

Johannesburg: the urban mediate

by Claire Lubell

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Author's Declaration

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

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Abstract

Object _ This thesis draws from the specific universality of Johannesburg to develop a theoretical framework that critically examines the opposing forces of its urbanization. In just 130 years the city of Johannesburg has in fact been many different cities. As the embodiment of rapidly shifting economic and cultural ideologies, each identity was expediently manifested, leaving little time for sedimentation. Built through accumulated juxtapositions, Johannesburg has continuously evaded categorization despite popular perception as a divided city. Throughout its history it has simultaneously embodied both apparently normative and exceptional trends of urban development that relate it to both emerging cities of the global south and competitive cities of the global north. And today, its unique cosmopolitanism reveals the need for theoretical frameworks which focus less on categorization and more on complexity.

Theory _ Like Johannesburg this thesis straddles popular approaches of urban study and uses a theoretical lens of mediation to position itself between aesthetic architectural research and territorial geographic research and frame urban forms as mediate spaces. Mediate spaces are the product of opposing forces of city building and subsequently become the site of contestation over those forces as well as the agent by which those forces evolve. The urban mediate, or device, is therefore the product, site, and agent of a perpetual feedback between process and future state. This product is always unique for, though the opposition may be similar in diverse contexts, its mediation will be calibrated by the specificity of territory, economy and society. This research draws from Henri Lefebvre to frame the urban as a space of struggle between homogenizing global

forces of ideology and individualizing local forces of everyday life and Frederic Jameson to understand mediation not as a midpoint but rather that which is produced through the unity of an oppositional relationship, or juxtaposition. By mobilizing a theory of mediation to inform a research methodology, this thesis frames Johannesburg as a differential totality rather than a neutral field of juxtaposed fragments, thereby exploring the convergence between these fragments rather than their divergence. This is a critical agenda for polarized cities.

Method — This thesis examines primary oppositions of Johannesburg’s urbanization and the critical urban devices that have produced the city over time. These oppositions emerge from economic transitions on one hand, typical of cities of the global north, and cultural or demographic transitions on the other, typical of cities of the global south. The evolution of these transitions is illustrated through a periodization of the city’s development; from the discovery of gold to the colonial town, from the industrial city to the divided city, from the African metropolis to the world class region. Within each period a pair of urban devices are framed which both exemplify and subvert perceptions of Johannesburg’s apparently normative or exceptional development; the compound and grid, the township and tower, and the taxi rank and suburban complex. While acknowledging apartheid’s powerful urban influence, the re-calibrated periodization decentres it as the primary analytical lens because it has generally led to research which isolates Johannesburg as extreme and absurd. This method seeks to integrate the city into broader urban discourse in order to challenge existing approaches to urban research and theory.

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To my parents, for everything, seriously.

To Johannesburg.

Dedication

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PREFACE

Johannesburg is an extremely difficult city to live in, but an addictive city to work on. It never reveals itself all at once. In fact it is reluctant to reveal itself at all. One suspects there must be more to it, more than this shimmering mirage and ceaseless activity, this aggressive web of highways, suburbs and shopping malls, this dross, floating on layers of mined-out conglomerate, being endlessly abandoned, reclaimed, recycled and reused. It is this sense of there being 'more' - not as essence, secret or underlying logic but rather as excess - that makes this city so compelling. One can never know enough to claim to know it. It refuses to submit to a reductive logic. It spawns multiple centers, sends one in divergent directions, weaves multiple paths and reveals itself in its impurities. It insists that to know anything about it requires coming back, again and again.¹

1. Lindsay Bremner, *Writing the City in to Being* (Johannesburg: Fourthwall Books, 2010), 1.

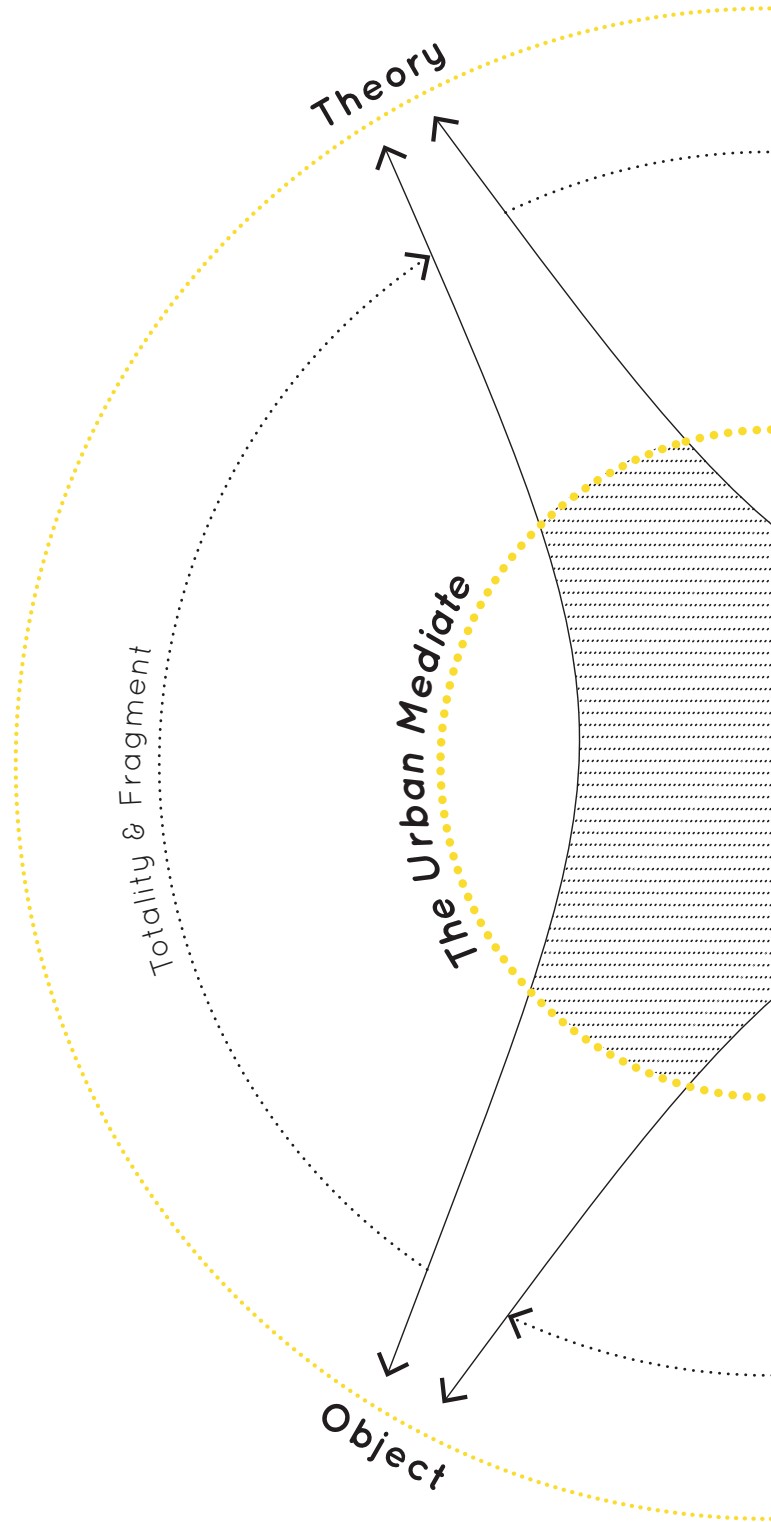
My introduction to Johannesburg in 2009 was through its peripheral black townships, the focus of much attention from media and non-profits who view them as symptomatic of apartheid's racial legacy. I participated in a studio focused on small scale participatory strategies to explore the role of designers in informal settlements. Brief encounters with the rest of the city revealed other facets, including the wall lined and vacant streets of the middle class suburbs, the orchestrated enclaves for the wealthy and their corporations, and the decaying inner city, usually depicted as an apocalyptic no-man's land that only fools and desperate souls inhabit. This dystopian view was well satirized in the film District 9, which came out that year. The challenge of finding the everyday Johannesburg behind these sensationalized juxtapositions pulled me back the following year. This time, with a job in a once vibrant, now long disintegrated, Indian suburb on the west side of the inner city, and an apartment in an up and coming revitalized industrial precinct on the east, I immersed myself to whatever extent I could. I found an urban life by no means easy, and of course I had it comparatively easy, but also one full of diversity, creativity, opportunity and driven by both fierce pride and active critical engagement in the city's future.

This future has now re-entered international debate with the passing of Nelson Mandela and the questioning of whether South Africa is really the beacon of democracy it supposedly became twenty years ago. There is no ignoring persistently blatant racial and economic inequalities, but if recent news articles have illustrated anything, focusing on the fact that Johannesburg never fulfilled utopic hopes for reunification allows little room to understand

the city within broader discourses of urbanization that could shed light on both its opportunities and challenges. This thesis is therefore structured to dismantle apartheid as the defining narrative of Johannesburg's entire urban history, creating the opportunity to explore the many other factors which have also contributed to its polarization and identity over time but may have been overlooked. This is not to dismiss apartheid as a powerful hegemonic force in shaping the city, but is motivated by the recognition that being a stranger afforded me the opportunity to experience the city unencumbered by personal attachment to its troubled history and that this allows me to study it from a more removed perspective, as a complex city like any other complex city.

The Johannesburg I experienced is a city with an identity still in the making and a prism through which to study contradictory and contested processes of urbanization. The research is driven by a belief that the built environment is shaped by a contextually specific mediation between exogenous and endogenous forces that has the capacity to foster divergent ways of life and a more inclusive city. I have sought to draw from as wide a theoretical discourse as possible, including geography, sociology, and political-economy, to frame architecture within a complex network of forces. Johannesburg has profoundly impacted my experience of the many cities I have lived in since and what I hope to accomplish here is to frame a theoretical and methodological approach that can inform my own future work.

Claire Lubell
August 2014



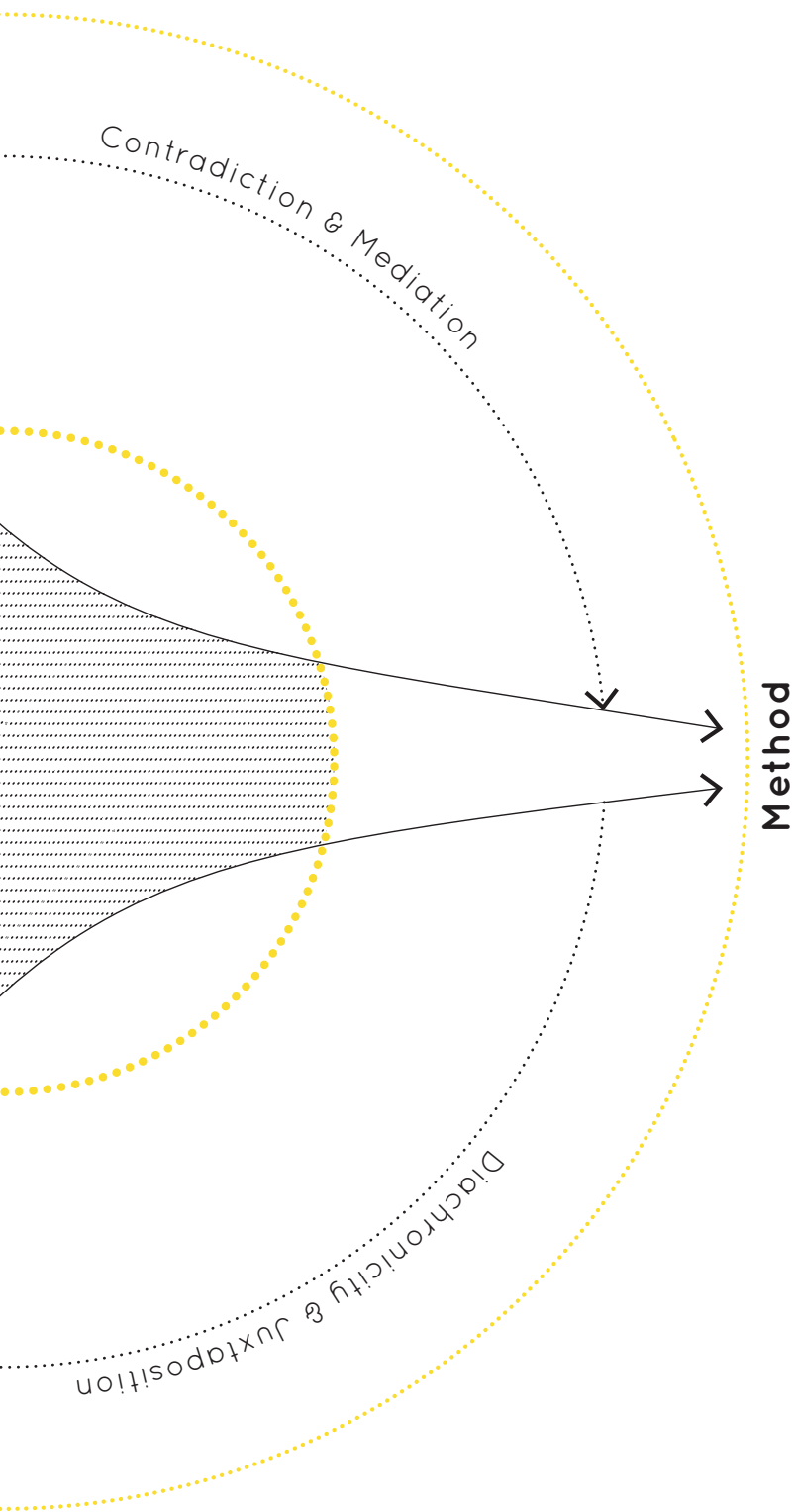


Figure 0.1

*The Mediate Thesis: object,
theory, method*

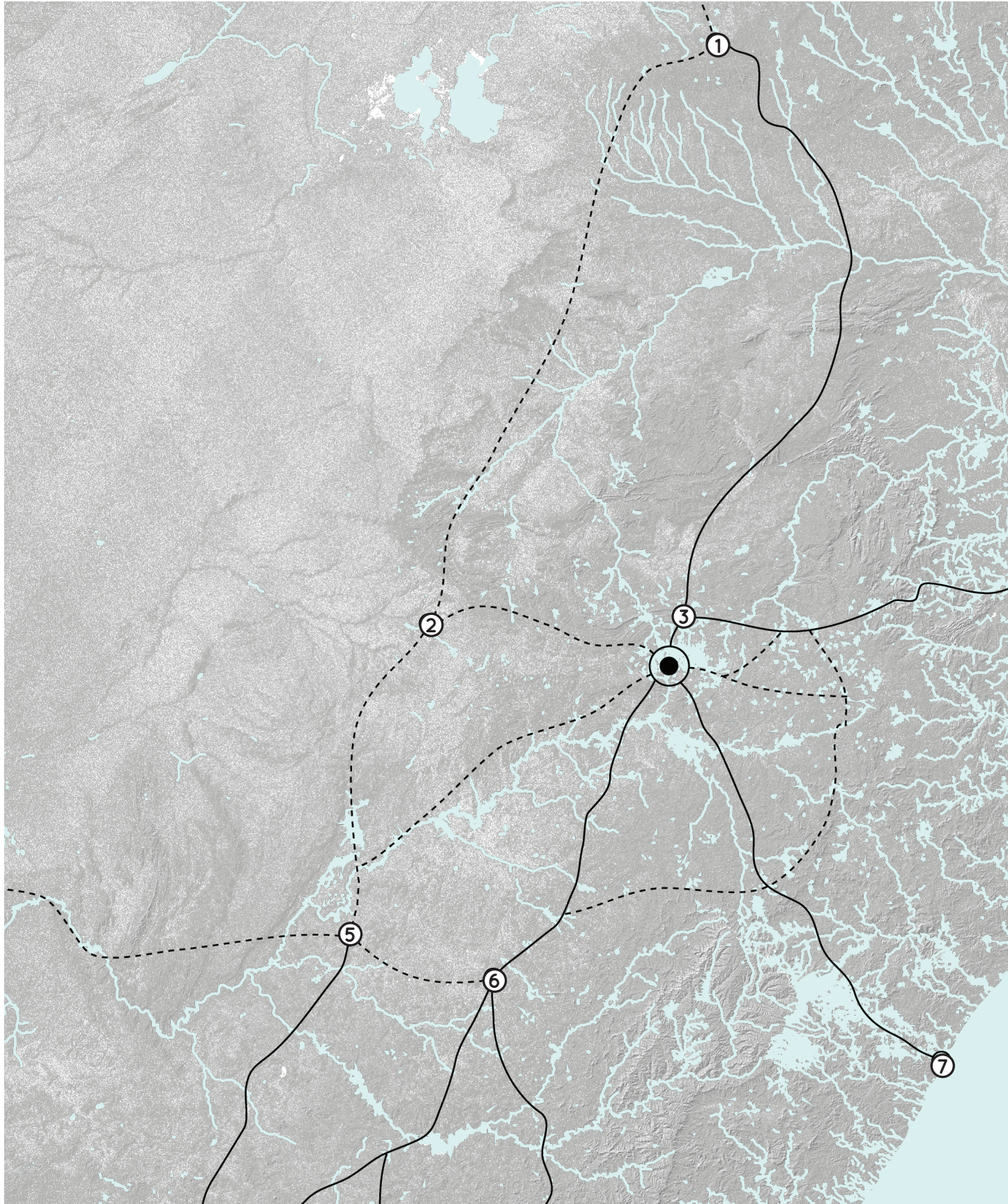
OBJECT

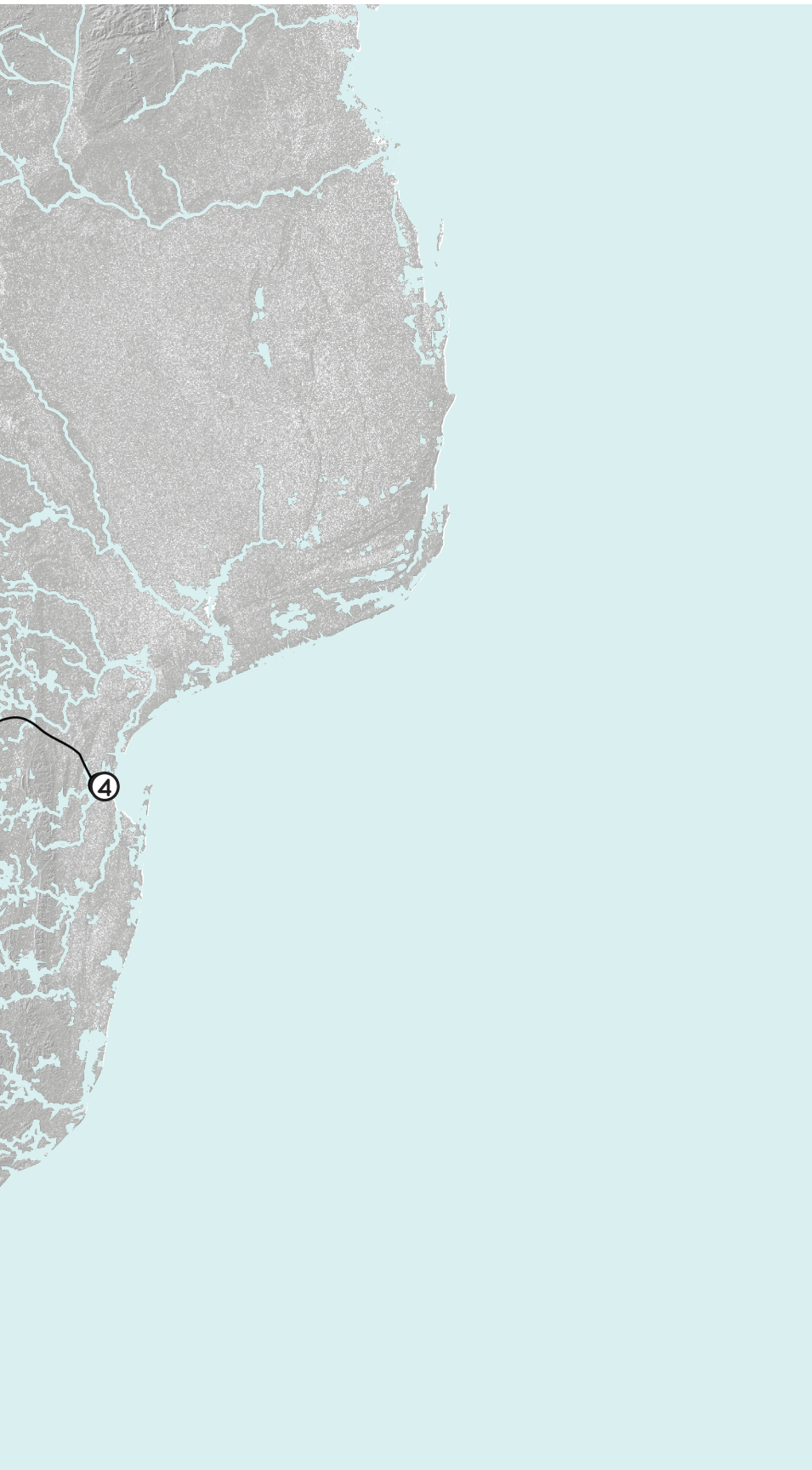
*There is no city as old as a river,
as old as this minor stream
whose millennia have sculpted the veld.
The wiser cities lie down with great rivers
to learn what rivers teach of time,
or with the timelessness of seas;
but my city's mazed metal of hurried streets
has buried the small white water.*

.....

*How can you love what changes too swiftly,
too swiftly changes and changes again?
A river is momentarily different, and daily,
but the slow living banks hold the shape of memory -
the self can stay while the river runs
and we can love the river.
But Jo'burgs straight streets hardly
survive their shouting rivers of traffic;
this place owes too little to time,
too much to appetite and rage
and guilty self-contempt -
it eats and tears itself...renews...renews...renews...²*

2. Lionel Abrahams, "Thoughts on Johannesburg's Centenary," in *From Jo'burg to Jozi: Stories about Africa's Infamous City*, ed. Heidi Holland and Adam Roberts (Johannesburg: Penguin, 2002), 15-16.





All Roads Lead to Johannesburg

Main urban settlements at the time of Johannesburg's foundation and railway connections completed within the city's first decade (followed by those dashed).

- ① Bulawayo (Zimbabwe)
- ② Mafikeng
- ③ Pretoria
- ④ Maputo (Mozambique)
- ⑤ Kimberley
- ⑥ Bloemfontein
- ⑦ Durban

Figure 1.1

All Roads Lead to Johannesburg

Johannesburg

Specific Universality

3. Loren Kruger, *Imagining the edgy city: writing, performing, and building Johannesburg* (New York: Oxford University press, 2014), 12.

4. Daniel Herwitz, "Modernism at the Margins," in *Blank Architecture, apartheid and after*, eds. Hilton Judin and Ivan Vladislavic (Rotterdam: NAI Publishers, 1999), 413.

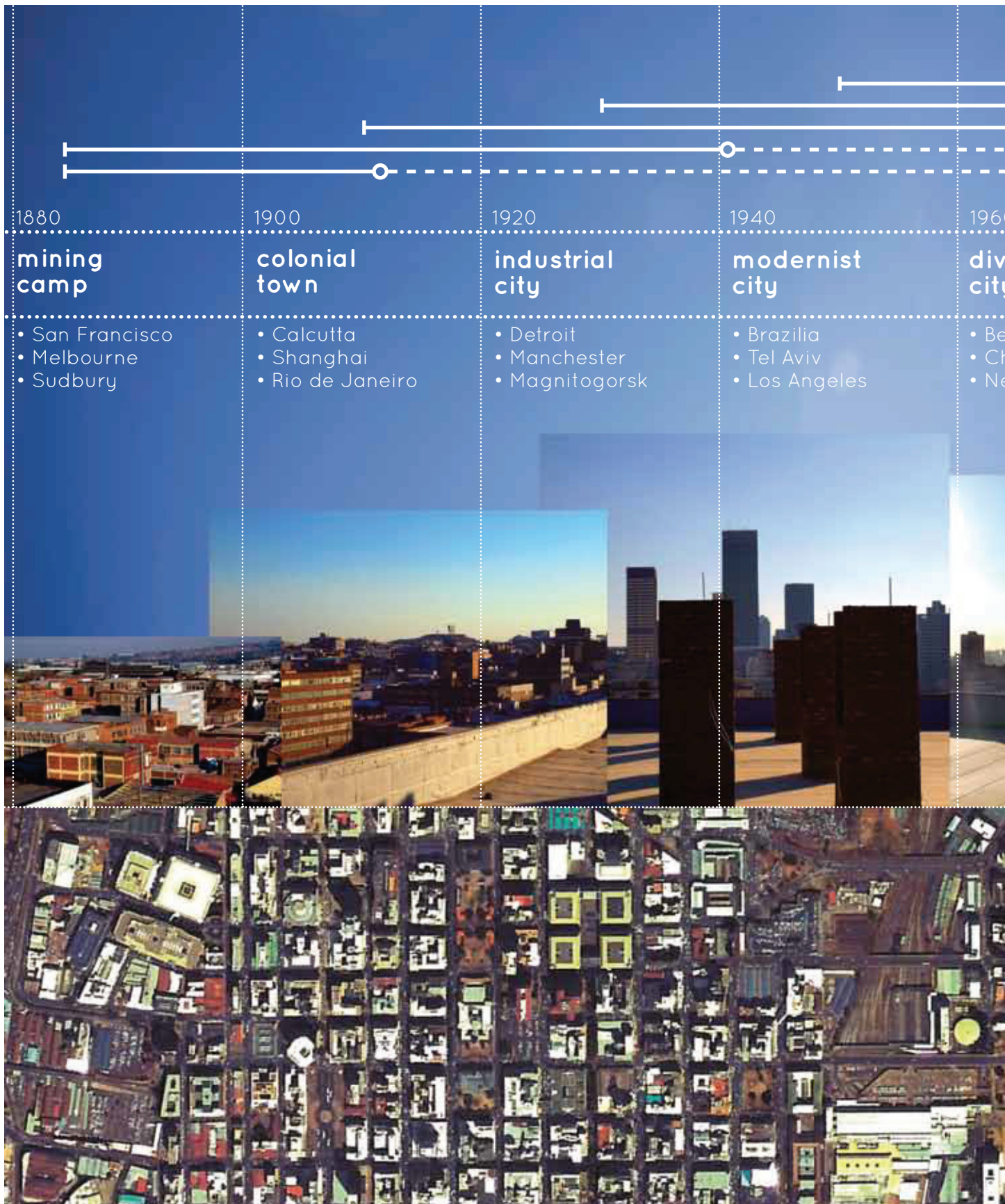
5. Township is the popular term, replacing 'location', to refer to the large residential zones built for non-whites, before, during, and after apartheid. Soweto, for example, is short for the South Western Townships. In the city's early decades, townships refers to all surveyed settlements without city status.

While all cities embody changing identities through their development, the history of the city of Johannesburg is that of the concrete manifestation of multiple highly charged economic and cultural transitions in less than 130 years. It was founded without former history, in a location that was isolated from other urban centres, not on an existing trade route, and lacking a waterway. Without visibly strong geographic features or long standing political and economic boundaries to define the city, subsequent metamorphoses of its urban fabric, spontaneous or orchestrated, developed unencumbered by history and relatively unattached to constructed identities. Johannesburg is a "city notorious for obliterating its history."³ As a frontier city it has been one of ceaseless mimetic re-invention in which the concurrent pursuits of replication and originality, inevitable in a city where history and identity of urban form and society had to be borrowed from elsewhere, result in a modern metropolitanism that is distinctly African, and European, and American, and therefore not precisely alike any.⁴ It was that which was invisible, the deep Witwatersrand gold reef, which shaped and fueled Johannesburg's growth along with ideas of the city and its society brought by generations of fortune-seeking migrants. As a city founded and first developed by entrepreneurs, each metamorphosis was expediently built in relatively rapid succession following financial booms, allowing little time for sedimentation. The perpetual building of the inner city, was fueled by speculation rather than planning, producing a seemingly ad hoc composition of distorted grids. This in contrast to the highly orchestrated government built black townships⁵ and today's free-market fueled suburban communities and complexes, driven by economic efficiency and

competition cloaked in powerful ideological visions. Johannesburg's current morphology reads as a fragmented accumulation of extreme oppositions.

It is its very nature of the 'City of Extremes'⁶ that has kept it removed from general urban theory because its characteristics are seen as exceptions to traditional perceptions of urban development. While Johannesburg is typically studied as the highly unique spatial manifestation of racialized planning, the apartheid city, its urban identity is also defined by its intertwined lives as a mining camp, a colonial town, an industrial city, a modernist city, a divided city, an African metropolis and a world class region. As a city which materialized almost instantly, the impact and adaptation of global forces has manifested in extreme ways, a characteristic which, rather than isolating Johannesburg as exceptional, positions it as an example from which other cities witness to similar changes may have lessons to learn. By de-centering apartheid as the primary analytical lens, Johannesburg's urban development may be traced through a series of congruent and accumulated oppositions which challenge perceptions of both normative and exceptional city-building processes. The question is to what extent are various narratives of Johannesburg's urbanization utterly unique to time and place and to what extent are they exaggerations of the same global trends visible elsewhere? The complexity of Johannesburg's urbanization, illustrated through a study of key urban fragments of the many cities it has been in its comparatively short evolution and its resistance to narrowly defined ideologies, has the potential to contribute to a broader understanding of processes of urbanization in diverse contexts.

6. Martin J. Murray, *City of Extremes: The Spatial Politics of Johannesburg* (London: Duke University Press, 2011).





Specific Universality

The multiplicity of Johannesburg's accumulated identities through its short history point to its commonality, rather than exceptionalism, with other cities over time and therefore broader urban discourse.

Figure 1.2

Johannesburg's Specific Universality

Compression

Until the discovery of gold in 1886 the area around Johannesburg was quiet farmland 70km south of Pretoria, the Afrikaaner city established 30 years prior as the culmination of the Great Boer Trek and the capital of the Transvaal Republic. Johannesburg, the mining town, grew at rapid speed as an industrial settlement along the east west axis of the Witwatersrand gold reef and by 1895 had a population of 80,000, already larger than Cape Town, and was becoming the central destination of southern African rail transit.⁷ By 1936, its golden jubilee and the year it hosted the first Empire Exhibition outside Britain, the city had grown to 475,000.⁸ Johannesburg has been vying for the title of `world city` since this period, a status it continues to pursue through the current slogan of `a world class African city`, adopted in 2002 to re-position the city as a stable market for multinational investment following the tumultuous 80s and 90s.⁹ It is now a city of almost 4.5 million, nearly 8.0 million in the larger metropolitan area, which contributes 16% to the gross national product and yet only 7% of the national population.¹⁰ At the same time, recent statistics place unemployment at 25% and informal sector employment at 16% and the townships are still largely void of formal economic opportunity.¹¹ Both the world of high finance and that of the unregulated city are critical aspects of Johannesburg's everyday mechanics and their convergence and divergence contributes to the city's collective urban identity. Following its intensely rapid growth, far removed from urban networks, Johannesburg continued to expand at relative pace with its early development, without significant periods of stagnation, resulting in a highly compressed and rapid layering of economic, social and therefore city-building periods.

7. Keith Beavon, "Johannesburg: a city and metropolitan area in transformation," in *The Urban Challenge in Africa*, ed. Carol Rakodi (Tokyo: United Nations University Press, 2007), 156.

8. *Ibid.*, 153.

9. Jennifer Robinson, "Johannesburg's Futures Beyond Developmentalism and Global Success," in *Emerging Johannesburg: perspectives on the post-apartheid city*, ed. Richard Tomlinson et al. (New York: Routledge, 2003), 261.

10. Statistics South Africa, 2011 Census, http://beta2.statssa.gov.za/?page_id=1021&id=city-of-johannesburg-municipality

11. Klaus Segbers, *The Making of Global City Regions: Johannesburg, Mumbai/ Bombay, Sao Paulo, and Shanghai* (Baltimore: The Johan Hopkins University Press, 2007), 49.

The potential significance of research on Johannesburg “rests in how the city embodies, speeds up, and sometimes brutalizes aspects of urban life common to many African cities,”¹³ and in comparison with other globally important cities. From the hasty foundations of a camp in frontier territory, Johannesburg’s city fabric has been shaped by the forces of resource extraction, colonialism, industrial capitalism, segregation, revolution, and both democratic and neo-liberal restructuring. This research groups the city’s multiple identities into three periods: from its mining camp origins through to the colonial city of the 1920s, from the increasingly modern industrial city of the 1930s through the divided city of the 1960s, and from the revolutionary and declining city of the 1970s through until the present day global and African metropolis. These periods are delineated not according to specific internal political dates but rather more fluidly in the context of global and local forces related to the transitions in economic structure and cultural identity and their impact on major periods of urban expansion and investment. This periodization therefore shifts away from most research which frames the city through the rigid pre-apartheid (1886-1948)/apartheid (1948-1991)/post-apartheid (1991-today) triptych that emphasizes current trends in violence and poverty as unique products of racial inequality and government policy rather than also resulting from global trends in economic restructuring and demographic change.¹⁴ Such a methodology has largely excluded study of Johannesburg’s simultaneous industrial decline and rise as the lynchpin of African finance and culture, as well as its primacy as a destination for migrants, characteristics which align it with advanced capitalist cities and its global South counterparts, and therefore

13. AbdouMaliq Simone, „People As Infrastructure.“ in *Johannesburg: the Elusive Metropolis*, ed. Achille Mbembe and Sarah Nutall (Durham: Duke University Press, 2008), 85.

14. Jo Beall, Owen Crankshaw, & Susan Parnell, *Uniting a Divided City: Governance and Social Exclusion in Johannesburg* (London: Earthscan Publications Ltd, 2002), Part 1 & 2.

15. Robinson,
„Johannesburg’s Futures:
Beyond Developmentalism and
Global Success,” 260.

render it subject to related global economic and social trends.¹⁵ In very broad terms, Johannesburg can be said to follow economic trends associated with cities of the global north and cultural/demographic trends associated with cities of the global south. Given its specific universality and unsteady balance of both normative and exceptional city building process, this research seeks to use Johannesburg as a catalytic object to formulate a theoretical framework which then has the capacity to integrate the complexities of Johannesburg into broader urban discourse and therefore potentially be applicable to other urban contexts.

Reading Johannesburg

Reductive Perceptions

16. John Eligon and
Nicholas Kulish, “In Soweto and
Beyond, Mandela Still Serves as
a Beacon of Hope,” *New York
Times*, Dec 8, 2013.

The passing of Nelson Mandela and the discussion around his legacy and the future of South African cities has brought urban poverty roaring back into the media. A recent New York Times article painted the picture of the “vast squatter camp...where thousands...live in tin shacks...people gathered in tin-walled churches...to offer prayers for Mr. Mandela.”¹⁶ The first difficulty with this description, is that the reporter is discussing Diepsloot which, though originally an informal settlement, is in fact now a formalized township planned and built post-apartheid under the Reconstruction and Development Program. The second, is that it perpetuates the international view of Johannesburg as a city at the margins of civilization where destitution and anarchy reign supreme. This article is symptomatic of dominant popular opinion that, as articulated by Achille Mbembe, understands “the defining feature of contemporary African urbanism [as] the slum” and underestimates “the extent to which major African cities attract, in their own ways, certain forms of colonial and now global

capital.”¹⁷ In other words, if its slums are the entry point of study on Johannesburg, then Johannesburg will have difficulty becoming anything other than the ‘city of slums’. The inclusion of Johannesburg as one of the primary cities studied by the Urban Age Project in *The Endless City*, a collaboration between the London School of Economics and the Deutsche Bank’s Alfred Herrhausen Society, was an important step for integrating the city into popular discourse on urbanization. However, while the essays do elaborate on the complexities of Johannesburg, the data based analysis, whereby all six cities are directly compared, is extremely reductive. Without prior knowledge of the city’s socio-economic spatial character and how it has evolved over time, the maps of ‘social exclusion’, ‘density’, ‘finding work’ and ‘moving in the city’ are only superficially informative.¹⁹ How do these metrics, traditional in geographical and sociological study, teach architects and urbanists about the character of urban space and the urban life facilitated, or the ‘citness’²⁰ of a place? This term was originally coined by Saskia Sassen who differentiates it from the term ‘urbanity’ saying that “urbanity is perhaps too charged a term, charged with a western sense of cosmopolitanism of what public space is or should be. Instead, citness suggests the possibility that there are kinds of urbanity that do not fit with this large body of urbanism developed in the West.”²² For Sassen, the foundations of citness are born out of the intersection of differences and the production of something new, positive or negative, as consequence of this intersection.²³ Citness as a concept is now used by many prominent international urban theorists, as well as those working in Johannesburg, and has emerged as a means to discuss the specific quality of city spaces without resorting to pre-determined

17. Ricky Burdett and Deyan Sudjic, ed., *The Endless City* (London: Phaidon Press, 2007), 486.

19. „Moving in the city“ maps the railway because railway and subway are the two modes of transit mapped in the other cities, when in fact it is the extensive highway network and minibus taxi system that define the city’s public and private transit.

20. I chose to adopt this spelling from Lindsay Bremner however I retain Saskia Sassen’s original spelling when quoted.

22. Burdett and Deyan, ed., *The Endless City*, 484.

23. Saskia Sassen, „Citness in the Urban Age,“ *The Urban Age Bulletin*, no. 2 (2005): 1, http://downloads.isecities.net/0_downloads/archive/Saskia_Sassen_2005-Citness_In_The_Urban_Age-Bulletin2.pdf.

pros and cons, which may or may not be relevant to dynamically shifting cities of the global south.

24. Bremner, *Writing the City into Being*, 55.

In the context of Johannesburg, Lindsay Bremner argues that citiness is primarily analysed through the three distinct and often reductive lenses of “an apartheid city, with its categories of race and exclusion, a global city, with its categories of fragmentation, inequality and spectacle, or an African city, with its categories of informality and distress.”²⁴ It is, of course, impossible to view these lenses as mutually exclusive since many categories of the apartheid, global, and African city have coexisted in Johannesburg throughout its history. The dominance of these categorical lenses is echoed by Achille Mbembe and Sarah Nutall in the introduction to *The Elusive Metropolis*, in which they argue that the body of typical historiographic literature on Johannesburg has a “relative lack of comparative depth, [a] paucity of theoretical reach, and [an] overall dependence on political economy.”²⁵ They group studies into three similar categories: the first focuses on racial polarization and spatial exclusion by the apartheid state and sees the city solely as a space of division and the township as a separate entity (the apartheid city); the second focuses on the city as a problem to be fixed and are prescriptive in their attempts to map a geography of deprivation in order to change policy frameworks while ignoring existing city life (the African city); and the third focuses on the splintered privatization and barricading, or ‘citadelization’ of the city and the documentation of the fantastical enclaves which emerge (the global city). Mbembe & Nutall’s primary criticism of this body of work is that though empirically dense it fails to discuss citiness in Johannesburg and broaden its reach to a more

25. Achille Mbembe and Sarah Nutall, “Introduction: Afropolis,” in *Johannesburg: the Elusive Metropolis*, ed. Achille Mbembe and Sarah Nutall (Durham: Duke University Press, 2008), 15.

global discourse in urban theory. A more nuanced approach to analysis is required in order to position the specificities of Johannesburg's urbanization in relation to other cities of both the global south and north. One way to begin addressing this challenge is to build from the city's early history without viewing it as a set of conditions which inevitably led to apartheid, but rather one which had the potential to foster a diverse and vibrant urban society. This may shed light on the citiness of Johannesburg today as something other than the consequence of apartheid. This thesis proposes that such an endeavour requires a recognition of Johannesburg's exceptional historical narratives and the key urban forms which have emerged, while simultaneously positioning them in relation to outside influences and generic patterns. Citiness is therefore positioned as a physical rather than phenomenal category upon which design, as a product of economic and social mediations, has the capacity to both react to and reshape. This research ultimately focuses on key built forms and their catalytic roles in urban development, rather than simply their fleeting or insurgent occupation in spite of physical fixity, because architecture is well positioned to understand the relationship between aesthetic and spatial design decisions and their impact on broader processes of geographical change.

There are currently several key theorists who work across disciplines of architecture, urbanism, geography, sociology, history, political science, cultural studies, and literature who are rejecting a reductive study of Johannesburg. While this is by no means an exhaustive list those discussed here have been chosen for their trans-disciplinary nature, their critical approach, and the articulation of their

Toward Complexity

26. Mbembe & Nutall, "Introduction: Afropolis," 15.

27. Ibid., 15.

28. Ibid., 17.

method. Foremost are those who themselves are working towards the challenge they put forth as editors of *The Elusive Metropolis*, Achille Mbembe and Sarah Nutall. Mbembe is a professor of history and politics while Nutall is in literature and cultural studies, however both research and teach as part of the University of Witwatersrand's Wits Institute for Social and Economic Research (WISER). For them "cities are subjects *en fuite*."²⁶ This elusiveness points to their multiplicity, their ceaseless metamorphosis and their capacity to outpace our analysis of them. In other words, the key to the elusive metropolis lies in "the gap between the way things actually are and the way they appear in theory and discourse."²⁷ To locate this gap they propose that the primary characteristic of the *Afropolis*, epitomized by Johannesburg, is the dialectical relationship within the built urban environment between "the underground, the surface, and the edges."²⁸ This dialectic is latent in the potential opposition between how and by whom urban form is made and its actual metropolitan character - its representation and aesthetics. What 'elusiveness' manages to encapsulate is a common thread in the theoretical work discussed below which is the dynamic movement which arises out the attempt to mobilize dialectical thinking to address the extreme oppositions of Johannesburg's everyday reality. The challenge of Johannesburg, which is also the challenge of the exceptionally rich research and theoretical arguments it has given rise to, is the difficulty of relating these oppositions, or fragments, to any overarching interpretations of Johannesburg's collective identity.

While their work is intertwined, both Mbembe and Nutall develop independent theories that draw on

a dialectical method of reading the city. In his essay “*Aesthetics of Superfluity*,” Mbembe uses the idea of superfluity to describe the confluence of racialized space and industrial capitalism in Johannesburg where the black body was rendered simultaneously disposable and indispensable, creating a “tension between the apparent fixity of race and the potential unfixing of the commodity form, even after race became a commodity.”²⁹ Through this lens he explores the related processes of territorializing and deterritorializing in the apartheid state where distance, proximity and mutual dependency coexisted in “a network of exclusive connections and disjunctive inclusions, [that] superposed and juxtaposed a geographic organization and the organization of *gens* inherited from the frontier wars period”³⁰ This translated to a city not so much characterized by a multiplication of disconnected fragments but rather one in which those fragments were interlocked but whose connectivity was subverted by the fissuring of the divisions that defined them. During apartheid, metropolitan life for the marginalized involved the constant negotiation of these boundaries and now without the glue of state oppression the city is for everyone “an experience of fragmentation and of permutations that may never achieve coherence... the city of deconstructed images.”³¹ Mbembe proposes a reading of the city as a contested ground in which opposing groups and process are tightly bound through mutual dependency yet constantly undermined by this binding.

Sarah Nutall’s theoretical approach is developed through literary criticism and, though much less based in political or economic theory, equally founded on dialectics. In her book *Entanglement*,

29. Achille Mbembe, “Aesthetics of Superfluity,” in *Johannesburg: the Elusive Metropolis*, ed., Achille Mbembe & Sarah Nutall (Durham: Duke University Press, 2008) 58.

30. *Ibid.*, 49.

31. *Ibid.*, 63.

32. Sarah Nutall, *Entanglement: Literary and cultural reflections on post-apartheid* (Johannesburg: Wits University Press, 2009), 13.

33. *Ibid.*, 20.

Nutall frames a series of juxtapositions in her theory that Johannesburg's citiness "is an intricate entanglement of éclat and somberness, light and darkness, comprehension and bewilderment, polis and necropolis, desegregation and resegregation."³² She explores this manifestation through space, but also through literature, art, race, sex, and so on arguing that the term entanglement is intended to draw "critical attention to those sites and spaces in which what was once thought of as separate - identities, spaces, histories - come together or find points of intersection in unexpected ways."³³ The point is to understand conditions under which something is made, conditions which are generative. Through the lens of the emerging body of fiction in which Johannesburg is the main protagonist, or perhaps antagonist, Nutall identifies prevailing descriptions of the urban 'infrastructures' of the street, the cafe, the suburb, and the campus that gives rise to figures of the city's metropolitan life: the stranger/migrant, the aging white man, the suburban socialite, and the hustler. These figures, she suggests, arise from the text of the African city but could be written back into that of the European city to elucidate its citiness. This is a reading of Johannesburg in which the everyday infrastructures and figures of urban life become the means of relation between seemingly unrelated narratives in the metropolis but are also the product of their relationship. By drawing on key generic types that comprise a city, physically and socially, but giving them specificity within the setting of Johannesburg, Nutall is able to construct a holistic narrative of metropolitan life through the fragmented experiences of its everyday mechanics.

Working more directly within urban theory

are Martin J. Murray and Lindsay Bremner. Murray is a professor in urban planning and Afroamerican/African studies at the University of Michigan while Bremner is an architect, former chair of architecture at the University of Witwatersrand and professor at the University of Philadelphia, currently teaching at the University of Westminster. Despite being the only professional architect discussed here, Bremner follows Nuttall in her exploration of narrative as practice and text as object to actively reveal the otherwise elusive Johannesburg of today, as evident in the title *Writing the City into Being*. In doing so she draws primarily from post-modern theory, most heavily from Michel de Certeau's method of walking to city, to read the urban space through an "ornamental cross section without hierarchy or totality, that reveals citiness through spaces that function as hieroglyphics of social reality."³⁴ This approach is an explicit challenge to a reading of the city as a "thing", through typological and morphological taxonomies and hierarchies, "rather than a contradictory, contested, open-ended space."³⁵ Being generally more concerned with the occupation of space than the construct of space itself, Bremner articulates three theories: lived space, insurgent urbanism, and citiness. The first refers to the everyday concrete life of the city and the capacity of walking to rewrite urban space; the second refers to the actual occupation of urban space in spite of its visionary formation; and the third is the uniqueness which emerges from the relationship between the concreteness of place and the life it facilitates. From these three theories emerge three themes more specific to Johannesburg: loose space, immaterial architecture, and terror. The first describes spaces where unintended activities occur or intended activities no longer, or never, did; the second explores

34. Bremner, *Writing the City into Being*, 61.

35. *Ibid.*, 59.

36. Ibid., 105.

37. Ibid., 77.

simulation and spectacle; and the third fortification. Bremner calls for “a migratory architecture, or rather an architecture for these migratory times” that sees building the city less as a material practice and more “as a thicket of circuits and routes, delays and vast expanses of space between, or several places simultaneously.”³⁶ The concept of loose space, perhaps the most relevant here, is meant to describe the emergence of the post-apartheid city within the skeleton of its predecessor and refer to both striated and smooth space, concepts adopted from Deleuze and Guattari. Striated space is bounded and tends toward interiority whereas smooth space is directional and takes the form of exteriority.³⁷ The co-existence of both types of space in an unstable but dependent relationship is a critical way of understanding the forces at work in the making of Johannesburg as a whole over time.

Contrary to Bremner, Martin J. Murray explores urban development less from an experiential perspective and more from an analytical one which understands built form primarily through the lens of economic processes. In both *Taming the Disorderly City* and *City of Extremes*, Martin J. Murray seeks to understand the strong socio-urban continuities between the apartheid and post-apartheid state primarily by exploring the implication of coinciding democratization and neoliberalization in South Africa. By showing the means by which urban restructuring efforts have further ingrained the juxtapositions created under apartheid Murray argues that it is not legitimate to think that there are two different cities to be studied simply because of the end of state legislated racialized planning. Both books fall within Mbembe and Nutall’s third category of study

that focuses on spatial restructuring, polarization and citadelization and therefore rely most heavily on a critique of the contradictory process of late capitalist city building. Murray's analysis is based on three premises: first, that urban regeneration and ruin are mutually dependent processes; second, that while planners see the urban fabric as a flexible entity it is more often very fixed; and third, that when based on market competition, polarity between inclusion and exclusion becomes extreme. Though strongly rooted within the political economy, as opposed to Bremner, Murray proposes a similarly "synthetic approach, which manages to convey some sense of the panoramic totality of the city through the patchwork assemblage of fragments...[which] involves the identification of persistent themes or common threads that, when brought into relation with one another, constitute something akin to the unified totality"³⁸ While perhaps clearest in his aim to create a holistic understanding of the dynamics of post-apartheid reconstruction through an interlacing of apparently disconnected snapshots, the focus on the continuity of embedded revanchist urban processes paints a predominantly negative image which may disguise ways in which Johannesburg also fosters and creates innovative urban spaces.

Lastly is Jennifer Robinson, an urban geographer at University College London whose theoretical work is perhaps the most direct challenge to Johannesburg's traditional exceptionalism. Rather than looking at architectural or urban form specifically, Robinson studies city wide planning and policy frameworks from a post-colonial perspective. In her book *Ordinary Cities: Between Modernity and Development*, Robinson points to the persistence of

38. Martin J. Murray, *Taming the Disorderly City: The Spatial Landscape of Johannesburg After Apartheid* (London: Cornell University Press, 2008), ix.

39. Jennifer Robinson, *Ordinary Cities: Between Modernity and Development* (New York: Routledge, 2006), 108.

40. *Ibid.*, 122.

western formulations of urban development through perceived irrelevance of so called third world cities to urban theory because their ad hoc infrastructures and informal sectors break with traditional totalizing visions. They are boxed into the chaotic megacity conception of the Urban Age thesis leading to definitions of what citiness should not be rather than its potential diversity. The category of the ordinary city is a challenge for theory and policy to see all cities within the same field of analysis rather than “seeing some cities as more advanced or dynamic than others, or assuming that some cities display the futures of others, or dividing cities into incommensurable groupings”³⁹ Robinson proposes that each city must be understood as a unique collection of wider processes, differentiated by a complex array of networks and that even the most seemingly unrelated cities have much to learn from one another. Locating her argument in opposition to the limitations of prevailing global cities and developmentalist approaches, Robinson’s theory of the ordinary city proposes that “taking a city-wide view, alongside a proper appreciation of the complexity and diversity of cities, can do some important work in reconfiguring urban theory.”⁴⁰ Robinson proposes that Johannesburg is the unique product of an urban system which holds both the global city and the developing city within its web and that the operations of the city as a whole are a function of the relationship between these two identities.

The Imperative of Johannesburg

Collective Totality Divisive Fragments

A key observation which emerges from the work discussed above is the realization that a post-modern way of reading the city, particularly in the theoretical work of Bremner and Nutall, emerged during Johannesburg’s transition as a morally charged

social and political project. a theoretical resistance to the breed of race and class based modernism made spatial by colonial and apartheid ideology. By its very foundation as a frontier city of strangers fueled by industrial capitalism, Johannesburg was always a place of difference and opposition, but these became overdetermined by successive state regulations. The recognition of the multiplicity and diversity of lived realities that had long cohabited Johannesburg came to the forefront of critical theory across disciplines as the city became South Africa's fundamental test of the future of the new 'Rainbow Nation'.⁴¹ Despite the imperative work of rejecting totalizing ideologies to reveal the latent complexity of Johannesburg's true character, embracing a reality of exponential difference also undermined the necessity to project an idea of a city towards which processes of unification could work. Following the arguments of Mbembe, Bremner and Robinson that the city becomes what we write and how we theorize it, then not only does a fragmented city lead to fragmented methods of reading it but fragmented methods of writing about the city perpetuate its perceived fragmentation. In this way Johannesburg has become not the emblematic city of post-apartheid unification, but rather that of post-modern multiplication. Yet in doing so it presents us with the opportunity to re-assert that while a city increasingly fragments it will also always bring together. For contested cities, where the right to the city is at the surface of daily life and built form takes on radically different and rapidly changing meanings, there is an imperative to understand the collective totality as a product of the multiple oppositions it fosters rather than as a neutral pastiche of layered difference.

41. The term coined by Archbishop Desmond Tutu following South Africa's first democratic elections in 1994.

One of the current pre-eminent dialectical thinkers unassociated with Johannesburg and more specifically positioned within the disciplines of architecture and urban design is Italian theorist and designer Pier Vittorio Aureli. In *The Possibility of an Absolute Architecture* he explores O.M. Ungers and OMA's project 'Berlin as a Green Archipelago' and states that the dominant theme of Ungers' work solidified through this project was "the principle of turning the splintering forces of the metropolis into architectural form that addresses the collective dimension of the city."⁴³ Aureli argues that the mode of reading the city as a dialectical field of forces allowed Ungers and OMA, in respective projects, to locate the idea of the city somewhere between the totalizing vision of pervasive urbanization and that of a collage of fragments. The latter, articulated through Colin Rowe's theory of Rome as the Collage City, is criticized by Ungers for being a-contextual and ignoring conflict by "collapsing [the city's] complexity into a single temporal layer" of "elegant architectural 'figures' coexisting, in spite of their differences, within the 'ground' of the city fabric."⁴⁴ In his lyrical description of Johannesburg, Mbembe says that "behind its disorderly convulsions and apparent formlessness, there is a recognition that the metropolis is fundamentally fragmented and kaleidoscopic - not as an art form but as a compositional process that is theatrical and marked by polyphonic dissonances."⁴⁵ In musical terminology polyphonic describes the use of multiple simultaneous independent lines of harmony and dissonance describes an unpleasant harmony, by traditional standards, and therefore an unpleasant one. This instability creates a tension as the resulting sound seems to require resolution into a stable harmony, a consonance.⁴⁶ Though not an architect,

43. Pier Vittorio Aureli, *The Possibility of an Absolute Architecture* (Cambridge: The MIT Press, 2011), 197.

44. *Ibid.*, 205.

45. Mbembe, „Aesthetics of Superfluity," 60.

46. Consonance and Dissonance, *Wikipedia*, http://en.wikipedia.org/wiki/Consonance_and_dissonance (accessed May 17, 2004).

Mbembe's dialectical reading of Johannesburg creates a similar narrative of understanding the city as an archipelago rather than a collage. The former reads the city as an agglomeration or system of contrasting singular forms whose autonomy is maintained but whose identity is defined in relation to the system within which they are conceived and interrelate. The city as archipelago approach has the potential to be particularly relevant to contemporary Johannesburg, a city where very distinct and self-contained urban forms have developed, therefore amplifying a potential reading of the city as highly fragmented. Yet most forms develop in historical tandem with other fragments which, though perhaps largely unrelated in terms of physical proximity or interchange, are products of similar economic and cultural tensions that impact the city system as a whole, and therefore are in fact in relation. The city as archipelago theory is one in which architecture and urban space are capable of holding the oppositions of the city as a whole within them and fostering positive exchange. While there is risk in the implication of finding productivity in the polarization of urban space, and therefore its society, a theoretical approach which presupposes a finite end goal to the stable harmonization of differences cannot critically analyze and evolve with them. Rather holding the fragmented oppositions in tandem with the idea of their collective unity and understanding this as a relationship of movement and consequence becomes central to an urban theory which embraces and fosters diverse interpretations of urban development.

A key factor in ideas of the potential productivity of fragmented urban development, and therefore tension, is the implicit presence of a mediating agent

or process of mediation. Mediation brings disparate things into relation while maintaining difference and creating new identities. I would argue that among the Johannesburg theorists, those outside architecture and urban design go further to theorize the consequential nature of these relationships of tension or opposition, rather than simply their occurrence, Mbembe proposes the characteristics of the elusive Afropolis as unique product of the intersection of African modes of life and western metropolitan norms; Nutall positions entanglement as the non linear relationship between paradoxical identities and histories; Robinson positions Johannesburg as illustrative of the ordinary city whose citiness is a unique product of its own position between categories of the global and developing. To bring this into architectural and urban theory requires a more explicitly spatial theory of the mediation of fragmented urban space and its intersection with economic and cultural forces that also shape the built environment. And to make this exercise critical to Johannesburg, and to its relevance to global urban discourse, requires understanding these oppositions through time and their mediation within a broader set of relationships, not simply those internal to the city's history.

THEORY

The city always had relations with society as a whole, with its constituting elements, and with its history. It changes when society as a whole changes. Yet, the city's transformations are not the passive outcomes of changes in the social whole. The city also depends essentially on relations of immediacy, of direct relations between persons and groups which make up society. Furthermore, it is not reduced to the organization of these immediate and direct relations, nor its metamorphoses to their changes. It is situated at an interface, half-way between what is called the near order and the far order. The city has a history; it is the work of history, that is, of clearly defined people and groups who accomplish this oeuvre, in historical conditions. Conditions which simultaneously enable and limit possibilities.⁴⁸

48. Henri Lefebvre, *Writings on Cities* (Oxford: Blackwell, 1996), 100-101.

The Globalization of Urban Theory

Singular Paradigms

49. Seminal texts include John Friedmann's 1986 „The World City Hypothesis“ and Saskia Sassen's 1991 „The Global City“.

50. Major reports are put out by AT Kearney and the Globalization and World Cities Research Network (GaWC) using their own index systems to develop of hierarchy of global cities. This has expanded to social and cultural indices in many other studies.

51. This has become a particularly trendy topic within architecture and urban research projects. For example, GSD: Project on the City Lagos, ETH MAS UD: Building Brazil, The Global Studio, GSAPP: Slum Lab.

52. Robinson, *Ordinary Cities*, 2006.

What then are the broader urban theory paradigms and methods within which this research positions itself and through which Johannesburg is being studied, and are they appropriate? Within the current climate of global urbanization predominant schools of research can generally be understood as contained within either global city theory or developmental/informal/mega city theory. The former originates in the mid 1980s as a theory examining the role of primary urban command centres in the transnationalization of capital and increased competition for municipal governments to provide an attractive climate for multinational investment.⁴⁹ [Fig 2.1] Since broadened it has become primarily concerned with the rapid expansion of global networks and ranks specific cities, or increasingly mega-regions, through a taxonomic method of data based comparison with other cities within the network.⁵⁰ The developmental/informal/mega city theory approaches rapid urban expansion through a lens of chaos and promotes focus on the basic service needs of the individual community through a methodology of bottom-up problem solving in failing urban areas that municipal governance either ignores or has inadequate capacity to address.⁵¹ While these lenses are not without their merits, the former shedding light on the connectivity of capital and the latter encouraging participatory processes, both are too readily adopted into models of governance, design and theory without first extrapolating from the city's economic, geographic and cultural historic foundations.⁵² Though valuable when understood in counterpart, alone these lenses are either too removed or too specific, pointing to the need for a framework which takes a more critical and holistic approach to urban research. Influencing

both approaches is an underlying bias about what characterizes the ideal modern cosmopolitan urban environment, of which such cities as Chicago or Paris (cities of the West), have historically been considered the model. However, if we accept that in a globalized and urbanized world there cannot in fact be universally applicable theories of urbanity, then suddenly every city becomes a site for the production of variegated urban theory. According to Jennifer Robinson, “ordinary cities, then – and that means all cities – are understood to be diverse, creative, modern and distinctive with the possibility to imagine (within the not-inconsiderable constraints of contestations and uneven power relations) their own futures and distinctive forms of cityness.”⁵³ This is not to say that there are not global trends, but that every city’s local characteristics are unique and can contribute to an urban theory which can then be more relevant to diverse forms of urban life. It also means that if we focus on what makes an apparently exceptional city in fact rather ordinary, and visa versa, we may come closer to understanding what actually makes it unique.

53. Ibid., 3.

The Endless City is positioned somewhere between the two paradigms as one of the first popular and graphic studies in comparative urban and architectural research to mesh together cities from extremely varied contexts. However, despite efforts to broaden the global city dialogue to emerging areas, the analytical methods employed fall victim to the global city approach of metric classification. This is combined with the traditional anthropological and geographical documentation methods of the developing city, albeit lacking their scientific rigour.⁵⁴ The collection of essays do engage with both topics

54. For example, the indices combined to determine relative „social exclusion“ are never identified. Is it based on economic opportunity, or education, or access to housing and services?

Figure 2.1
 The Hierarchy of World Cities
 John Friedmann

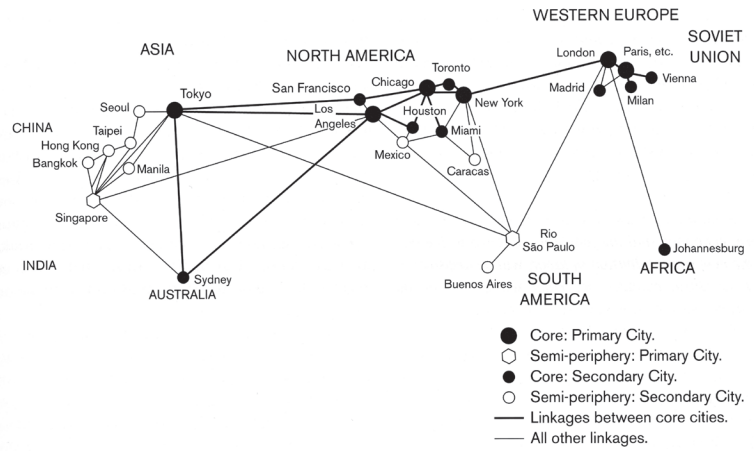


Figure 2.2
 Understanding the City
 The Endless City

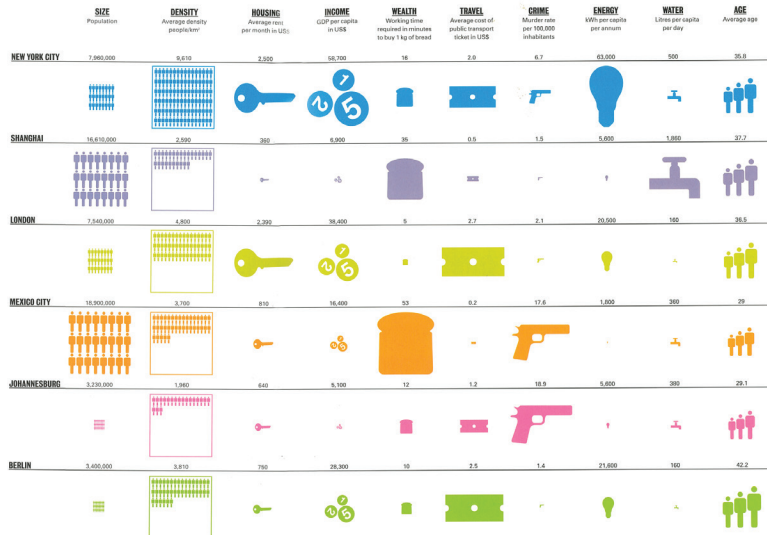
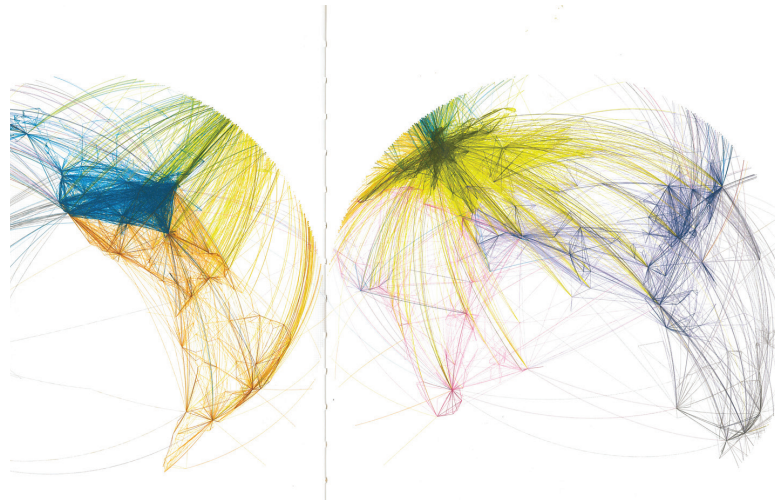


Figure 2.3
 Global Connections
 The Endless City



of the global city and the developing city from a more sociological perspective but their disconnection from the maps and statistical charts do little to communicate the socio-economic spatial makeup of the cities. The systematic scanning, according to a standardized set of scales and indicators which are not calibrated to context, produces dangerously reductive logic, as already discussed in the case of Johannesburg. [Fig 2.2] By setting up a series of statistical comparisons between cities of vastly different sizes, average incomes and crime rates, there is more emphasis paid to 'good' versus 'bad' conditions, even if this was not the intention, rather than to extrapolating information in such a way that critical comparisons can actually be made. The collection and curation of comparable statistics and anecdotes about various contexts does not in and of itself constitute critical urban study, comparative or otherwise, especially when the cases are exceptional or spectacular. Rather their attempted comparison risks leading to generalizations or the proposal of simplified models or urbanization.

Among those most critical of the pervasiveness of the Urban Age Project, of which *The Endless City* is the primary publication, in urban theory today are Neil Brenner, Christian Schmid, and Andy Merrifield. Brenner & Schmid argue that the Urban Age thesis, backed by UN statistics, has been accepted as the de-facto meta-narrative of contemporary urban study but that it is "empirically untenable (a statistical artifact) and theoretically incoherent (a chaotic conception)."⁵⁵ They specifically point to the territorialist nature of the Urban Age method which presupposes boundaries rather than considers the historical and political specificity of a territory

Territorial Fixations

55. Neil Brenner and Christian Schmid. „The urban age in question,“ in *Urban Theory Lab: Towards an Investigation of Planetary Urbanization*, ed. Neil Brenner (Cambridge: Harvard Graduate School of Design, 2013), 189.

56. Ibid., 199.

57. Andy Merrifield.
„Whither Urban Studies?“ in
*Urban Theory Lab: Towards
an Investigation of Planetary
Urbanization*, ed. Neil Brenner
(Cambridge: Harvard Graduate
School of Design, 2013), 179.

58. David Gissen,
„Architecture’s Geographic
Turns,“ *LOG 12* (2008), 63,
[http://htcexperiments.files.
wordpress.com/2009/01/log_
gissen2.pdf](http://htcexperiments.files.wordpress.com/2009/01/log_gissen2.pdf).

as a socio-spatial construction.⁵⁶ This is echoed by Merrifield who laments the loss of connection between philosophy, political engagement and the city due to the valorization of neutral and expert, rather than ideological, knowledge in geography and of theoretical knowledge too removed from its context. He argues that the former lacks impact because it is “superficial,” “positivist-empiricist,” “post-political;” and “anti-intellectual”, or “analytically empty” in summary, while the latter lacks impact as well because it is “conceptually blind.”⁵⁷ More moderate in his critique, David Gissen argues that architectural and urban design concepts justified by geographical methods of territorial and empirical data acquisition, as opposed to critical theory, are not in fact “post-theoretical” because geography is a theoretical discipline.⁵⁸ The issue is more that the architect/urbanist turned geographer tends to use quantitative information in both documentary and generative ways, drawing into question the accuracy of the data representation and the validity of the conclusions that are made. However a map is, of course, never a purely quantitative tool but also a critically projective one. The capacity to serve both purposes lies in the way factual information is represented in sets, either complimentary or juxtaposed, allowing the map to become a powerful theoretical mechanism.

Rem Koolhaas’ Harvard Project on the City in Lagos is a controversial example of urban study caught on unstable ground between Schmid’s analytical emptiness/conceptual blindness and Gissen’s geographic/architectural project. [Fig 2.5] The research studio effectively glamorized the informal economies and ways of life in Lagos, projecting that they are in fact the future of mega-city global

urbanization to which the cities of the west/north will eventually morph. Matthew Gandy, among others, criticizes this proposition in his paper, "Learning from Lagos,"⁵⁹ by outlining the politically driven economic decisions, guided by the IMF and World Bank and enacted by Nigeria's military dictatorships, that have been made over the last several decades and have resulted in Lagos' massive informal economy. Gandy argues that the acceptance of informality as general condition, replicated through the world, is a perversion founded on superficial research which documents existing phenomena without critique of the fundamental condition.

There is a growing body of architects and urbanists who are documenting manifestations of informality in their cities as a driver for design projects.⁶⁰ They primarily focus on strategies to provide adaptable housing developed through in-depth, first-hand research of living conditions, and driven by principles of incremental design. This is an approach used as early as 1975 with Steven Holl's fourth place entry into a Habitat for Humanity competition for housing in Daga Dagatan, Manila. His proposal was that of a uniform raised concrete platform around/upon which residents would build their own structures. [Fig 2.6] This approach became popular in the mid 1970s, particularly following John Turner's 1972 *Freedom to Build* and 1976 *Housing By People* which advocated for a model of 'aided self-help' housing that was co-opted by the World Bank to promote a more laissez-faire approach to government subsidized building programs. The success of this kind of project lies in its appropriation by the individual but it typically falls short of expanding impact to the collective public realm or, at a theoretical

59. Matthew Gandy, "Learning From Lagos," *New Left Review*, no. 33 (2005): 37-52.

60. For example, Urban Nouveau (India), Elemental (Chile), 26'10 South Architects (South Africa)

Residents fill the regular grid with their dwellings and businesses, starting from the main streets ...



Figure 2.4

“How to Moderate Incremental Economies”

ETH Zurich: MAS Urban Design, Building Brazil

Figure 2.5

“a total self-help effort”

Rem Koolhaas, Harvard Project on the City Lagos

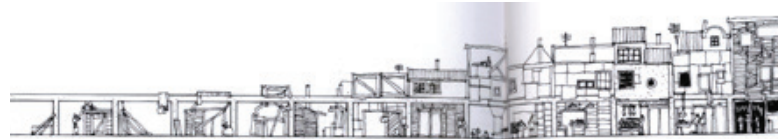
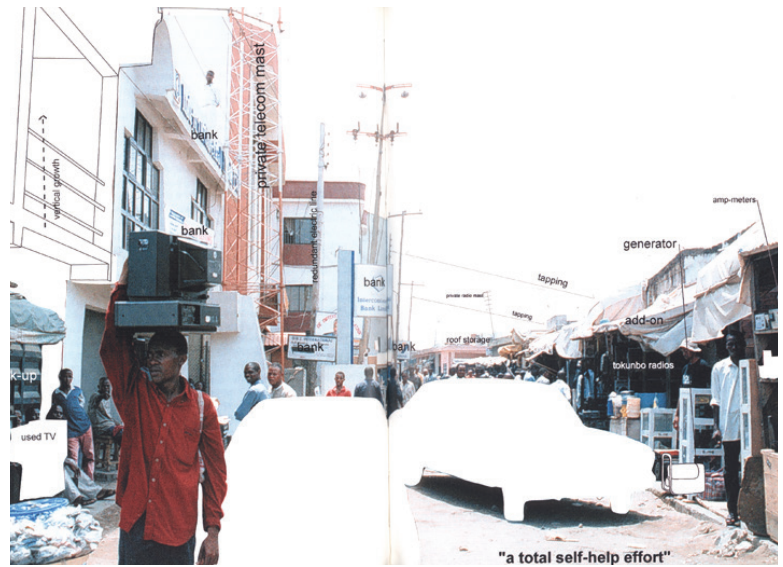
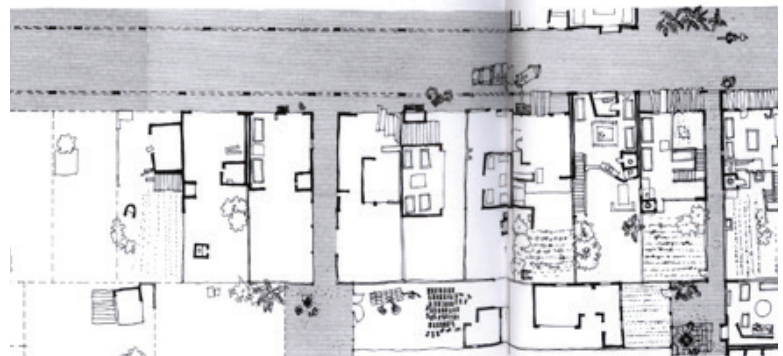


Figure 2.6

Concrete arcade structuring the public space

Steven Holl, Daga Dagatan Housing Competition Entry



level, challenging the systemic processes of urban development which create the condition the design is attempting to solve. For example, approaching Johannesburg from a purely developmentalist, or 'bottom-up', point of view is complicated by the city's history where a very interventionist government actually resulted in quite highly developed, albeit unequally distributed, infrastructure and a relative lack of influence from international bodies such as the IMF and World Bank, in comparison to other global south cities.

However, in the relationship between geography and architecture is the potential for a project which is "neither wholly aesthetic and subjective nor empirical, but rather explorative of the particular material and discursive strategies that...tie concepts to the earth, produce difference on the earth, and foster an earthen political subjectivity."⁶¹ In order to become both more reflective and projective, research and design projects like The Endless City and Lagos Project on the City would need to learn from Christian Schmid's proposition for a more dynamic twofold approach to research which is both synchronic and diachronic. By this he means horizontal research which documents the current state of affairs and vertical research which reveals the historical causality, thereby detecting both exceptional emerging conditions and the mechanisms by which general tendencies manifest in specific contexts.⁶² This is similar to Brenner, Peck and Theodore's argument for bringing greater contextual and historical specificity to the seemingly ubiquitous global spread of neo-liberalism. They propose that this spread is in fact uneven, or variegated, and that a study of its variegations avoids a reading of both generalization and unprincipled variety and instead

61. Gissen, „Architecture's Geographic Turn," 67.

62. Christian Schmid, „Patterns and pathways of global urbanisation: towards comparative analysis," in *Urban Theory Lab: Towards an Investigation of Planetary Urbanization*, ed. Neil Brenner (Cambridge: Harvard Graduate School of Design, 2013), 269.

63. Neil Brenner, Jamie Peck, and Nik Theodore, „Variegated Neoliberalization: geographies, modalities, pathways,” in *Global Networks*, 10, 2 (2010), 182-222, http://metropolitanstudies.as.nyu.edu/docs/10/222/Brenner_Peck_Theodore_2010_Global_Networks_final_PDF_file.pdf.

Contradiction & Mediation

Defining Urban

64. Neil Brenner, „What is Critical Urban Theory?,” in *Cities for People Not for Profit: Critical Urban Theory and the Right to the City*, ed. Neil Brenner, Peter Marcuse and Margit Mayer (New York: Routledge, 2012), 11.

recognizes the relationship between path-dependent patterns and the meta-context.⁶³ It is unfounded to rely on study of contingency and contextual exceptionality when information traverses territorial boundaries and equally as unfounded to rely on study of globalized homogenization when cities retain historiographic specificity. For Johannesburg this is particularly critical because of the confluence of colonial, capitalist and unregulated global markets, the remoteness of its sub-Saharan context, and its natural condition as a tabula rasa at foundation.

This confluence puts into action a process of contradictory relationships, amplified in a city with such a contested history of economic and political power struggles. A starting point for approaching the challenges of urban theory in Johannesburg is through Henri Lefebvre, whose writing is widely regarded as the foundation of critical urban theory (along with Harvey, Castells, Soja), and those who have elaborated on his work. Critical urban theory is based on the proposition that the condition of cities is not a static relationship between entrenched laws, social norms, or economic systems but rather is of cities defined by the “politically and ideologically mediated, socially contested and therefore malleable character of urban space – that is, its continual (re) construction as a site, medium and outcome of historically specific relations of social power.”⁶⁴ The “right to the city” (or “the right to urban life”), as coined by Lefebvre, is the rallying cry of critical urban theorists. This is not ‘right’ in the individualistic legal sense but rather as the broad collective right to a more democratic urbanism that is not driven primarily by accumulation. The struggle for the right

to the urban life is therefore manifest at the urban level which Lefebvre defines as M (mixed, mediator or intermediary), in between G (global) and P (private).⁶⁵ The urban level is where specificity is defined through a process of mediation between G and P and together the three levels constitute what we refer to as the city. Specificity is generated in level M because it “distinguishes itself by assuming a determinate relationship to its ‘site’ or ‘immediate surroundings’ as well as the ‘situation’ or ‘distant surroundings’ and ‘global conditions’. While being ‘projected’ by the level G...level M also introjects the contested dynamics”⁶⁶ of Level P. This specificity it is at risk of disappearance in the face of the homogenizing global level (universal, technologically driven rationale shaped by industrialization and the world market)⁶⁷ and the private level (parcelled and commodified everyday life).⁶⁸ Despite first impressions, the three levels are not intended to be interpreted as concrete scalar lenses which can be analyzed separately from one another, but as the framework for a set of inter-dependent relationships with oppositions at work within each level and between G and M and P and M. This, as Kanishka Goonewardena argues, is a “spatially mediated theory of totality”⁶⁹ and Lefebvre’s most critical contribution to theorizing the city as a collective whole rather and urban space as a space of mediation.

Here then emerges the theoretical idea of mediation, requiring the exploration of the complexity of this term within critical theory and its intrinsic relationship to dialectics. The dialectical approach places focus on the observation and analysis of oppositions and methods for resolving contradictions. Since the theory of contradiction is that it is universal,

65. Henri Lefebvre, *The Urban Revolution* (Minneapolis: The University of Minnesota Press, 2003), 78-80.

66. Kanishka Goonewardena, „The Urban Sensorium: space, ideology, and the Aestheticization of Politics,” *Antipode* 37, no. 1 (2005): 65.

67. Christian Schmid, „Henri Lefebvre, the right to the city, and the new metropolitan mainstream,” in *Cities for People Not for Profit* (New York: Routledge, 2012), 47.

68. Lefebvre, *The Urban Revolution*, 89.

69. Goonewardena, „The Urban Sensorium,” 22.

Defining Contradiction

70. Mao Zedong. „On Contradiction,“ (1937): 2, <http://academics.wellesley.edu/Polisci/wj/China/Mao%20Readings/OnContradiction.pdf>.

71. Fredric Jameson, *Valences of the Dialectic* (London and New York: Verso, 2009), 59.

72. *Ibid.*, 26.

73. *Ibid.*, 36, 47.

74. *Ibid.*, 76.

and without its own internal and relational (with a thing external to itself) contradictions no thing develops and nothing moves,⁷⁰ this becomes a catalyst for study across context, scale and time. The method of resolving a contradiction, however, is not universal for it depends on the specificities of the contradiction. Fredric Jameson defines contradiction as the ‘single thought’ that holds two distinct entities within a unity and locates it at “the point at which tension and negativity divide as much as they relate, or relate as much as they divide.”⁷¹ In *Valences of the Dialectic* he describes the multiplicity of the potential nature of oppositions as a counter to the rigidity of the thesis/antithesis/synthesis mode of Hegelian reasoning. Firstly a mutually dependent relationship, like master and slave, is an asymmetrical dualism rather than a binary opposition because the individuality of each is defined through the other as each is an equal part of a system but one is subordinate. The resolution of the opposition therefore relies on its dissolution and the elimination of difference altogether.⁷² Secondly, a binary opposition is perfectly equal and identity is defined by negation of external factors rather than internal relation, resulting in diverse identities with no particular relationship to each other. Thirdly, juxtaposition, the union of negative opposites, is where identity is defined through pure difference and therefore produces an opposition which has no internal relationship but is unified towards an external cause.⁷³ Synthesis in this last case is the precursor for this unity rather than the overcoming of the fundamental difference. If the opposites are equally strong, or equipollent then one will constantly undermine the other, allowing for no resolution.⁷⁴ Jameson brings the opposition, be it asymmetrical, binary or juxtapositional, into a spatial and temporal,

or historical, analytical context by questioning the nature of an opposition as vertical or horizontal. Tying this argument back to Christian Schmid's proposition for structuring comparative urban study, horizontal implies synchronicity in which a thing and its negation coexist from the beginning and are superimposed over time; vertical implies diachronicity in which the negation of the thing follows the thing itself to produce a contradiction.⁷⁵

75. Ibid., 50-51.

Using the work of Piet Mondrian and his synthesis of binary oppositions of line and colour and figure and ground, Jameson introduces the difference between harmonization, where opposites are given equal prominence to reach a balanced state, versus neutralization, which attempts to destroy the tension and therefore opposition altogether.⁷⁶ The former results in static equilibrium and the disappearance of opposition whereas the latter in fact requires that the opposition and therefore tension be maintained in order to be neutralized.⁷⁷ This paradoxical process is a dynamic rather than static one which produces continuous change. The difference between harmonization and neutralization is analogous to Richard Sennett's concept of the public realm of the city as either a closed or open system in which a closed system risks producing a harmonious equilibrium whereas an open system allows for unstable evolution. Sennett relies on biological analogy arguing that in the evolutionary process, the open system has structures to respond to uncertainty and coordinate change and that the evolution of urban space similarly relies on the existence of such structures. He equates the open system to the cell membrane which while porous is also resistant and therefore provides a frictional interface for negotiation interaction.⁷⁸

76. Ibid., 44.

77. Ibid., 45.

78. Richard Sennett, „The Public Realm,“ *Richard Sennett*, <http://www.richardsennett.com/site/SENN/Templates/General2>.

The collective potential of the public realm is fueled by the ceaseless neutralization of tensions that emerge between oppositions fostered within an open system. In Johannesburg it is important to look for harmonization or the open system because of the apparently hermetic nature of urban form that is inevitably always broken open, a dynamic process made obvious through the perpetual and rapid shifting of territories in the city.

Defining Mediation

Jameson also critically engages in the complexity of defining mediation, a term or process he argues has not been fully explored. Mediation takes on multiple possible roles: it is a metamorphosing prism, the “black box” through which a state passes; it is the binding relationship between opposites, the equation which can define their identity, difference, or both; and it is an inherent relationship which can be made temporal.⁷⁹ He poses the question of whether mediation, as relational process, replaces the need for reaching a solution to an opposition or whether it, as born from within the opposition, itself is the solution and product of the relational process. The multiplicity of mediation is most effectively captured by Theodor Adorno whom Jameson quotes: “mediation is therefore in Hegel never - as any number of fateful misunderstandings since Kierkegaard would have it - a midpoint between the extremes; rather mediation takes place within the extremes themselves: and this is the radical feature of Hegel which is irreconcilable with any moderate or intermediate position. What traditional philosophy hoped to achieve as an ontological foundation turns out to be, not distinct ideas set off discretely against each other, but ideas each of which requires its opposite, and the relation of all of them together is process itself.”⁸⁰

79. Jameson, *Valences of the Dialectic*, 46.

80. *Ibid.* 77.

The distinction between mediate and intermediate is a critical one for though more commonly used the latter implies a level of classification (beginner/intermediate/advanced) whereas the former is defined as “occupying a middle position”, “acting through an intervening agency”, or “exhibiting indirect causation, connection, or relation.”⁸¹ Mediate therefore occurs in both the passive and active sense. The critical point here is that mediation is not only a process but that the mediate is also the agent and product of this process. This process is not an amalgamation or blending of opposites but rather one of re-calibration through exchange whereby differences are multiplied, not erased. A reading of the mediate qualities of the built environment is therefore a proposition that space has the multiplex identity as the site, actor, and product of the relationship between various forms of opposition. Furthermore, as Jameson discusses in the earlier work, *The Political Unconscious*, the process of mediation is that of transcoding, of mobilizing a language which appeals to the underlying unity of things rather than the reality of fragmented appearance,⁸² a critical endeavour in the context of Johannesburg, as previous discussed. In line with Robinson and Schmid’s cry for a more varied understanding of urbanity, mediation seeks first to establish a general identity in order to then register specific identification and differentiation and is therefore as much a process of establishing difference as of establishing identity.

The capacity to understand urban space through a lens of mediation is made operative in critical urban theory where “the essence of the city is determined not by size, density or heterogeneity,

81. „Mediate,“ *Merriam-Webster*, <http://www.merriam-webster.com/dictionary/mediate>.

82. Fredric Jameson, *The Political Unconscious: Narrative as a Socially Symbolic Act* (Ithaca: Cornell University Press, 1982), 7.

Ideology & The City

Metrics of the Unquantifiable

83. Schmid, *Cities for People Not for Profit*, 49.

84. Chris Wachsmuth. „City as Ideology,” in *Urban Theory Lab: Towards an Investigation of Planetary Urbanization*, ed. Neil Brenner (Cambridge: Harvard Graduate School of Design, 2013), 346.

but by the quality of active, everyday processes of interaction.”⁸³ In other words, cities cannot be defined, measured or calculated solely based on a traditional concept of the city and associated systems of metrics, namely the size, density, heterogeneity triad. David Wachsmuth argues that the fundamental conceptions of the traditional city inherited from the Chicago School, namely city versus country, city as self-contained system, and city as ideal type, no longer apply as relevant analytical categories as urbanization explodes. They remain as phenomenal concepts however because they mediate our experience of more complex processes of urbanization that are produced through capitalism but they also obscure those processes.⁸⁴ This argument becomes particularly salient in a context like Johannesburg whose complete history of development is tied to capitalist processes of city making; whose urban form, albeit ad hoc, was conceived in the image of British and American conceptions of the city; and yet whose identity was shaped by the imbrication of frontier settlement and non-western modes of urban occupation. By straddling characteristics of the global north and global south over time Johannesburg retains the influences of the traditional city concepts and yet makes clear that these concepts cannot serve as sole analytical foundation because the lived experiences of its urban life challenge traditional western ideologies.

With regard to methods of analysis and tools of representation, Lefebvre discusses the difficulties of synthesis and extrapolation in urban studies and who, or what combination of specialists have the capacity to synthesize the urban phenomena in its totality. He asks, in a question very salient to Brenner, Schmid

and Merrifield's criticism of The Urban Age Project, "who is going to demonstrate that the 'language of the city', to the extent that it is a language, coincides with ALGOL, Syntol, or FORTRAN, the languages of machines, and that this translation is not a betrayal? Doesn't the machine risk becoming an instrument in the hands of pressure groups and politicians?"⁸⁵ In the contemporary context, for example, the metrics of global city theory, measuring such things as direct global flight connections [Fig 2.3] and number of financial headquarters, have become the criteria for competitiveness towards which many municipal governments push at the jeopardy of collective everyday urban life.⁸⁶ There is no question that digital analytical tools used by geographers, sociologists and designers have embedded more nuance and complexity into their systems since Lefebvre's 1970s critique, and will continue to do so, but the question remains as to the validity of their eventual application when the system relies on yes or no questions and answers and therefore produces fragmentary knowledge. Kanishka Goonewardena warns against the danger of the post-modern "*fetishism* of space that masquerades as spatial 'theory'" and "*reified* spatial 'fixations' in *unmediated* theoretical form"⁸⁷ On the other hand, the mapping of our phenomenal experience of urban space, through real-time documentation or observation, is also unmediated unless extrapolated to relate its historical moment to the global social and economic structures that shape the spaces of our lived experience and tie them to the totality of the city. This is characteristic of a journalistic style of urban research which accepts situations at face value, like the appearance of informal systems, rather than critically analyzing the socio-economic polarization of contested cities.

85. Lefebvre, *The Urban Revolution*, 59.

86. Toronto is a key example here. See Stephen Kiper and Roger Keil, "Toronto Inc.? Planning the Competitive City in the New Toronto," *Antipode* (2002): 227-264.

87. Goonewardena, "The Urban Sensorium," 57.

Aesthetics & Ideologies

88. Ibid., 50.

89. Ibid., 51.

90. Ibid., 52, 55.

In his essay “The Urban Sensorium”, Goonewardena draws from Jameson to propose that while Kevin Lynch’s conception of cognitive mapping in *The Image of the City* is intended to break the spatial bounds of the map and engage the dialectic between perceived reality of lived experience, or aesthetics, and imagined idea of the city as a totality, or ideology, it falls short of grasping the mediate relationship between the production of space and the production of ideology.⁸⁸ Aesthetics refers to the perceptible textures of space, and ideology refers to the representation of the imperceptible structures of totality. Space, according to Goonewardena, is the “postmodern opium of the people.”⁸⁹ The complex differentiation between a process or relationship which is mediate as opposed to immediate, meaning unmediated, is fundamental to the concept of the ‘Urban Sensorium’. To mediate is to bring to light the reality of the aesthetic dimension of everyday life in relation to the imagined ideological structures of society. An ideology is an illusion but it alludes to reality, acting as a map through which we respond to the conditions of our lived existence.⁹⁰ Maps, however, require interpretation. Ideology is therefore in and of itself immediate but is mediated through the production of urban space because space itself, not just those who plan it, becomes an agent of mediation. Space, once produced, is also not faithful to either the imagined totality or the real everyday existence and instead becomes an actor in the relation between the two and subsequent redefinition of both. Wachsmuth, who builds from Goonewardena, argues that the urbanization of ideology is reflected in the relationship between what he calls ‘urban ideological effects’, where urban experience distorts our understanding of global structures, and ‘ideological

conceptions of urbanization', where global structures distort our understanding of urbanization'.⁹¹ In arguing that there is a gap between our consciousness of everyday life and the global structures that shape the spaces of that life, and that this gap is produced and perpetuated through city building, Goonewardena and Wachsmuth relate directly to Mbembe and Nutall's theorizing of Johannesburg as the 'Elusive Metropolis.' An understanding of the city's elusiveness is critical because it "point[s] to the gap between the way things actually are and the way they appear in theory and discourse"⁹² and thereby renders traditionally rigid definitions of urbanization more fluid. Johannesburg has a tendency to exaggerate apparently normative processes of urban development but also to produce exceptional ones that seem absurd or driven by specific political (ideological) will. Understood in isolation neither process is able to explain the city's development in great complexity but once understood in relation the opposition between normative and exceptional urban spaces within one system begins to reveal the gap between the perception of urbanization overall and the reality of lived experience. The relation between the two is a mediate one, or a process of mediation, which redefines the urban system as a whole.

Both Goonewardena and Wachsmuth's conceptions of urban space draw on Lefebvre's definition of the urban (mediate) level as "pure form: a place of encounter, assembly, simultaneity... an abstraction, but unlike a metaphysical entity, the urban is a concrete abstraction associated with practice."⁹³ The urban is concrete, rather than phenomenal, mediate because it is both ideology and lived reality made visible through the intermediary of

91. Wachsmuth, „City as Ideology," 346.

92. Mbembe and Nutall, „Introduction: Afropolis," 25.

Towards a Mediate Method

A Framework

93. Lefebvre, *The Urban Revolution*, 118.

94. Lefebvre, *Writings on Cities*, 100-101.

built form which in turn also shapes those ideologies and realities and our perception of them. The 'urban level' is the site, the actor and the product of mediation between successive layers of external histories which are internally calibrated to continually redefine the city. This mediation between the "near order and the far order,"⁹⁴ rather than a simple amalgamation, is the process through which unique forms of urban development are produced. This research is organized around the premise that given the shifting nature of contextual specificity and global ideology, the process of mediation is perpetual because it is without achievable end goal given that it builds upon itself by constantly neutralizing oppositions through the building, destroying, and rebuilding of space. The production of mediate space is a perpetually dynamic and consequential system of mediation.

The proposed focus on mediation in this thesis is intended to both critique singular methodologies of urban analysis and bring to light the issues, and subsequently relevance, of Johannesburg itself which makes it a critical context for generating a mediate method. The proposed methodology seeks to accomplish this in three sequential ways: re-calibrate the periodization of Johannesburg's history in order to focus on broader economic and cultural processes rather than on ruptures associated with specific political action; define the primary relationships of tension that emerge from these processes that inevitably leave their imprint on the built form of the city; and frame concrete urban forms, in this case three pairs of 'devices', as spaces which originate from this tension as well as reshape it. [Fig 2.7] The tensions emerging from the cultural transitions deal primarily with the dialectic between alterity and identity while

those emerging from the economic transitions deal with planning and contingency. Moving beyond Johannesburg's geographic location and chaotic appearance, this research does not frame the city as one of the global south but rather it is structured on the premise that its economic development has resembled that of an advanced capitalist city of the global north while its cultural development has resembled that of a contested post-colonial city of the global south. And yet while the opposition between global city and developing city is therefore a critical one to Johannesburg's history, this research goes further to show that although this opposition may be apparent on the surface of everyday life, key urban devices act subversively to complicate such a clear definition of duality.

These urban devices are typologies that purposefully straddle a fine line between being contextually and historically specific and universally generic. Each device is a key product of this tension and a convergence of both economic and cultural transitions but also a strategic tool in shaping the city during a specific period of time. These are by no means the only important typologies of urban development in Johannesburg, but they are ones of strong intention and particular power in giving both aesthetic and ideological shape to the city. The relation of each pair, two dimensions of the same city, is a concrete abstraction of the urban totality at a place in time because through the contradictions latent within each relationship a new context originates. One triptych of devices (labour compound, municipal township, minibus taxi rank) focuses on forms which appear unique to Johannesburg while the other triptych (block grid, multiuse urban tower, suburban

shopping and business complex) focuses on forms which are generally considered normative to western urban development. By framing what appear to be completely different formal and spatial typologies, as is the case within each tryptic, within a diachronic genealogy and by arguing that their development is evolutionary, analysis challenges the study of built form in purely aesthetic architectural terms and instead seeks to analyze built form by its economic and cultural origin and impact. The emphasis on specific built forms is, nonetheless, intended to place the capacity of mediation as generative theory directly in the sphere of the projective practice of architecture rather than more documentary practice of urban geography. The method of this research is therefore intended to weave a delicate disciplinary path between the two which simultaneously grounds urban geography in the built forms of the city and architecture in the geographical meta-context (economic and cultural) of time and place. From the perspective of an architect, this is based on the conviction that the importance of architecture lies outside the object itself and in relation to the tension it manifests in the urban environment.

Each of the six urban devices studied is mediate because each subverts its own apparent normalcy or exceptionality, thereby transforming into something other than what it started out being and in turn having unanticipated impact on the broader geographical context. In doing so it subverts the relationship between ideology and aesthetics by both creating and destroying the Urban Sensorium. Johannesburg is axiomatic of this dialectical loop in urban development because of its nature as a city of multiple extreme identities accumulated over

time, a city with a cosmopolitanism that thrives despite all odds, and a city which evades reductive categorization. As Loren Kruger says, “Johannesburg [has] appeared to planners and artists alike to be unimaginable as well as unmanageable; it seem[s] not merely to elude representation, but rather to sabotage it.”⁹⁵ The subversion at work in each case study is also what, following Jameson’s arguments for dynamic versus static systems, neutralizes the tensions embedded within space and thereby perpetuates the evolution of new mediate formations (if the tension were harmonized it would be resolved whereas when neutralized it evolves with changes in the original source of opposition). The selection of a pair of urban devices to be studied in each period not only juxtaposes normative versus exceptional processes but also frames each case as an independent entity that can nonetheless only be characterized as normative or exceptional in relation to its counterpart; an approach which builds from Aureli and Ungers’s reading of the city as an archipelago. In each period the parts of a pair of devices are understood as constitutive fragments, equally powerful players, in the formation of the urban totality at the time. They are therefore intrinsically related through their position within and definition through the urban system as a whole, and yet do not necessarily have a direct physical relationship that would result in an easily definable confrontation. Nevertheless to study one and not the other would be to miss the critical role both of each device and of the mediate relationship between them in directing Johannesburg’s urban evolution.

95. Loren Kruger, *Imagining the Edgy City*, 151.

Figure 2.7 (next spread)

Proposed Analytical Framework

Cultural Identity
(Transitions)

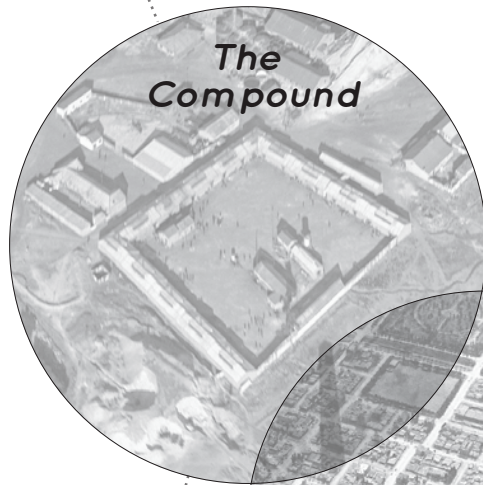


Actors/Influences
(Tensions)

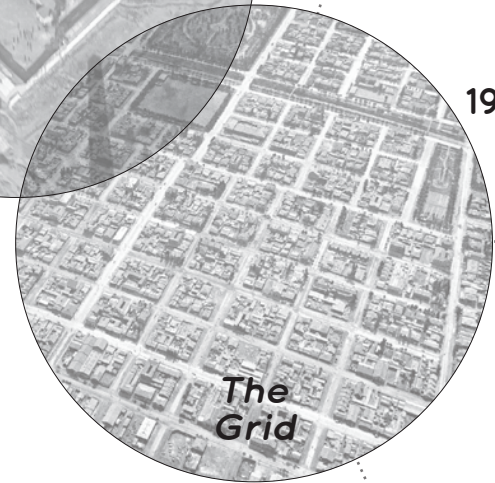
Immigrant Society
+
Boer Farmland

Urban Devices
(Mediations/Mediators)

1886



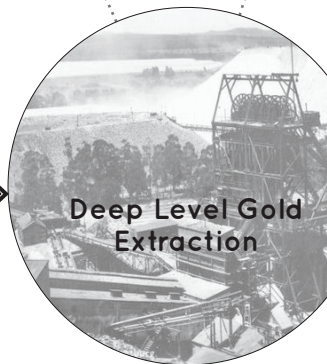
1930

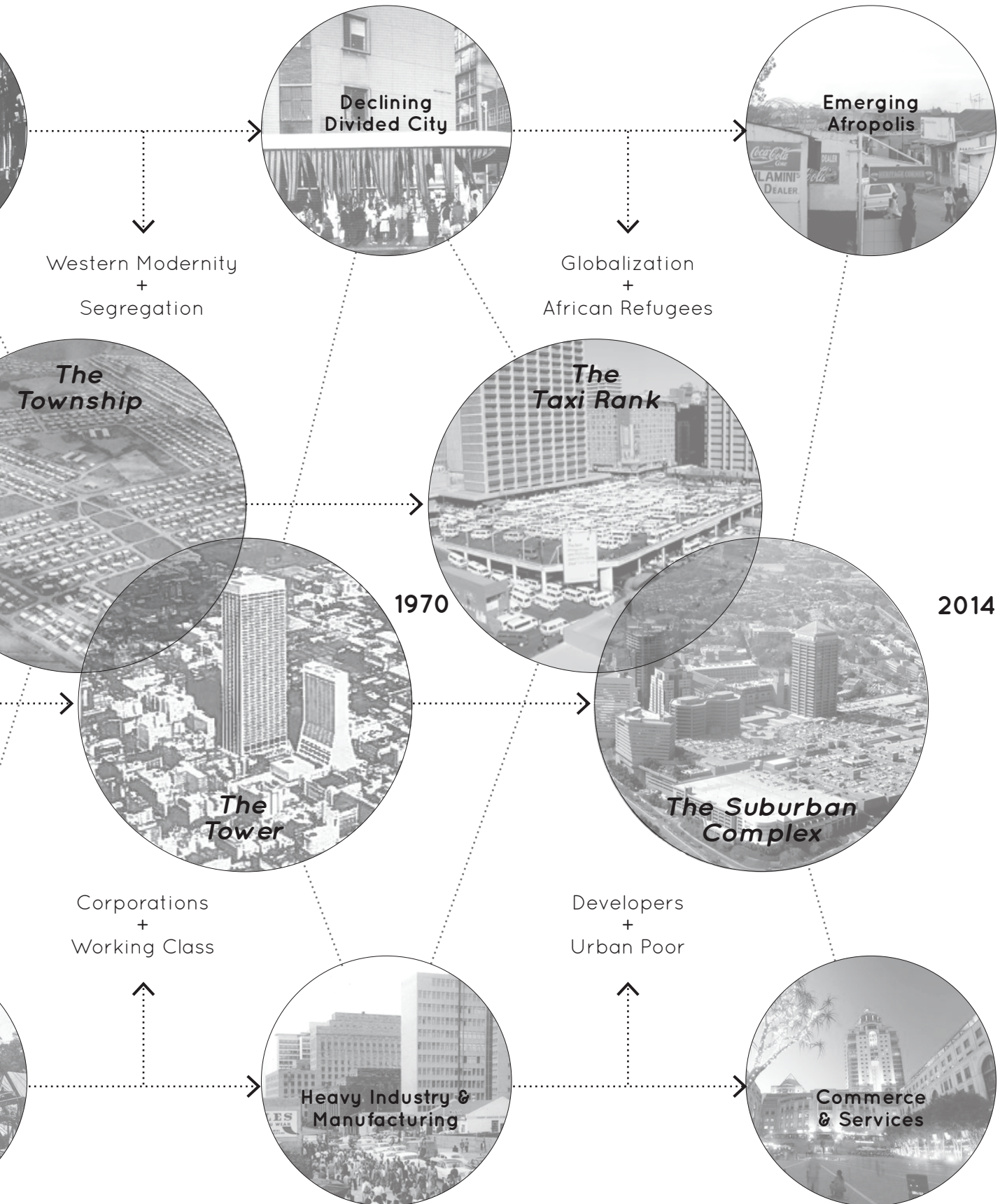


Actors/Stakeholders
(Tensions)

Randlords
+
Migrant Labour

Economic Foundation
(Transitions)





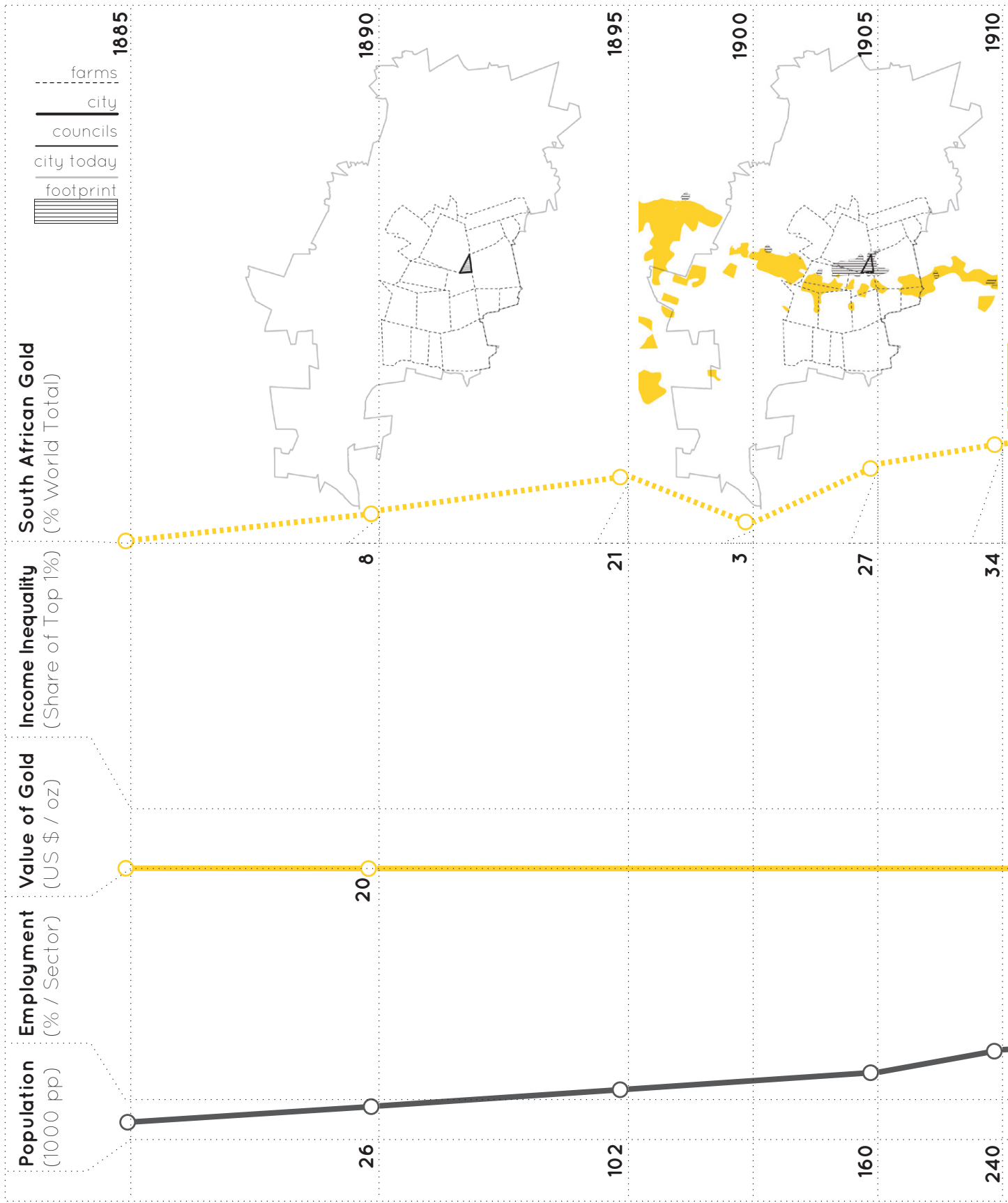
So we return to the theme of a city whose urbanism, whose juxtapositions of form and personality, whose inflections, interminglings and gaps bespeak a complex, convoluted modernity which neither colonial nor apartheid rules could prevent or undo....From one perspective, South African spaces are built to order, to survey, to administer, to facilitate mining, industry and work, to exemplify essentialized distinctions between colonizer and colonized, to reflect a 'European' taste which is coloured by the exotic and responds to local climate. From another, South African spaces exhibit the hybridities of immigrant cities, where diverse people arrive and amalgamate, where identities are shed and new ones taken on, where streets, neighbourhoods and suburbs collide in the formation of a modernity that contains its own chaotic pile-up of meanings and styles of life.⁹⁶

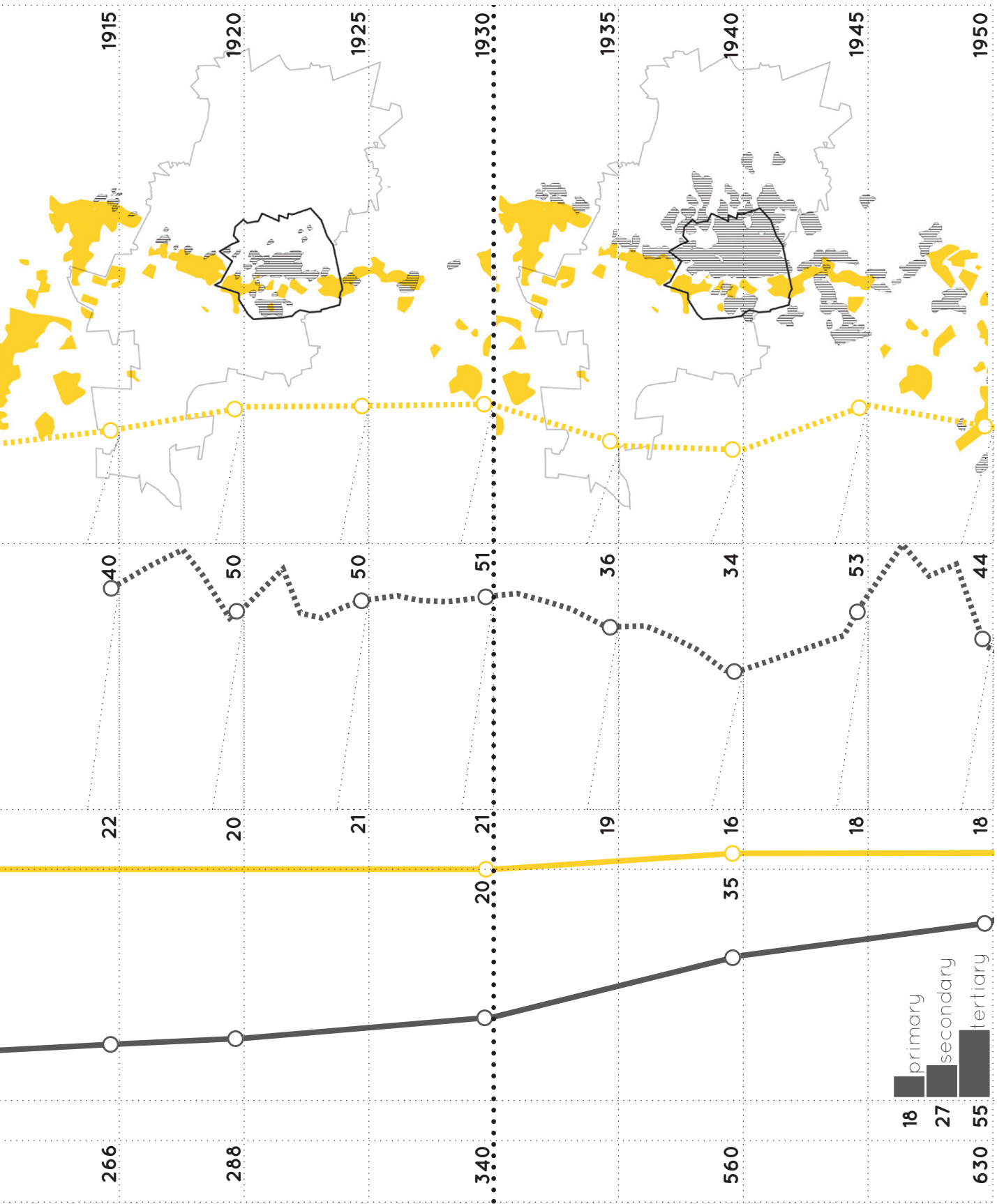
METHOD

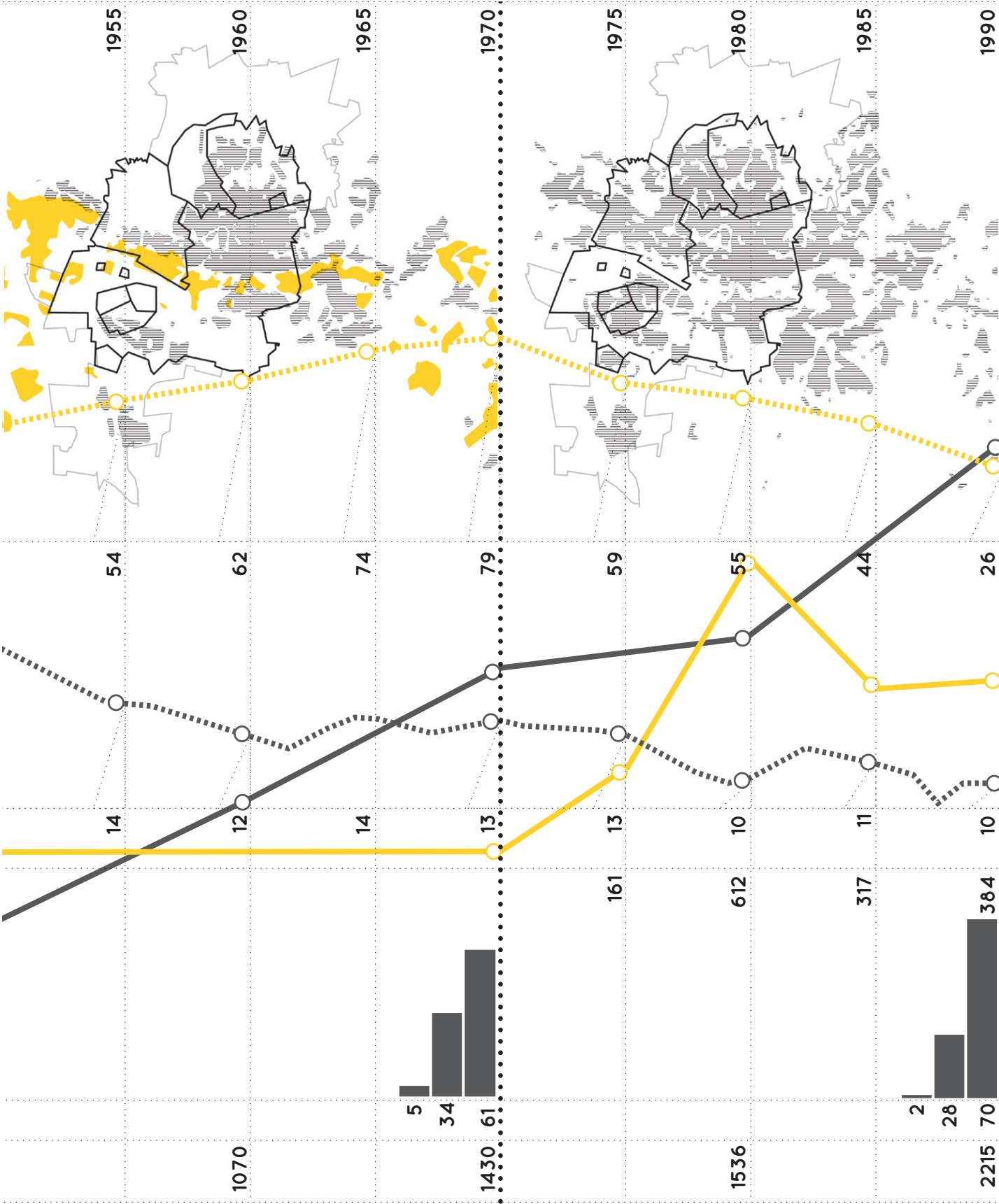
96. Herwitz, „Modernism at the Margins,“ 418-419.

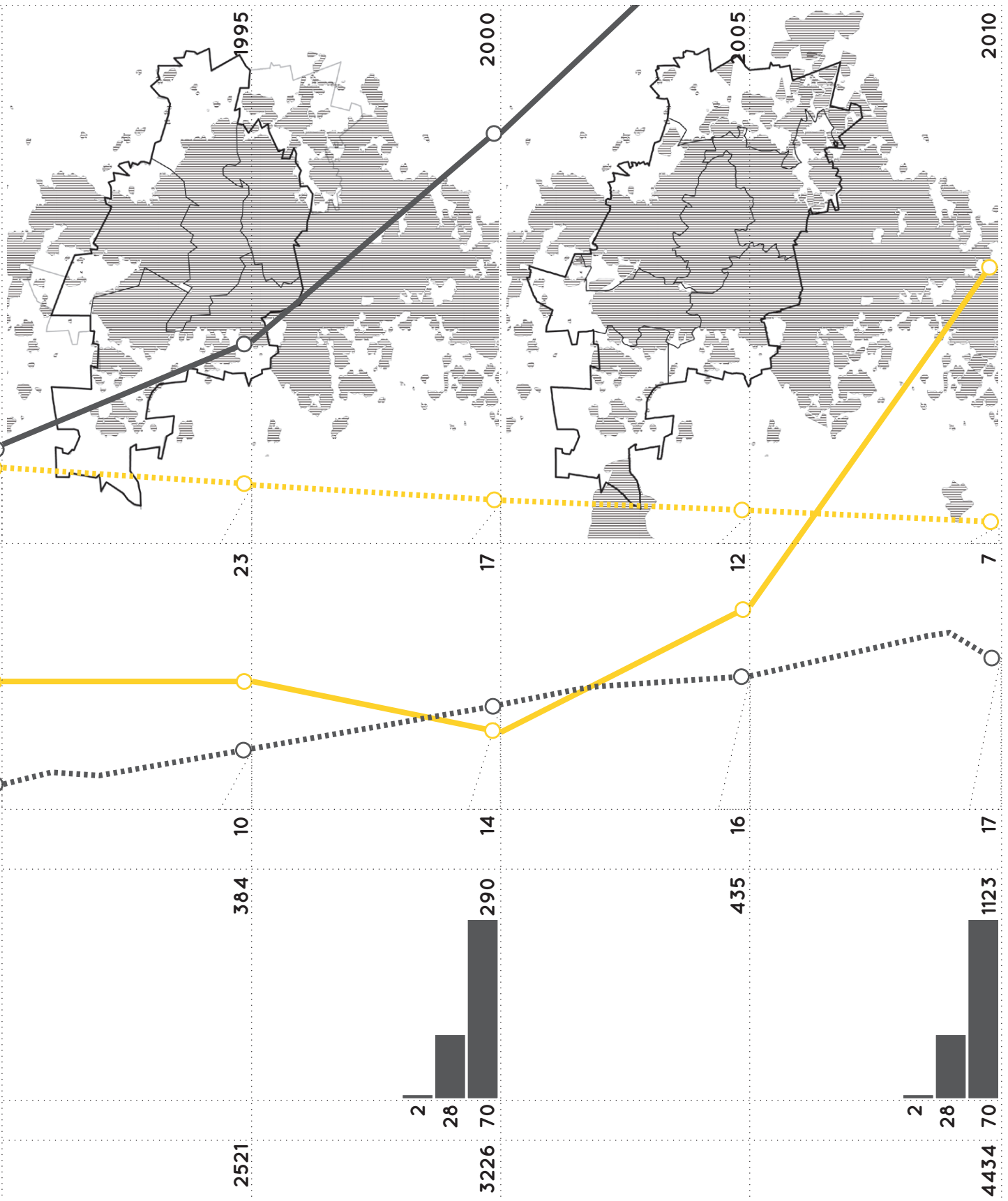
Figure 3.0.1 (next two spreads)

Expansion of Johannesburg in relation to its administrative boundaries, total population, and employment by sector, as well as South African income inequality, gold production and world gold value









In their book *Uniting a Divided City*, Jo Beall, Ian Crankshaw and Sue Parnell argue that Johannesburg is not only significant for understanding the dynamics of divided cities (because in reality all cities are divided, some just more explicitly so than others), but it is therefore also axiomatic of challenges facing the typical 21st century city.⁹⁷ According to the authors, from a cultural and demographic perspective Johannesburg is first, a linguistically, religiously, and culturally diverse city and therefore a cosmopolitan centre, like major cities of the North, yet one in which many occupants retain strong non-urban ties, like cities of the South. And second, Johannesburg's population is expanding at a rate akin to cities of the South and increasingly part of a rapidly urbanization regional conglomeration. From an economic perspective, Johannesburg is, first, an unequal city with both a large poor population and substantial middle and upper class ones, who expect the government to address global competitiveness with equal commitment to poverty reduction.⁹⁸ The historical relevance of inequality for South Africa over time is demonstrated by Thomas Piketty's research in *Capital in the Twenty First Century*, which shows that the country's income inequality and employment by sector breakdown followed the same general trend as the United States.⁹⁹ Income inequality was high pre-WWII, decreasing on average between WWII and the mid 1970s, and increasing to pre-war levels today while primary and secondary sector employment together were equally as important as the tertiary sector in 1950, whereas today the latter dominates. This also supports Beall, Crankshaw and Parnell's point that Johannesburg has an economy in transition towards liberalization which, like cities of the North, is shaped by internal restructuring rather

97. Beall, Crankshaw and Parnell, *Uniting a Divided City*, 7-9.

98. Ibid., 8.

99. Thomas Piketty, *Capital in the 21st Century* (Cambridge: Harvard University Press, 2014), Technical Appendix: Figure I.1, 2.4, 9.9, <http://piketty.pse.ens.fr/files/capital21c/en/Piketty2014FiguresTablesLinks>.

than IMF/World Bank imposition but, like cities of the South, includes the imperative to manage, rather than marginalize, unregulated economies. Lastly, in Johannesburg the renegotiation of the relationship between public and private sectors has seen a shift towards the privatization of infrastructure and services visible in cities of both the North and South. The power of the gold industry and the socially interventionist government have shaped Johannesburg in particular ways, however the more general characteristics of population growth, class division, and economic transition have also been critical factors in city building processes over the city's 130 year history. [Fig. 3.01]

The periodization of this 130 years into 1886-1930, 1930-1970, and 1970-today takes into account both circumstances specific to Johannesburg's economic and cultural development as well as aligning with similar trends globally. As previously mentioned, this breakdown is intended to re-orient study on Johannesburg away from the typical 1886-1948, 1948-1991, 1991-today, political periodization which is rigidly specific to South Africa. The new dates of 1930 and 1970 are not in and of themselves of critical importance but are understood as tipping points within periods of overlapping economic and cultural transition from which specific urban devices were developed that had profound spatial impact on the formation of the city as a whole. There is therefore generally more focus on continuity than rupture insofar as these transitions, though often quite rapid and pronounced in a context which tends to exaggerate change, are part of the evolution of the city over time. These two dates are not surprisingly more in line with global cultural and economic

shifts than 1948 and 1991 and therefore position Johannesburg's development in relation to how it was influenced by the Depression and WWII and the deindustrialization and decentralization beginning in the 1970s.

The following detailed timeline [Fig 3.02] relates events and transitions in Johannesburg's cultural and demographic history to those of its economic history and locates the built developments which emerge from these transitions between. To briefly summarize the three periods of analysis: the first transition, starting from the existing context of farmland solely occupied by Boers since the early 1800s, occurs within a decade of the city's foundation when MacArthur-Forrest cyanide extraction is introduced in 1890, making deep excavation a viable investment and shifting the gold rush from surface digging into a capital and labour intensive industry. This is coupled with the rapid expansion and relative diversity of the city's pioneer population and the transition from a camp to a permanent settlement on relatively blank territory. In many ways Johannesburg was typical of the development of resource based and pioneer settlements but the confluence of remoteness and colonial management models resulted in a particular city building process. The primary urban devices to emerge are the mine-owned compounds for migrant labour and the government surveyed township grid for the settlement, now the central business district. The second period of transition occurs with increased government investment in infrastructure, heavy industry and services in the late 1920s as Johannesburg's reputation as a modern cosmopolitan city solidified and it began to create itself in this image. Combined with the expansion of manufacturing, the

massive rural migration during WWII, the strength of gold and the incredible output of the Witswatersrand mines at the time ensured not only stability but prosperity through the 1930s. This period was for many cities one of increased government intervention through industrialization and urbanization due to migration towards employment opportunities. In Johannesburg this was less due to depression, given the counter-recessionary nature of gold, and more due to drought and aggravated by the relative youth of the city which was not prepared for such rapid population increase. The primary urban devices here are the state subsidized housing developments, or non-white townships, and two rounds of tower building in the CBD, in the mid 1930s and the late 1960s to early 1970s. The third period of transition occurs with the beginnings of mass social unrest and economic decline around the 1976 Soweto youth riots and state legislated industrial decentralization programs as well as various global sanctions and embargoes. This combined with the opening up of South Africa to the world as apartheid disintegrated and the relaxing of immigration controls as civil wars in Nigeria, the Congo, Mozambique, Angola and Zimbabwe displaced large populations. Such trends, while certainly related to a specific political transition in this case, are similar to the deindustrialization, decline and increasing transnationalization of major cities worldwide and the shift towards service based and liberalized markets. The primary urban devices of this last period, which now strongly shape Johannesburg, are the speculative retail and business complexes in the northern suburbs and the taxi ranks, or stations, serving the semi-unregulated minibus taxi network which supplements the long neglected public transit system.

Figure 3.0.2 (next two spreads)

Detailed Timeline of Economic and Cultural Transitions and Spatial Investments

Economic Trends	Important Economic Dates & Events	Important Urban Buildings & Events	Cultural Trends
Digging	<p>1886 Gold discovered</p> <p>1887 Stock Exchange founded</p> <p>1887 Chamber of Mines founded</p> <p>1890 Cyanide extraction</p>	<p>1886 First Survey</p> <p>1890 Second Survey</p> <p>1891 Horse drawn trams</p> <p>1893 New stock exchange</p> <p>1897 First Map</p> <p>1897 Railway Station</p> <p>1897 Post Office</p>	<p>1885</p> <p>Camp</p>
Boom	<p>1895 Share Boom</p> <p>1896 Inner City Explosion</p> <p>1900 Gold Standard Act</p>	<p>1896 First Census</p> <p>1899 Anglo Boer War</p> <p>1902 British defeat Boers</p> <p>1904 Chinese labour recruited</p> <p>1904 'Coolie Slum' relocation</p>	<p>Mixed Immigration</p> <p>1895</p> <p>1900</p>
Capital		<p>1906 Electric Trams</p>	<p>Controlling</p> <p>1905</p>

1910	Chinese Labour repatriated.								
1910	Union of South Africa.								
1913	Natives Land Act.	1913 Market Hall.							
1913		1915 City Hall.							
1917	Anglo-American formed.								
1922	Rand Revolt.								
1923	ESCOM established.								
1925	Tarrif's Act								
1927		1927 Jeppe Power.							
1928	SA Iron & Steel Ind. Corp.								
1929	NY Stock Exchange Crash								
1931	UK leaves Gold Standard								
1932	SA leaves Gold Standard								
1932	Drought								
1933		1933 Park Station.							
1935		1935 Orlando - 3000 houses							
1936	Land Act								
1937	Gold shares crash								

Diversity

1915

Political Growth

1920

1925

World City Status

1930

1935

Rural Migration

1940

Generation & Stability

State Investment

Depression

Boom

1945	Wits mines = 96% SA gold	1945	59% Black Pop. Growth	1945	1945	1945	1945
1946	African Mineworkers Strike	1948	Buses replace Trams	1948	National Party elected	1948	1948
1946	Gold in Orange Free State	1950	Hillbrow boom begins	1950	Suppression of Communism	1950	1950
1949	Gold price rise 44%	1950		1950 Group Areas Act			
1951	Anglo-American world #1	1951		Bantu Authorities Act			
1956	Mine Houses lend R6m	1953		Bantu Education Act			
1957	Western Deep Mines	1955		Sophiatown demolition			
		1955		Klipfontein Freedom Charter			
		1956		The Treason Trials			
		1959					
		1960		ANC Banned			
		1960 Exchange Control imposed		1960 Sharpeville Massacre			
				South African made Republic			
		1962					
				Rivonia Trial			
		1962		Soweto formed			
		1965 53,000 state houses					
		1966 Sandton established		Rhodesian Bush War			
		1967 Carlton Centre		1966 Congo Crisis			
		1968		1967 Nigerian Civil War			
				Civil Rights Movement Ends			
		1968					
				Telkom Tower			
		1968		Standard Bank			
		1970 Kruggerand introduced					
		1970 Trust Bank					
		1971 Smithsonian Agreement					
		1972		Highpoint Hillbrow			
		1973		Marble Towers			
		1973 World Oil Crisis		1973 Sandton City Mall			
		1976		Ponte City Tower			
		1977		Roodepoort established			
		1977 UN Arms Embargo		1975 Angolan Civil War			
		1977 Taxi industry begins		1976 Soweto Youth Riots			
		1979		1977 Group Areas Amended			
				1977 Mozambican Civil War			
				Eastgate Mall			

Import Substitution & Stability

Boom

Urbanization & Activism

Political & Cultural Isolation

1980

Revolution

1985

1990

1995

2000

2005

2010

African Immigration & Desegregation

1980 w/its mines = 3% SA gold						
1982 Regional Ind. Dev.						
1985 EU & UK Sanctions	1985 11 Diagonal	1985 Dissolution of Bantustans				
1985 Global Credit Line deleted	1985 Sun Hotel					
1985 SA trade unions Congress		1989 Fall of Berlin Wall				
		1989 Fall of Soviet Union				
		1990 Fall of National Party				
1994 New city boundaries						
1995 JSE deregulated		1994 ANC Elected				
1999 JSE moves to Sandton		1995 Rugby World Cup				
2000 iGoli 2002 framework		1996 Truth & Reconciliation Comm.				
2000 Municipal boundaries	2000 Montecasino	1997 Congo Civil War				
2002 Ja'burg 2040 plan	2002 Metro Mail Rank					
	2003 Bara Rank					
	2005 Brickfields Housing					
	2006 Gautrain construction					
	2007 Melrose Arch					
	2009 Rea Vaya bus system	2008 Xenophobic Riots				
2010 SA joins BRICS		2010 World Cup				

Decentralization & Decline

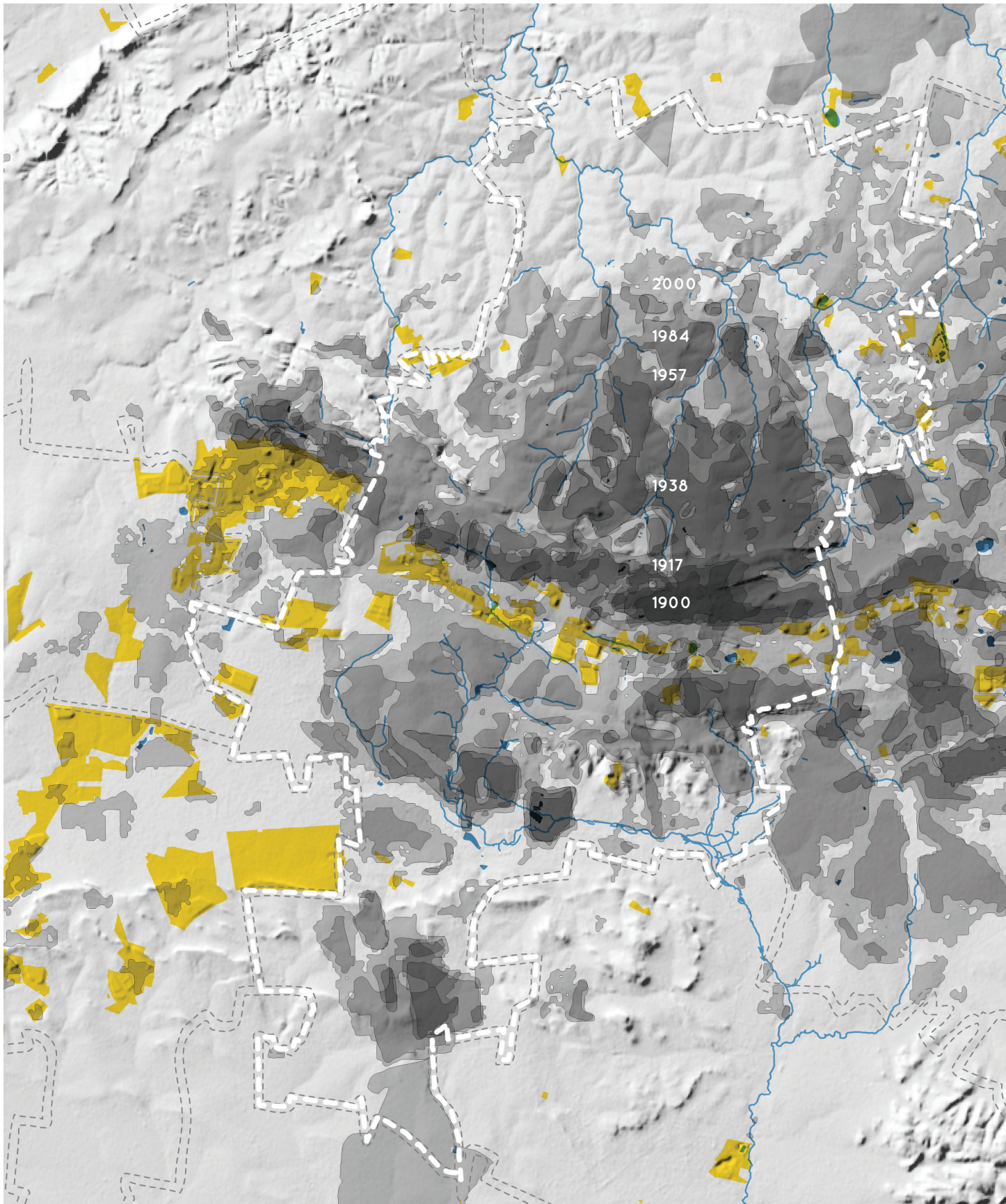
Restructuring

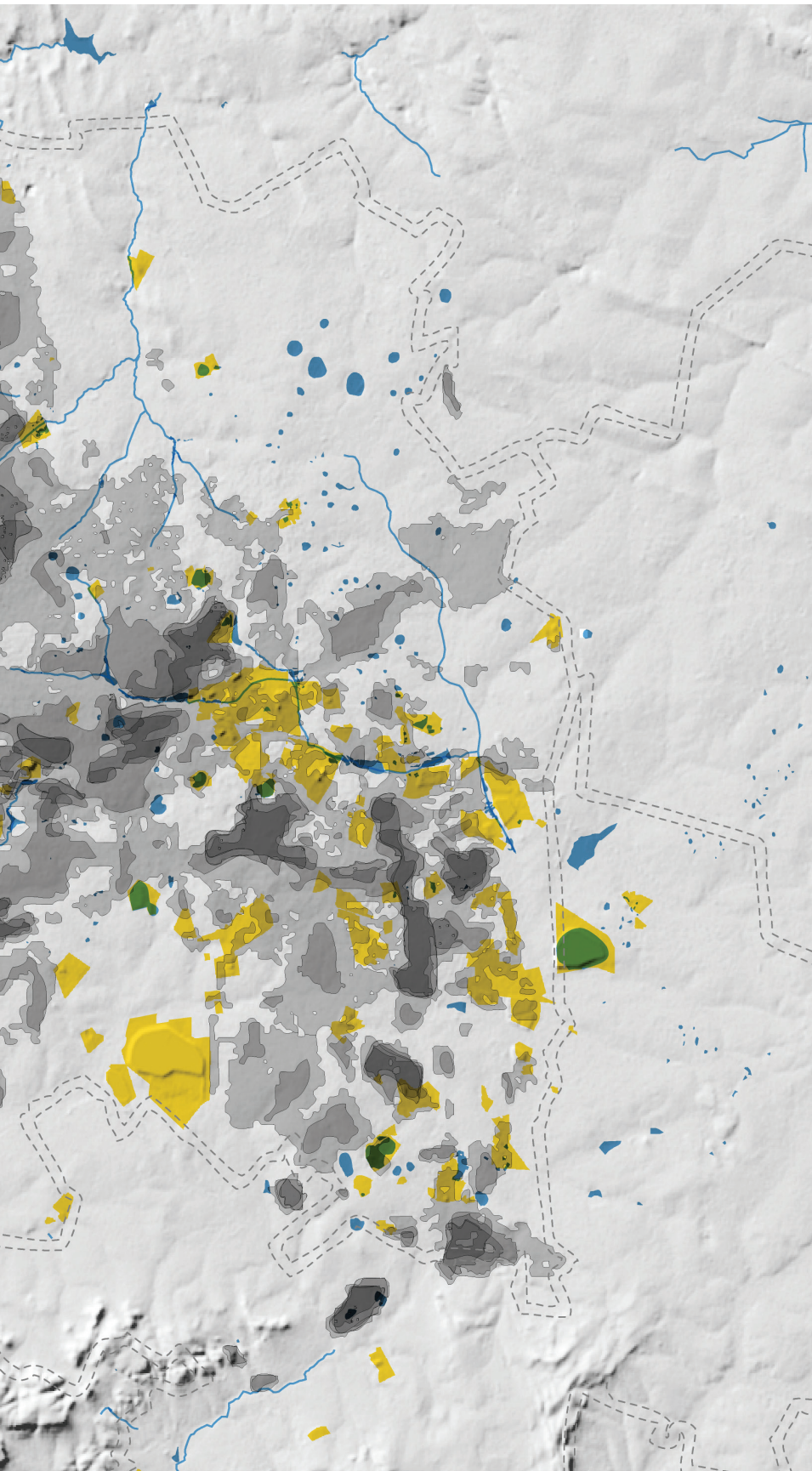
Privatization

Before expanding the diachronic research through the three historical periods, this chapter draws from Johannesburg's potential position as an axiomatic 21st century city to set the present day contextual backdrop. A series of maps at the territorial scale juxtapose economic with demographic trends to illustrate their tension across the city as a whole. These maps are based on City of Johannesburg 2011 census information made available through the Gauteng City Region Observatory. In combination with these maps is a selection of my own photographs from 2009 and 2010 in various parts of this territory which try to speak to the everyday spaces characteristic of these economic and demographic trends and the visibility of past layers of their development.

Johannesburg Now

Territorial Maps and Everyday Spaces





Mining Belt & Settlement Expansion

The East-West axis of the gold reef spurred the direction of otherwise unbounded urbanization and created a North-South socio-economic divide, from early in Johannesburg's history, encouraging speculative northern suburbanization.

Lakes & Rivers



Mine & Residual Areas



Urban Footprint



Figure 3.11

Mining & Urban Expansion





The Weight of Commissioner Street

Commissioner Street housed many of early Johannesburg's important financial and institutional buildings. It is the city's portion of Main Reef Road, the major East-West artery which connected all the Rand mines and towns to the CBD.

Figure 3.1.2

The weight of Commissioner Street



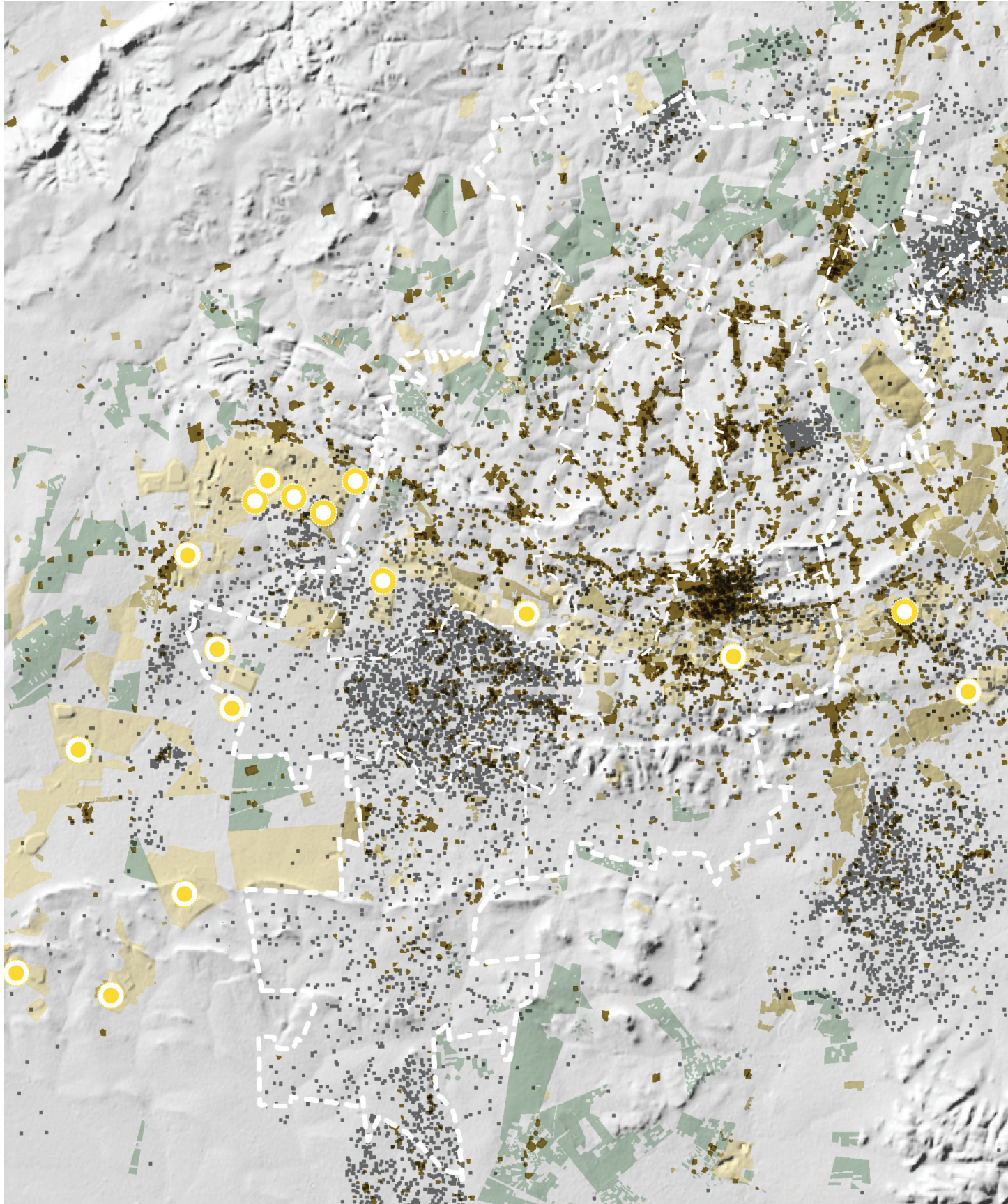


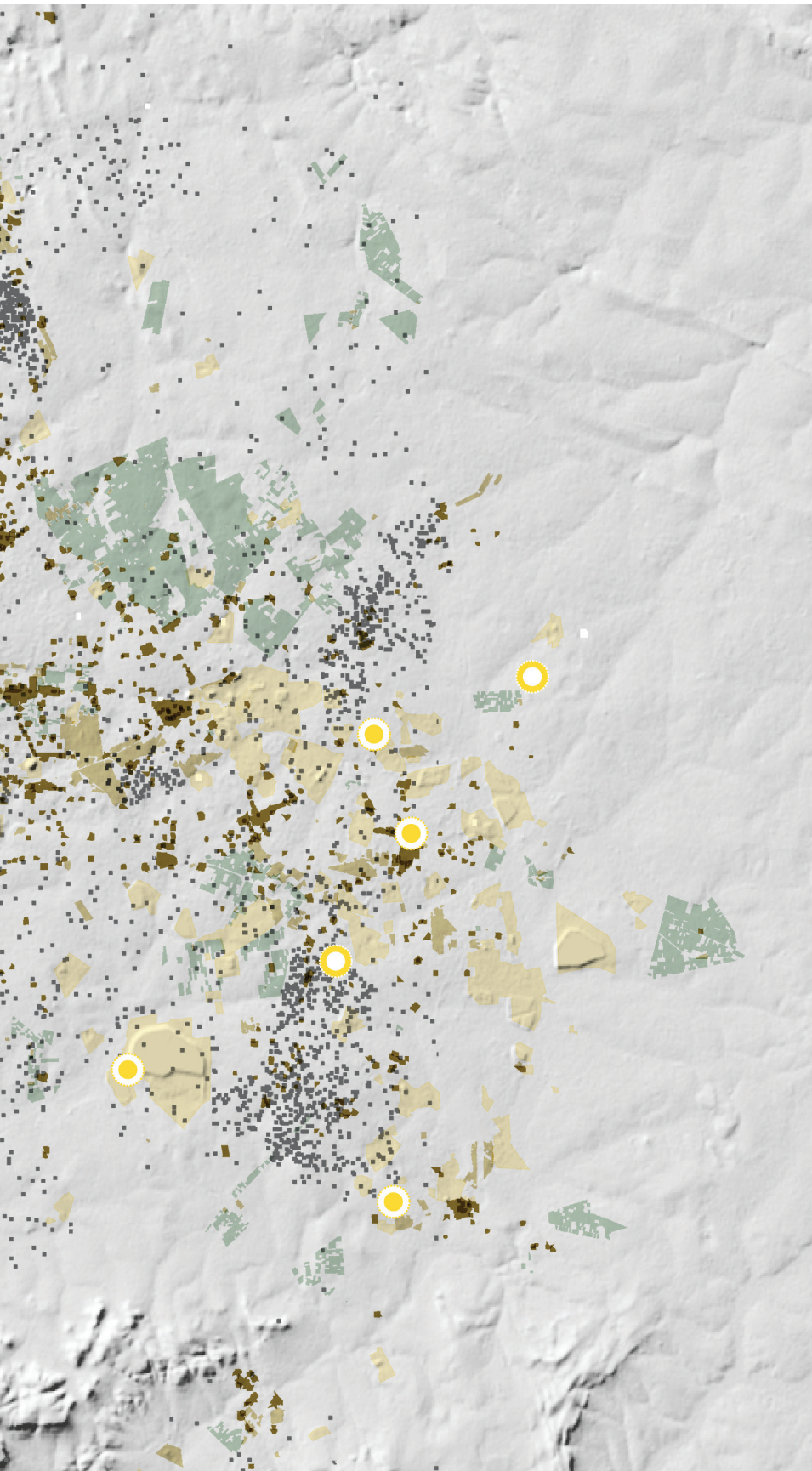
Landscape of Tailing Dumps

The huge mountains of tailings from the mines remain one of the defining features of Johannesburg's horizon. This one was, for a time, reused as a drive-in theatre. These sites are now too toxic to be occupied.

Figure 3.1.3

Landscape of Tailing Dumps





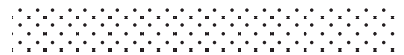
Economic Sector

Distribution &

Unemployment Density

Johannesburg's land use pattern clearly translates the transition from a relatively consolidated primary and secondary, to a decentralized tertiary economy. It's unemployment pattern, however, shows signs of influence from political zoning and extreme concentration due to migration and poverty.

Density (1 dot = 100 people)



Tertiary (Finance & Retail)



Secondary (Manufacturing)



Primary (Mine Residue Area)



Gold Producer/Past Producer



Primary (Small Farms)



Figure 31.4

*Economic Sector &
Unemployment Density*





Conflicting Economies

The spread of services to the far northern suburbs, in this case near Diepsloot located 40km from the central city, clashes with the unregulated economies of overpopulated peripheral townships which act as reception areas for poor rural and illegal migrants.

Figure 3.1.5

Conflicting Economies





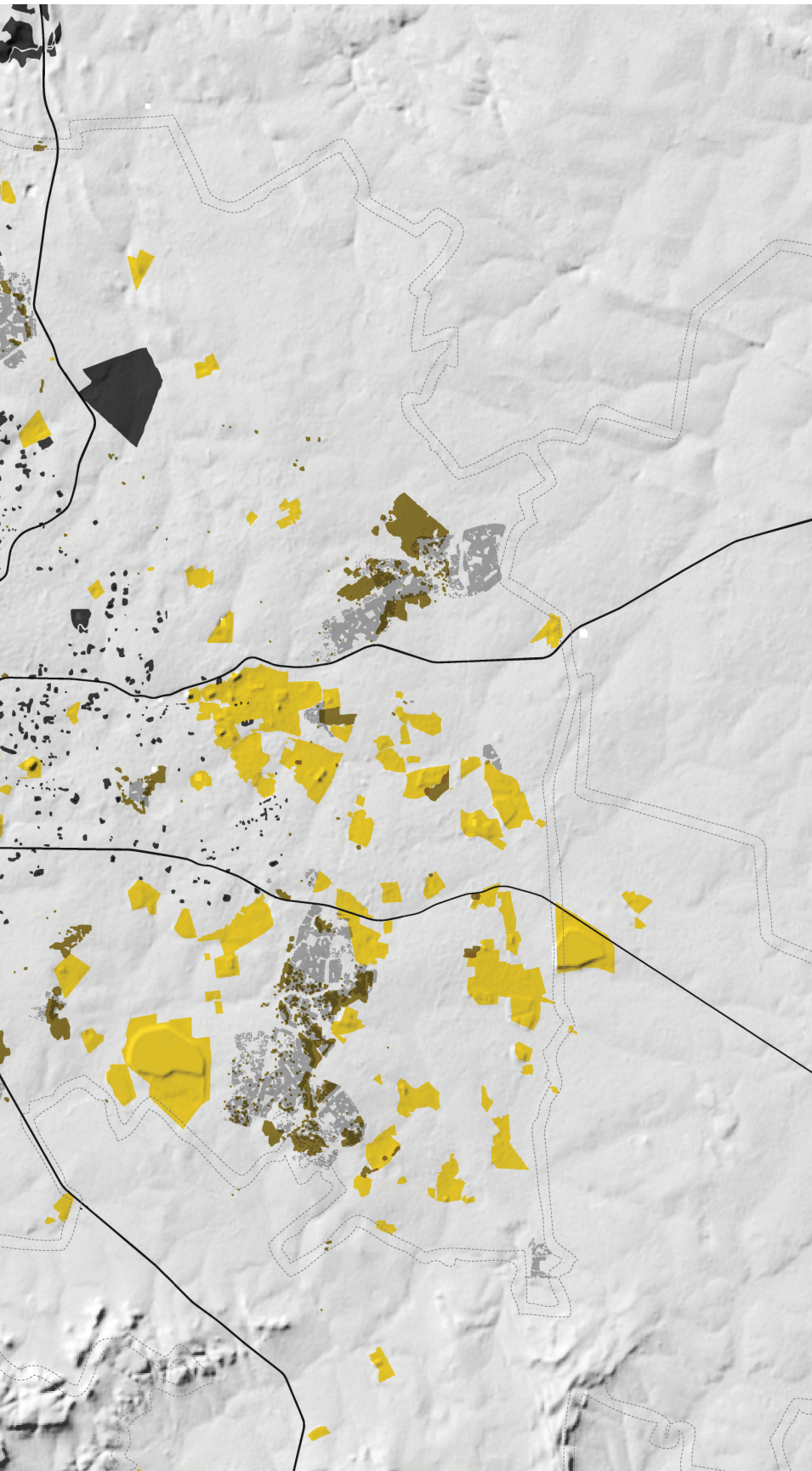
Early mornings in Fordsburg

The decentralization of manufacturing and shift to a service sector economy led to the decline of the inner city. Fordsburg is a historically Indian and Coloured neighbourhood to the West of the inner city and was known as a place of commerce and business.

Figure 3.1.6

Early mornings in Fordsburg





Mobility & Property

Polarization

Johannesburg's patterns of movement today, through formal or informal transit and private vehicle, result from the relative permanence and privatization of land occupation. Though still suffering decline as of the 1980s, the CBD remains the primary interchange to move from the poor south to places of work in the north.

Minibus Taxis

Bus Rapid Transit

Highways

Gated Offices/Communities

Backyard Structures

Informal Structures

Mines & Residual Areas

Figure 31.7

Mobility & Property Polarization





Rush Hour on Bree Street

Minibus taxis move along Bree Street between Metro Mall and Noord Street stations, the major nodes for unregulated transit in the inner city. Downtown Johannesburg still serves as a hub for travel between Soweto, the northern suburbs, and surrounding towns.

Figure 3.1.8

Rush hour on Bree Street



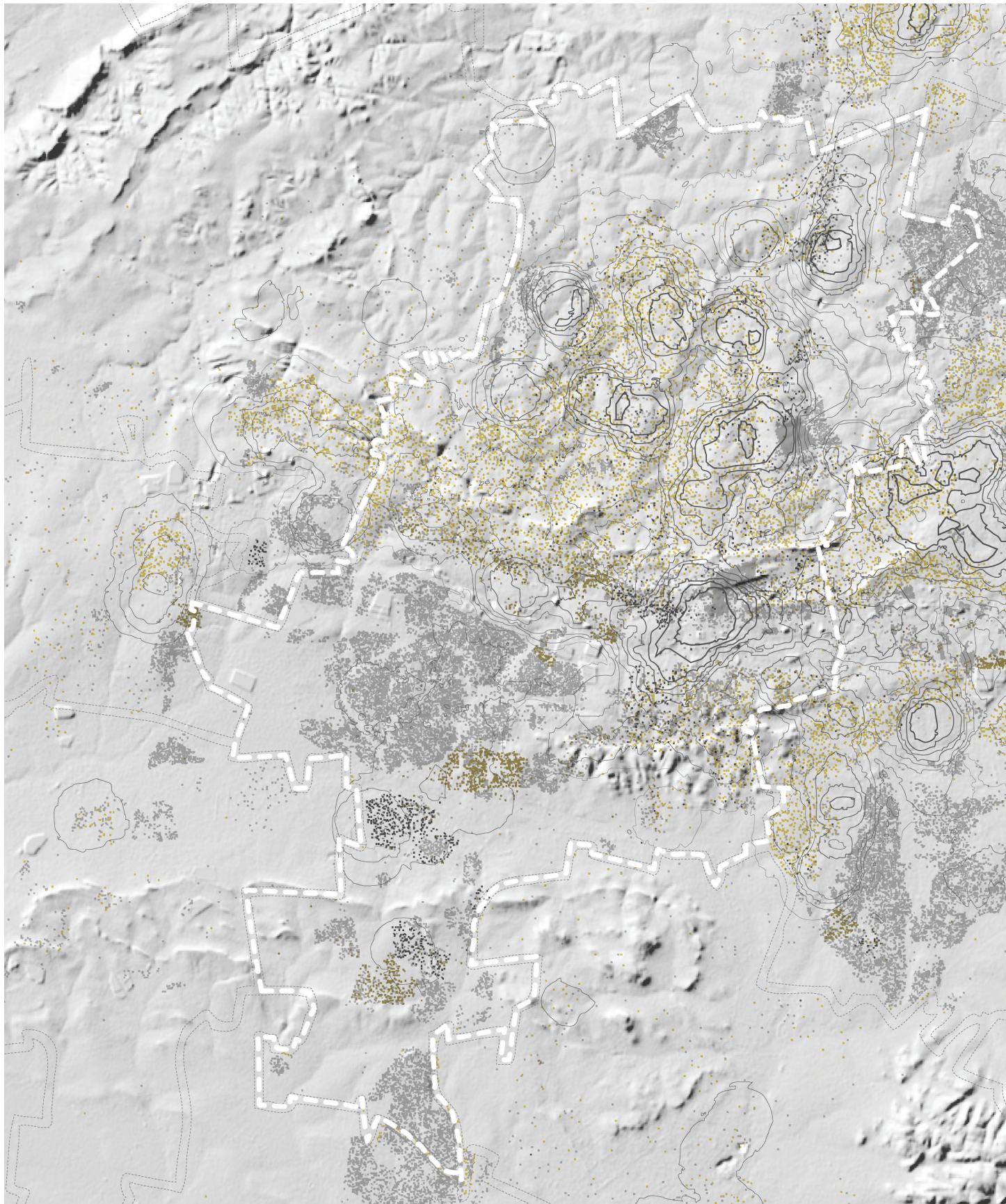


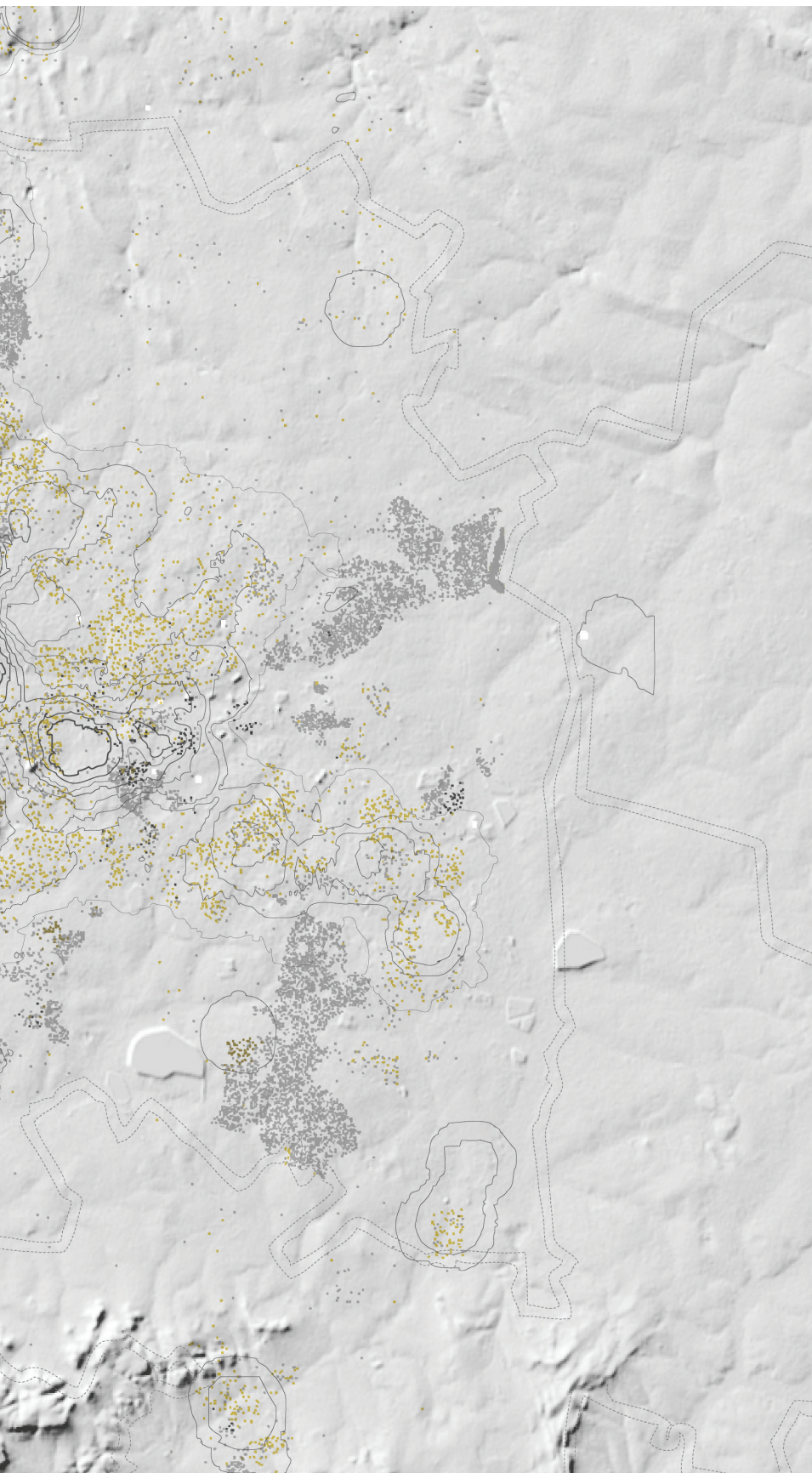
Alexandra Township at Dusk

Alexandra, the city's earliest and longest standing township with African freehold rights, is reputed to be one of the most densely populated areas on the continent.

Figure 3.1.9

Alexandra Township at Dusk





Ethnic Group Distribution & North-South Economic Divide

Johannesburg's patterns of segregation remain entrenched in the poor south, but integration in the middle class north is evident apart from planned townships and the CBD, which is home to African immigrants. Economic activity has migrated to the suburban business/shopping hubs.

Economic Activity Hotspots

Density (1 dot = 100 people)

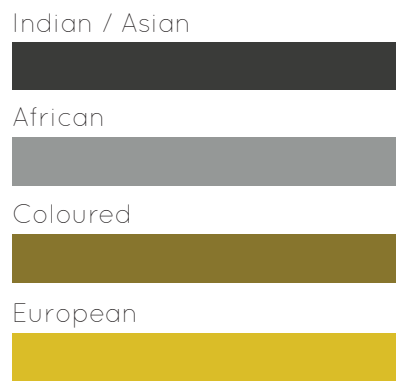
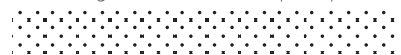


Figure 3.1.10

Ethnic Distribution & North-South Economic Divide





Chisa Nyama Soweto

New business and social spaces, in this case a butcher shop and barbeque restaurant have emerged since the 1970s in Soweto which are now beginning to attract the city's diverse population.

Figure 3.11

Chisa Nyama in Soweto





Write the Future

The towers of the 1960s building boom, mostly the headquarters of banks and insurance companies, overshadow the city's turn of the century's commercial shopfronts. While the CBD used to be the heart of economic activity in the region, it has now been overpowered by commercial developments in the northern suburbs.

Figure 3.1.2

Write the future

Johannesburg is founded on mobility. Since the discovery of gold in the nineteenth century, the city has attracted labourers, entrepreneurs and industrialists hoping for a better life. As a place where strangers have always converged, the city is the site of continuous contestations over who belongs in the city and to whom the city belongs.¹⁰⁰

Johannesburg 1890-1930

100. Caroline Kihato, „African Urbanism,“ in *The Endless City*, ed. Ricky Burdett and Deyan Sudjic (London: Phaidon, 2007), 489.

Figure 3.2.1

*Ferreira's Camp, 1886
The first settlement on the Rand*

Photographer unknown



Figure 3.2.2

Johannesburg rooftops, 1888

Photographer unknown



Figure 3.2.3

*Commissioner Street at the
corner of Cecil Rhodes' Rand
Club, 1900*

Photographer unknown



Henri Lefebvre states that the 'critical point' of the development of the urban is the simultaneity and mutual dependency of urbanization of society and industrialization of production. Along the path to urbanization there is the political city, the mercantile city, the industrial city, and the critical zone. The transition from agrarian to urban lies between the mercantile and industrial cities and what he calls the "implosion-explosion" of the urban (concentration and expansion) occurs in the critical zone.¹⁰¹ As a landlocked city not on established travel routes, Johannesburg was never a mercantile city (a port or place of exchange), but it became this out of necessity simultaneously with concurrent processes of urbanization and industrialization. The city's very origin therefore begins at Lefebvre's critical point such that even as a temporary diggers camp and inland trading hub, [Fig. 3.2.1] rapidly engulfing Boer farmland, Johannesburg was urban from the beginning.

As a city brought into being because of gold, which is mined solely for profit accumulation,¹⁰² Johannesburg was built upon a system of capitalist speculation. The need to manage the gold industry quickly established the city as a centre of international financial services, an early contender for Saskia Sassen's 'global city' of today. The Johannesburg Stock Exchange, along with other syndicates, financial institutions and the mining houses, was founded in 1887 just after the first settlement to facilitate the trading of gold on the global market while the city itself remained geographically remote and culturally isolated. By 1889 the original Diggers' Committee had been replaced by the Chamber of Mines as representative of the interests of the industry.¹⁰³ The

The Mining Camp to the Colonial Town

101. Lefebvre, *The Urban Revolution*, 15.

102. In "Aesthetics of Superfluity", Achille Mbembe notes that gold has only exchange value, not use value, as opposed to other natural resources such as iron, rubber or coal which are used in manufacturing and daily consumption, and are therefore economically and socially productive assets.

103. Lis Lange, *White, Poor and Angry: White working class families in Johannesburg* (Chippenham: Ashgate Publishing, 2003), 9.

Figure 3.2.4

Wemmer's Mine with
Johannesburg behind, c 1890

Photographer unknown

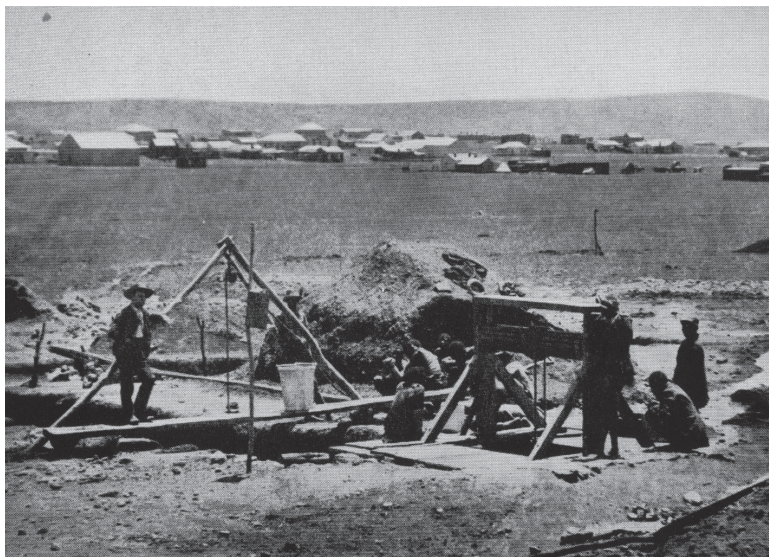


Figure 3.2.5

Crown Mine, date unknown

Photographer unknown

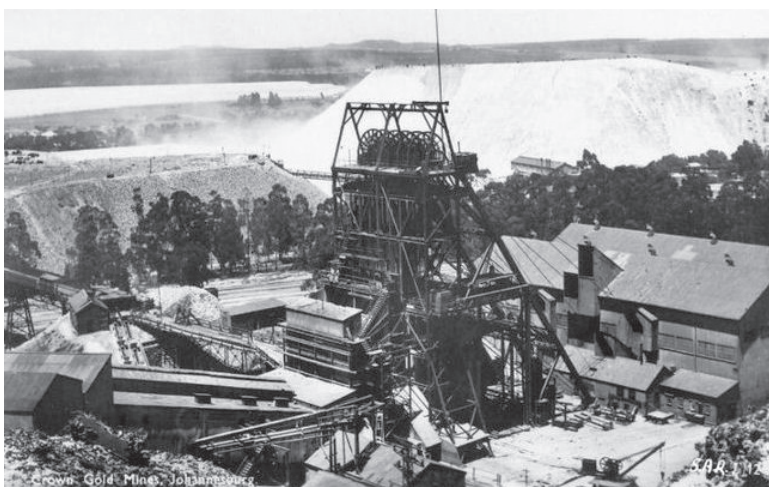


Figure 3.2.6

Witwatersrand mines with
Main Reef Road leading to
Johannesburg, 1911

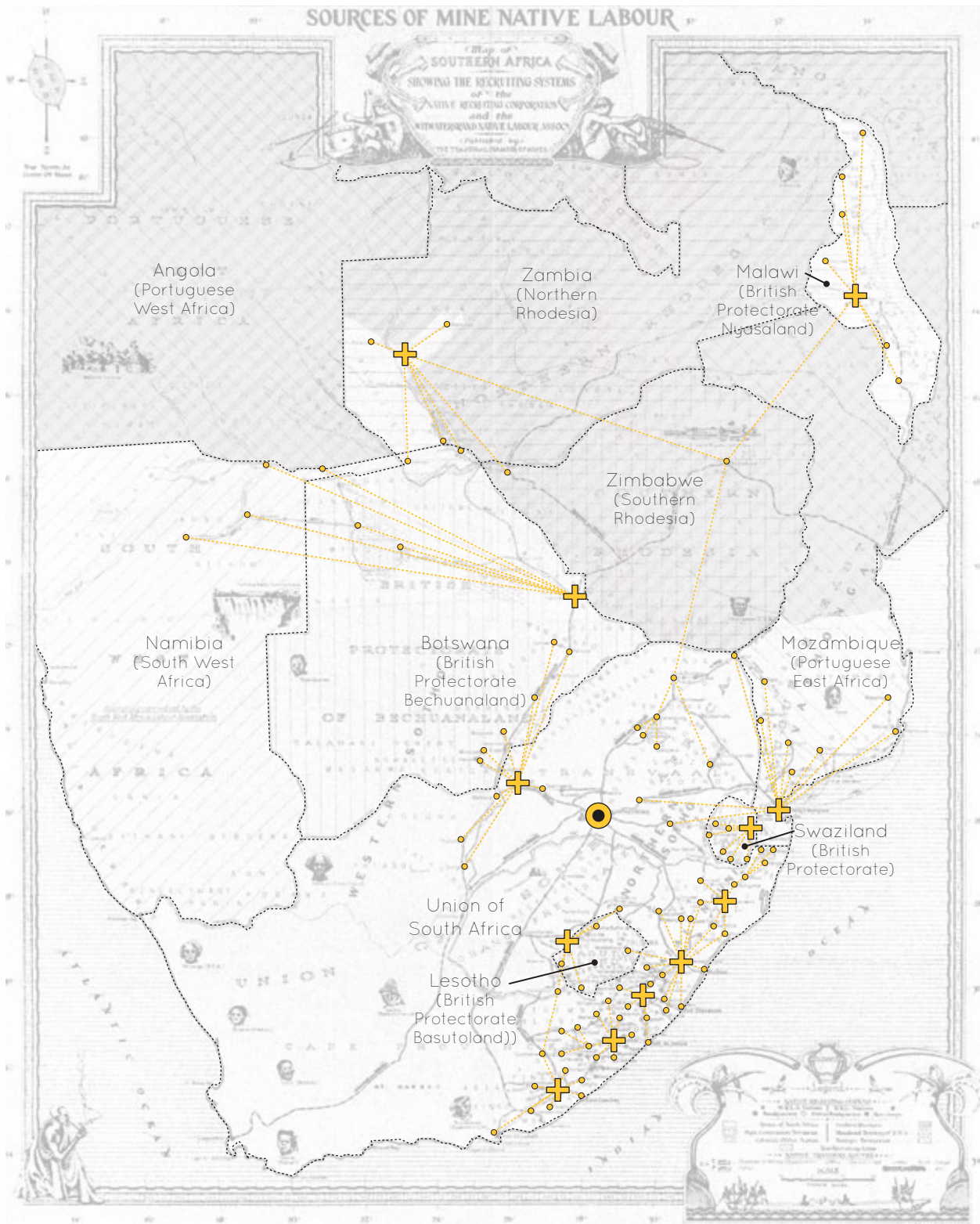
Photo by Eduard Spelterini



founding members of the Chamber were Eckstein & Taylor's Corner House (later Randgold & Exploration Ltd.), Cecil Rhodes' Consolidated Gold Fields (later Gold Fields Ltd.), J.B. Robinson's The Robinson Group, and Barney Barnato's Johannesburg Consolidated Investment Company (later JCI Ltd.). These men, among others, became known as the Randlords and formed the elite society of the early city, gathering at the Rand Club which was built by Cecil Rhodes. [Fig. 3.2.3] Together with their corporations the Randlords wielded substantial influence over Johannesburg's development through mass property ownership and often by holding positions in public office, particularly following the British victory in the 1899-1902 Anglo-Boer War.¹⁰⁴ The early emergence of the Chamber of Mines and the consolidation of the industry was necessitated by the geology of the Witwatersrand reef which, though extremely regular, contained low-grade ore deep below the surface.¹⁰⁵ The industry's first crisis was triggered by the discovery that this deep ore did not respond to existing mercury based technologies. This was fortuitously resolved by the 1890 introduction of the MacArthur-Forrest cyanide extraction process which catalyzed the transition from surface level prospecting to deep level extraction. What began as an industry whereby any fortune seeker could pay a fee and stake a claim [Fig. 3.2.4] quickly morphed into one which required large capital investment [Fig. 3.2.5] leading to the formation of mining groups on the Rand to pool financial assets and managerial expertise. Between the period of 1902 to 1913 five groups had already managed to gain control of a nearly 70% share of the mining activity: Rand Mines Ltd/Central Mining Investment Corporation with 37%, JCI Ltd/The Robinson Group/George Farrar & Associates with

104. At this point the Transvaal became a British colony, along with the Cape, Natal, and Orange Free State. These colonies remained separate political entities until the Union of South African in 1910. Therefore government or state pre-1910 refers to the Transvaal, and post-1910 refers to South Africa.

105. Lange, *White, Poor and Angry*, 9.



Johannesburg
 Recruiting Headquarters
 NRC/WNLA Stations
 Non Recruiting Area



20%, and Consolidated Goldfields with 11%.¹⁰⁶

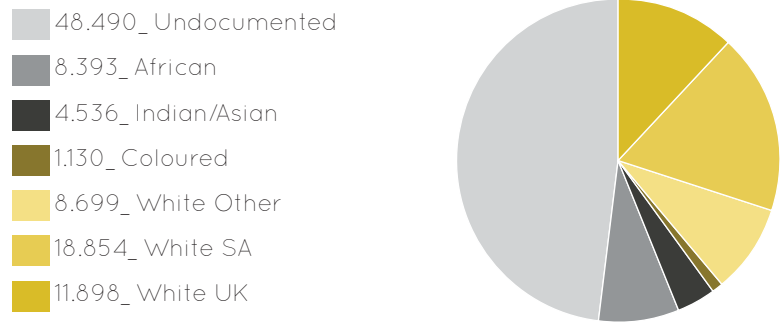
106. Ibid., 10.

In order for deep level mining of low grade ore to be profitable, massive quantities of ore had to be extracted which, in turn, required a constant and abundant stream of cheap labour. Securing this labour force and retaining it proved to be one of the industry's most difficult challenges and required the formalization of recruiting systems. The Witwatersrand Native Labour Association (WNLA) and the Chamber of Mines' established Native Recruiting Corporation (NRC) were formed in 1900 and 1912 respectively and spread their networks throughout the subcontinent. [Fig. 3.2.7] Labour shortages after the Anglo-Boer War led the WNLA to embark on recruiting experiments such as the unsuccessful importation of 60,000 Chinese miners in 1904 and their subsequent repatriation just six years later. However the primary stable sources of labour remained Mozambique, the Transkei (South Africa) and the former British High Commission territories of Lesotho, Swaziland and Botswana and lesser supply from Malawi and Zimbabwe. The institutionalization of the migrant labour system, whereby miners worked 12 month shifts with a single 6 month renewal before obligatory repatriation to their place of origin for 6 months, created a network of constant movement in which the Rand reef became the junction through which hundreds of thousands of migrants from throughout southern Africa rotated while their lives remained rooted elsewhere. At an early stage the Transvaal state began to take a decisive role in securing stable labour by political means, primarily through a 1909 convention with the Mozambican state whereby 47.5% of all shipping imports would be directed through the Maputo harbour in exchange for

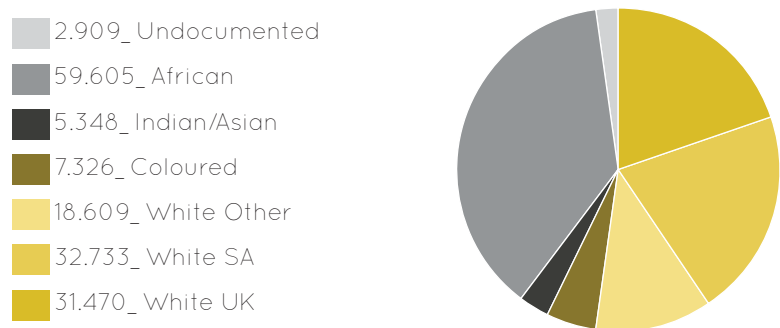
Figure 3.2.7 (Left)

Map showing network of sub-Saharan labour recruitment by the NRC & WNLA.

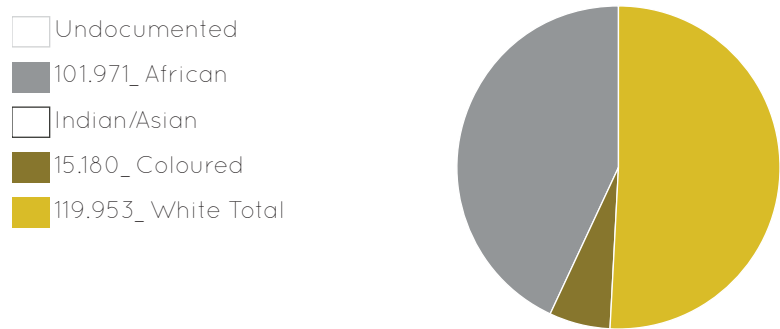
1896_total 102.000 / documented 53.510 / miners 45.000



1904 - total 158.000 / documented 155.091 / miners 80.000



1911 - total documented 237.104 / miners 174.000



1921 - total documented 282.971/miners 170.000

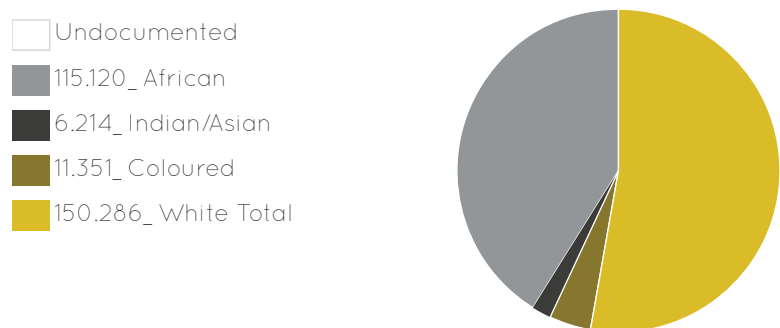


Figure 3.2.8
Johannesburg's Early
Demographics

the Chamber of Mines' sole right to the recruitment of an annual labour quota from the country's southern region.¹⁰⁷ South Africa's recruitment network created a geography of capital based exploitation that overlapped and overwrote existing geographies of Dutch, Portuguese and British colonialism.

Both the Randlords and the working class were considered *uitlanders*, foreigners in Afrikaans, and initially refused citizenship by President Kruger of the Boer Transvaal state. By 1890, however, the *uitlanders* outnumbered the Afrikaners in Johannesburg.¹⁰⁸ [Fig. 3.2.8] The Afrikaners had been the primary inhabitants of the Transvaal region, after migrating from the Cape Colony, for the prior fifty years following their victory over the Zulus in 1838 by which time the region had already been seriously depopulated due to inter-tribal conflict, known as the *Mfecane*. At the time of the discovery of gold, the Witwatersrand was a territory of large sparsely populated Afrikaner run farms. Ten years later the first census encompassed an area of just five square miles and documented a population of 53,510. This population was already categorized according to the predominant ethnicities of White, Coloured, Indian/Asian and African.¹⁰⁹ The White population comprised of about 12,000 from the UK and 19,000 from South Africa, meaning that almost 9,000 were from throughout the industrialized north, likely of German, Yiddish speaking, Russian, Australian, and so on, descent. The remaining undocumented 48,500 of the total estimated population of 102,000 correlates to 1896 estimates of the black labour force on the mines, roughly two thirds of whom were Mozambican.¹¹⁰ The second census in 1904 encompassed an area of 82 square miles and documented a total population of

107. Ruth First, „The Gold of Migrant Labour,“ *Africa South in Exile*, vol.5 no.3 (1961): 13, <http://www.disa.ukzn.ac.za/webpages/DC/asapr61.3/asapr61.3.pdf>.

108. Kruger, *Imagining the Edgy City*, 8.

109. In South Africa the term Coloured refers to people of mixed race. Various subgroups include those of predominantly Indian or Malay descent. The majority of coloureds speak Afrikaans or a dialect of it. The Indian population were primarily merchants and migrated up from Natal. Durban continues to have a strong Indian culture today.

110. J.S. Harington, N.D. McGlashan, and E.Z. Chelkowska, „A century of migrant labour in the gold mines of South Africa,“ *The Journal of The South African Institute of Mining and Metallurgy* (2004): 2.

155,091 with continued cultural diversity amongst the white population. It is unclear whether the 60,000 Africans documented contribute to the estimated 80,000 black labour force on the mines. This discrepancy continues in 1911 and 1921 where documented African populations do not equate to the estimated stable 174,000 miners during this period of which 53% and 40% (respectively for 1911 and 1922) were Mozambican. The most plausible explanation for this is that the migrant labourers who lived in compounds on mine property, rather than in urban areas, may not have been included in city censuses. Had early population surveys taken into account ethnic diversity within the African population,¹¹¹ the full heterogeneity of Johannesburg's early population would have been revealed.

111. To put this diversity into perspective, South Africa alone today has 11 different official tribal languages, the dominant of which are Zulu, Xhosa, Sotho, and Tswana.

Johannesburg's early socio-economic makeup can be roughly categorized into three groups: the mostly British industrialist elite, the mixed race poor working class, and the African, mostly foreign, migrant miners. As a rapidly emerging urban society in frontier territory, Johannesburg was relatively diverse and integrated, a condition which "complicates the standard narrative of the relentless march toward the rigid separation of apartheid."¹¹² During this period Afrikaners, Europeans (apart from the British elite), Africans, Indians, Asians and Coloureds all found themselves in similar economic standing and equally at the mercy of the harsh frontier lifestyle. As this condition perpetuated itself, however, the Afrikaners sought growing protection and support from the Boer government to elevate their economic status and living conditions. Yet it was not until 1923 that spatial segregation by race became legislated through the Native (Urban Areas)

112. Kruger, *Imagining the Edgy City*, 46.

Act which placed severe restrictions on the number of non-whites granted legal permission to reside within city boundaries. By 1933 settlement across all of Johannesburg was controlled under this legislation effectively perpetuating the migrant status of all Africans, whether urban or compound dwellers.

With long term investments being made by the mines to industrialize and by the Chamber to recruit labour, came, albeit slowly, long term investment in the urban settlement which did not even have gas or electrical supply until 1891 and was not granted municipal status until 1897.¹¹³ Johannesburg was typical of mining towns with a perceived lifespan; remote and therefore expensive, since all supplies originally had to be brought in by wagon from long distances, so most overseas working-class miners were either single or unaccompanied by their families and intended to return home once they had made sufficient money.¹¹⁴ Yet as the city became increasingly perceived as a permanent settlement the tension between the European mining houses and the Boer government rose. Large capital investment from the Randlords needed to be balanced with state involvement to reduce the costs of transport, food and dynamite, and decrease the cost of living to entice skilled overseas miners.¹¹⁵ While it had assisted in the securing of Mozambican labour, substantial state intervention in the built fabric of the city would only come after the Angle-Boer War, first with the 1906 implementation of electric tram service to replace Boer operated horse drawn wagons, for which a power station was built, and then a 1920 housing act which facilitated loans to local authorities for the building of working class housing of which there had consistently been a critical shortage.¹¹⁶ In general,

113. Lange, *White, Poor and Angry*, 39, 102.

114. *Ibid.*, 14-15.

115. *Ibid.*, 11.

116. WPA 95



however, Johannesburg was left to develop at the hands of the mining industry while the state took a backseat in planning for such rapid urbanization. Nonetheless, thanks to the relative stabilizing effect of the gold market, by 1926 Johannesburg was already being considered an emerging ‘world city’,¹¹⁷ joining other non-Western cities, mostly established trading hubs, such as Shanghai, Buenos Aires and Calcutta as well as Cairo, the largest city on the African continent in the 1920s.¹¹⁸ This worldliness was informed by a distinctively modern aesthetic shaped by the electric trams and major buildings built in the image of Victorian and Edwardian England using prefabricated steel framing from the UK, Germany and Holland. [Fig. 3.2.9] Apart from innovation in engineering and architectural objects, two critical devices of urban management emerged early on within which the mechanics of Johannesburg’s economy and class divisions, coupled with its geographical remoteness and sudden occupation by a diverse urban population, were intricately intertwined. These are the first land survey and stand layout of the original settlement and the widespread use of the compound as a space of residence for the massive migrant labour force on the mines. The former marks the state’s most significant early contribution to Johannesburg’s urban form, while the latter marks the mining industry’s early impact on the settlement of the Witwatersrand.

117. Ibid., 174.

118. United Nations Department of Economic and Social Affairs, *Growth of the World's Urban and Rural Population 1920-2000* (New York: United Nations, 1969), 36, [http://esa.un.org/unup/Archive/wup-archives/studies/United%20Nations%20\(1969\)%20-%20Growth%20of%20the%20World's%20Urban%20and%20Rural%20Population,%201920-2000.pdf](http://esa.un.org/unup/Archive/wup-archives/studies/United%20Nations%20(1969)%20-%20Growth%20of%20the%20World's%20Urban%20and%20Rural%20Population,%201920-2000.pdf).

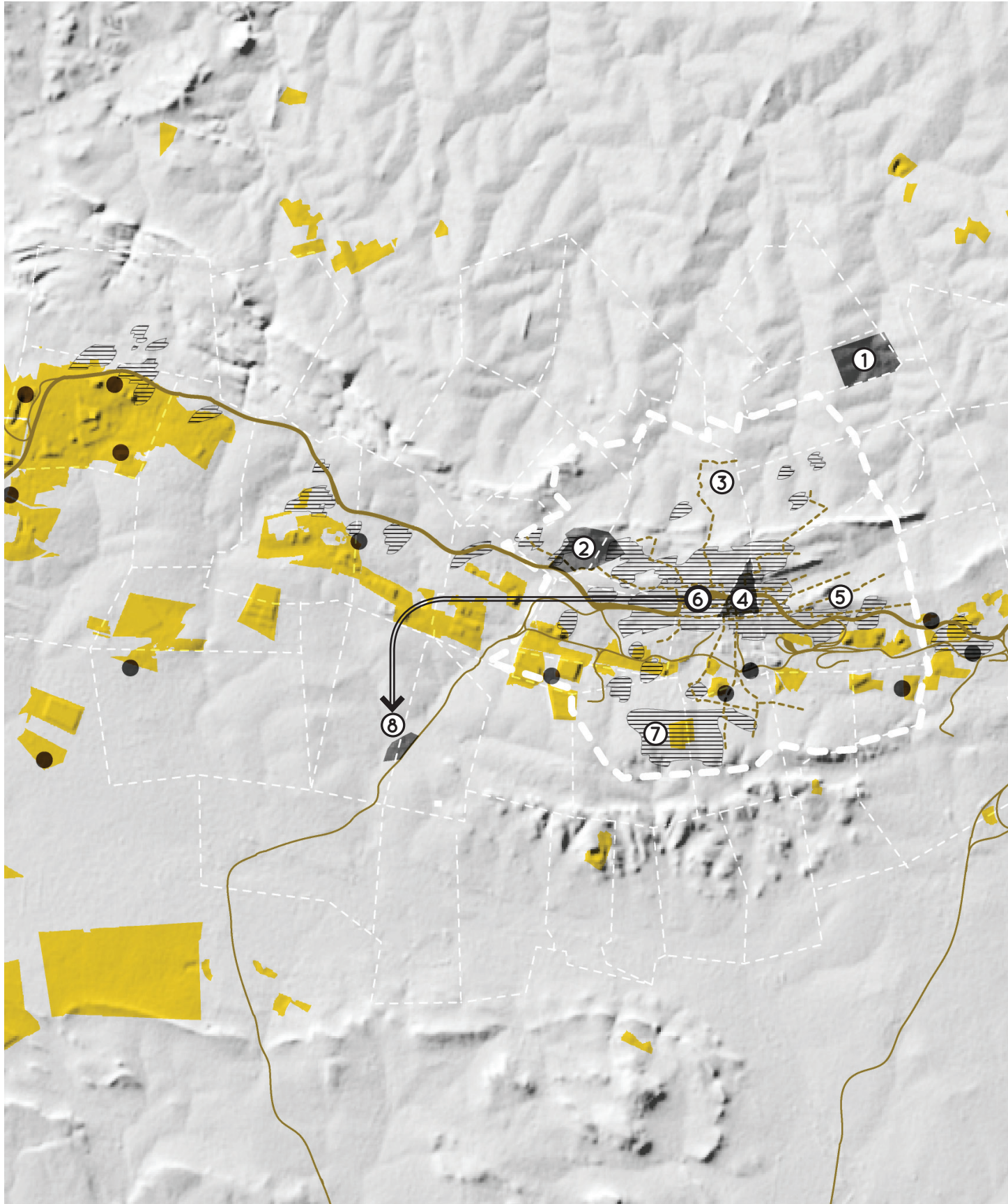
Figure 3.2.9

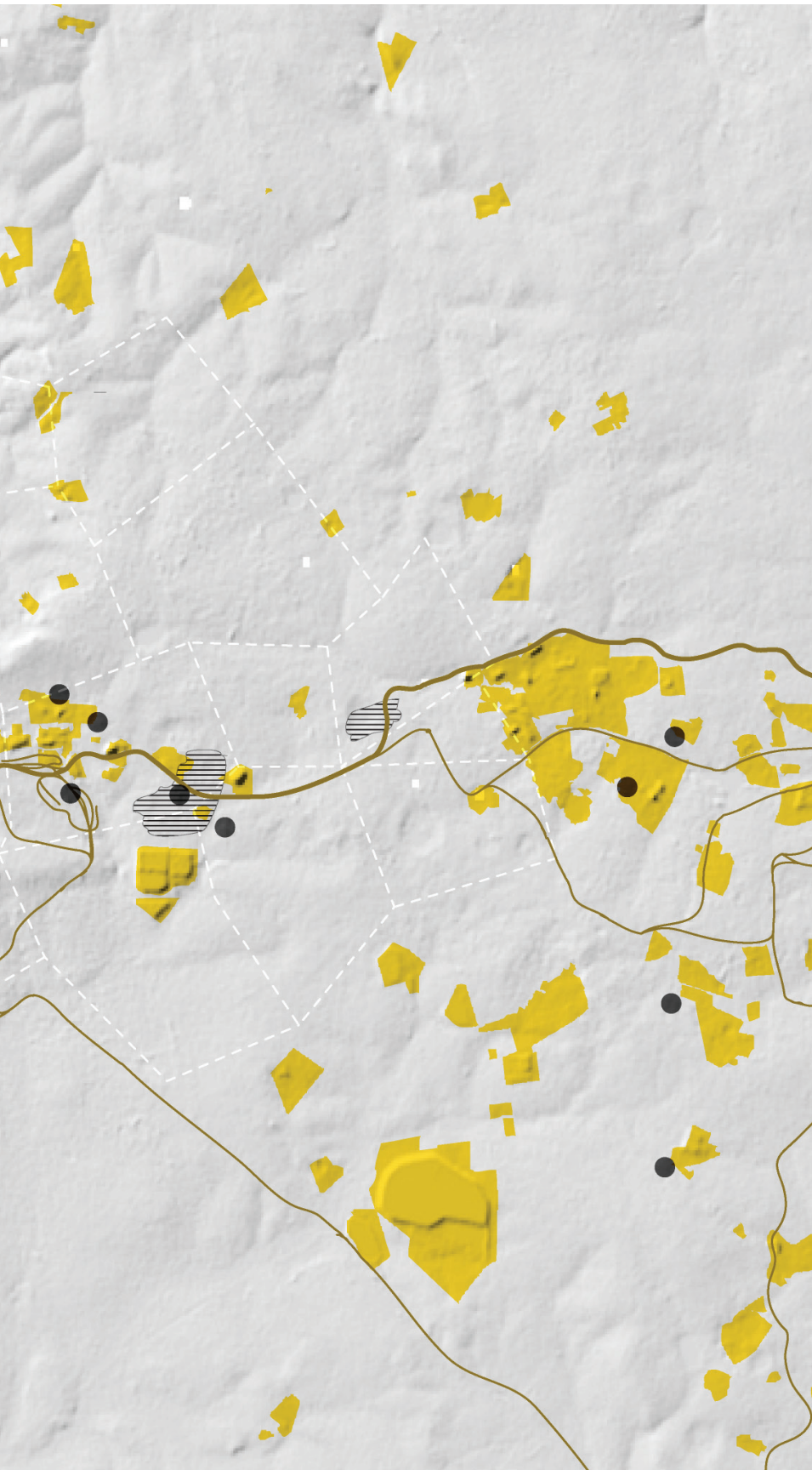
Market Street with trams 1920s

Photographer unknown

Figure 3.2.10 (next spread)

Johannesburg circa 1915





Johannesburg circa 1915

- ① **1911 Alexandra**
African freehold area & migrant slum
- ② **1903 Sophiatown**
African freehold area
- ③ **Northern Suburbs**
White managerial class
- ④ **1886 Randeslaagte**
The original gov't land surveyed, now the CBD
- ⑤ **Eastern Suburbs**
White working class
- ⑥ **Western Inner City**
Mixed working class
- ⑦ **Southern Suburbs**
White working class
- ⑧ **1904 Klipspruit**
Relocation of slum area following plague outbreak

Mine Labour Compound
(ruins currently visible)



Rand Railway



Electric Trams

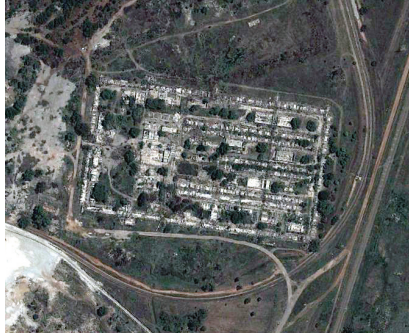
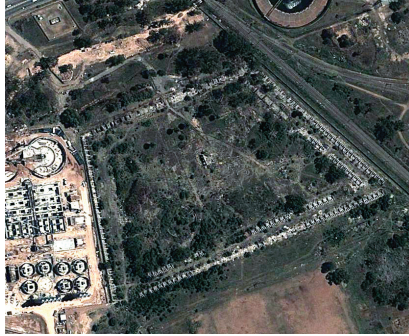


Settled Footprint



Mines





The use of compounds to house mine labour is a particularly South African phenomena which was first developed after the 1880s on the Kimberley diamond mines in order to control the smuggling of diamonds out of the mines and their circulation into the black market. In Kimberley the spatial tool of the compound took on the role that legal action was deemed inadequate to address, particularly in frontier territory, and therefore developed into a particularly penitentiary-like typology.¹¹⁹ The compounds were inspired by Brazilian slave barracks but on the Rand they were occupied by recruited migrant labourers on wage paying, rotational contracts. The compound, as opposed to scattered barracks, also went hand in hand with the transition to deep level mining and the emergence of larger companies making fixed investments for whom the compound was a highly efficient tool of business management rather than explicitly one of oppression. Given the incredible cost that the municipality would have incurred in providing housing and transportation for a large labour force, which represented a significant portion of the Rand's early population, the combination of enforcing migrant working status and the relinquishing of control to the mines through on-site housing, was in the best economic interests of both the Transvaal government and the mining companies. In this context, the compound became an intricately intertwined system of bio-political control coupled with the need to bring security to a speculative economy and therefore became a temporal and spatial instrument of coercion. Though originating as an economic device, the compound became a space where political, legal and physical norms of life were also highly controlled. This was not so much a political state of exception as an architectural one which served to maintain

The Compound

119. Lindsay Weiss, „Exceptional Space: Concentration Camps and Labor Compounds in Late Nineteenth-Century South Africa,” in *Archaeologies of Internment*, ed., A. Myers and G. Moshenska (New York: Springer, 2011), 24-26, <http://www.networkedheritage.org/wp-content/uploads/2011/06/Weiss-Exceptional-Space.pdf>.

Figure 3.211

Abandoned Compounds

Figure 3.212

Early Witwatersrand compound,
c 1890

Photographer unknown

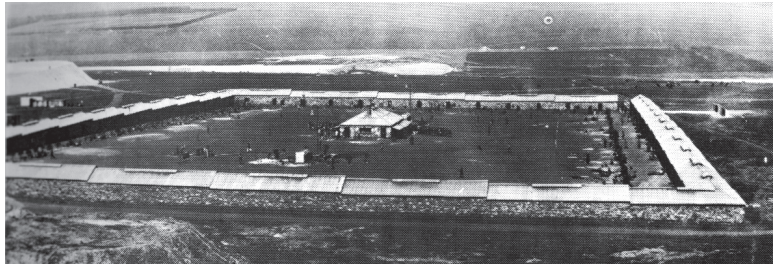


Figure 3.213

Rand Compound, 1911

Photo by Eduard Spelterini



Figure 3.214

Harmony Mine Compound,
Western Deep Level Mines,
c 1960

Photographer unknown



Figure 3.215

The Rand Hut

Photographer unknown



the contradiction of superfluity whereby, as Achille Mbembe argues, the body of the labourer was made simultaneously indispensable and dispensable.

The architecture of the compound itself struggled with a balance of control and spatial flexibility, evident in the evolution of its plan over time. The earliest compounds were rectilinear figures with a high solid outer wall forming the back of the perimeter housing units which opened into the central court where the washrooms and kitchen were often located. [Fig. 3.2.12] The compound manager's office was typically adjacent to the single point of entry and exit. The square compound, however, was inefficient because it fixed a maximum capacity at the time of construction given that filling a square with further barracks, assuming mining operations expanded, would compromise the ability of the manager to easily survey up to several thousand labourers. Radial barracks within a rectilinear perimeter began to develop and finally a panopticon layout was adopted with linear barracks arrayed like spokes around the central pivot of the manager's office. [Fig. 3.2.14] This layout became more common in the 1930s and then widely used for the Western Deep Level mines established in the late 1940s, where compounds are still in use today. In 1914, however, the panopticon compound of City Deep Mine, just south east of Johannesburg's CBD, was an exception.¹²⁰ While the repetition of general planning models is evident from the remaining ruins, each compound was built by the individual mining company and therefore unique. What became more standardized was the Rand Hut, [Fig. 3.2.15] the residential unit typology introduced by a 1905 Health Ordinance which set requirements for minimum square footage and ventilation.¹²¹ These

120. Jonathan Crush, „Scripting the Compound: power and place in the South African mining industry,“ *Environment and Planning D: Society and Space* 12 (1994): 308-309.

121. *Ibid.*, 311.

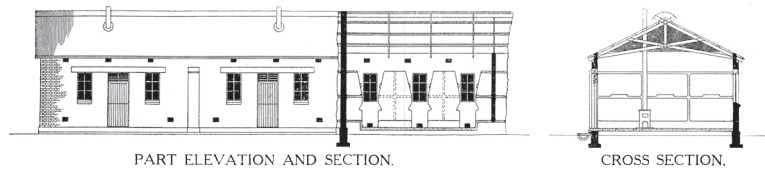
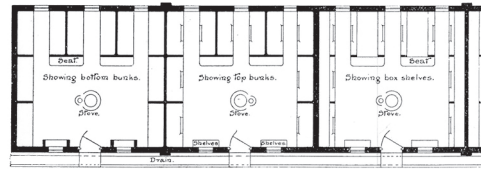


Figure 3.216

Typical Compound Room Layout



COMPOUND ROOM.
Standard Type to accommodate twenty natives.

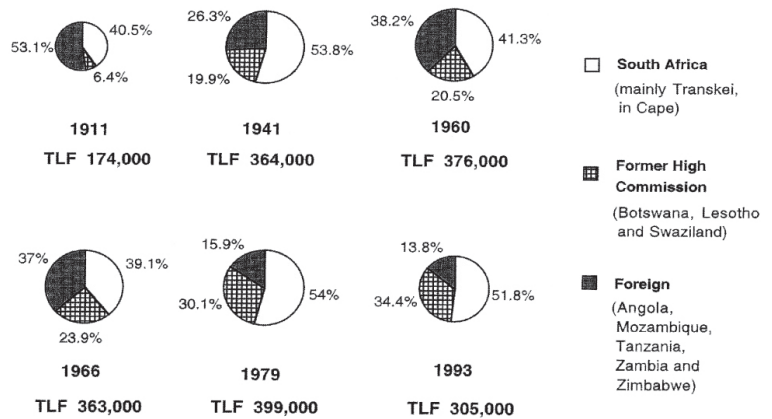


Figure 3.217

Origins, percentages and actual labour force of black gold miners in South Africa



Figure 3.218

South African Pondo tribe miners, 1970

Photo by David Goldblatt

standards were clearly exceptionally low and, with up to twenty workers per average room, privacy was all but eliminated in the compound. [Fig. 3.2.16]

Despite the apparent fixity of the compound as a typology and the temptation to view it as a completely hermetic object, it was never a purely abstract space removed from time and place. Their ubiquitous implementation across the Witwatersrand territory catalyzed a fluid network of people, goods and ideas that subverted their ability to contain and control a large population. By 1910 there were fifty compounds distributed across the Rand gold reef, housing nearly 200,000 miners. This number had increased to 300,000 by 1930.¹²² [Fig. 3.2.17] The network of scattered compounds marks the earliest signs of Johannesburg's profoundly fragmented pattern of urbanization. And while serving to fragment an enormous migrant population, the compound simultaneously became a space of relation whereby, under this new all-encompassing capitalist economy, "African men from across the vast distances of the subcontinent, and even more powerful linguistic and ethnic differences, addressed each other as confederates and equals for the first time."¹²³ The compound was a point of passage in an expansive geographic network of recruitment stations distributed across southern Africa and as a component within a regional network it began to foster a public sphere that existed in limbo between a rooted urban and a migrant rural identity. Through their physical proximity but separation from the adjacent urban fabric the compounds became spaces for the development of quasi urban societal practices. These were a complex entanglement, to use Sarah Nutall's term, between the immediate

122. Ibid., 306.

123. Keith Breckenridge, "„We Must Speak for Ourselves“: The Rise and Fall of a Public Sphere on the South African Gold Mines, 1920-1931," (presented at the African Studies Seminar, University of Witwatersrand, April 22, 1996), 2, <http://wiredspace.wits.ac.za/bitstream/handle/10539/8505/ISS-52.pdf?sequence=1>.

Figure 3.2.19
Adjacent Rand Compounds, 1911
Photo by Eduard Spelterini



Figure 3.2.20
Compound (top centre of image
between mine dumps) adjacent
to urban settlement, 1911
Photo by Eduard Spelterini



Figure 3.2.21
Concession store keepers, Rose
Deep Gold Mine, 1966
Photo by David Goldblatt



context surrounding the mines and the distant context of the miners' homelands.¹²⁴ [Fig. 3.2.20] To understand the link with immediate context, it is important to recognize that the compounds on the Rand were not in fact closed, as they had been in Kimberley, and the miners were permitted to leave when they were not on shift. They served more to keep the outside out than the inside in. This is not to diminish the role of the compound as a space of oppression and the compound manager as oppressor, but it does clarify that there was constant movement of labourers between these residences, the adjacent settlements and the municipality of Johannesburg. This resulted in inevitable interaction between both migrants and permanent urban dwellers as well as people of diverse ethnic backgrounds.

This interaction manifested in multiple, both positive and negative ways. For example, though the mines supplied food and shelter to their labour, trading stores for the purchase of other necessities developed a competitive market around the mines and the compounds. When inflation was of particular issue after WWI the Chamber of Mines, through the NRC, attempted to shield miners and their wages from this by establishing wholesale outlets within compounds, a move which was defeated by the city who required shops to be established in adjacent townships along with privately owned concession stores.¹²⁵ [Fig. 3.2.21] The compounds also, in the early decades, served as a safe haven for liquor syndicates and youth gangs who could avoid police harassment while simultaneously terrorizing nearby white settlements, hiding stolen goods inside the compound, and recruiting new members.¹²⁶ Given that the compounds were owned by the mines and run by a company employed

124. Crush, „Scripting the Compound,” 320.

125. Breckenridge, „We must speak for ourselves.” 10.

126. Crush, „Scripting the Compound,” 316.

manager, the municipal police force initially took little involvement in regulating illicit activity. Most critical however, is the role the compound and its network played in the early political development of the black migrant proletariat. This is particularly evident in the series of strikes which spread across the Rand gold mines in early 1920 with more than 70,000 workers participating, when Johannesburg's urban population was under 300,000, and the halting of production on 21 mines, when the Rand reef was responsible for 50% of worldwide gold production. The 1920 strikes were marked by a succession of protests which brought workers out of their compounds in the thousands in protest marches along the Main Reef road into the Johannesburg CBD where the WNLA headquarters were located.¹²⁷ These strikes were part of a wider system of political development in the years before and after 1920 within which both the South African Communist Party (SACP) and the African National Congress (ANC) were formed and subsequently backed the recently formed Industrial and Commercial Workers Union of Africa (ICU).¹²⁸ This, of course, was not unique to South Africa as the post-WWI period was one of widespread revolutionary movements, particular in Russia and Germany with the Bolshevik uprising and the period before the formation of the Weimar Republic. On the Rand, the fact that the Chamber of Mines eliminated competition between mining companies by regulating workers' contract periods, minimum wages, and provisions meant that almost all labourers within a compound were subject to the same conditions of employment and all compounds followed the same general conditions of living. What was a measure of centralization and efficiency for the industry to keep labour cheap and maximize profit, was also a common ground for the

127. Breckenridge, „We must speak for ourselves,” 6-7.

128. The ICU eventually disintegrated due to internal disagreement, particularly due to conflict with joint members of the SACP who were expelled

development of a public sphere given shape and identity within the constraints of the compound and expanded by communication between compounds.

By viewing the Rand as a territory dotted with compounds, and anchored by the centrality of settlement in Johannesburg, a powerful map is generated which projects a mode of simultaneously concentrated and dispersed urbanization tied to capitalist modes of accumulation. There is no question that the compound, an apparently exceptional typology to Johannesburg's history, was a particularly extreme manifestation of frontier settlement but it is not entirely unrelated to similar modes of managing migrant workers elsewhere in the world. Johannesburg could never have become the most important city of gold mining if it was not for a quantity of labour so vast it was outside the capacity of a previously non-existent municipality to manage. The compound became a charged space for managing economic necessity and demographic influx but it subverted its own fixity and capacity to control by becoming a homogenizing space of social convergence that had important consequences for regional urbanization. Not viewing the compound as equivalent to a forced labour/interment camp or retention centre, though perhaps typologically similar, reveals the role it had in concentrating a diverse population that it could eventually not longer hold. The limit of the compound as a widespread urban system was reached with the transition to industrialization and manufacturing, requiring a stable workforce and a longer term vision of urbanization for which the government would eventually take responsibility and address through the construction of the black townships.

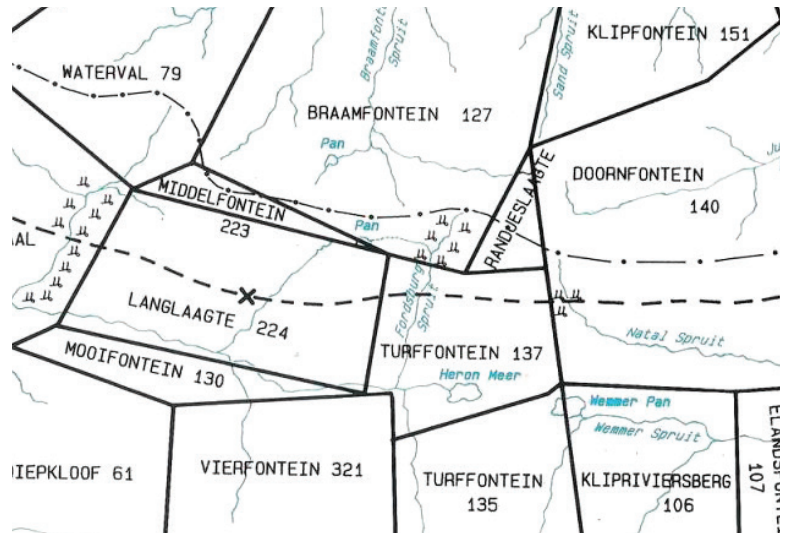


Figure 3.2.22

Witwatersrand farms at the time of the discovery of gold

Author unknown

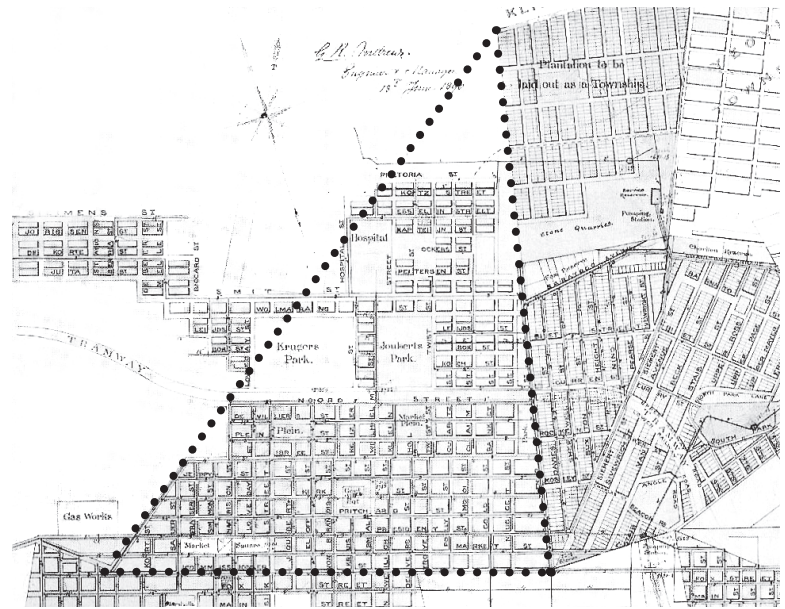


Figure 3.2.23

Survey Map, 1890

By Johannesburg Waterworks Estate & Exploration Company Ltd. (Owned by Barney Barnato)



Figure 3.2.24

The infill of stands, 1911

Photo by Eduard Spelterini

The Grid

Following the discovery of gold on the Langlaagte property, the surrounding farms were declared public digging sites between September and October 1886. [Fig.3.2.22] The first settlement on the Rand was known as Ferreira's Camp on the northern edge of Turffontein farm, but the reef was quickly dotted with more and more camps.¹²⁹ Initially land was simply divided up according to the allocation of digging claims but the Transvaal government eventually ordered the survey and marking of property stands in 1887 to bring some order to the expanding informal settlement. A triangle of land by the name of Randeslaagte was chosen as the settlement site because, as a remnant piece of property from the original survey of farmland, it was owned by the government. It offered no particular geographic or geological benefits. This approximately one square mile parcel was first laid out with two blocks of stands of an average 50'x50' which were made available for a 99 year leasehold at 10 shillings a month.¹³⁰ [Fig.3.2.23] At such a comparatively small size these stands were more appropriately scaled for residential development than the dense mixed use fabric they quickly facilitated. Corner stands could be leased at a higher fee and attracted an occupancy, namely bars, canteens, restaurants and hotels, which could be taxed at a higher rate. Given the importance of this income for an impoverished rural state, the government ordered the settlement to be surveyed with as many corner stands as possible.¹³¹ This resulted in a mostly regular rectilinear grid of approximately 200'x200' blocks without any distinct sense of hierarchy. [Fig.3.2.24] The 200' dimension roughly equates to that of a Manhattan short block and with relatively narrow 50' streets Johannesburg's CBD eventually developed a similarly canyon-like

129. Addinton Symonds, *The Johannesburg Story* (London: Frederick Muller Ltd. 1953), 31, 55.

130. Lange, *White, Poor and Angry*, 42.

131. Symonds, *The Johannesburg Story*, 52. Murray, *City of Extremes*, 40.

Figure 3.2.25
Geographical Axes
Graphic by author

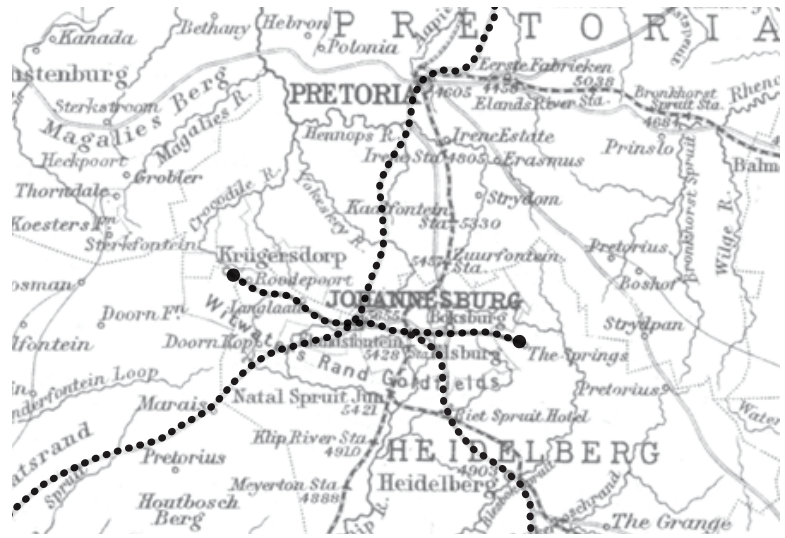


Figure 3.2.26
Rissik Street, a major north-south artery connecting the central train station to Market Square
Photographer unknown



Figure 3.2.27
Market Square, 1899
Photographer unknown



feel as construction extruded vertically during building booms in the 1930s and 1960s. The compact grid increased street frontage and encouraged the development of an active commercial economy at grade. Each block typically held four 50'x100' inner stands and eight 50'x50' stands on the east and west edges. Though this fostered diversity within a block many stands consolidated over time since the blocks were small enough to be fully occupied by two to four large buildings or even a single stand alone one. The small block eventually proved limiting for large real estate ventures so over time several superblocks formed, shutting off cross streets, to facilitate complex developments, for example the Carlton Centre as well as the magistrate court and First National Bank complex.

With an orientation arbitrarily defined by the Randeslaagte farm boundaries, the grid established no particular hierarchy. What its Cartesian equality did embody were the strong directional relationships embedded in Johannesburg's formation: the north-south axis of trade from Pretoria to Kimberley/Cape Town and Durban and the east-west axis of the gold reef from Krugersdorp to Springs.¹³² [Fig.3.2.25] The primary space of centrality where these axes converged within the city's ubiquitous figure ground was the original Market Square. This 1300'x300' space in the south west corner of the Randeslaagte triangle was the terminus for supply wagons from Cape Town and Durban and, at the time, the geographic centre of gravity of the new settlement. [Fig.3.2.27] It originally acted as the point of measurement from which the first city boundaries were demarcated and the population counted.¹³³ The 1897 Jeppe map used concentric 1/4 mile rings radiating from Market

132. Murray, *City of Extremes*, 41.

133. Lange, *White, Poor and Angry*, 44.

- main shopping 
- shops & businesses 
- shops & wholesalers 
- finance offices 
- residential 

Figure 3.2.28

Natural formation of program zones in the CBD 1898

Graphic by Keith Beavon

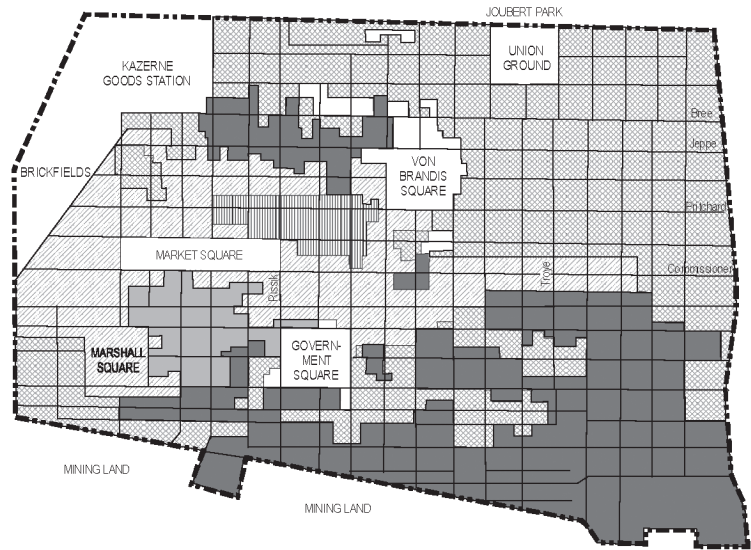


Figure 3.2.29

Johannesburg downtown, 2010

Photo by The Urban Age Project

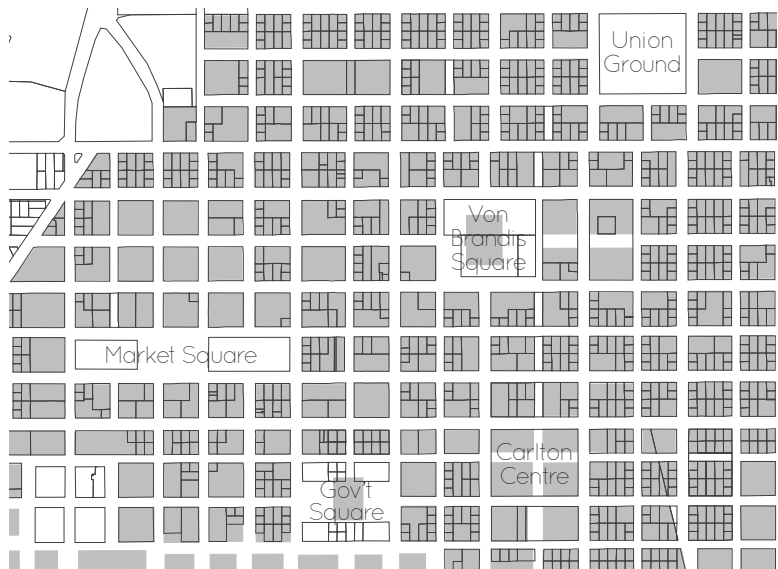


Figure 3.2.30

Original blocks & present stand agglomeration & void infill

Graphic by author

- Original Block 
- Current Property Boundaries 



Square to illustrate the then 3 mile radius limit of settlement. The natural inclination of the neutral grid to develop programmatic zones began early with the Stock Exchange, Chamber of Mines, Corner House, Rand Club and several banks collecting around Market Square, forming a financial district that established Johannesburg as a stronghold for overseas capitalism.¹³⁴ [Fig.3.2.28] Though there were other voids in the grid for parks or key administrative buildings, like the Von Brandis Square law courts, as a place of mercantilism and exchange Market Square represented a democratic space of attraction for a new and diverse urban society. Yet as a place of business, as opposed to a church or other typological symbol of power around which urban public space often formed, it ultimately symbolized the capital driven economy of the city's foundation. However, by 1913 the municipality had taken over the market and used the square to located the new City Hall building, displacing the market to the north in a hall adjacent to the railway line.¹³⁵ Over time most of the public spaces held within the grid fell victim to real estate economics. [Fig. 3.2.30]

If Johannesburg's relative topographic neutrality and lack of water body presented something of a blank geographical slate upon which to plan, then the overlay of the urban grid compounded this; a tabula rasa upon tabula rasa. "To the extent that these standardized units lacked any clearly defined sense of place, they constituted the principal building blocks of modernist city building"¹³⁶ particularly in a context of laissez-faire urban development. This had a dual effect: on one hand the parcel by parcel development trend whereby each building or block represented a microcosm of varied urban activities

134. Keith Beavon, „The Role of Transport in the Rise and Decline of the Johannesburg CBD, 1886-2001“ (paper presented at the 20th South African Transport Conference, January 16-20, 2001). <http://repository.up.ac.za/bitstream/handle/2263/8191/5b4.pdf?sequence=1>.

135. Lucille Davie, „Joburg's market square defined the town,“ City of Johannesburg, accessed May 2, 2014, http://www.joburg.org.za/index.php?option=com_content&task=view&id=937&Itemid=188.

136. Murray, *City of Extremes*, 41.

137. Murray, *City of Extremes*, 57.

138. Lange, *White, Poor and Angry*, 40-44.

139. *Ibid.*, 51.

indifferent to its neighbours, created a kind of ambiguity and anonymity in the CBD rather than any synchronized approach to city building. “The result of this idiosyncratic individualistic building program was a largely incoherent, disorderly and highly diversified pastiche - one that reflected a frenzied city-building process driven by entrepreneurialism”¹³⁷ In the adjacent residential areas the combination of low tax and leasehold instead of freehold tenure, logical in the uncertain climate of gold mining, had from an early stage encouraged the speculative accumulation of property which naturally concentrated in the hands of the mining houses and their estate companies.¹³⁸ This made it extremely difficult for the working class, regardless of ethnicity, to find housing or acquire property and build housing, entrenching a substantial level of class division in the spatial development of the city well before this division became fully integrated with a racial one. Well into the 1930s the mixed race working class population concentrated in a dense low income housing zone to the West and South of the CBD, in a band between the city and the mining claims. On the other hand, as opposed to the negative view of the grid as a tool of speculation, the diversified fabric of commerce, residence and employment, incoherent and disorderly though it may have been, created an urban environment in which “classes, races and nationalities could mix, colonial bourgeoisie with the popular classes, Boer with Briton, and Whites with Blacks.”¹³⁹ The grid was the ultimate product and experience of the modern city which, when fueled by speculation, grew through expediency rather than planning and became a mechanism for fostering difference. Into this modern experience, however ambivalently produced, the city’s society of

immigrants was drawn, creating the potential for a truly cosmopolitan urban environment. Loren Kruger defines cosmopolitanism as an attribute of “urban civility” whereby multiple identities and practices are drawn into affiliation with each other through a process of improvisation.¹⁴⁰ In this sense, contestation over belonging in the modern city is an essential part of the performance of cosmopolitanism.

140. Kruger, *Imagining the Edgy City*, 10.

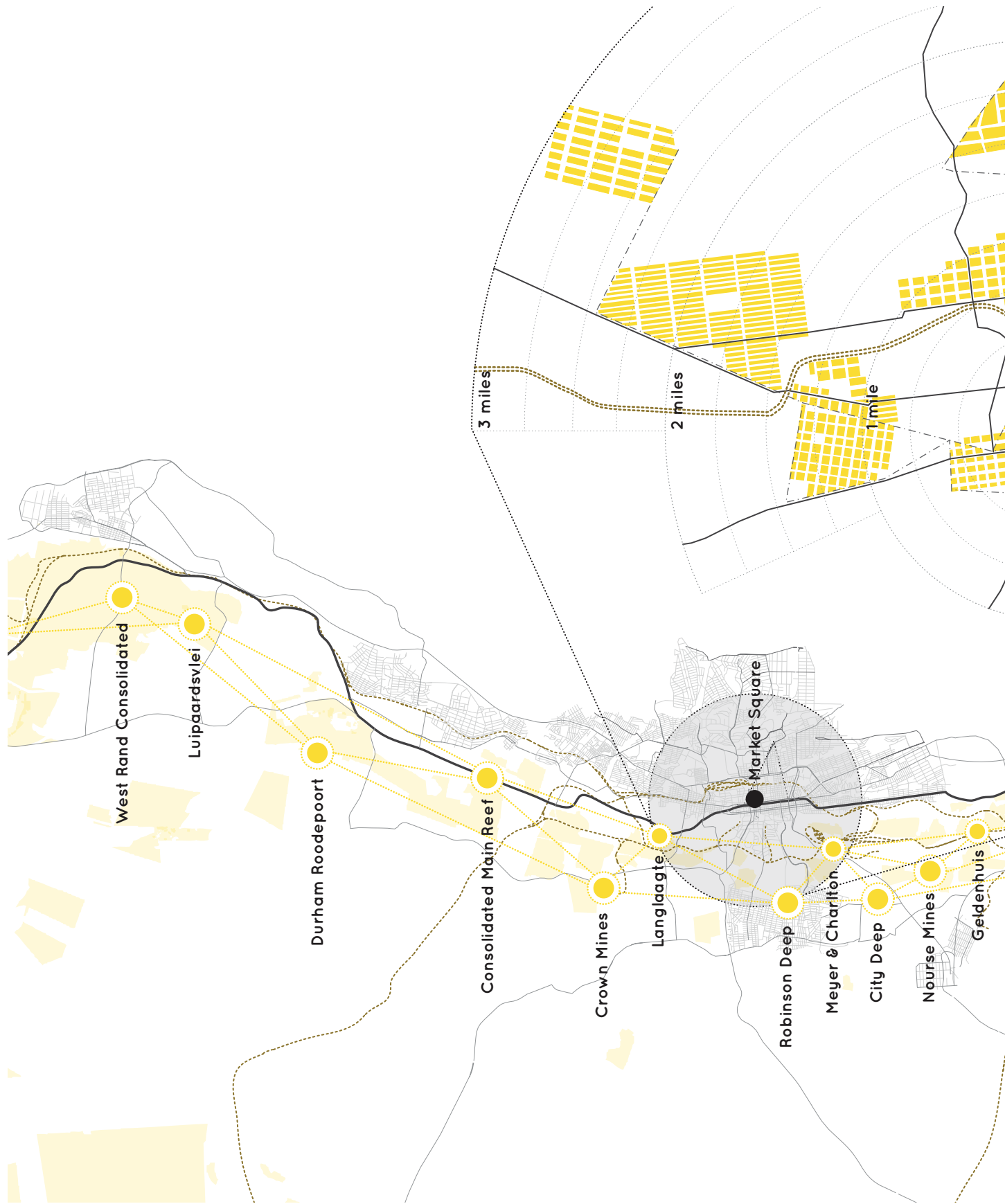
While trying to fix the city to its geography, the grid’s arbitrary application did not succeed in fixing a sense of place and instead created a kind of interchangeable matrix within which to perpetually destroy and rebuild, thereby constantly reinventing the identity of the grid itself. As a generic planning tool it was the first of many ways in which Johannesburg has tried to catch up to its own urbanization and deal with the tension between the “modern civility” of projected reality and the “uncivil modernity”¹⁴¹ of the city. Even during the decades of strictest apartheid control and surveillance the CBD’s combination of density, anonymity and centrality made it a hub of anti-apartheid activity.¹⁴² This drama between ceaseless attempts to manage chaos while the city ceaselessly subverts this through insurgent, or even everyday, practices has manifested in the reshaping and occupation of the CBD from its origins. The grid is one of the most normative tools of Western urban planning yet in the capital driven frontier the absolute arbitrariness of its application without long term vision, characterized by compactness and homogeneity, gave it specificity as a neutral tool capable of absorbing and generating the difference latent within an immigrant population.

141. *Ibid.*, 11.

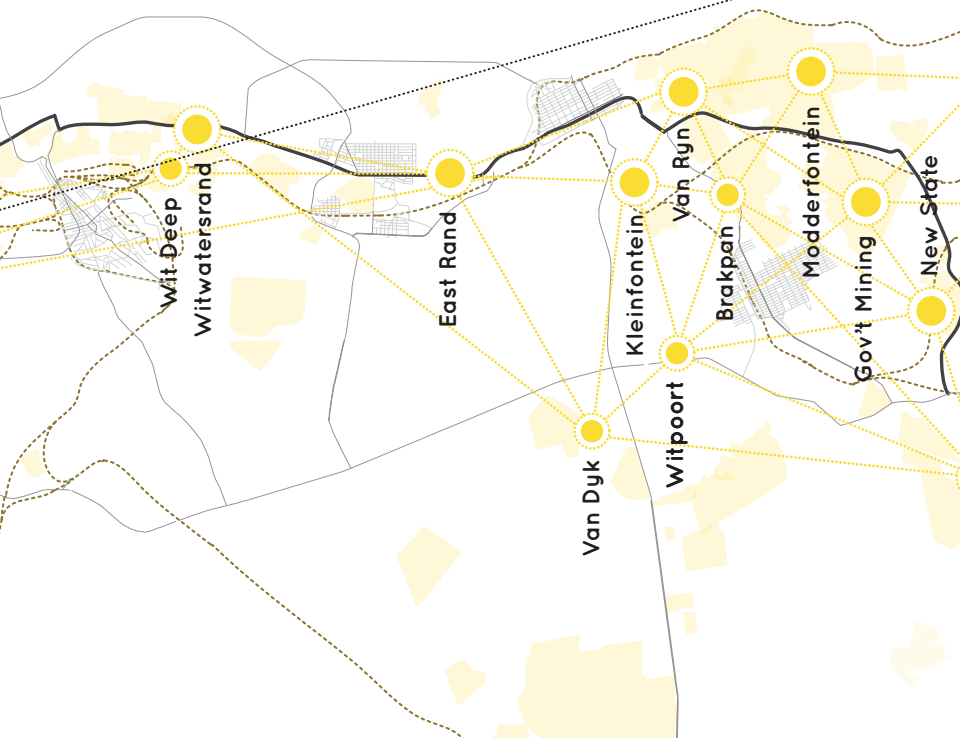
142. *Ibid.*, 105.




Figure 3.2.31

Compound Network, the beginnings of fragmentation, and the 3 mile area of settlement



The Compound & the Grid



-  Mines
-  3 Mile Inner-City Radius
- Mining Zones 

Both the compound and the grid speak to the powerful relationship between the frontier spirit and the production of urban modernity which manifested in a self-interested indifference towards the shaping of a future city. The two were born from the transition from prospecting to deep level mining in tandem with that of a digger's camp to a permanent urban settlement and the resulting tensions between Randlords and the migrant labour upon which they relied and the sudden arrival of a diverse immigrant society in rural Boer territory. Given its remoteness and singular *raison d'être*, Johannesburg's culture and economy were particularly in service of each other during the city's early decades. Both the compound and the grid, and the totality of the urban settlement to which these two primary urban devices gave rise, embodied the unstable alliance between the simultaneous colonial and capitalist obsessions with power and profit at the turn of the 20th century.

The compound was a contextually specific and highly exceptional economic and anti-urban device developed to manage and maintain an enormous population by providing all basic necessities on location. The grid, on the other hand, was likely the most normative tool of managing new urban settlement and property valuation at the time in the West, and by extension in the colonies. The ubiquity of the compound in Johannesburg's early development is an extreme example of the power of a single urbanizing device which bound together a diverse and otherwise unrelated population. Viewed this way the compound, though a closed system in comparison to the porosity of the grid, served a similar role as the grid which developed in a contextually particular and non-hierarchical way without premeditated planning,

allowing the diversity of the heterogeneous society and the emerging economy to be absorbed within the framework and perpetually reinvented. The two devices were independent and equally powerful yet opposing agents in shaping the patterns of spatial development and relationships of different groups to the urbanization of the Witwatersrand. Maintaining the social order of each was entirely dependent on their separation while maintaining the economic viability of each was entirely dependent on their relation. So while the two never touched and their occupants had limited interaction, they were highly codependent. This relationship was not equal given that the compound was, in cultural and economic terms, the subordinate of the grid as space in service of stabilizing the future of the city while it itself eventually fell into disuse as mines shut down or reached their lifespan. Yet in the moment, the compound was the more intentional and powerful spatial tool of management even if not originally an act of city building but rather one that nearly replaced the need to plan a city at all. Though abandoned compounds were never re-appropriated they ingrained within the territory a pattern of fragmented growth through singular spaces that has persisted throughout Johannesburg's development. The fact that gold was fortuitously discovered and therefore Johannesburg located at the midpoint of the Rand reef allowed the city to gain a dominant centrality as the symbolic heart of urbanization even while a majority of the population was initially transient and scattered within private mining property. The city produced by the compound and the grid together was a constellated and migratory territorial system, rather than a compact urban one, with an anchor disjointed from the field of satellites.

But Johannesburg had a different claim, and a legacy of its own. Within living memory and only sixty years before, it had been no more than a rough mining camp on the bare and inhospitable veld. Johannesburg downtown was still populated by the first and second generation uitlanders who had built Johannesburg out of their dreams of gold or freedom. Deep in their consciousness were the folk memories of times gone by - perhaps of the rough frontier democratism and internationalism of the mining camp; perhaps of life in eastern European lands where radicals and reds had been their only defenders against tsarist and cossack pogroms. Those memories resonated in many downtowners, making Johannesburg a city with a heart; an inner progressive, radical and democratic heart.¹⁴³

Johannesburg 1930-1970

143. Rusty Bernstein, „Tidal Flow,“ in *From Jo'burg to Jozi: stories about Africa's infamous city*, ed. Heidi Holland and Adam Roberts (Johannesburg: Penguin SA, 2002), 41-42.

Figure 3.3.1

Eloff Street, 1940s
The main retail street with mix
of Victorian and Art Nouveau
buildings

Photographer unknown



Figure 3.3.2

Commissioner Street, 1953
The imposing canyon of the
city's main business street

Photographer unknown



Figure 3.3.3

Hillbrow, 1960s
High density residential for the
young white working class

Photographer unknown



The Industrial City to the Divided City

By the late 1920s not only was Johannesburg's reputation as an 'world city' growing but it had finally been proclaimed an official city instead of a township, marking a critical turning point in the shifting perception of Johannesburg as an aspiring metropolis rather than a disorderly and oversized boom town. The economy enjoyed two periods of major local expansion and foreign investment in the 1930s and 1960s that were a complex mix of factors relating to the gold market, cultural development and state intervention. Together they bracketed the formation of a modernist breed of city calibrated to the peculiarities of time and place.

Given Johannesburg's shifting metropolitan identity in the 1920s, it is no surprise that the now national government, following the 1910 Union of South Africa, began to take a much greater role in developing infrastructure and diversifying the city's economy into the heavy industrial and manufacturing sector in order to balance the interests of the mines. Two critical government corporations, ESCOM and ISCOR, were established in 1923 and 1928 respectively; the first to increase power supply for a fledgling manufacturing sector, resulting in the construction of the 1927 Jeppe Power station in the CBD and the 1942 Orlando Power station in Soweto, and the second to supply iron and steel parts and machinery to the local market and mines, resulting in the construction of a first plant in Pretoria and a second large steel works south of Johannesburg in 1947. These investments were supported by the 1925 Tariff's Act which introduced tariff protection and import substitution in order to insulate the production of consumer and industrial goods intended primarily for the local market.¹⁴⁴ Such measures, focused on

144. Philip Bonner, „The Great Migration and The Greatest Trek: Some Reflections,“ *Journal of Southern African Studies*, vol. 30, no. 1, (2004): 89, <http://www.jstor.org.stable.4133859>.



protection and stimulus, were typical of developed countries post WWI and, when coupled with the advanced mechanization of Johannesburg thanks to the mining sector, created a fertile ground for rapid industrialization.

The other critical move on the part of the government was South Africa's departure from the Gold Standard in 1932, following a similar move by Britain, which de-coupled the value of the pound from that of gold, resulting in a 50% increase in the price of gold.¹⁴⁵ This heralded a period of massive foreign investment into Johannesburg and its imprint on the cityscape through a prolific building boom concentrated in the CBD. Between 1933 and 1938 the capital inflow was equal to two thirds of the total inflow of the previous 40 years, since the city's foundation.¹⁴⁶ While this represented a diversification of mining capital into built real estate, the government also benefitted from the departure from the gold standard by way of an excess profits' tax that was channelled into infrastructure projects.¹⁴⁷ The combined counter-recessionary tendencies of gold and state investment turned Johannesburg into an exceptional "world city in the midst of world depression."¹⁴⁸ This growth only increased in the WWII period with manufacturing output tripling in support of the allied war effort, such that by 1950 manufacturing had overtaken mining as the primary sector of employment in the Johannesburg municipality.¹⁴⁹ [Fig. 3.3.4] Factories were also a much more attractive employment option than the mines given that, safety and health factors aside, they paid weekly instead of monthly and wages tended to keep pace with inflation as opposed to those fixed by the Chamber of Mines.¹⁵⁰ Nonetheless, at the close of the war mining was still

145. Ibid., 89.

146. Robinson, "Johannesburg's Futures", 261.

147. Bonner, "The Great Migration and the Greatest Trek," 97.

148. Kruger, *Imagining the Edgy City*, 27.

149. Beall, Crankshaw and Parnell, *Uniting a Divided City*, 34.

150. Phillip Bonner, "African Urbanisation on the Rand between the 1930s and 1960s: its social character and political consequences," *Journal of Southern African Studies*, vol. 21, no. 1 (1995): 119, <http://www.jstor.org/stable/2637334>.

Figure 3.3.4

Evening exodus on West Street: blacks going for trains to Soweto, whites in their cars to the suburbs, 1964

Photo by David Goldblatt

151. Keith Beavon, „Johannesburg: a city and metropolitan area in transformation,“ in *The Urban Challenge in Africa*, ed. Carol Rakodi (Tokyo: The United Nations University Press, 1997), 157.

152. The Pass Law of 1952 required all black people to obtain and carry with them at all times an identification and work permit document in the form of the Pass Book. This was required for any movement between rural and urban areas and day to day movement between black townships and white designated urban areas

153. Clive Chipkin, „The great apartheid building boom: The transformation of Johannesburg in the 1960s,“ in *Blank Architecture, apartheid and after*, ed. Hilton Judin and Ivan Valadislavic (Rotterdam: NAI Publishers, 1998), 250.

154. *Ibid.*, 265.

155. Historical Gold Charts, Kitco, accessed October 13, 2013, http://www.kitco.com/scripts/hist_charts/yearly_graphs.plx.

employing 23% of the city’s population at a time when South Africa was producing 40% of the world’s gold, 96% of that coming from the Witwatersrand reef of which 34% was from mines within Johannesburg’s municipal boundaries alone.¹⁵¹ The mining sector therefore continued to provide an important local market for industrial and manufactured goods.

The dual powers of sustained mining and industrial growth put Johannesburg on a stable and profitable path through the 1940s and 1950s. The one kink in this path came in 1960 following widespread anti-pass law protests,¹⁵² the shooting of 70 demonstrators in Sharpeville south of Johannesburg, the declaration of a State of Emergency, and the banning of the ANC and the Pan Africanist Congress (PAC). This led to a brief period of investor panic, capital flight and a plummeting gold reserve to which the state responded by imposing exchange control policies and arresting most of the ANC leadership (eventually put on trial in 1964). Within two years these measures had reversed the tide and a decade long boom began.¹⁵³ With oil still at \$3/barrel and a 9%/year gross geographic product (GGP) growth rate in 1963, Johannesburg became the site of an intense frenzy of foreign investment which by 1969 was receiving between a 10% and 17% after-tax return, twice that of anywhere else in the world.¹⁵⁴ The end of the share boom of the late 1960s was then boosted by the 1971 Smithsonian Agreement which demonetized the value of gold, allowing it to fluctuate and rise with the value of the dollar. Its value, which had remained at approximately US\$35 since the 1930s more than quadrupled by 1975.¹⁵⁵ Given that the Witwatersrand mines are not nationalized, this resulted in massive financial benefit for private corporations. They,

however, were required to sell produced gold to the state at a standing fixed rate of US\$42.44 which the state then sold on the international market, returning the profit to the mine owners after keeping an unknown commission.¹⁵⁶ To put into perspective the potential profits gained, 1970 marked the peak of South Africa's role in the world gold market with the country producing nearly 80% of total worldwide gold output. Nonetheless, by this point mining employed less than 5% of Johannesburg's population given that most of the ore on the central Rand had been extracted and large scale operations had migrated to the Western Deep Level Mines, 80km south west of the city, starting in the 1950s.¹⁵⁷ So while the economic shifts from the 1960s on were happening much more at the national level than specifically in Johannesburg, as the country's heart of all sectors of the economy, the evolution of the built fabric of the city still responded directly to these complex economic transitions. The two booms which bracket the middle years of Johannesburg's development were fueled by the sustained strength of the gold industry but amplified by high levels of government intervention in line with similar Fordist trends in developed economies.

While Johannesburg's economy appeared to be developing to a position of consolidation, self-sufficiency and invulnerability, its cultural and demographic growth remained as fragmented as it had been from foundation. The transition to a largely secondary sector economic base also implied a shift in the nature of the labour force required and its relationship to the urban environment in general. [Fig. 3.3.5] Though the city weathered the Depression with relative ease, its impact was more pronounced in rural areas and was compounded by a severe

156. Leonard Siled, "New thoughts on monetary role of gold," *New Straits Times*, 31 October 1973, 9, <http://news.google.com/newspapers?nid=1309&dat=19731031&id=FIUuA AAAI IBAJ&sjid=hn0FAAAA IBAJ&pg=2151,5753239>.

157. Beavon, „Johannesburg: a city and metropolitan area in transformation," 159.

Figure 3.3.5
 Primary & Secondary
 Employment, 1945-1975

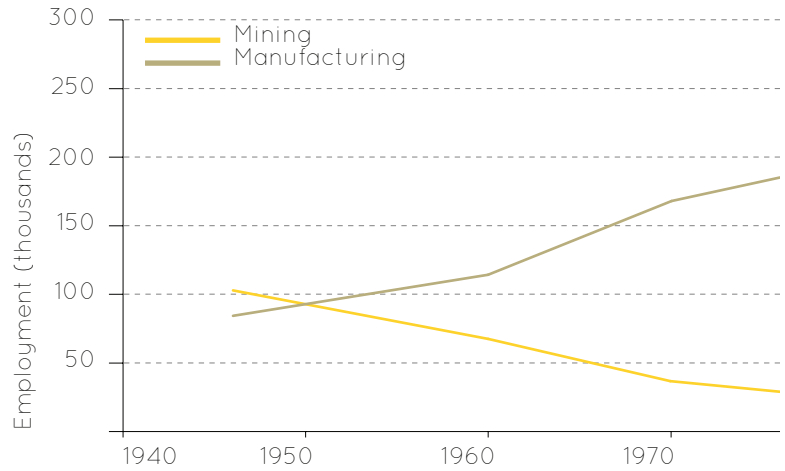


Figure 3.3.6
 Population by racial group and
 municipal housing construction,
 1911-1996

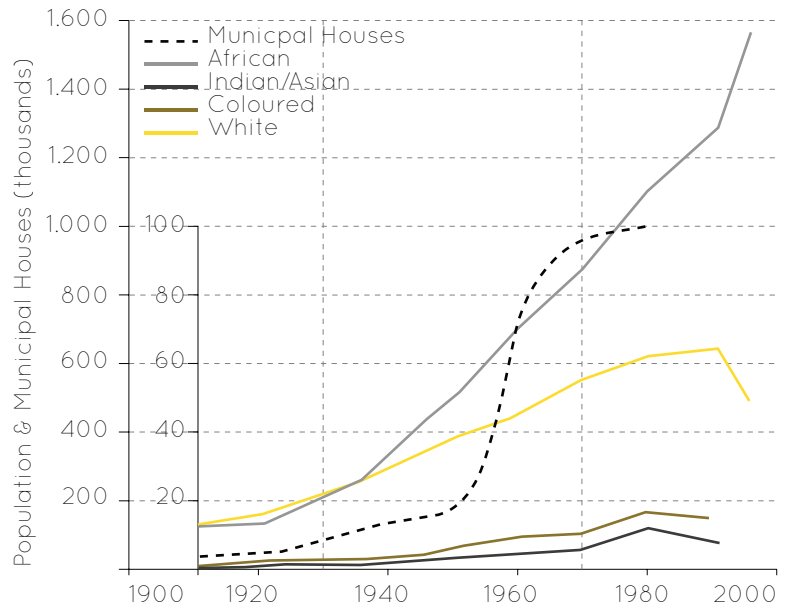
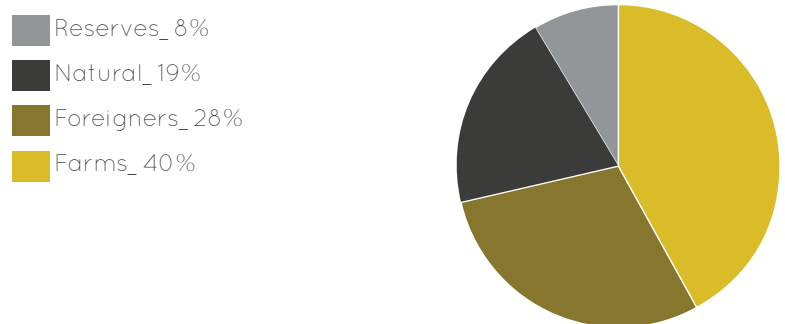


Figure 3.3.7
 Origins of black population
 increase, 1938-1951



1932-1934 drought that resulted in a near 50% drop in the output value of agricultural production in the Transvaal region.¹⁵⁸ The city offered a network of protection and opportunity to avoid starvation and triggered a massive period of migration whereby, between 1936 and 1946, the black population grew by over 60% and the white population grew by about 30%.¹⁵⁹ [Fig. 3.3.6] While both of the city's major racial groups grew substantially, this period marked a decisive break in the trajectory of Johannesburg's urban demographic composition with the African population growing exponentially from this point onward. While this new population continued to increase, it was still the first generation of urban dwellers and therefore not entirely sedentary. With less than 20% of the African urban population growth from 1936 to 1951 resulting from natural increase, almost 80% was therefore coming from outside the Witwatersrand. [Fig. 3.3.7] Records between 1936 and 1944 show that 90% of African labour in Johannesburg was from outside the city and that over that period 50% had returned to their place of origin.¹⁶⁰ So while the economy and the population were simultaneously booming, that population remained migrant in nature for some time. But as it became increasingly difficult to establish a secure urban life, once some measure of stability had been attained workers were less likely to return to reserves on a cyclical basis.

Given the relative lack of government intervention in housing and services during Johannesburg's first 40 years and the fact that the mines had housed most of their labour in on-site compounds, the city was ill-equipped to deal with a population surpassing 500,000 by 1940. The existing African residential areas became completely

158. Bonner, „The Great Migration and the Greatest Trek,“ 96.

159. „Black residential development in Johannesburg,“ South African History Online, accessed May 12, 2014, <http://www.sahistory.org.za/topic/black-residential-development-johannesburg?page=3>.

160. Bonner, „African urbanisation on the Rand,“ 117.

Figure 3.3.8

Eloff Street, 1967
City of Strangers

Photo by David Goldblatt



Figure 3.3.9

Sophiatown, 1950s
Run down shopfronts with
expensive cars

Photo by Jurgen Schadeberg



Figure 3.3.10

Fietas, 1977
Men listening to cricket in front
of one of their shops

Photo by David Goldblatt



overcrowded. Sophiatown was housing 40,000 in an area meant for 10,000, and by 1944 the beginnings of Johannesburg's informal settlements were emerging with over 100,000 setting up residence in tents on vacant municipal land.¹⁶¹ This put the changing government in a perplexing situation for though the National Party was largely brought to power in 1948 by rural Afrikaners who were losing labour to the city, the growing African urban population was needed in a booming economy and therefore had to be housed. The government began to introduce site and service schemes and family accommodation, as opposed to single sex hostels, in order to stabilize an African urban workforce, thereby blatantly contradicting all attempts made thus far to turn that same workforce into a body of rightless sojourners and perpetuate a system of migrancy (the effective mandate of the 1923 Urban Areas Act).¹⁶² The urbanization of the working class through the consolidation of municipal housing to the city's south west resulted in a north-south economic divide, separated by a dual mining and manufacturing belt, that preceded and has long outlasted apartheid's policy to separate residential zones by race. This was accomplished through the 1950 Group Areas Act which designated residential zones by colour and allowed the government to remove groups living in the 'wrong' zone. The combination of the simultaneous factors of overcrowding and legislated segregation had the effect of throwing classes together in the non-white residential areas and creating a mix of poor and aspiring middle class residents. [Fig. 3.3.9] Before their removal through the 1950s, 1960s and 1970s, the city's multiracial inner city working class neighbourhoods, primarily Sophiatown, Fordsburg, and Fietas,¹⁶³ supported a vibrant mix of cultures, languages and ethnic practices that had a

161. Ibid., 121.

162. Ibid., 121.

163. Kruger, *Imagining the Edgy City*, 140 (note 36): Pageview, previously Fietas, had a mix of 60% Indian and 40% Black, Chinese and Coloured



strong impact on the development of the city's urban culture.¹⁶⁴ [Fig. 3.3.10]

164. Ibid., 60.

In general, between 1930 and 1970 Johannesburg shifted from a state of growing cultural connectivity to one of a high degree of isolation as the apartheid state tried to segregate the diversity of its own population and insulate the city, by restricting the movement of people and ideas both in and out, against growing international opposition. Prior to this isolationist turn, however, the 1936 Empire Exhibition, held outside Britain for the first time, effectively put Johannesburg on the world map of technological and cultural modernity and provided further impetus and vision for the building boom of the 1930s with which it coincided. A sum of £9 million was spent in the built environment in the year leading up the Empire Exhibition, earning Johannesburg the title of 'Africa's Wonder City.'¹⁶⁵ Yet if the Exhibition accentuated anything it was that this was a city "caught between modern aspirations to international trade and cosmopolitan culture, and neocolonial dependence on black labor and on British cultural prestige."¹⁶⁶ While the mid 1930s marked the first round of explosive modernist city building in the CBD, to be repeated in the late 1960s, 1935 also marked the beginning of decades of municipal housing construction, in the form of the 'matchbox' house, in the black townships that would eventually form the South Western Townships, or Soweto. If the towers spoke of American technological influence, the townships spoke of British influence in social engineering, based on a rhetoric of healthy urban environments, which was all too easily adopted by the increasingly economically and socially interventionist South African government.

165. Ibid., 20, 30.

166. Ibid., 27.

Figure 3.3.11 (left)

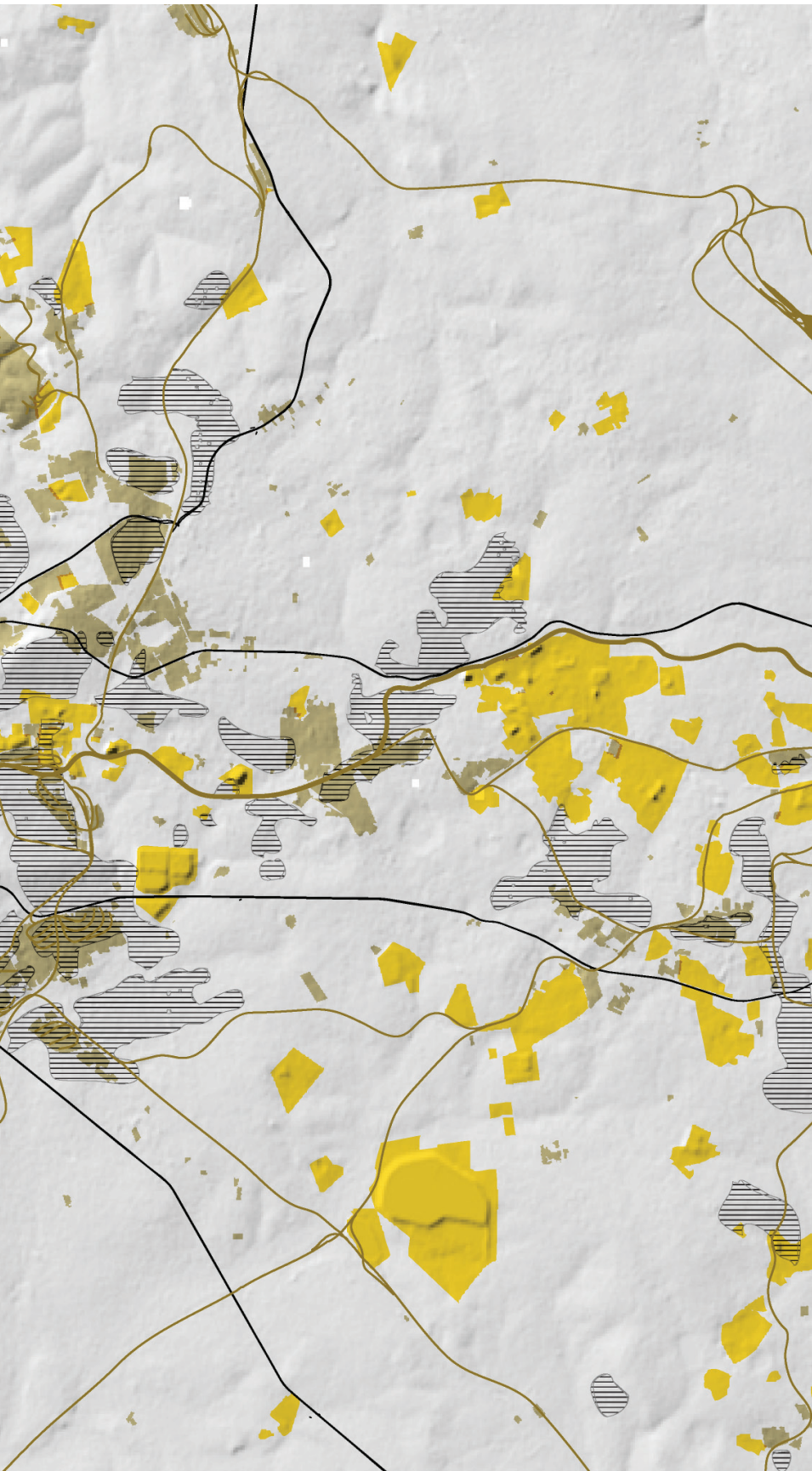
Downtown, Pritchard Street at Eloff Street, 1960s

Photographer unknown

Figure 3.3.12 (next spread)

Johannesburg circa 1960





Johannesburg circa 1960

- ① **1959 Randburg**
Wealthy White suburb
- ② **1966 Sandton**
Wealthy White suburb
- ③ **1950s Hillbrow/Berea**
High density inner-city rental for young Whites
- ④ **Pageview & Fordsburg**
Mixed-Race working class inner-city suburbs
- ⑤ **1935 Orlando**
Relocation of Alexandra
- ⑥ **1956 Meadowlands**
Relocation of Sophiatown
- ⑦ **1960 Eldorado Park**
Relocation of Pageview & Fordsburg
- ⑧ **1950 Lenasia**
Relocation of Pageview & Fordsburg
- ⑨ **1950-1970 South Western Townships (Soweto)**

Rand Railway

Highways

Settled Footprint

Mine & Residual Areas

Industrial Zones

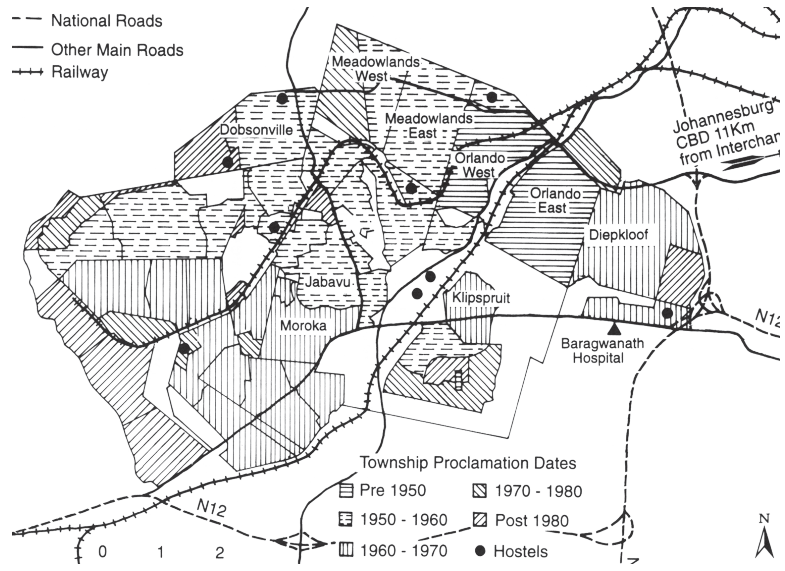


Figure 3.313
 The Growth of the South Western Townships (Soweto)
 Graphic by Keith Beavon



Figure 3.314
 Meadowlands, Soweto
 Photographer unknown



Figure 3.315
 Planning the Native Townships
 Photographer unknown

The Township

The first major government investment in formal accommodation for the working class in Johannesburg, either black or white, was in 1935 when 3,000 houses for families and six hostels for rural migrants were built in Orlando, 15 kilometres south west of the CBD along the southern edge of the mining belt. This was followed by a further 8700 houses in 1939, then minimal construction in the 1940s and then 53,000 over the 1950s and 1960s as the South Western Townships, or Soweto, spread to the south west. [Fig. 3.3.13] This massive government undertaking was unparalleled in any similar country at the time.¹⁶⁷ The township not only represented the large scale urbanization of the African population outside of the private compounds of the mines but also a problematic shift into the large scale interventionist role of the government in the built environment in a region driven by speculative capitalism. [Fig 3.3.15] Beginning in 1923, housing provision had been made the responsibility of the local municipalities and while, in the best case scenario, that would have resulted in the balancing of ideological imperatives of the government with material ones, little to nothing was built. Without the municipal middle man, the vision of the government planned township was an ideological conception of space. By the time these visions were being fully developed, in response to the Witwatersrand housing crisis and the rhetoric of post-war reconstruction, modernist planning was already highly developed in Europe. The modern planner's trend towards thinking in terms of population and economic groupings rather than axes, as well as the dominance of the neighbourhood unit concept, fit comfortably both with apartheid's breed of modernism and past colonial developments under the guise of health protocol.¹⁶⁸

167. Derek Japha, „The social programme of the South African Modern Movement,“ in *Blank Architecture, apartheid and after*, ed. Hilton Judin and Ivan Valadislavic (Rotterdam: NAI Publishers, 1998), 423.

168. Susan Parnell and Alan Mabin, „Rethinking Urban South Africa,“ *Journal of Southern African Studies*, vol. 21, no. 1 (1995): 55, <http://www.jstor.org/stable/2637330>.



Figure 3.316

Orlando West Type C.2. House,
1944
£400/house

DATA.

AREA OF HOUSE + DEC.	787 SQ. FT.
COST PER HOUSE + DEC.	£410-7-1.
COST PER SQ. FT. + DEC.	10-5.
COST OF SERVICES.	£300-1-1.
COST OF LAND.	£ 3-0-0.
TOTAL COST.	£751-10-2.
MONTHLY RENTAL.	£ 1-10-0.

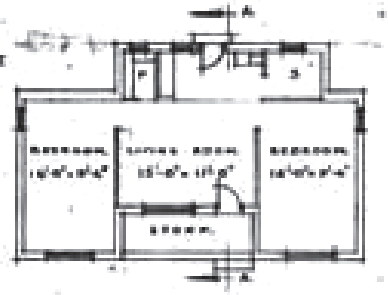


Figure 3.317

NE 51/9 Type House, 1951
The six brickwork tasks

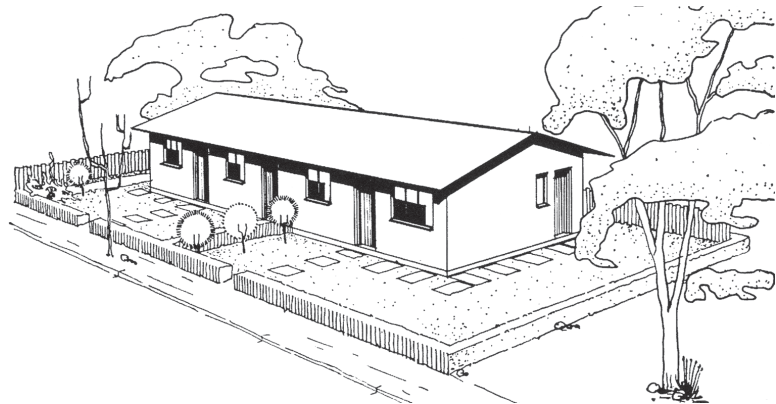
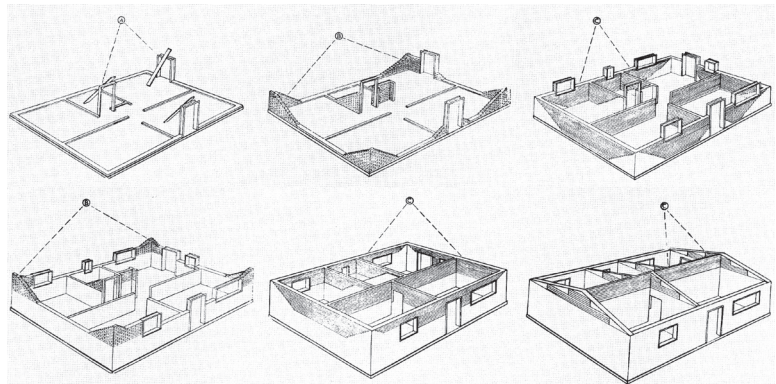
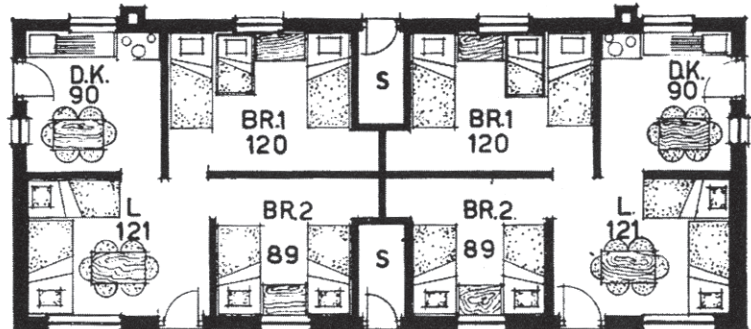


Figure 3.318

NE 51/8 Type House
Axo & Plan, 1951
£227-310/house



In the 1940s, during the apparent stagnation of housing construction, two organizations, the Housing and Planning Commission (NHPC) and the Building Research Unit (NBRI), developed a series of reports on planning models and housing standards between 1945 and 1949. Despite South Africa's remoteness, a modern movement had emerged in the architectural profession and one of its early prominent members, Norman Hanson, had an important role on the advisory committees of the NHPC and NBRI from 1944 to 1963. Hanson, having become critical of the formalist trend in the early work of the South African modern movement, advocated for planning which recognized the social aspect of international modernism to work for the non-racialized collective good.¹⁶⁹ The published reports put forth three concepts: "the belief in the possibility of an objective science of the environment informed by sociology, psychology and economics, the pursuit of standard-setting as a key activity, and the pairing of regionalism and the neighbourhood unit as the formal model for housing development."¹⁷⁰ This modernist combination of scientific rationalism and regionalism was embraced by the new National Party government in 1948 and effortlessly rolled into its mandate for urban social engineering according to race. Standard-setting quickly morphed into the singular technical imperative to make the unit of production, the house, economically viable in absolute terms, meaning that there would be no subsidization.¹⁷¹ [Fig. 3.3.17] Though a limited number were available for fixed period leasehold, the vast majority of these houses were rental properties managed by the government.¹⁷² In this context the municipality could build vast quantities of housing with no need to pay heed to market demand because they were controlling

169. Japha, „The social programme of the South African Modern Movement,“ 426.

170. Ibid., 431.

171. Ibid., 434.

172. Beall, Crankshaw and Parnell, *Uniting a Divided City*, 50.

Figure 3.3.19

Meadowlands, 1957

Photographer unknown



Figure 3.3.20

Party at Doris Mthanya's house,
699 Emdeni, Soweto, 1972

Photo by David Goldblatt



Figure 3.3.21

George and Sarah Manyane,
3152 Emdeni Extension, Soweto,
1972

Photo by David Goldblatt



the market, in fact forcing demand by legislating segregation. What were often speculative post-war developments elsewhere, were here built within a highly regulated but not subsidized housing bubble. In reality it was economically unviable to create a massive rental market of low quality, standardized single housing units on single properties with little resale value, but the government managed costs in order to support its modernist vision. The unit itself represented the minimum standard for a spatial unit which could support the integrity of the family unit, deemed fundamental to stable urbanization, an aspect that policies toward migrant labour and the very nature of the mining town had undermined. The new plan for Western styled single storey, detached or semi-detached rowhouses on individual plots, was a carefully calibrated ratio between typical family size to plot size, density and area. [Fig. 3.3.18] Rather than a simple mechanism of absolute segregation and coercion, the township was also a physical tool for the moulding of a modern life. This 'modernizing' process, however, was subverted by the coercive aspects of the township enacted through physical separation from the city and employment restrictions, making it impossible for townships to become self-sufficient. [Fig. 3.3.19]

If a central contradiction of modern urbanity was the coexisting ideas of compartmentalized order and cleanliness along with those of an intermingled cosmopolitan society, then the struggle to and ultimate futility of managing Johannesburg's exploding population was axiomatic of this opposition. Like the compound, the township as urban device tried to homogenize by concentrating an immigrant urban population that was scattered across the Rand in

173. Bonner, „African urbanisation on the Rand,“ 128.

174. Beavon, „Johannesburg: a city and metropolitan region in transformation,“ 169.

175. Alexandra and Sophiatown were the only two areas of African freehold in Johannesburg because they had been established prior to the 1923 Urban Areas Act

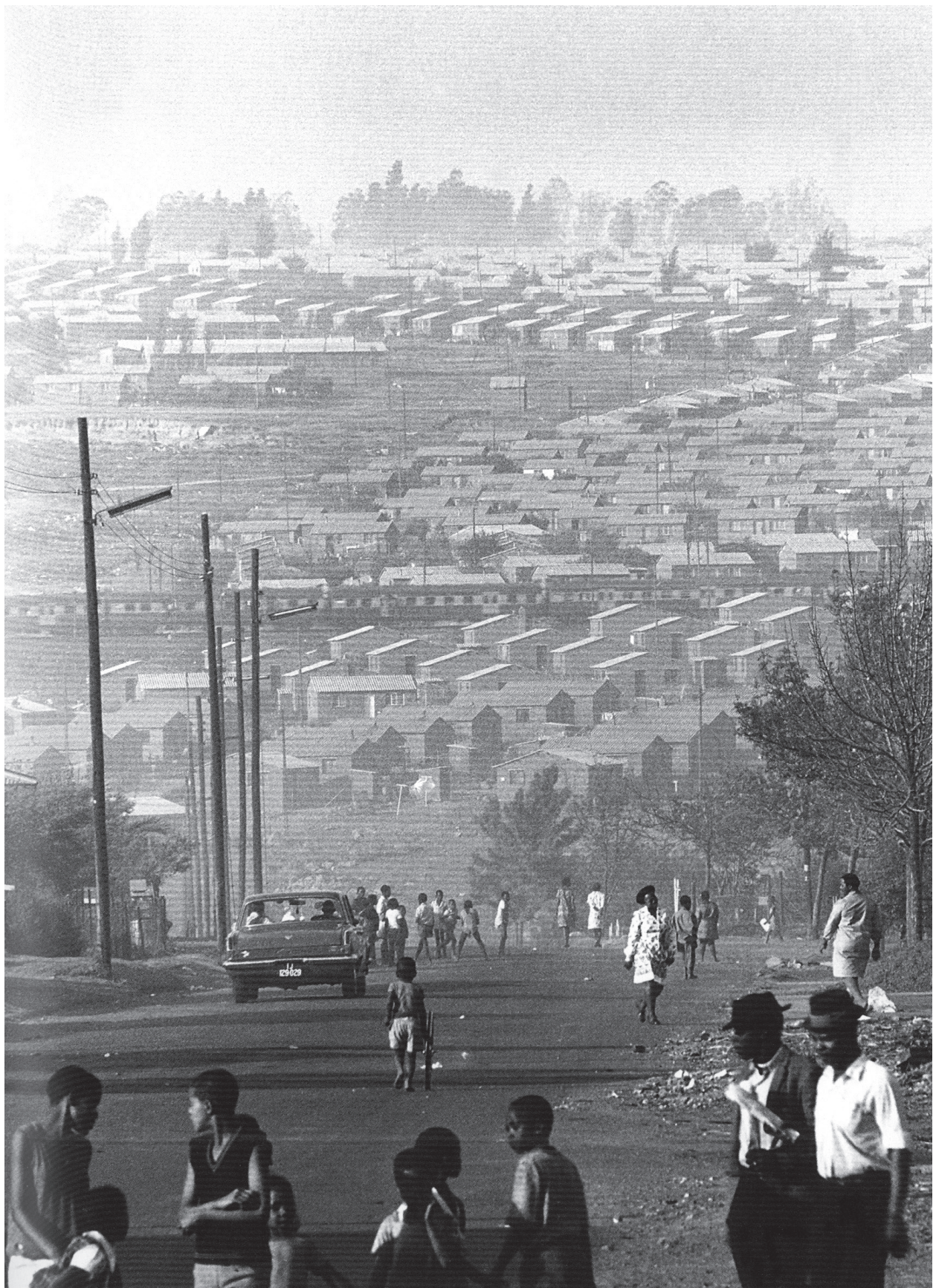
back-of-house rooms in white areas, in smallholdings surrounding the towns, and in the yards of non-white freehold stands.¹⁷³ The struggles of the township, namely against the government's rental fees and expensive transit to the CBD, now became the common ground of the urbanized immigrant African population living under a standardized set of conditions. Though township building was a national program, in Johannesburg the concentrated development of Soweto across the industrial belt from the aspiring world city, created a particularly dualistic relationship whereby the city could not survive without the labour base of Soweto and Soweto could not survive without the economic base of the city. This codependency was maintained by economic restrictions placed on the townships, not unlike strict residential zoning in suburban neighbourhoods, that only allowed basic shops such as pharmacies, butchers, beerhalls, and so on.¹⁷⁴ Even under high levels of control, however, the fragments of an urban environment of such contiguity inevitably became embroiled in the shared life and economy of the city as a whole. Driven by the necessity of transit, the 1957 bus boycotts, for example, demonstrated the growing working class collectivity of the still heterogeneous and fragmented urban landscape when residents of Alexandra¹⁷⁵ refused to pay an increased fare and instead walked the 35 kilometres to the CBD. Reminiscent of the spread of the 1920s compound strikes, they were quickly followed by residents of Sophiatown, the Western Native Townships, and Kliptown, Moroka and Jabavu in Soweto, together sustaining the boycott for three months until the Public Utility Transport Corporation (PUTCO, a private but subsidized company), was forced to concede. The daily use of different city spaces and movement between them

rendered the black townships ambiguous spaces where occupants were constantly traversing invisible boundaries and exchanging with counterparts across the geographical fissures in the city. When business restrictions were lifted and townships became catalytic in the development of unregulated economies, the semi-informal minibus taxi transit system, in particular, began to facilitate a territorial network of exchange as the city's boundaries were no longer legally enforced.

Apartheid was a system of urban management that proposed that territorial distance and buffers, along with legally regulated urban status and activity, could sustain Johannesburg's dualistic and mutually dependent urban economy. Apartheid boundaries were physically ambiguous but legally rigid because in such a codependent environment absolute fixed boundaries were not an option, as they had been in other divided cities such as Berlin. As such, in trying to create a 'world of strangers',¹⁷⁶ the modernist project of apartheid, coined 'separate but equal', overlooked that such a world is still one collectively inhabited world no matter how much distance you put between its occupants. This had been exemplified by the inner city's peripheral neighbourhoods, like Sophiatown, which were eventually replaced by the standardized township model where cosmopolitanism prevailed because earlier land ownership regulations along racial lines had subverted modernist segregation along class lines. It was through the "contiguities (spatial, intellectual, recreational) which the paracities engendered that resistance could emerge out of a racially mixed conglomeration of people from all walks of life: politicians, professionals, intellectuals, workers."¹⁷⁷ The persistence of Sophiatown in

176. Kruger, *Imagining the Edgy City*, 80.

177. Herwitz, "Modernism at the Margins," 418.



particular, a place of contestation over the right to urban life, as a reference point for true South African urbanity despite its physical characteristics of a ghetto, in line with American counterparts of the period, testifies to the imagination of a future in its image.¹⁷⁸ And despite the repeated neighbourhood clearances and the creation of Soweto in the image of modern compartmentalization, the spirit of the cosmopolitan neighbourhoods it replaced was never quite eradicated for the contested and precarious urban life they had nurtured had become a “state of mind”, an “attitude of resilience, stubbornness and unpredictability”¹⁷⁹ The role of the township in political development was formalized through the Civic Associations, or ‘civics’, a series of technically apolitical community based organizations that emerged after the ANC and PAC were forced underground in 1960, which mobilized against quality-of-life and development issues.¹⁸⁰ In Johannesburg these civics eventually grouped under the umbrella of the Soweto People’s Delegation which in turn was made part of the South African National Civics Organization (SANCO), now a major player in the negotiation of all municipal development issues in the city today. By becoming a spatial tool of division by race, the township threw together economic classes and therefore disguised the natural inclination of the capitalist city to divide by economic status, which had been much clearer in Johannesburg’s early days and has become extreme today. In doing so the township concentrated a politically and economically engaged lower class that subsequently embedded public decision making processes into city building policy frameworks during Johannesburg’s post-apartheid transition.

178. Kruger, *Imagining the Edgy City*, 60.

179. Jennifer Beningfield, *The Frightened Land* (New York: Routledge, 2006), 257.

180. Beall, Crankshaw and Parnell, *Uniting a Divided City*, 70.

Figure 3.3.22 (left)
Mofolo South, Soweto, 1972
Photo by David Goldblatt



Throughout the decades of horizontally sprawling municipal housing construction, central Johannesburg remained the scenic backdrop of a city in search of another modern identity. In the context of the industrializing economy and the gold standard boom, the 1936 Empire Exhibition was the first statement of how this economic transition would manifest through the transformation of a haphazard collection of Victorian, Edwardian and Transvaal structures held together into a cohesive whole only by the common grid, into the world city for which it was gaining a reputation. The progress towards a collective urban modernity on display through the Exhibition also signalled the potential of moving beyond the ideological dichotomy of colonialism between the elite white and tribal black masses. The role of African workers as agents of urbanization was in fact recognized during the Empire Exhibition, partly in ISCOR's building, and in the street parades that were attended by the city's diverse races.¹⁸¹ The potential of this progress, however, was simultaneously being undercut by the legal action of the Urban Areas Act which curtailed the rights of non-whites to reside in the city, regulations which were introduced in 1923 but not applied city wide until 1933. Despite supposedly being a celebration of the civilizing power of Britain in this remote territory, the imagery of the exhibition seemed ambivalent towards this heritage. Instead it leaned more towards representing a productive industrial modernity than the agricultural and mining based, or raw material, economy of its foundation. The official exhibition poster captured this shift with futuristic skyscrapers erupting out of the high veld bedrock, overpowering the tents and wagons of the original frontier settlement. [Fig. 3.3.23] By the beginning of the exhibition, two dozen

The Tower

181. Kruger, *Imagining the Edgy City*, 44.

Figure 3.3.23

Voortrekker and the City of Gold, 1936 Empire Exhibition Poster

Graphic by J.P. Ullman



Figure 3.3.24

Ansteys (top left), Chrysler House (top right), Lewis & Marks (bottom left), ESCOM House (bottom right)

Photographers unknown



Figure 3.3.25

Johannesburg CBD 1930s

Photographer unknown

new buildings had been completed, with two dozen more in progress, all relying on the reinforced steel frame or concrete core technology of the Chicago legacy.¹⁸⁰ And in 1937 and 1938 four skyscrapers were built, ESCOM House, Anstey's, Chrysler House, and Lewis & Marks. [Fig. 3.3.24] The Chrysler House in particular, built on an entire city block by the American company as a showroom and service centre for its automobiles, was an odd confluence of the minimalism of international style complete with massive exposed concrete structure, recessed to allow large continuous horizontal bands of glazing, and a completely unornamented facade, yet with a characteristically Art Deco stepped tower. The Lewis & Marks building more clearly resembled the style of the recently completed Rockefeller's RCA building in New York, albeit a stunted version, with its monolithic form and emphasis on verticality. The ESCOM House also took up an entire city block, occupying the ground plane with magisterial presence. It housed ESCOM and ISCOR's main offices, but also provided rental office space and ground floor banking halls for major branches of Barclays Bank and the Standard Bank of South Africa. Beyond its corporate functions and typical staff facilities, it also contained an exhibition hall, lecture theatre, chemical laboratory and underground parking.¹⁸³ Like Anstey's, which combined a major department store with residences, the ESCOM house was a multi-use typology. These skyscrapers gave appropriate physical stature to the world's most important gold mining city and its claim to world city status, resolutely projecting an image of the future which left behind the British colonial and rural Boer not-so-distance past. [Fig. 3.3.25] They would be unmatched until the financial boom of the 1960s which resulted in a much more wholesale

182. Murray, *City of Extremes*, 51.

183. „ESCOM House,“ ESKOM Heritage, accessed June 10, 2014, http://heritage.eskom.co.za/escom_house/escom_house.htm.

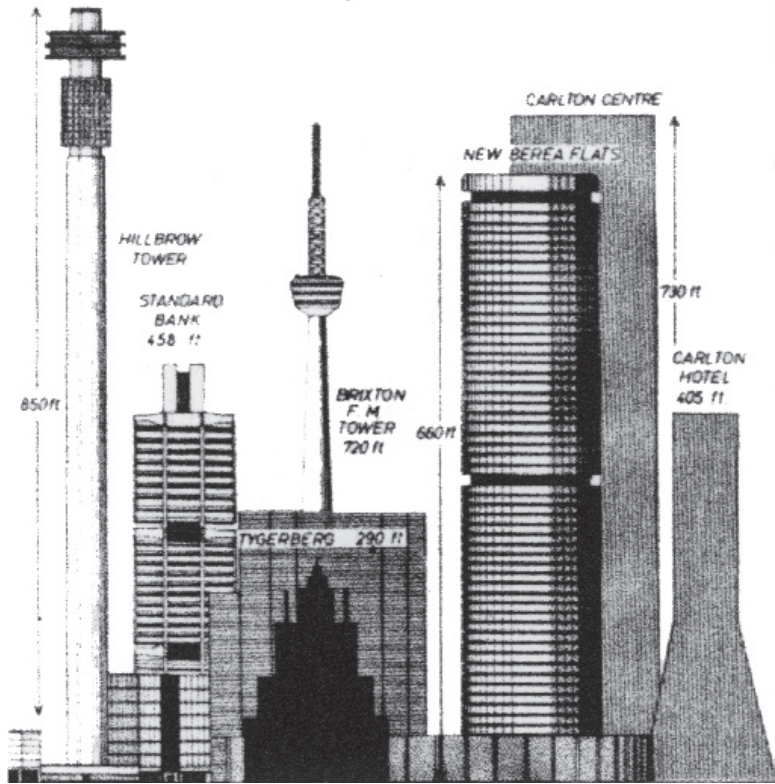


Figure 3.3.26

Johannesburg City of Towers,
1968

Figure 3.3.27

I Love Jozi
Company branding image



Figure 3.3.28

Towers in a Park, Modernist
vision for Johannesburg CBD, c
1971

Graphic by Monty Sack



transformation of the CBD. [Fig. 3.3.26]

The eruption of towers in Johannesburg, at the height of apartheid, represented the physical power of global financial flows and the profoundly ambivalent ethics of foreign capital. Big power has always tended to translate to big architecture, take Imperial Rome or Mussolini's Italy for example, and in the case of Johannesburg, with the government headquarters just far enough away in Pretoria, big architecture was produced by big money. This was less the expression of political hegemony than that of unadulterated economic speculation which was, nonetheless, made possible by the hegemony of that political system. [Fig. 3.3.28] The frantic tower building of the late 60s also foreshadowed the transition towards an almost purely financial and service sector based economy, foreshadowing the absolute decline of the manufacturing sector in the 1980s. While most were mono-functional buildings for telecommunication or bank offices, the largest project, the Carlton Centre, was an important urban proposal and transformation of civic space. It was commissioned by Anglo American Inc which had become the world's largest mining company in 1951, with funding from SA Breweries and Barclays Bank and designed by the prolific Gordon Bunshaft at Skidmore Owings and Merrill, who had already long since built the canonical Lever House and One Chase Manhattan Plaza in New York. Here however he designed the tallest reinforced concrete building in the world; a 50 storey poured in place tower combined with local grey granite sand blasted to expose its aggregate. This was primarily due to South Africa's continued import substitution policies which encouraged the use of reinforced concrete structure rather than the

Figure 3.3.29

The Carlton Centre superblock
with the Standard Bank going up
in the distance, 1968

Photo by David Goldblatt



Figure 3.3.30

The Carlton Centre towering
above the mid rise inner city
skyline

Photographer unknown



Figure 3.3.31

The three part composition of
the Carlton Centre

Photographer unknown



imported steel frames that had characterized the city's public buildings of the Edwardian period.¹⁸⁴ The sense of absolute weight of Johannesburg's CBD, with only a few steel and glass structures, seems rooted to the bedrock of its foundations.

184. Chipkin, „The great apartheid building boom,” 255.

Beyond technical peculiarities and innovations however, the Carlton Centre marked a profound shift in the conception of urban public space in Johannesburg. Firstly, in its location towards the east of the CBD, the complex destabilized the grid's centre of gravity which had rested around the financial district and adjacent Beaux Arts Public Library, City Hall and gardens which occupied the original Market Square site. This demonstrated the power of single mega-projects to become places of centrality and catalyze new modes of urban development. [3.3.30] Composed of the three objects of office tower, hotel and department store along with a skating rink and shopping mall set below grade, the complex engulfed four of the original compact city blocks, too small to accommodate the scale of such speculative investment, closing the cross streets and creating a grade level pedestrian plaza and a glazed atrium connecting the whole complex. [Fig. 3.3.31] This single deft move of absorbing the retail space of the street, which the original block density and stand layout had so effectively made abundant, and turning that space inward gave the illusion of the continuity of public life while making it private, thereby creating a city-like environment within the city. The Carlton Centre was “SOM's version of the Ville Contemporaine, divorced from social theory and adapted for commercial use. From the city as a collectivity to the city of private real estate. The Ville Radieuse reinterpreted for the market economy.”¹⁸⁵ It both embodied the spirit

185. Ibid., 255.

of unrestrained capitalist speculation of the city's foundation and foreshadowed the proliferation of privately managed public space in the form of shopping/business complexes that would drive the polycentric expansion of the city. This polycentric development, combined with economic decline and political instability, would cut short the glory of the Carlton Centre which eventually lay vacant for many years until it was sold to state owned Transnet in 1999 for a fraction of its value. While the office tower and shopping centre have been re-inhabited, the hotel remains mothballed. The abandonment of the Carlton Centre made it an exceptional place of nostalgia whereby instead of heralding the future of the city, it recalled a bustling European or American metropolis which was no longer the reality of its surroundings.

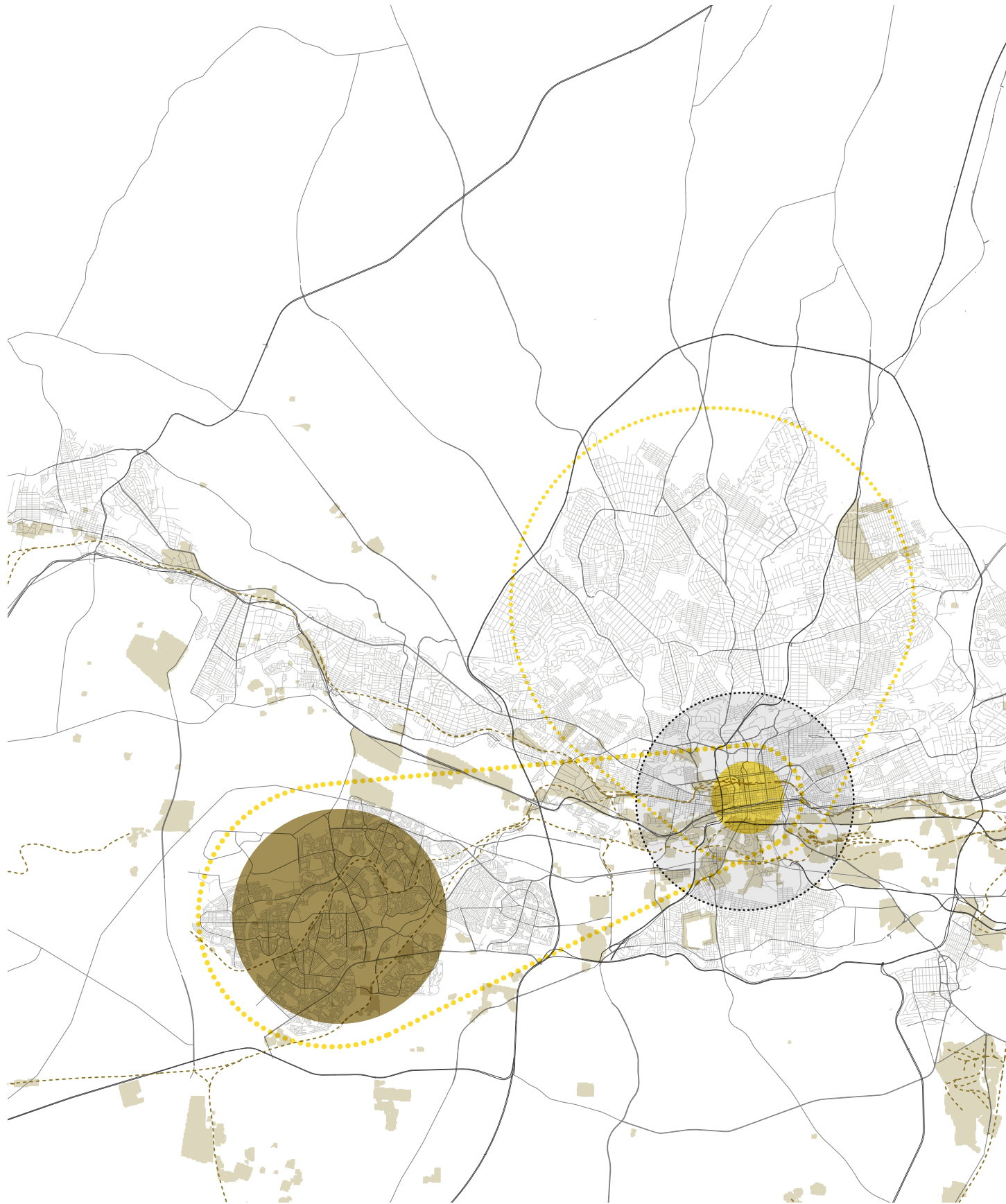
The generational purging of chunks of the CBD at the hands of private and state corporations, perpetuating the idiosyncratic trend of parcel by parcel or block by block development, has created an oddly dense patchwork of coexisting Edwardian, Art Deco, and Modernist architecture. Yet to view this as a peaceful coexistence, a collage, would be to remove this haphazard composition from the contested economic and social history under which each era of city building emerged. Fueled by speculation rather than planning this building process was the accumulation of competing representations of the city's aspirations to an extraordinary and innovative modernity that was both a statement of the city's accomplishments so far and of its imagined future. "Even if the built environment is not alive in the ecological sense...the structures of the urban landscape not only bear traces of life as it was, but act as shaping environments of life as it is now and may

yet become.”¹⁸⁶ Despite the political and economic situations under which Johannesburg’s skyline grew, that same skyline, the collection of idiosyncratic endeavours of which it is composed, gave legitimacy to the world class city claims dating back to the 1920s and 1930s and are now the dramatic stage set for continued pursuit of this identity today. The most politically driven of all the towers, the Hillbrow telecommunications tower, built by state owned and apartheid controlled Telkom broadcaster, has become the most visible icon of the Johannesburg skyline as the branding image of the Jo’burg 2030 planning framework and official city logos. While on one hand this is pure irony, on the other it is also a reminder that no matter the apparent fixity of an urban object, it has the capacity to both embody and shape the aspirations of a city that transcend historical time and space. And yet as representative image for the re-emergence of the world city claim, the towers today simultaneously attempt to defy the reality of inner city decline. While the Carlton Centre used to be the symbol of success in Johannesburg, these aspirations are now embodied in the luxurious world of Sandton City in the northern suburbs, and as such the Carlton Centre is forced to face the reality of its impoverished inner city surroundings and cater to shifting economies and demographics, thereby denying its ability to function as a self-sustaining city within a city. As an otherwise typical development of the grid, the towers in Johannesburg took on a particularly urban role in encompassing the social life of the block within a single development, thereby creating social and economic civic space while concurrently obliterating it.

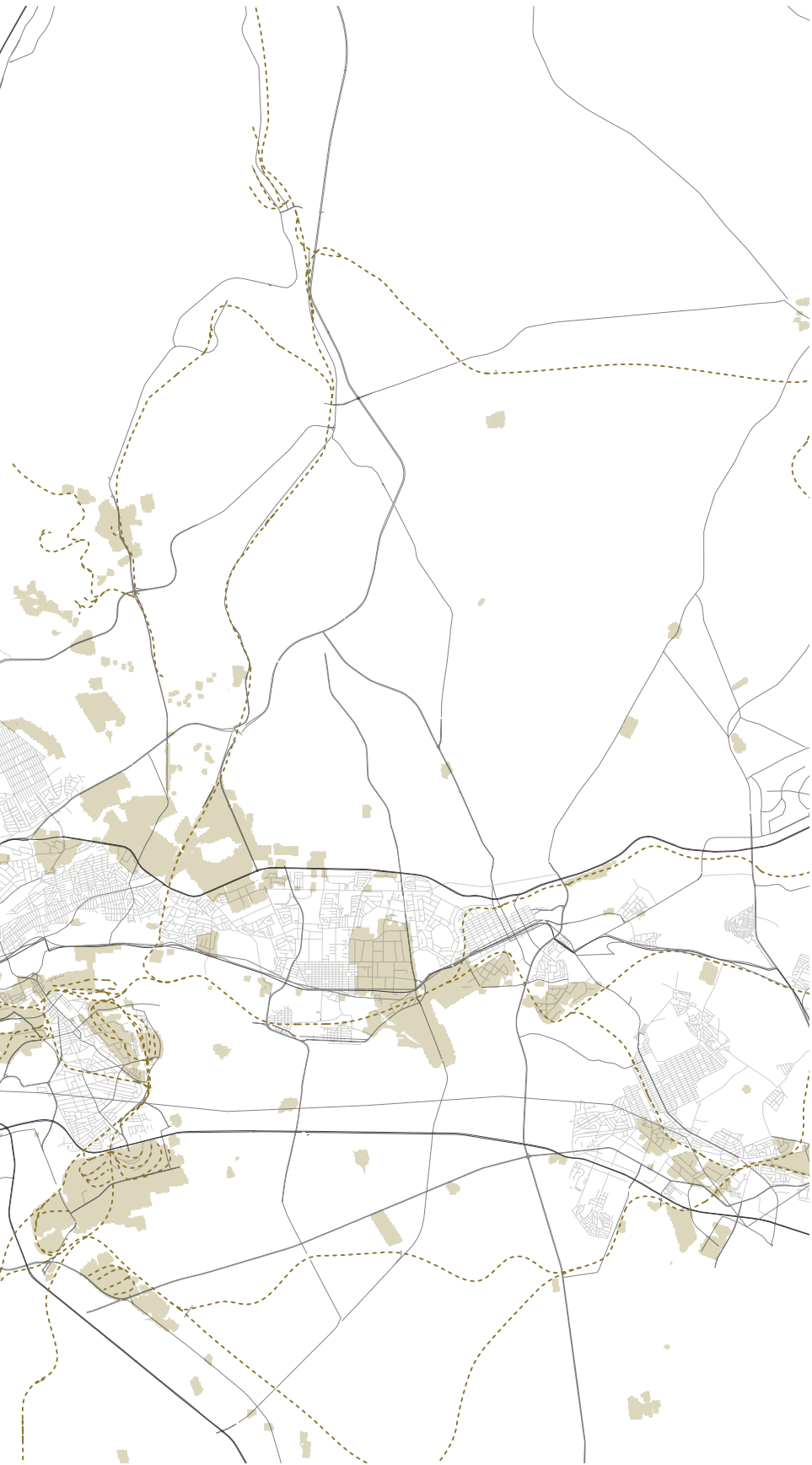
186. Kruger, *Imagining the Edgy City*, 13.

Figure 3.3.32 (next spread)

The Township & The Tower



The Township & the Urban Tower



-  CBD Towers
-  South Western Townships
-  3 Mile Inner City Radius
-  Industrial Zones

The concurrent building of Johannesburg's townships and its urban towers, though typologically and programmatically a juxtaposition between serial horizontality versus singular verticality and place of residence versus place of work, embodied the relationship between government intervention and the speculative capitalist economy. Both had competing visions of an urban modernity caught somewhere between the industrialized and progressive new world and the established structures of colonial hegemony. The two urban devices gave shape to a city in transition from a deep level mining economic base to an industrial and manufacturing one and from an emerging cosmopolitan city to a segregated one. The dual forces of internationalism and isolationism produced a society heavily influenced by outside identities all while becoming increasingly divided against itself. The municipal township is a particularly extreme form of development in South Africa but given its articulation based on modernist standardization and regionalist planning principles it is effectively also a normative model of a post-war dormitory suburb. In the context of Johannesburg it had an exaggerated sense of placelessness and disjunction and could only function and be defined in opposition to the power and profit of the city of towers just across the industrial belt. Yet it was its subordinate position within this asymmetrical but codependent relationship that also gave the township its power as the locus of revolutionary change by which it eventually inverted the relationship and eclipsed the inner city's capacity for projective change. The city of towers would eventually depend on the consumer market provided by the township to define its role in the decentralizing urban environment as a whole, while simultaneously remaining the problematic

representation of relentless claims to world class modernity.

Johannesburg became an increasingly dualistic environment which was epitomized by contradictory processes of decentralization and concentration, caused by segregation, and manifested in the expansion of matchbox houses in the shadow of the eruption of skyscrapers. The former minimized all innovation, except in terms of cost efficiency, the later achieved advanced feats of engineering. The townships and the towers epitomized the programmatically compartmentalized production of urban space which set into motion a series of superimposed and opposed daily movements that ensured the perpetual crisscrossing of the city's diverse population, though eventually also subject to shifting levels of compartmentalization. The agglomeration of townships which eventually created the massive Soweto effectively formed another centrality through sheer population mass that distorted a pure hierarchical relationship between centre and periphery. The balance of economic and cultural power that defined the entire city and the building of its specific breed of urban modernity was held in perpetual tension, often at tipping point, between these two urban devices. This was a city of boundaries that were constantly being crossed and therefore redefined by the very daily transgressions they necessitated in order to maintain the economy of the city as a whole.

Johannesburg 1970-Today

When visitors from outside want to know why I live here, I always take them into the decaying heart of our old downtown, where Africa and the West come face to face across a narrow street called Diagonal. On one side there`s a little African apothecary where a certain K Naidoo does a roaring trade in healing and magical herbs, baboon skulls, lizard feet and tiny vials of crocodile fat. On the other there`s a soaring edifice of blue glass and steel, designed by Helmut Jahn, the great avant-garde architect from Chicago.

I've been there a hundred times, and the juxtaposition has never ceased to amaze and elate me - witch doctors entering one building, accountants exiting the other, and mingling on the street between. It seems extraordinary, but it isn`t, because this is the nature of the city: at once an outpost of western `civilization` and a point of entry into another reality, a parallel kingdom of African consciousness.¹⁸⁷

187. Rian Malan, „Jo`burg Lovesong“ in *From Jo`burg to Jozi: stories about Africa's infamous city*, ed. Heidi Holland and Adam Roberts (Johannesburg: Penguin SA, 2002), 155-156.

Figure 3.41
Diagonal Street, 1984
Photo David Goldblatt



Figure 3.42
Appropriating space for spiritual practice around the abandoned factories of Doornfontein, inner-city Johannesburg

Photo by Santu Mofokeng



The African Metropolis to the World Class Region

David Harvey refers to a contradictory process of 'creative destruction' in city building in which capitalism is forced to constantly destroy its own creations to maintain the perpetual necessity for accumulation and therefore investment in new projects.¹⁸⁸ This process was emblematic of the kind of city building occurring in Johannesburg during the decades of economic boom and intermediate stability from the 1930s to 1960s. The 1970s then marked the beginnings of characteristic implosion in which this cycle began to unravel and an intense decline was initiated. [Fig 3.4.1] While a strong interventionist state was a common worldwide trend in the post-WWII era, apartheid had taken this to such an extreme in its efforts to control urban social life that it did so at the jeopardy of capitalist aspirations for Johannesburg to be a major player in the "emerging world industrial economy."¹⁸⁹

Just as the mining industry's high level of mechanization and need for materials had bolstered Johannesburg's rapid industrialization, the financial and service sectors that had long been established to support the gold industry provided a strong foundation for the transition to an economy dominated by the tertiary sector. [Fig. 3.4.3] Beginning in the late 1970s, a series of events and policy changes compounded in Johannesburg to amplify the impacts of general deindustrialization and the oil crisis which were affecting economies worldwide. To begin with, the government removed import substitution policies, shifting towards an export led growth model, and introduced inflation control measures. The former had benefitted the local economy but the changes restricted the supply of liquid money into the secondary sector and reduced

188. David Harvey, *The Urbanization of Capital* (Oxford: Blackwell, 1985), 25.

189. Chipkin, „The greater apartheid building boom," 267.

Figure 3.4.3
Secondary & Tertiary
Employment 1960-2000

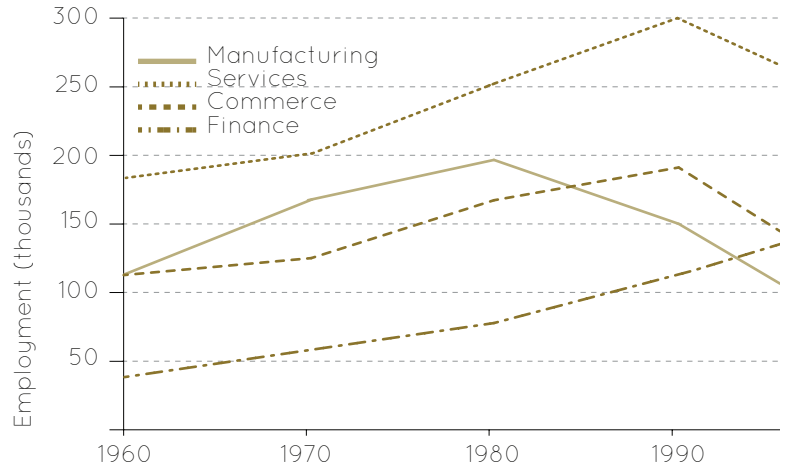
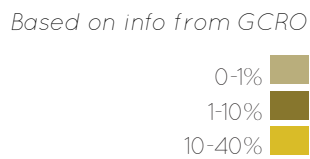


Figure 3.3.4
Regional Industrial
Development Program 1980s



Figure 3.4.5
Origins of Cross Border Migrants
2010



the profits of the manufacturing and commercial sectors.¹⁹⁰ The government also relaxed controls on capital flows which, though intended to attract investment, allowed investors to withdraw given the growing political instability in Johannesburg, which most clearly surfaced in the 1976 Soweto Youth Riots. Overall, the late 1970s shift toward “neo-liberal economic policies had the unintended effect of choking domestic manufacturing output and caused the dis-investment of foreign capital.”¹⁹¹ Beginning in 1970 Johannesburg’s GGP went into a 15 year decline at an average -0.6% per year (recall that it had been growing at almost 10% per year in the 1960s), with employment in the secondary sector decreasing from 34% in 1970 to 13% in 1996 and that in the tertiary sector increasing from 61% to 72%.¹⁹² Loss in secondary sector jobs was also intensified by industrial decentralization instituted through the Regional Industrial Development Program of the 1980s which offered incentives and tax breaks to industrialists to draw employment and therefore population into more remote areas in order to relieve pressure on the rate of urbanization, and subsequently social unrest, in the cities. [Fig. 3.3.4] The impact of the relative failure of this policy was further compounded by growing international opposition to the apartheid state resulting in the 1985 withdrawal of credit lines by several foreign banks, led by Chase Manhattan, and the 1986 economic sanctions imposed by the USA, European Commission and Japan.

While the tertiary sector, including commerce, finance, transport, and business, community and social services, was already a major source of employment in Johannesburg in 1970,¹⁹³ the decline in the secondary sector had a much greater impact on the majority

190. Beall, Crankshaw and Parnell, *Uniting a Divided City*, 36.

191. *Ibid.*, 37.

192. *Ibid.*, 33. Beavon, „Johannesburg: a city and metropolitan region in transformation,“ 159.

193. Beall, Crankshaw and Parnell, *Uniting a Divided City*, 159: statistics show that the rest of the Witwatersrand was evenly distributed between secondary and tertiary sectors by 1970, where the secondary sector had absorbed all employment lost in the primary sector after 1950.

194. Ibid., 39.

of the population. Manufacturing jobs had provided an essential labour market for stable unskilled and semi-skilled jobs with the possibility of upward mobility, so while Johannesburg under the strong regulatory industrial state of the 1940s through 1960s actually had very low unemployment (inequality was largely in terms of wage inequality), it now began to grow.¹⁹⁴ The same abundance of both un/semi-skilled jobs available in the manufacturing sector did not translate to the tertiary sector where low-wage, entry-level jobs did not provide the same opportunity for growth and a larger percentage of positions were available for white-collar professionals. These are characteristic labour dynamics of the transition from a Fordist to post-Fordist structure of accumulation. So while Johannesburg's urban working class population continued to grow, opportunities for employment substantially decreased, meaning that the working class eventually became the lower class while those who managed to transition out of the manufacturing sector moved into the increasingly multiracial middle and upper classes. The lower class, in turn, was forced to seek economic refuge in the informal sector. Given that by 1996 Johannesburg's racial makeup was 70% African and 20% white, in contrast to the 50/40 ratio in 1946,¹⁹⁵ the growing lower class was therefore predominantly African. Furthermore, the concentration of the growing lower class in Soweto resulted in, following the 1977 lifting of economic restrictions in townships, opportunities for informal entrepreneurialism as well as the unregulated but legal development of the minibus taxi transit system.

195. Ibid., 40.

The racial divide of north versus south that had been ingrained into the Johannesburg landscape in the 1950s and 1960s evolved into a definitive

class divide regardless of colour (the working class white still live in the south eastern suburbs while the northern suburbs are now multiracial). The possibility of overcoming this spatial divide today is severely hampered by the divisive territory of the mining belt which, though largely abandoned, is highly contaminated and remains the private property of mining conglomerates. The change in national government between 1991 and 1994 did not substantially alter municipal economic policy nor improve employment conditions in Johannesburg.¹⁹⁶ While tax base redistribution through the redefinition of municipal boundaries was a primary concern between 1991 and 2000, this was undermined by concurrent efforts to reassert Johannesburg's competitiveness on the world market and further solidify its status as the high-tech, financial and commercial heart of Africa, or the foremost 'world class African city.'¹⁹⁷

196. Ibid., 37.

197. Robinson, *Ordinary Cities*, 144.

Reasserting Johannesburg's economic importance went hand in hand with opening back up to the world following a period of relative political and cultural isolation during the last decades of apartheid. This opening up was, on one hand an embracing of the commercial influences of market globalization, and on the other, the relaxation of immigration and rural migration controls. While the lower class and informal economy were expanding, 1986 marked the abolition of all state legislation that had attempted to reduce and manage urbanization of the country's African population. Simultaneously, as South Africa became increasingly unstable and the government was unable to adequately police its borders, undocumented African migrants began to flock to Johannesburg which, despite industrial decline,

Figure 3.4.6

*iGoli 2010
Johannesburg as the heart
of the African continent and a
world class city*



Figure 3.4.7

*Gauteng billboard promoting
a new world class destination,
overshadowing the declining
industrial areas of the inner-city.*

Photo by author



Figure 3.4.8

*Enduring Juxtapositions, the
towers of Sandton with Alexandra
townships between*

Photo by Themba Hadebe



still represented the continent's centre of economic opportunity.¹⁹⁸ Civil wars in the Democratic Republic of Congo (1965), Nigeria (1970), Mozambique (1975), and Zimbabwe (1979) in particular, were important in contributing to and defining the ethnic makeup of this migration. Even prior to 2000 estimates placed the number of Congolese and Nigerians in Johannesburg at 23,000 and 3,000 respectively, though of course these numbers are difficult to cite with certainty.¹⁹⁹ The reason for this is that international migrants, named *amaKwerekwere* ('people who talk funny'), are as unwelcome now to many in South African black population as the *uitlanders* were to the Boers at the time of the gold rush, and therefore avoid documentation.

The decline in the manufacturing and commercial sectors, which were concentrated in Johannesburg's inner city, along with the increased foreign immigration and rural migration, for which existing black townships did not have the capacity to absorb, compounded to lead to what is called the 'greying' of inner city Johannesburg.²⁰⁰ As early as the 1970s vacant residential units had already begun to be rented to non-whites at the same time as vacant low grade industrial space was being occupied by African manufacturers in textiles, clothing, food, prefab metal works and so on. The CBD began to cater to the working class and concentrate the informal economy of the lower class. In the mid 1980s inner city Johannesburg was already only 75% white occupied, decreasing to 43% in 1991 and 19% in 1996 by which time there was also an estimated 3000 to 4000 street vendors compared to under 1000 formal retailers.²⁰¹ [Fig. 3.4.10] And by 1990 the unregulated minibus taxi transit system had already become a

198. Kruger, *Imagining the Edgy City*, 153.

199. Richard Tomlinson et al., „The Postapartheid Struggle for an Integrated Johannesburg,“ in *Emerging Johannesburg: Perspectives on the Postapartheid City*, ed. Richard Tomlinson et al. (New York: Routledge, 2003), 14.

200. Kruger, *Imagining the Edgy City*, 106.

201. Beall, Crankshaw and Parnell, *Uniting a Divided City*, 52, 57, 60.



Figure 3.4.9

New township economies

Photo by Lindsay Bremner



Figure 3.4.10

Informal barbers on Bree St in downtown Johannesburg, 1998

Photo by Themba Hadebe



Figure 3.4.11

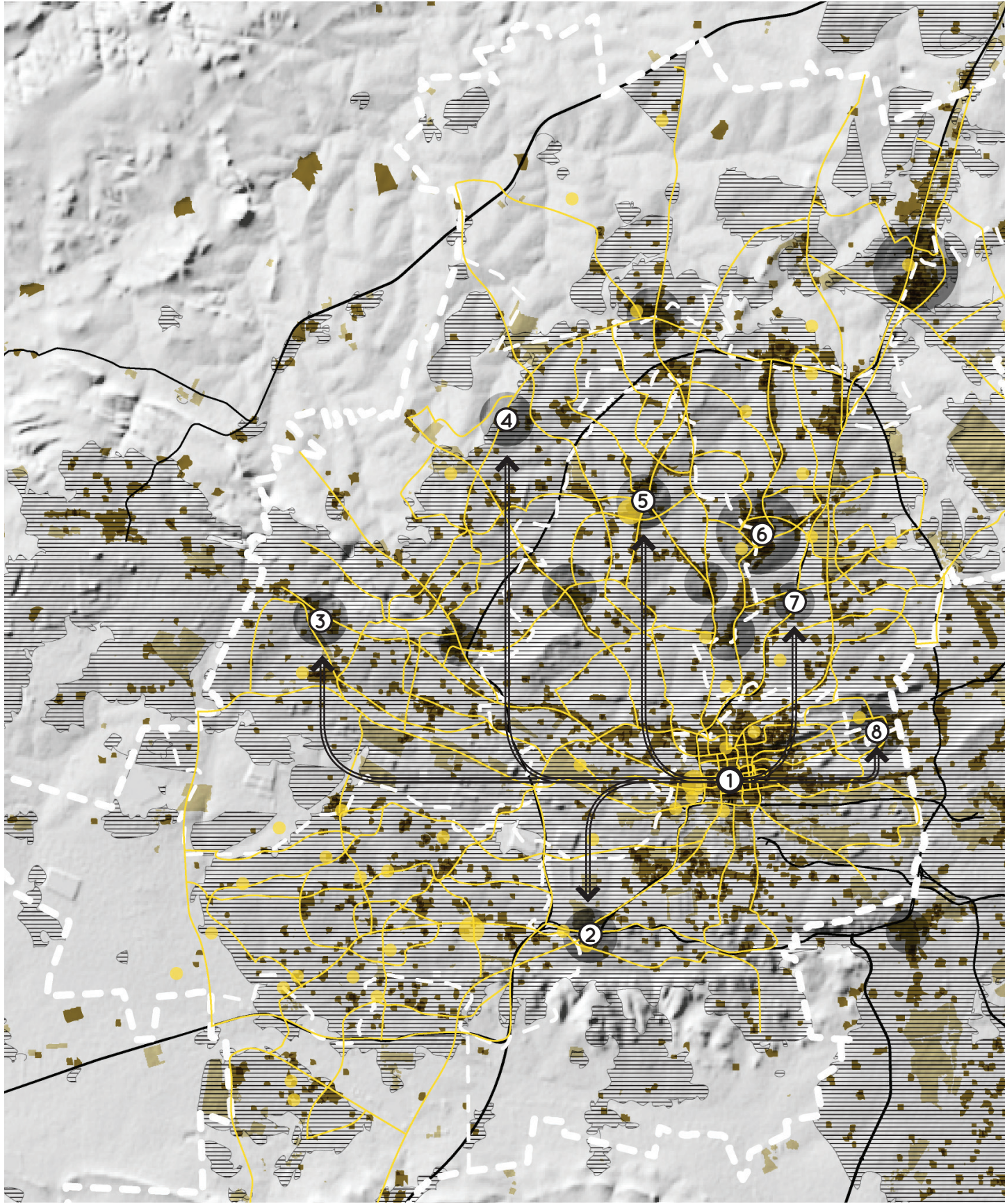
The proliferation of gated communities

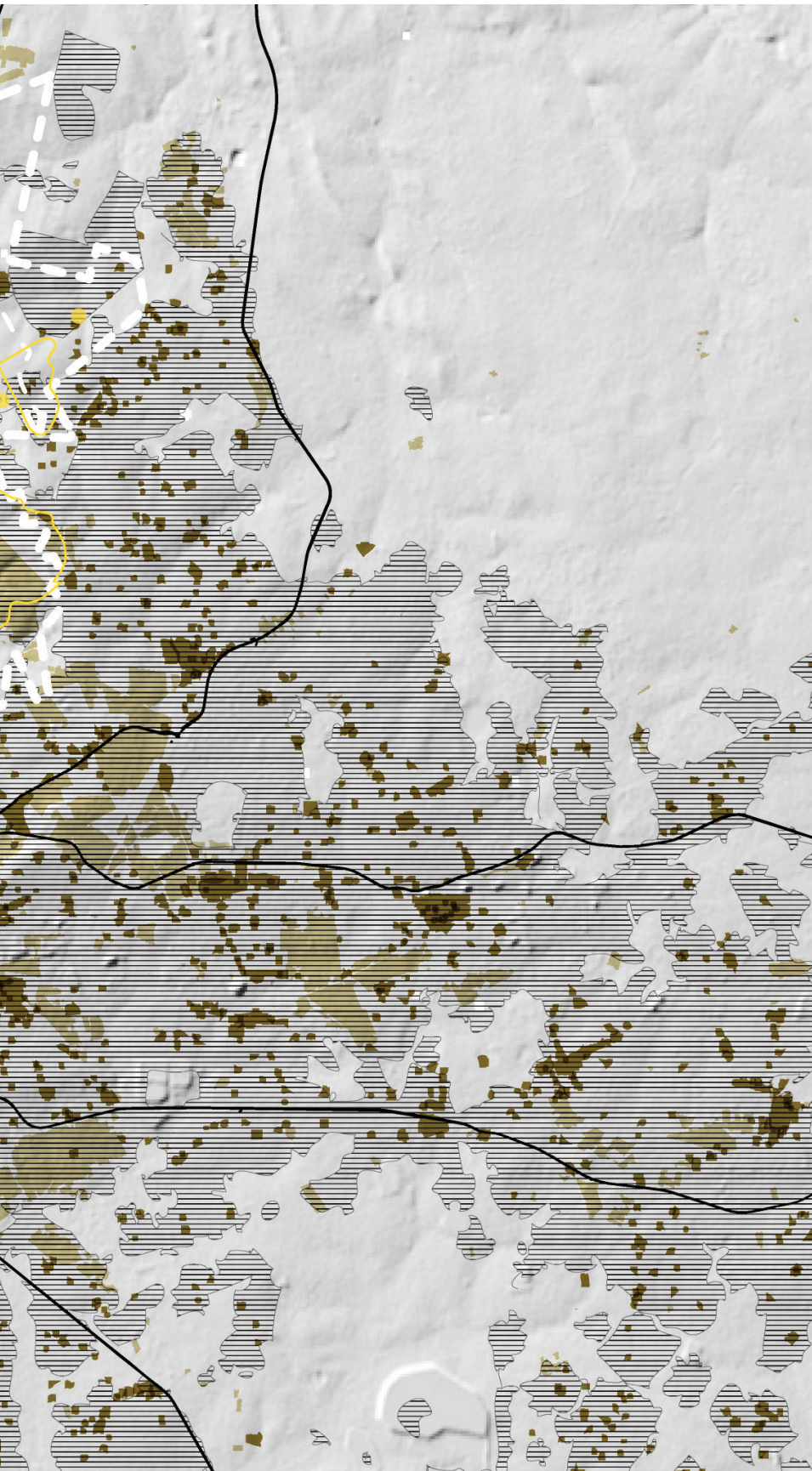
Photo by The Urban Age Project

dominant force in the shifting landscape of the city. The 'greying' of Johannesburg was both a cause and effect of the general northward movement of the city's middle and upper classes, and their associated retail and service needs, beginning as early as the 1960s. While the northern suburbs were initially entirely dependent on the financial and commercial centrality of the CBD, as separate municipalities with separate tax bases, controlled primarily by real estate companies, they also competed for access to the same consumer market. Private developers began building vast suburban shopping malls and business/ industrial complexes, secure and well connected to the highways, to lure upscale retail, financial services, and large capitalist business away from the declining CBD. [Fig. 3.4.11] In this way, Johannesburg experienced the same quintessential post-Fordist development pattern of inner city decline and the scattering of the CBD's function into suburban edge cities. Concurrently, the power of the predominantly insurgent minibus taxi system and the increased mobility of both the urban poor and multiracial middle class, created the need for transfer stations, called ranks, to efficiently manage transportation across the horizontally expansive city. The emergence of taxi ranks, both in the CBD and scattered in new edge cities, forced the city to recognize its reliance on an unregulated economy and develop innovative private-public partnerships in the form of multi-modal ranks. Together the suburban complex and the multi-modal transit rank represent key spaces of economic and social engagement that developed out of very pronounced transitions and are critical to shaping contemporary Johannesburg.

Figure 3.4.12 (next spread)

Johannesburg circa 2000





Johannesburg circa 2000

- ① **Inner City Transition**
White flight and Africanization
- ② **Southgate**
Shopping Mall
- ③ **Westgate**
Shopping Mall
- ④ **Northgate**
Shopping Mall
- ⑤ **Randburg**
- ⑥ **Sandton City**
Replacing the CBD as the primary place of business
- ⑦ **Melrose Arch**
Residential & commercial gated complex
- ⑧ **Eastgate**
Shopping Mall

Minibus Taxi Routes

Highways

Settled Footprint

Commercial & Retail Zones

Industrial Zones

202. Ibid., 58. Kruger, *Imagining the Edgy City*, 97.

The minibus taxi industry in Johannesburg, catalyzed by a series of complex political and economic changes, emerged from the townships and their struggle for a better quality of life to become a lynchpin of everyday movement and interaction in the city that challenges western perceptions of urban management. Concurrent with the impact on Soweto of the decrease in manufacturing employment was the Johannesburg municipality's relinquishment of responsibility for housing construction after 1968. This was done first by transferring responsibility to the West Rand administrative board after 1973 and then to separate municipal entities, Black Local Authorities (BLAs), in 1982, which were in reality puppets of the state but without revenue to continue housing provision.²⁰² While until the 1970s illegal housing in Soweto had been absorbed into the overall township structure as extensions and backyard structures, more informal structures spread and the infill squatter settlements of the 1940s began to reappear by the 1980s. As the urban situation in Soweto continued to decline, the Civic Associations began orchestrating rent and service payment boycotts in the townships in an effort to make them ungovernable and force a transfer of legitimate power. Growing social unrest peaked in the 1976 Soweto youth riots which, though primarily centered around the issue of the language of education instruction, sparked substantial reform of the Group Areas Act in 1977. Critical aspects of this reform were the legalization of permanent African urban settlement and, as mentioned, the lifting of business restrictions in the townships. The latter reform change opened the door, albeit unintentionally, for the formation of the minibus taxi industry.

While it was difficult for a robust commercial

or business sector to materialize immediately in the residentially zoned suburban landscape of Soweto, the minibus taxi industry erupted at rapid pace. The development of more transit filled a critical need for the majority population underserved by the limited existing bus system, the same one subject to repeated boycotts over the previous decades. The number of minibus taxis in Soweto rose from 1.4 per 1000 people in 1980 to 3.5 in 1990, equating to 7000 legally operated taxis.²⁰³ Though largely informal, meaning that owners are not operating a registered business, the minibus taxi industry is legal in the sense that most owners do have operating permits and most drivers have licenses.²⁰⁴ Originally the industry began with 10 seater buses, based on a loophole in the changed 1977 regulations whereby if one seat of 10 was left empty owners could apply for a road carrier permit, and in 1986 sixteen seater buses were designated legal taxis.²⁰⁵ Initially permits were difficult to obtain and regulations surrounding parking, loading and unloading zones were unclear which increased the chaotic nature of the industry. Beginning in 1983 several commissions were started to define the policy issues around the taxi industry and implement regulation strategies, however these were largely not finalized until 1989. The period of over a decade in which the legalities of the industry were unclear made it possible for large numbers of operators to enter the business such that by 1990 the industry was already beginning to over-saturate.²⁰⁶ In turn, local associations of taxi owners developed in order to secure permits and operating routes. These associations created an organizational structure whereby an operator applies to join and requires a large upfront capital to pay a joining fee, the permit and a weekly membership fee.²⁰⁷ Based on the routes

The Taxi Rank

203. Beavon, „Johannesburg: a city and metropolitan region in transformation,“ 171.

204. Jane Barrett, „Organizing in the Informal Economy: a case study of the minibus taxi industry in South Africa,“ International Labour Office (2003): 1.

205. Ibid., 6.

206. Ibid., 7.

207. Ibid., 22.

Figure 3.413

Taxis overflow into unoccupied urban spaces

Photo by Lindsay Brember



Figure 3.414

Taxi congestion outside the Noord Street Rank, a concrete deck with holding on the top

Photo by Hannelie Coetzee



Figure 3.415

The Wondrous Rank on Bree Street for long distance taxis

Photographer unknown



they service, different associations run their taxis out of specific ranks.

As the city's racial and class boundaries began to shift and employment opportunities began to concentrate in nodes outside the CBD, the minibus taxi system created a new geography of mobility that overwrote existing planning boundaries. Now not only did the working class need to move between Soweto and the CBD, it also increasingly needed to move to a variety of locations in the northern suburbs. While existing transit systems did not have the flexibility to adapt to the extreme rapidity of socio-economic changes in the city, the minibus taxis responded to demand, and despite being a private industry had a strong incentive to provide affordable transportation to a disenfranchised population. The need for transit interchange and taxi holding stations to manage the long distances of travel in Johannesburg became critical as the thousands of privately owned taxis began to make use of unoccupied spaces in the city. [Fig 3.4.13] The taxi rank has developed into an important urban typology in South Africa, albeit of great formal variability, that manages to balance the fast pace of change and highly charged realities of everyday life in Johannesburg. Taxi ranks are highly fluid public spaces, typically without strictly defined pedestrian entry and exit points given that fares are paid directly to the driver when boarding so no ticketing system is required. [Fig. 3.4.14] The most basic rank is typically a series of platforms (curbs) organized in rows or bays, exterior but covered, with minimal public facilities. While many hastily formed ranks remain large mono-functional, unpleasant, and unsafe spaces that make inefficient use of large pieces of urban property, several multi-



Figure 3.416

Metro Mall existing site and schematic plans

Graphic by Ludwig Hansen



Figure 3.417

Metro Mall Interchange

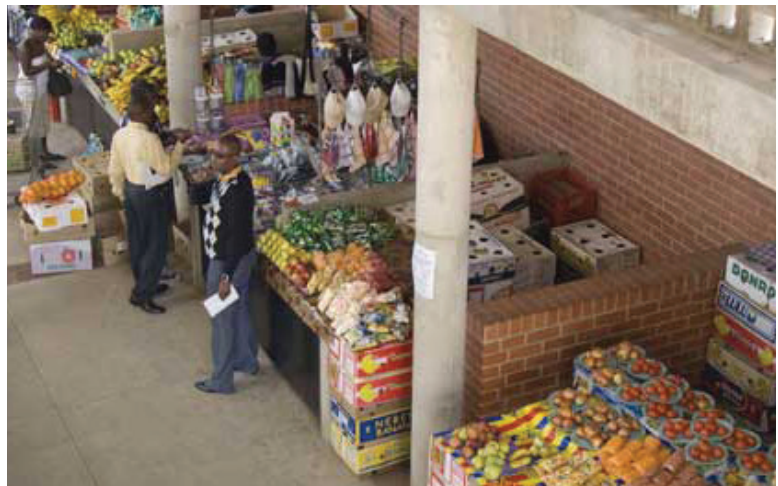
Photo by 26'10 South Architects



Figure 3.418

Metro Mall traders

Photographer unknown



modal stations constructed by the city in the past decade combine municipal and private transit and have become critical nodes of not only mobility but also economic and social activity both at the scale of the neighbourhood and that of the city as a whole. The major nodal ranks accommodate a series of functions including separate ranking areas for short and long distance taxis, a large holding area for taxis in off-peak periods, a ranking area for city buses, management offices, and shopfronts, trading stalls or market areas for both informal and formal commerce. These complex spaces negotiate competing stakeholders and necessities, complicated by the territorial possessiveness of the taxi associations, as well as the interests of the surrounding context, and as such are full of tension. As places of intense convergence in an otherwise increasingly divergent urban environment however, they act as important places of civic centrality.

Johannesburg's two largest multi-modal interchanges are Metro Mall in the CBD, which acts as a transfer point for the whole city, and Bara in Soweto, which acts as a major collector of inter-township routes. Metro Mall serves an estimated 150,000 commuters daily with almost 3000 taxis, using 1700 taxi bays, and 30 bus bays. It also accommodates 600 informal traders and 3000m² of formal retail space.²⁰⁸ The complex internalizes the ranking areas in order to maintain a strong perimeter of primarily retail space addressing the street fronts, giving shape to two city blocks at a major point of entrance into the CBD from the north. [Fig 3.4.16] Trading stalls are incorporated into internal passages through which commuters pass to reach the ranking areas. [Fig. 3.4.18] Bara serves 42,000 commuters daily with

208. „Projects: Metro Mall,“ Johannesburg Development Agency, accessed June 12, 2014, <http://www.jda.org.za/milestones/newtown/projects>.

Figure 3.4.19

Bara Taxi Rank, Soweto

Graphic by Ludwig Hansen, Photo
by Darren Alexander

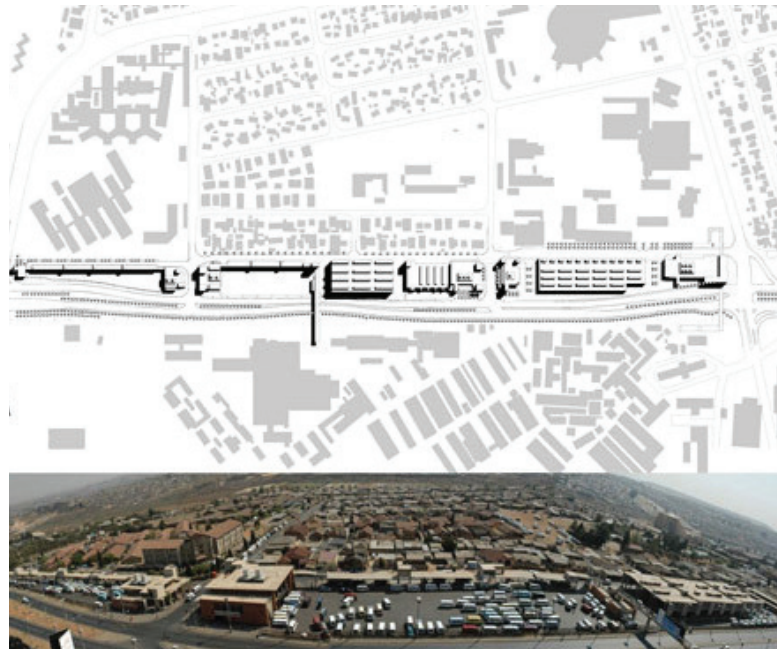


Figure 3.4.20

Bara Taxi Rank circulation &
trading spine

Photo by 26'10 South Architects



Figure 3.4.21

Diepsloot Taxi Rank with public/
commercial interface to street

Photo by 26'10 South Architects



ranking for 20 buses and 800 taxis from 12 different associations.²⁰⁹ While it attracts more than 1,000 informal traders, well above its capacity, it provides 470 trading stalls of varying sizes for an average rent of ZAR60 (about \$5) per month.²¹⁰ The linear site was negotiated by using a long arcade at the back which accommodates circulation, seating and trading while clusters of management offices and market areas break up the sequential bays for taxis, long-distance taxis, buses and holding. [Fig 3.4.19] While not a multi-modal station the newly renovated Diepsloot taxi rank, serving one of the cities most peripheral townships which is home to 200,000 residents, still creates a sense of civic gathering by introducing a strong linear interface with the street which incorporates trading stalls, public washrooms, and seating areas, while the ranking bays are contained behind. [Fig 3.4.21]

The taxi rank has proven a flexible and robust urban typology for managing both access to mobility and economic opportunity for the lower and middle classes. While the taxi industry itself is a strong player in the rise of the informal sector, the rank further supports and institutionalizes informal trade which is a symptomatic part of the city's shifting economy, its opening up to bordering nations and its exposure to the global market. [Fig. 3.4.22] This exposure is made clear through the minibus taxi industry for although it has gained particular dominance in Johannesburg, it is by no means a uniquely South African product. It joins similar industries in predominantly developing economies such as the *mutata*, *fula fula*, and *dala dala* in Kenya, Uganda, the Congo and Tanzania as well as non-African examples such as the *Jeepnee* in the Philippines and Turkey and the *tap tap* in Haiti. Nevertheless, the quasi formalization of the

209. „Baragwanath Taxi Rank,“ Ludwig Hansen Architets + Urban Designers, accessed June 16, 2014, <http://www.ludwighansen.co.za/architecture/bara.html>.

210. Liz Findley and Liz Ogbu, „South Africa: From Township to Town,“ The Design Observer Group, accessed June 16, 2014, <http://places.designobserver.com/feature/south-africa-after-apartheid-from-township-to-town/31148/>. „Bara transport hub up and running“, Johannesburg Development Agency, accessed June 16, 2014, http://www.jda.org.za/index.php?option=com_content&view=article&id=571:bara-transport-hub-up-and-running&catid=95:october.



taxi industry in South Africa and the public-private partnerships created through the development of multi-modal ranks points to the particular power of the industry in Johannesburg to generate new forms of urban development. The taxi rank can also be seen as a contemporary manifestation and concentration of the role of the city as a location and organizer of arrival, departure and passage, a characteristic which AbdouMaliq Simone argues is the original primary role of most African cities.²¹¹ As a distributed typology the rank acts a nexus for the movement of people, goods and information in the same way as ports traditionally did. The rank is able to give shape to the contested dynamics of city building in which “volatile, subversive and proliferate dimensions of the urban are at work – at times messy and violent, at other times capable of consolidating vast stretches of disparity, conflict and contradiction into functional spurts of change and growth.”²¹² In a city where public space was largely evacuated both by speculative capitalism and political control, taxi ranks have become dynamic democratic spaces that balance municipal and private interests.

211. AbdouMaliq Simone, „Globalization and the identity of African urban practices,” in *Blank_Architecture, apartheid and after*, ed. Hilton Judin and Ivan Valadislavic (Rotterdam: NAI Publishers, 1998), 186.

212. Ibid., 186.

Figure 3.4.22

Informal and rental trading stalls at Bara Taxi Rank

Photo by author

Figure 3.4.23

Early expansion of shopping centres, originally relatively evenly distributed, then strongly clustered in the central northern suburbs

Graphic by Keith Beavon



Figure 3.4.24

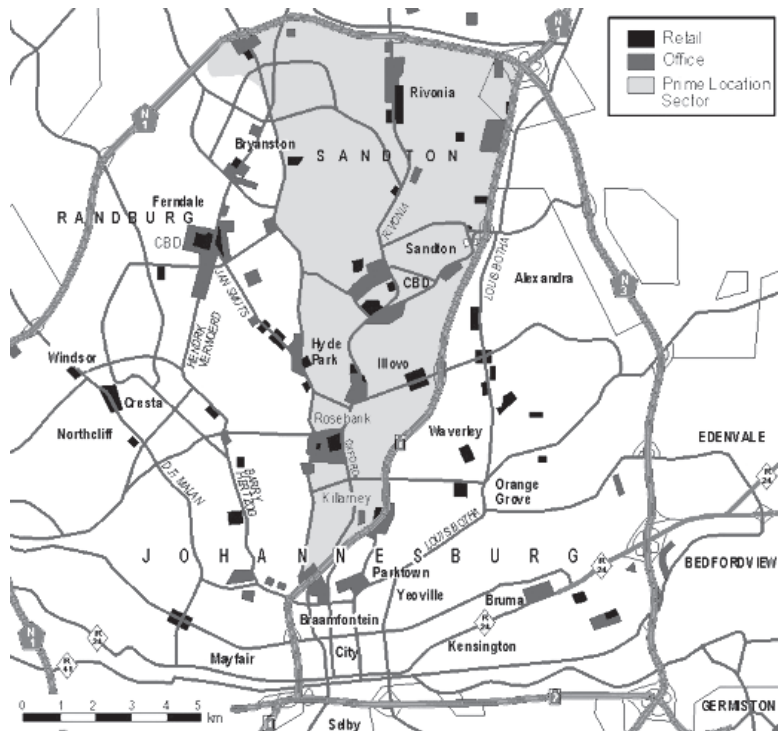
Northgate, Southgate, Eastgate Westgate Shopping Malls



Figure 3.4.25

The northern wedge of most sought after office and retail property, 1995

Graphic by Keith Beavon



While the development of the minibus taxi industry and ranking facilities was driven by powerful demand, the development of Johannesburg's northern suburbs was largely driven by supply. To begin with, Randburg and Sandton were made separate local municipalities in 1969 which, given that they were controlled by wealthy developers, often subsidiaries of mining companies, meant they were able to compete with the CBD by offering low property taxes and easy zoning adjustments to accommodate more commercial and retail development.²¹³ The growth in suburban complexes represented a shift towards speculative real estate as the primary place of investment for the vast quantity of capital accumulated from the boom of the 1960s. Capital output in manufacturing had fallen 40% between 1970 and 1986 and the sanctions and exchange controls of the period limited overseas investment opportunities so despite the economic downturn office construction increased 42% between 1975 and 1995, the number of shopping malls of 10,000m² or more increased from nine to eighteen between 1972 and 1979 alone, and real estate transactions in general doubled in the 1980s.²¹⁴ [Fig. 3.4.23] Much of this over-accumulated capital had concentrated in the largest elite insurance, banking, real estate and mining corporations that controlled the majority of investment property in the CBD. By investing in speculative developments these companies created a false sense of competition between them and devalued their own downtown fixed assets by oversupplying suburban office space.²¹⁵ In reality Johannesburg's inner city had more than enough existing capacity but perceptions of the aging nature of the existing stock coupled with industrial decline and socio-economic transition prompted relocations such that even by

The Suburban Complex

213. Andre P. Czegledy, „Villas of the Highveld: a cultural perspective on Johannesburg and its Northern Suburbs,“ in *Emerging Johannesburg*, ed. Richard Tomlinson, et al. (New York, Routledge, 2003), 30.

214. Soraya Goga, „Property Investors and Decentralization: a case of false competition?,“ in *Emerging Johannesburg*, ed. Richard Tomlinson, et al. (New York, Routledge, 2003), 70, 73.

215. Murray, *City of Extremes*, 90-91.

1990 two thirds of Johannesburg's office space was located in the northern suburbs, up from 9% in 1980, and four shopping centres of between 70,000m² and 110,000m² retail space each had been built (Toronto's Yorkdale Mall was one of the largest in the world with 93,000m² when built in 1964 and was a precedent for Sandton City).²¹⁶ [Fig. 3.4.24] While many north American cities were experiencing inner city decline and suburban expansion beginning in the 1970s, the hollowing out of the inner city in favour of suburban retail nodes and the relocation of business power to Sandton City, occurred in particularly dramatic, and characteristically rapid, fashion in Johannesburg thereby dislocating any sense of civic centrality.²¹⁷

216. Richard Tomlinson and Pauline Larsen, „The Race, Class and Space of Shopping,“ in *Emerging Johannesburg*, ed. Richard Tomlinson, et al. (New York, Routledge, 2003), 46

217. Czegledy, „Villas of the Highveld,“ 29.

Because Johannesburg's suburbs were fragmented commercial developments made by individual companies, they were mostly laid out in a highly individualistic way without any central planning to determine the nature of their physical relationships to each other.²¹⁸ On one hand this allowed different neighbourhoods to develop with varied public and private spatial characteristics, on the other it created a disjointed residential landscape with introverted pockets of intense commercial development. While on one hand this could be seen to resemble the idiosyncratic building of the downtown, in this case, without the grid generating diversity within a framework, these pockets developed as introverted visions without connection to the surrounding context to provide constraint. The nature of the grid as a tool of speculation, capitalism, and modernity has been replaced by a powerful polycentric model with no defining spatial characteristics besides interiority. If the building booms of the 1930s and 1960s represented a shift of identity away from British colonial origins

218. Ibid., 31.

into American industrialism and commercialism, these suburban complexes have managed to combine a typical North American development model with a reliance on continental European aesthetics, central public spaces and vibrant retail streets to invent a new image of urban life. As holistic urban developments, often containing residential, commercial, industrial, and retail in one area, Johannesburg's suburban complexes have redefined the generic shopping mall to resemble self sufficient micro cities more so than peri-urban nodes.

Sandton, the first of the large suburban developments, and Melrose Arch, one of the more recent, are two critical examples of how Johannesburg's suburban complexes have obliterated any codependent relationship with the CBD, creating new centralities rather than peripheral satellites. What is difficult to create is the cultural and aesthetic identity of civic life in places focused predominantly on business transaction. According to Martin J. Murray, Melrose Arch, in particular, has drawn on principles of New Urbanism to develop a holistic vision for a compact micro-urban environment that includes mixed use program, varied densities and types of housing, human scale connectivity and a pedestrian environment that revolves around the street and the plaza. In "staging a theatrical re-enactment of a lost civic ideal,"²¹⁹ Melrose Arch allows residents and visitors to imagine the reality of a secure cosmopolitan life that no longer exists for the upper-middle class and truly wealthy of Johannesburg who have retreated behind security systems since the 1980s. With nearly 10,000m² each of retail and top grade office space and a projected residential population of 22,000,²²⁰ the developer, Sentinel Mining

219. Murray, *City of Extremes*, 110.

220. *Ibid.*, 111.

Figure 3.4.26

Melrose Arch

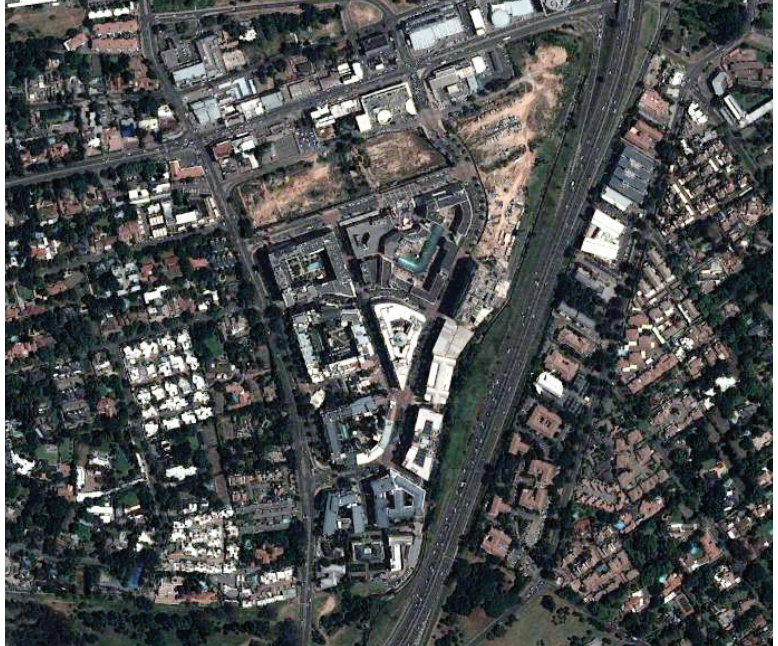


Figure 3.4.27

Melrose Arch

Photo by Arup



Figure 3.4.28

A plaza in Melrose Arch

Photo by Arup



Industry Retirement Fund, is building a miniature pseudo-European town, not a suburban complex. [Fig. 3.4.26] Complete Tuscan paved boulevards and pedestrian walkways lined with everyday necessities like a pharmacy, dry cleaner, post office, doctors and banks, and leisure necessities like a hotel, art gallery, nightclub, and restaurants, as well as independent utilities, telephone exchange, garbage removal and security,²²¹ Melrose Arch attempts to create the atmosphere of a neighbourhood, shaped by European perimeter housing blocks with interior courtyards, that does not rely on the municipality for any services. Lack of reliance also equates to a profound lack of engagement with the urban totality. Though an aerial view of the site's development gives the impression that the project only turns its back on the adjacent M1 highway, which connects Johannesburg to Pretoria through Sandton and Midrand, in reality Melrose Arch provides a staged setting in which residents, need never leave the safety of the enclosure. [Fig. 3.4.27] The intermingling of a cosmopolitan urban society becomes a performance. As the perception of the inner city's vibrant streets shifted to one of chaotic, dirty, crime ridden confluences of poverty and pan-African cultural clashes, they were no longer 'legitimate' stages for the everyday business and leisure of the city. This unstable situation has allowed developers of projects like Melrose Arch to convince Jo'burgers that this is what the global, aspiring world-class, African city should look like, thereby undermining the potential to question perceptions of the changing city and allowing multiple urban realities to emerge as viable and simultaneous alternates.

221. Mbembe, „Aesthetics of Superfluity,” 55.

On an even more extreme level, Sandton

Figure 3.4.29

Vision for Sandton City expanded to include a major office tower

Graphic by Rapp & Maister



Figure 3.4.30

Sandton c 1978, the lone tower out of place in the peri-urban landscape

Photo by Keith Beavon



Figure 3.4.31

Sandton City today

Photo by Andrew Murray



Figure 3.4.32

Nelson Mandela Square
Sandton City

Photo by Sandton City



City has literally come to eclipse the CBD as the heart of economic and social activity rather than simply supplementing or complimenting it. Even the Johannesburg Stock Exchange relocated to Sandton City in 2000 to add to the enormous quantity of office space and the 130,000m² shopping mall which is indisputably the primary consumer destination in the region. At the time of its development in 1970, Sandton City was an absurdly speculative development with a 30,000m² shopping complex and 20 storey office tower in the middle of low density residential suburbs 12km north of the CBD. [Fig. 3.4.29] Beginning as a space of recreational country leisure for wealthy Jo'burgers as early as 1930s, well beyond the boundaries of the city, Sandton has continued to embody ideas of play and fantasy now coupled with excessive consumption.²²² What started out as a modernist tower and slab, a suburban version of the Carlton Centre, now also borrows from European aesthetic imagery to create an idealized world which seeks to confer a sense of elegance and refined culture to the brash reality of American style suburban excess. From an overall perspective Sandton City does not accomplish the holistic and unified vision of urban space like Melrose Arch because it is proto-city which has accrued over nearly 50 years. Its internal spaces, however, begin to reveal its role in creating spaces not only of consumerism but of fantasy in the city. This is exemplified through Nelson Mandela Square, the central plaza, which is a highly sterilized version of an Italian piazza complete with decorative paving, a central fountain, and outdoor terraces bound by the Michelangelo Hotel, a theatre, library, gallery and retail. Into its spectacle is drawn the full diversity of Johannesburg's regional population since Sandton City is the major collector, particularly on weekends,

222. Bremner, *Writing the City into Being*, 177, 179.

223. Tomlinson and Larsen, „The Race, Class, and Space of Shopping,“ 47.

for people from all different zones of the city.²²³ [Fig. 3.4.32]

This is a space of consumption that is driven by an economy of desire rather than the economy of need. The incredible success of places like Sandton City and Melrose Arch make clear the power of such a desire for alternate realities in city building, particularly in places of contested transition such as Johannesburg. This desire is not simply a materialistic one but also a desire for democratic civic space in a changing city which is as critical to the city’s development as to the meeting of basic needs. The danger in Johannesburg is the extent to which providing for this desire has become the mandate of the private sector, while the government struggles to meet the economy of need. Given that Johannesburg’s middle class is increasingly multiracial, its suburban complexes have become the common, albeit private and highly orchestrated, urban spaces of a heterogeneous population.²²⁴ Money has replaced race as the criteria of exclusion in the city in general but even then malls are often purely social destinations, places of gathering where no money is spent, simply because they are deemed clean, safe and effectively neutral. For better or worse, shopping malls began filling the need for public spaces in a city so fractured and fearful of life outside protected boundaries. Through their chameleon-like ability to reflect the desires of a changing population, they have become far more important to the urban identity of the city than simply a generic shopping mall. According to Achille Mbembe, these places represent an “architecture of hysteria” whereby space is both witness to forgetting the past but also active in asking that we forget it is an agent in that forgetting,²²⁵ These are seemingly apolitical spaces

224. Fred de Vries, „Megamalls, Generic City,“ in *Johannesburg: The Elusive Metropolis*, ed. Sarah Nutall and Achille Mbembe (London: Duke University Press, 2008), 302.

225. elusive 64

which do not hold the baggage of direct relation to apartheid and they therefore project a much needed, inappropriate or not, vision of the future a city unrelated to its past. The attempt to not so much forget history as to reinvent it, a process for which Johannesburg is notorious, results in “the evacuation of the meaning as well as the structure of public space reinforc[ing]the perception of Johannesburg as a city of edges and fractures” in which spaces of encounter are “emptied of desire” becoming “sites of aversion rather than urbane attraction.”²²⁶ So while these suburban complexes have genuinely come to both act as and project an image of public space and urban centrality in a heterogeneous city, the simultaneous process of creating a sense of place but without fixity to that place at all, brings only superficial cohesion to a city of divergent lives.

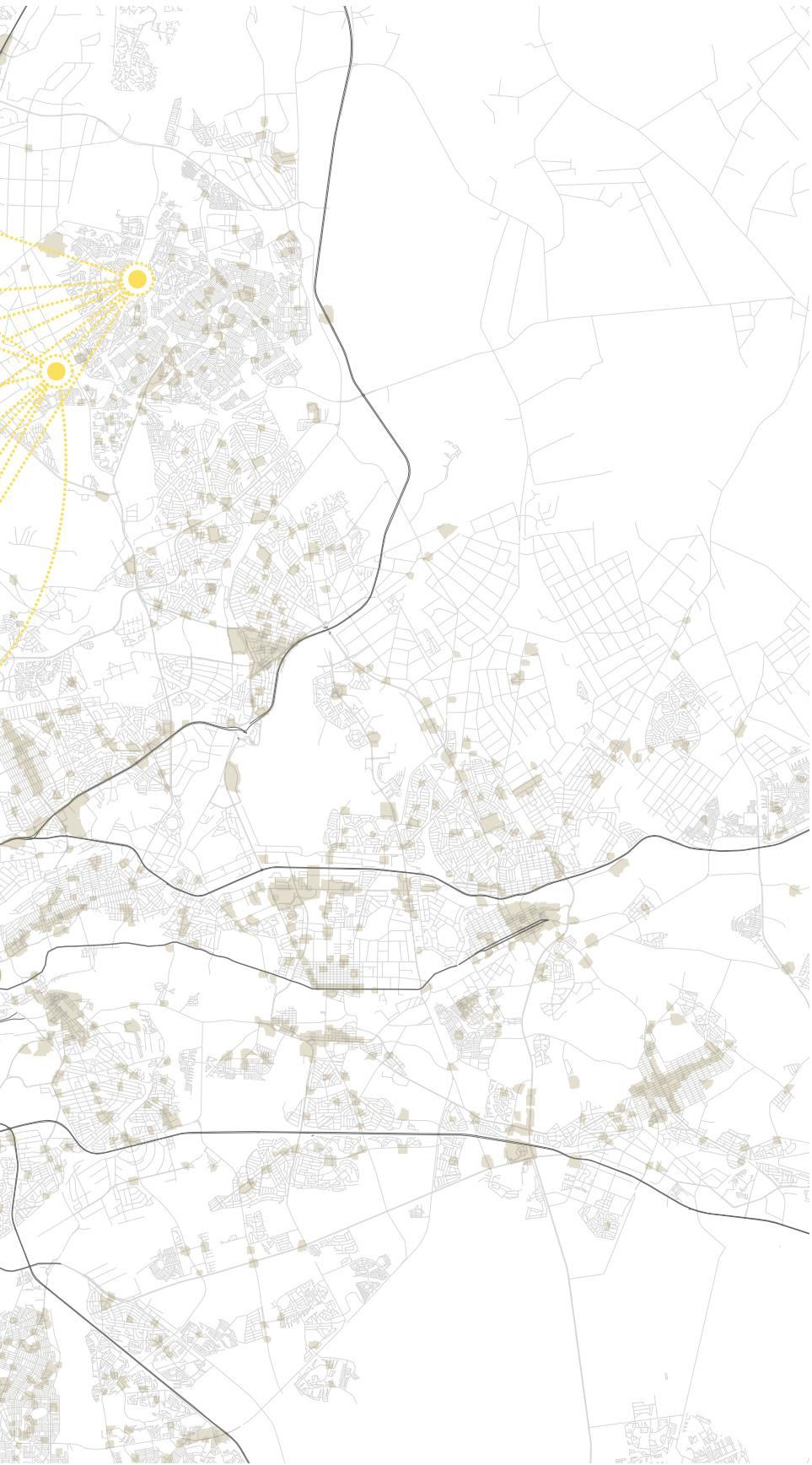
226. Kruger, *Imagining the Edgy City*, 152.





Figure 3.4.33 (next spread)

The Taxi Rank & the Suburban Complex



The Taxi Rank & the Suburban Complex



-  Taxi Rank
-  Large Shopping Mall
-  Major Office Nucleus
-  3 Mile Inner-City Radius

Commercial Space



The taxi rank and the suburban complex are distributed urban devices that act as points of entry and exit for people and goods, the former for emerging continental networks of unregulated trade, mostly in daily necessities, and the latter for global networks of finance and technology. The taxi rank and suburban complex both emerged from the transition from an industrial and manufacturing based economy to a service sector based one and from a declining and divided city to an emerging African metropolis. Within the taxi rank and the suburban complex are embedded and shaped complex relationships between developers and the urban poor and an increasingly globalized economy and culture and the 'Africanization' of urban space having been opened up to the continent. The two devices are facets of the increasing transnationalization of Johannesburg, the liberalization of its economy and the contestation over the identity and function of civic space.

The multi-modal taxi rank is a relatively unique development which has taken on particular social and economic importance in the shifting geography of Johannesburg. On one hand it appears a uniquely South African urban device but on the other it is an efficient and sophisticated model for balancing a complex mix of public and private stakeholders and structuring mobility. While it has become a normative everyday point of passage for most of the population, each remains a unique place in the city because each one takes on a different formal identity and relationship to its immediate context. The suburban complex is a typologically normative component of polycentric urban development but in Johannesburg the combination of residential, business and leisure functions has allowed them to develop complex

identities as city building devices rather than simply as peripheral nodes. In a city desperate for public space that doesn't hold the memories of an oppressive past, they've taken on particularly inflated roles as micro-universes that distort the same decentralized economic process they appear to exemplify.

While the taxi rank and suburban complex are more physically proximate than either the compound and grid or the township and tower, they are in fact less codependent. In economic and cultural terms they are both points of attraction, the former a place of passage and the latter a destination, within a polycentric network and are often concurrent. The taxi system brings the working class from residential areas to the commercial hubs of the suburban complexes which in turn provide strategic points of transit interchange. And yet while it appears as though they could flourish independently of each other, they foster the opposing unregulated and global markets which are so critically inseparable from the city's identity and operation as a whole. Both were initially equally as invasive in the urban environment, but taxi ranks are now places of movement and exchange that are woven into urban space and knit together the geography of the city as a whole, while the suburban complex is a destination, an urban escape whose otherworldly characteristics have been amplified by the theatrical branding of developers. Together the two devices reinforce the malleability of urban space in a city whose place of symbolic centrality shifted identity at such speed that it lost its role and new hierarchies emerged. Through the taxi rank and suburban complex the dual forces of decentralization and connectivity are mobilized to produce, to use Achille Mbembe's word, a kaleidoscopic city.

*Building in the city serves as a focal point because it brings together in concrete (and other materials) the physical and social transformation of the environment with the aesthetics of modernity, from the skyscraper to the cinema, and thus functions as an agent of urbanization as well as an actor on, rather than a mere backdrop for, fictional characters immersed or lost in the city.*²²⁷

CONCLUSION

227. Kruger, *Imagining the Edgy City*, 16.

By exploring processes of urban development through a theoretical lens of mediation this thesis has sought to develop an approach to urban study which positions itself between research approaches of urban geography and architecture. Urban devices are understood as mediates which are products of the economic and cultural forces of city building and subsequently become the sites of contestation over those forces as well as the actors that catalyze the evolution of the forces. This active and consequential process plays out both at the aesthetic scale of the architectural object and the territorial scale of the geographical context. The phenomenal experience of the city is not simply determined by the temporal occupation of space in spite of the apparent fixity of that which shapes space, but is rather a perpetually contested relationship between ideology and lived reality and the representation of each in the built environment. A mediate method implies not simply observing urban space in the immediate and passive sense but critically understanding the drivers of its production and its subsequent influence on its context. It is important to position this argument in Johannesburg where everyday life in the urban environment has often been viewed in opposition to the building of that environment and the disciplines of spatial design therefore dismissed as counterintuitive and counterproductive.

Attempting to understand the production of urban space in a context such as Johannesburg is particularly challenging and fruitful because of the confluence of strong economic, demographic and geographic forces at play in the city in a very compressed period of time. Johannesburg has had a tendency to speed up and exaggerate changes in the

shape of the city which makes it easier to understand direct correlations between economic and cultural ruptures and their results. Each of the six urban devices appeared quite rapidly, with the exception of the township planning system as a whole which was a long term strategy (though the first housing in Orlando was built very quickly before this strategy was put into place). The expedient nature of city building in Johannesburg, without long periods of sedimentation, and the collision of its strong cultural influences, has produced a city where the exaggerated oppositions of its historical development remain at the surface and yet has tended towards constant reinvention rather than self-reference. That being said, it remains important to frame these rapid changes and expediently built forms, ruptures though they may be, within their historical trajectory of development in order to understand their relation to broader processes both contextually specific and globally general. The exaggeration of Johannesburg's oppositions makes it fertile ground for understanding similar processes in other cities. Positioning the six urban devices studied in this thesis in relation to shifts from colonial to modernist to globalizing cultural change and from resource based to industrial to service sector economic change reveals them to be as critical as evolutions of each other as they are individual catalysts for change in the moment. By studying Johannesburg's primary economic and cultural juxtapositions over its entire, albeit short, history rather than simply in relation to apartheid, it is possible to see that the city has always developed in a polarized way and that the form of its oppositions are shifting, taking on particular shapes based on the strategic spatial devices of the moment that themselves then catalyze further change.

Johannesburg's oppositions were not all created by apartheid, but certainly often amplified as well as disguised by it. As a city founded and conceived in the image of various sequentially introduced forms of capitalism, from resource based to industrial to financial, Johannesburg is also demonstrative of the more general tendencies of urban space to form through the uneven processes of capitalist city building.

The particularly fragmented and polarized nature of Johannesburg today, which influences so much of the research on the city, made it important to return to the idea of mediation and its relationship to a dialectical method of study, which Achille Mbembe and Sarah Nutall, in particular, apply to Johannesburg through their own specific theoretical explorations of the *Afropolis*, and its dialectical characteristics of *superfluity* and *entanglement*. The process of mediation differs based on the nature of the contradiction which, according to Frederic Jameson, can be either a binary opposition, an asymmetrical dualism, or a juxtaposition. A binary opposition is a balanced negation without necessary internal relation; an asymmetrical dualism is a mutually dependent opposition with identity defined through the relationship; a juxtaposition is a union of negative opposites defined through pure internal difference. This thesis most specifically mobilizes Jameson's definition of juxtaposition as a union where identity is defined through the contradiction itself. It is therefore a relationship which, rather than being understood as simply an opposition of divergent parts, must be understood as a process where differences begin to relate and new entities/identities are formed. Contradictions are oppositions which can coexist

or accumulate and are most easily defined as either an asymmetrical dualism, where identity is defined through mutual dependence but one side is subordinate (like master and slave), or a binary opposition, an equal relationship defined through pure difference (like figure and ground). Mediation is a process whereby the relation between opposites is in and of itself a third entity which produces new identities and therefore multiplies difference rather than amalgamating it. In mediation, difference and identity are equally important so the mediate method holds the perception of the city as a whole in tandem with that of its most strategic opposing fragments. The juxtaposition of urban devices therefore allows one not so much to see the extreme divergence of the polarized city but rather how these devices converge to form a concrete abstraction of the city as a totality and a metamorphosing process of continuous change.

Approaching urban study as a codependent relationship between the city as a totality and its constitutive fragments and attempting to understand how those fragments subvert our understanding of both them and the totality, is a method informed most directly by a combination of the theoretical work and research of Jennifer Robinson, Pier Vitorio Aureli, Christian Schmid and Kanishka Goonewardena. In different ways these theorists, though a multi-disciplinary group, all argue that viewing the city as a whole, complete with its juxtapositions, is critical to developing contextually specific and globally relevant approaches to urban design and analysis. For Robinson this comes from a strong conviction that all cities are better studied by what makes them 'ordinary' than seemingly extreme in order to break down divisive trends in urban policy and research between north

versus south and global versus developing. Aureli's position comes from a strong stance against post-modern approaches to design which steer attention away from the political act of city building, with its capacity to influence the economic system within which it is manifest. Goonewardena is equally critical of this post-modern approach through his theorizing of the power of urban space to shape, or disguise, our everyday experience as well as our perception of both space's aesthetic quality and the broader ideological superstructures that create it. The need to find balance between generic and particular forms of urban development is addressed by Schmid in his arguments for a combination of diachronic and synchronic research and critical documentation techniques which would force them to develop more legitimate and universally relevant analysis that is simultaneously reflective and projective. By mobilizing the arguments of Robinson, Aureli, Schmid and Goonewardena through the specific urban object of Johannesburg, this thesis sought to move towards a theoretical framework and analytical methodology which balances aesthetic considerations of built forms and their impact on the idea of the city as well as the structures of broader geographical processes at work on both the architectural and territorial scale.

This thesis is a rough outline, a sketch of an entire city over its entire history, which must inevitably leave out many pieces of the puzzle. Though attempting to challenge reductive perceptions of the city, the research therefore acknowledges its own need to be somewhat reductive as a condensed study. Nevertheless, through a focus on very broad economic and cultural transitions and their manifestation through very specific formations of the

built environment, the research absorbed as much complexity as possible and channeled it through the exploration of three pairs of urban devices which together redefine and recreate the city. What this thesis hopes to do, at the least, is avoid categorical definitions of the nature of urban space and understand that while Johannesburg may have evolved from a mining, colonial, industrial, modernist, divided, emerging, to world class city throughout its history it has also, to some extent, always been all of these things all at once and cannot be understood through only one thematic lens. By exploring the building of each of these identities through specific devices which themselves subvert, disguise, and change the identities they apparently embody, the research insists that one can never take the geographical city as a whole or its individual architectural fragments at face value but that one must understand the production of the urban level between the two as a perpetually evolving relationship driven by tensions and oppositions. In positioning juxtaposition as an act of union rather than one of division and specific urban forms as devices for managing the mediate relationship between their own aesthetic identity and the geographical forces which shape the territory around them, this thesis frames both Johannesburg as a whole and the method of studying it as joint catalysts for a more theoretically multi-disciplinary and projective approach to urban research.

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