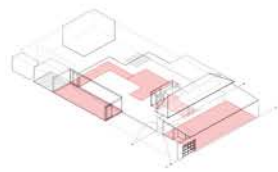
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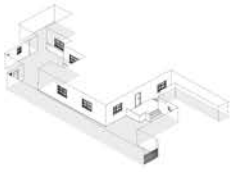
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#22

AXONOMETRIC # 3

Skin and transforming void



#1



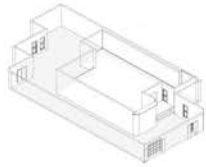
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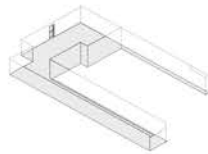
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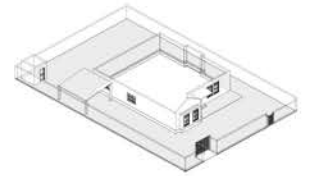
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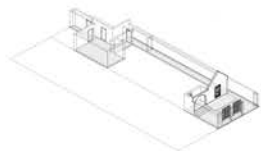
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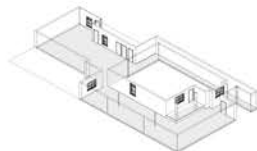
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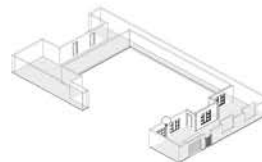
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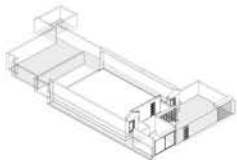
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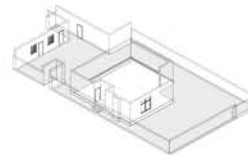
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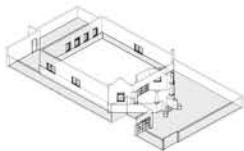
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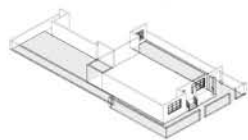
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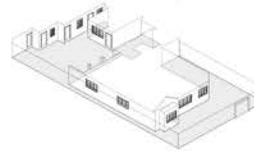
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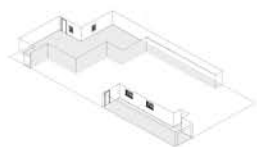
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#18



#19



#22