



FOLIO

MODERN | AFRICAN | CRITICAL

PUPAE

COVER IMAGE CREDIT

Photograph by Joe Wuerfel. 'Couple dancing under a volcano on the island of Fogo during a full moon.'

PUBLISHED BY

GSA Imprints
FADA Building, Bunting Road Campus
University of Johannesburg, Auckland Park
Johannesburg 2006, South Africa

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Bound and printed in South Africa
by Remata Press

This publication was made possible with a grant from the Graham Foundation for Advanced Studies in the Fine Arts, Chicago and the assistance of SACAP (South African Council for the Architectural Profession). The editor would like to thank Emmaneel van der Merwe whose graphic sensibility and enthusiasm has shaped this journal from the outset. Thanks are also due to Paul Samuels for his photographic work on pages 2 and 4 and to the entire team at the GSA who posed patiently for the cover shoot-that-never-was. To the entire editorial board: thank you for coming on board, and to Prof Randall Bird, Dr Edna Peres and Prof Iain Low in particular for their editorial input.

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Library of Congress
Cataloguing-in-Publication Data

Lokko, Lesley

PUPAE / Lesley Lokko. 268 p : ill. : 1.95 cm
— (FOLIO Vol One Winter 2017)

ISSN: 2520-3681

1. Architecture. I. Lokko, Lesley,
1964—II. Title. III Series

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In Memoriam — **Bryans Mukasa**

'I aspire towards an architecture without [A]rchitects, one that results from the collective. It should serve more than just shelter and be rooted in everyday life. It is born out of, resonates with, and expresses and reinforces humanity's inherent connection to nature, and its wonders. And lastly, it does not need to be a product. It is about re-thinking the role of design in the production of space, and questioning the existing dichotomy between the natural and the built. Such an architecture forms an integral part of what should constitute the cities of tomorrow.'

Bryans Mukasa was a Ugandan Master's student at KTH Stockholm, whose thesis work, 'Urban Eatopias: the Future of Food in Cities Shaped By Immigration', was supervised by Jordan Lane, himself a graduate of the same programme. He was awarded a place in the school's PhD programme but tragically drowned at a summer school for young sustainability leaders in Brazil, in 2016. Thanks to the generosity of his family and supervisors, we are able to make the full, unaltered version of Bryans' thesis available on our online version (see link below). His work is a powerful reminder of the potential that young African architects have made – and continue to make – to architectural discourse on a global as well as local level.

With thanks to **Bryans Mukasa's** family and friends, and especially his supervisor, **Jordan Lane**, at KTH Stockholm, for bringing his work to our attention. The full text of Bryans Mukasa's original thesis can be viewed in our online version at www.gsa.ac.za/publications/folio-1. It is also available online at ISSUU at [www.issuu.com/foliojournalofafricanarchitecture.com](http://www.issuu.com/foliojournalofafricanarchitecture)



From L to R: **Eric Wright** (Unit System Coordinator & Unit Leader), **Prof Lesley Lokko** (GSA Head of School), **Dr Edna Peres** (GSA Unit Leader - 2016), **Dr Finzi Saidi** (Head of UG Department of Architecture - 2016), **Thresh Govender** (GSA Unit Leader), **Claudia Morgado** (GSA Unit Leader), **Stephen Steyn** (GSA Unit Leader and HTD Coordinator)

EDITOR'S NOTE
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FOLIO—Pupae

ED'S NOTE

PROF LESLEY LOKKO

Lesley Lokko is Associate Professor of Architecture and Head of School, Graduate School of Architecture at the University of Johannesburg.

Like many a project, one suspects, the impetus is almost irrelevant. What prompted it? Who said 'yes', who said 'no, don't be silly, it'll finish you off' and who said 'great idea, let's help you with the funding' (thank you, trustees of the Graham Foundation!) The detail matters little: what matters – and what remains – is where the idea goes, what becomes of it . . . like architecture, perhaps, how the idea translates itself into form, a thing, an object . . . a journal. There's no denying the fact that here in Africa, there are precious few resources dedicated to architectural writing or criticism; few books, fewer journals and fewer publishing houses still. In recent years, most of the global scholarship on African architecture takes place elsewhere, in Europe or the United States, places that many African academics and students are unlikely to visit for many different reasons. But the impact of these many exhibitions, biennale, workshops and discussions reverberates across the continent, often online and via social media, so that the sense is less of being disconnected than being connected-at-a-distance, albeit often vast.

The original call-for-papers was put out in September 2016 and was immediately met with a flurry of interested responses from around the continent and the globe: from Accra to Albuquerque (of all places). By December there were sixty-one 'promises', of which roughly 40% survived the editing and reviewing processes and made it to print. It's a modest start **but it's a start**. That is what matters, what remains. The inaugural edition is entitled *Pupae* for good reason: whilst there's no protective cocoon in the form of institutional support (other than that which can be raised via grants and donations), there is a burning desire to say something, to join in and *shape the dialogues that shape us*, as African architects, both at home and abroad.

Following the theme of an emerging discourse, we have selected twenty-six papers under a rubric of 'Ps' – praxis, pupillage, perspectives and so on. The aim is to present a view of a continent bound not so much by the conditions, challenges and contexts that define it, but by the sheer range of positions that *don't*. We welcomed submissions from

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students, practitioners, academics, photographers and even a poet. It is our aim, as publishers, to challenge the stereotypes, to simultaneously widen access and promote excellence, to provoke, to question and occasionally to delight . . . much like any other architectural journal, one imagines. Some of the submissions were peer-reviewed (marked with an “*”) others were edited several times over, and then once more. It’s been both a

mammoth task and a mammoth joy. We dedicate this inaugural edition to a young Ugandan PhD student, Bryans Mukasa, who tragically passed before seeing his work in print. It’s a poignant reminder of how much our students, whether at home or abroad, have to offer the rest of the world. In its modest way, we hope FOLIO will provide a meaningful and rewarding outlet for others to follow . . . and enjoy.



From L to R: **Sumayya Vally** (GSA Unit Leader), **Mariapaola McGurk** (GSA Professional Services – Exhibitions), **Jhono Bennett** (GSA Unit Tutor), **Mikara Naidoo** (GSA Communications - 2016), **Hugh Fraser** (GSA Professional Services - Photography), **Tuliza Sindi** (GSA Unit Tutor), **Nthathi Makgalemla** (GSA Unit Assistant - 2016), **Craig McClenaghan** (GSA Unit Tutor - 2016), **Patricia Theron** (GSA Unit Tutor)

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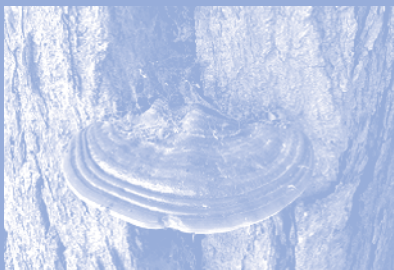
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FOREWORD

PROF TOMÀ BERLANDA

Director and Professor, School of Architecture,
Planning & Geomatics, University of Cape Town

January 1978 saw the appearance in print of the first issue of *Spazio & Società*, an international magazine dedicated to architecture and urban design, established by Giancarlo de Carlo and led for a quite unparalleled 23 years – 92 issue run. I make explicit reference to the first issue of the magazine both for personal reasons, since growing up, I had the opportunity to see the collection of issues linearly expand on my parents' library, and for the extraordinary – and even more so seen today, substantive presence in the first issue of a long article by Luciano Barbero and Athina Saviddu on the subject of 'Architecture and Neocolonialism.'¹ This influenced much of the subsequent themes and projects the editorial board pushed for, in its quest for an inclusive reporting from different cultures and societies. And the words which resonate in the first editorial, in its conceptualisation of architecture as a discipline that is preoccupied with process, rather than objects, hence called for a magazine that would be as explicit as possible, 'since the concealment of motivations and consequences muddles communi-

cation and therefore makes it impossible to gain experience from it.'²

Almost forty years later, I believe it is a fitting reference to establish the genealogy of thought and personas that, through their passion, political and ideological engagement, and ability to contribute new perspectives, are shaping the landscape of higher education and research both in practice and scholarly work, particularly in sub-Saharan Africa. The current immediacy and facility of graphic layout, word processing and printing are helpful tools in enabling the diffusion of a new wave of both printed and online journals and publications, such as the Tanzania-based *Anza* or the Cape Town-based *Chimurenga*. These speak of a desire to work outside established boundaries, and claim the space of resistance to mainstream communication that allow for previously marginalised voices to emerge, together with an embedded desire to take risks, in the sense of not rejecting aprioristically the possibility of failure.

It's a tentative project, filled with difficulties, doubts, unsolved problems

¹ Barbero, L, Saviddu, A. Architecture and Neocolonialism, *Spazio & Società*, 1, 1978, pp. 27-66

² De Carlo, G., The Magazine's Name, *Spazio & Società*, 1, 1978, p. 6

that only a multiplicity of ‘generous’ – to use one of Lesley Lokko’s favourite tropes – languages can accommodate. So, whereas it is too early and most likely irrelevant to write a celebratory foreword to the first issue of FOLIO, I feel it is useful to try and locate its conceptual origin in an attitude to take sides. Hence my initial reference to one of the vehicles of dissemination of the Team X generation, that certainly spoke to the political passion of radical – in its etymological origin of ‘root’ – questioning of the ‘modern / African / critical’ triad that FOLIO embraces in its subtitle.

And this is why grounding – in both its literal sense of giving it a solid, physical, ground, and conceptual sense of allowing it to have origin within the Graduate School of Architecture at the University of Johannesburg – gives the magazine an African perspective. The notion of ‘epistemological abyss’ that Achille Mbembe and Sarah Nuttall³ coined when describing the condition of looking at the world from South Africa is invariably present. It also opens up two sets of questions:

What is the appropriate language for the magazine? Should it be contained in the Anglophone dominance, or should it try and investigate outside this comfort zone? This is not simply a semantic or linguistic challenge, but one that tries and makes assumptions on its audience, its communities, and inevitable

plurality of mother tongues.

Secondly, how deliberately anarchic should the project be? Given that within the current crisis of values, the physical space of the territory seems to remain a reliable reference, albeit at risk of commodification. And by anarchy here I want to make explicit reference to the innovative nature of the effort of understanding our life in the era of Anthropocene.

The series of open ended political, economic, social and spatial dialogues that the table of contents of the first issue is a testament to, spur a series of dialectic contradictions. The analytical specificity of the terminology is more than a mere instrumental reason to ask ourselves what is (design) based research, and what value can it hold today. Beyond being a mode of cognition, a framework for interrogating the performative nature of changes to the built and natural landscape, it locates our engagement in knowledge co-production. Where, and here my foreword tries to bring the argument full circle, space and society are not seen within a dissonant binary, or in their singular declination, but rather speak to an advocacy of hope. Stemming from an optimistic approach that through the struggle and fight for the publication of new voices we can ‘go through the same fluctuating, itinerant, inclusive route through which all good architectural designs go.’⁴

³ Mbembe, A, Nuttall, S., *Writing the World from an African Metropolis*, *Public Culture*, 2004, 16(3): 349

⁴ De Carlo, G., *cit.* p. 8

DEAN'S ADDRESS

PROF FEDERICO FRESCHI

Executive Dean of the Faculty of Art, Design and
Architecture at the University of Johannesburg

In February 2015, the Faculty of Art, Design and Architecture at the University of Johannesburg (UJ) became the first school of architecture on the African continent to offer the Unit System, a method of architectural pedagogy first pioneered by the Architectural Association in London in 1971, and now run in some 200 leading schools internationally. Under the rubric 'Unit System Africa', the new curriculum set out to combine teaching, research and mentorship by clustering staff research interests and expertise into distinct 'Units'. In the first year of Unit System Africa, three Units were offered to a combined first- and second year Master's programme of 56 students, representing more than a hundred percent increase on the 2014 enrolment. These Units were centred on three distinct research areas: speculative design, social gain and responsibility, and urban infrastructure. A 100% pass rate was achieved at the end of 2015.

Word spread fast. By September 2015, a total of 98 applications for entry into the 2016 academic year had been received, including an unusually high number of external applicants (i.e., students who had not previously

been at UJ). Given the pressure on the programme to meet this growing demand, the decision was taken to split the Department of Architecture into two distinct programmes: the undergraduate programme, which continues to be known as the 'Department of Architecture', and the new Graduate School of Architecture (or GSA), the first dedicated postgraduate school of its kind in the country. Prof Lesley Lokko formally assumed the headship of the GSA in September 2015. At the end of 2015, 76 students had been accepted onto the programme for entry in 2016, a 300% increase on 2014's enrolment numbers, and additional Units were developed to accommodate the influx of new students and new areas of research, practice and expertise. Again, a 99% success rate was achieved, with external examiners awarding almost 50% of the outgoing graduates with distinction – this despite the anxieties and disruptions of the student movement in the latter part of the year.

Two further important steps occurred in 2016. Prof Lokko secured the Graham Foundation grant that has enabled this publication, and the

University of Johannesburg formally recognised the GSA as a ‘flagship’ programme, signalling the school’s potential to contribute substantially to the attainment of the wider University’s ambitious strategic plans. Three key sponsorship drives were launched from within the GSA: the GAP: A Saint-Gobain Urban Lounge in the GSA’s inner-city exhibition and review space in downtown Johannesburg; the GSA-Boogertman + Partners International Lecture Series, which has seen a number of high-profile international speakers at the GSA since being launched in August 2016, and an on-going partnership between Paragon Architects, SACAP (South African Council for the Architectural Profession), PPC Cement, Arup and LYT Architects. 2017 has once again seen an increase in enrolment, coupled with the scaling up of a number of initiatives designed to increase the students’ international exposure as well as their engagement with the city of Johannesburg. New programme offerings are also being developed, including a new post-professional Master’s programme, the Global Practice Programme with three international partners and the faculty-wide PhD programme, slated to begin in 2018.

I present these statistics and events not to sound boastful (although they are of course music to my deary ears!), but rather to underscore my conviction that the bold initiative of

introducing a new pedagogical model has struck a chord with the needs and ambitions of young South Africans seeking a professional qualification in architecture. As the student movement has urgently reminded us, the time has come for a radical new approach to education. ‘Transformative Pedagogies’, the unique teaching methodology underpinning the GSA, focuses on students’ individual and personal experiences as the starting point for their individual academic, professional and research journey through the two-year professional programme, and is committed to realising the transformative potential of design in both the personal and societal realms. The notion of transformative pedagogy is also implicitly a decolonised model, proceeding from the understanding that the generation and acquisition of knowledge is a fluid, iterative process which is rooted dynamically in the context of the learner. It does not aim simply to supplant one orthodoxy with another, but rather to build dynamically from what has gone before and to allow the extraordinary potential inherent in our diversity of thought and multiculturalism to flourish.

It is against this backdrop that *Folio* has been conceived, arising, as it has, from the energy, excitement, and imagination of the GSA. The six themes that it engages – pedagogy, perspectives, praxis, politics, pupil-lages, and practice – are fundamental both to the profession and the teaching

thereof. *Folio* thus sets out not only to meet an important need as a peer-reviewed journal of architecture with a particular emphasis on design research, but does so at an important intersection of theory, practice, and pedagogy. This is a unique and uniquely adventurous proposition, and I will be watching with keen interest to see how it asserts its place in Johannesburg, on the continent, and in the world at large.

As Robert Hughes famously reminded us, ‘nothing dates faster than people’s fantasies about the future’, and never more so in this hyper-connected world in which we

live. *Folio* nonetheless declares an optimistic stake in the future of Africa and African scholarship, urging us to rise to the challenge of engaging the multiple notions of identity and ability to dynamically construct ourselves that our hyper-connected world enables. Speculative architecture and design are, after all, by their very nature in the game of imagining new communities: they challenge us always to find the next horizon, never to accept easy answers, and to find dynamic ways of shaping the kind of world we want to live in and want to leave behind.

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AG page 230

Amlanjyoti Goswami's poems have appeared in publications in India, Nepal, Hong Kong, the UK, South Africa, Kenya and the USA, including the recent *Forty under Forty: An Anthology of Post-Globalisation Poetry* (Poetrywala, 2016). He grew up in Guwahati, Assam and lives in Delhi.

AG page 211

Anne Graupner is an architect and urban designer with experience in curatorial practice and knowledge management. She graduated cum laude from the Studio for Urban Design led by Zaha Hadid at the University of the Applied Arts, Vienna. She co-founded 26'10 South Architects with Thorsten Deckler, incorporating research into the practice's design process, ensuring that built works engage with the realities of Johannesburg.

AW page 68

Afua Wilcox is an architect and award winning poet. She is also a part-time lecturer in the Housing and Urban Environments elective at the University of Johannesburg.

BV page 53

Berend van der Lans is an architect and co-founder of African Architecture Matters. He has been involved in a large number of projects in the Netherlands and Africa. In 2001 he co-founded ArchiAfrika and was responsible for the overall management until it shifted to Ghana in 2012. He is a consultant for Hifadhi Zanzibar.

C page 265

Counterspace is a Johannesburg-based collaborative studio of young architects,

established in 2014 by Sarah de Villiers, Amina Kaskar and Sumayya Vally. Their work is predominantly concerned with image and narrative as a means of deconstructing and reconstructing space and city, ultimately with the aim to incite provocative thought around perceptions of Johannesburg.

EP page 160

Dr Edna Peres has a background in architecture, urbanism, and academia, and holds a PhD in architecture from the University of Pretoria, based on her research into the use of ecological resilience theory in the built environment. Having obtained a Master's degree in Architecture, she worked at studioMAS for over six years focusing on urban design. She has written several articles and was involved in documenting a Saint-Gobain residential case study project called Stand 47, on a digital platform.

FC page 193

Francis Carter is an architect and senior lecturer at the School of Architecture, Planning and Geomatics, University of Cape Town. He teaches in the postgraduate professional programme of architectural studies, with a focus on strengthening links between socio-spatial and technical design thinking. He enjoys drawing and tries to write as little as possible, usually on the pedagogic structuring of architectural knowledge.

FS page 160

Dr Finzi Saidi joined the Department of Architecture in the Faculty of Art, Design and Architecture at the University of Johannesburg in 2008. His research interests include studies of open space in informal settlements and

townships in South Africa, exploring Inner-city schools and urban open space, and innovative curriculum development.

ID page 80

With a Master's degree in Architecture from Yale University, *Issa Diabaté* is the managing director of Koffi & Diabaté Architects and co-founder of the Koffi & Diabaté Group based in Abidjan, Cote d'Ivoire.

JB page 265

Jhono Bennett is an architectural urbanist based in Johannesburg, South Africa. He manages the operations of 1to1 - Agency of Engagement, a non-profit collaborative spatial design entity. Jhono's work focuses on role of spatial design in fluid and dynamic urban areas of Southern Africa.

JR page 20

Dr Julian Raxworthy is a Senior Lecturer and Convenor of the Master of Landscape Architecture and Master of Urban Design programmes at the University of Cape Town. His books include *The MESH Book: Landscape & Infrastructure* (2004), and *Sunburnt: Landscape Architecture in Australia* (2011). His next book, *Overgrown*, for which he received a Graham Foundation grant, will be published by MIT Press in 2017 and concerns the relationship between landscape architecture and gardening, theorising a new language for plant material he has labeled 'the Viridic'.

KD page 182

Kirsten Doermann was educated as an architect at RWTH Aachen, ETH Zürich and the Berlage

Institute Amsterdam. She is interested in 'structures of great capacity' in various scales that are able to accommodate changing context and people, she is currently preparing her PhD proposal on urban compounds in Johannesburg, while working at the School of Architecture & Planning at the University of the Witwatersrand.

LK page 230

An architect and lecturer by training, *Leon Krige* understands the Johannesburg buildings he sees and captures. He finds that the night gives him a different perspective on the city, fresh with colour, movement and sound that contrast with the day. His work has been widely exhibited, including shows at Art 1:54, London, and the Johannesburg and Cape Town Art Fairs, as well as numerous other galleries and publications.

LN page 226

Lorenzo Nassimbeni is a South African architect and artist based in Johannesburg. He works in the medium of drawing, printmaking, mural work, surface design and sculpture. Group exhibitions featuring his work include the 54th Biennale di Venezia and Padiglione Italiano nel Mondo, Arsenale (2011).

ML page 237

Dr Mae-ling Lokko is the founder of AMBIS Technologies Inc, a building technology company that upcycles agricultural waste into high-performance, building-integrated material systems. She holds a PhD and MSc in Architectural Sciences from the Center for Architecture Science and Ecology (Rensselaer Polytechnic Institute, New York & Skidmore, Owings & Merrill, LLP).

MM page 53

Maryam Mansab is the office manager of Hifadhi Zanzibar. She was raised in East Africa and the UK, where she completed her studies in IT. She worked for GlaxoSmithKline in the Research & Development Department for Emerging Markets until her return to Zanzibar. She started as the quarter maker of Hifadhi in 2015.

MM page 148

Mxolisi Makhubo graduated from the GSA, University of Johannesburg, in 2015. He is currently working in practice and assisting the History & Theory Dissertation Team at the GSA in the capacity of Elective Tutor. He is also a renowned DJ, most often heard in Melville, Johannesburg.

MW page 104

Megan-Louise Wilson is currently in her second year of the Master program at the Graduate School of Architecture at the University of Johannesburg and aspires to be a radical thinker of the future of architecture. She is inspired by Kafka's statement, 'by believing passionately in something that still does not exist, we create it.'

OOA page 206

orthner orthner & associates is a Ghanaian-Austrian architectural firm founded by Rosemary and Martin Orthner in 2003 in Austria and 2006 in Accra, Ghana. The main focus of most of their projects is the integration of state of the art technology with the diverse social and cultural environment in Ghana using local building materials and traditional tropical design methodologies. Recently, OOA's works

and achievements have been featured on CNN's Inside Africa.

PD page 211

Paul Devenish (MArch Prof, UP), graduated in 2012 with distinctions in all components of the Master's Program. Paul works at 26'10 South Architects in Johannesburg and maintains a keen interest in making cities and spaces in which human action and event find expression in dialogue with the built forms (and frameworks) that they inhabit.

PM page 53

Paul Morel is senior project manager at Stadsherstel Amsterdam. He is the key person in the collaboration between Stadsherstel and the overseas counterparts in Surinam, Zanzibar and Morocco.

RE page 237

Prof Ron Eglash is a cyberneticist and professor of science and technology studies at Rensselaer Polytechnic Institute. His research is widely known for the use of fractal patterns in African architecture, art, and religion, and the relationships between indigenous cultures, modern technology, and generative justice.

SD page 98

Optimistic re-imaginings of social and economic exchange are *Sarah de Villiers's* curiosities, derived from her work as a graduate of the University of the Witwatersrand. She currently works for an established Johannesburg architecture firm, and is also co-founder of experimental practice, Counterspace.

SM page 182

Solam Mkhabela was educated at the Cooper Union NYC and UCT Cape Town. He holds a BAS degree in Architecture (UCT) and a Masters Degree of City Planning and Urban Design (UCT). He is currently undertaking PhD research on the role of audio-visual in planning and urban design processes, with particular focus on the development of streets. He works at the School of Architecture & Planning at the University of the Witwatersrand.

SS page 82

Stephen Steyn completed an MArch (Prof) at the University of Pretoria with a thesis which consisted of substantial portions of fiction interspersed with academic essays and architectural drawings. He is involved in the post-graduate programmes at both the Tshwane University of Technology and the University of Johannesburg's Graduate School of Architecture.

SV page 142

Digital collage and a forensic approach to space expose *Sumayya Vally's* particular obsession with deconstructing and reconstructing image and space. Her interests have admitted her into a host of prominent conceptual/investigatory projects; including a position as assistant curator and film producer for La Biennale di Venezia 2014 (South African Pavilion). In 2015, she co-founded the experimental architecture and research firm, Counterspace. Sumayya is currently co-Leader of Unit 11 at the GSA, University of Johannesburg.

SW page 116

Sabine Waskow is a Johannesburg-based architectural student in the Masters programme at the GSA, University of Johannesburg. Her

research pivots around the theme of memory and identity in cities and landscapes. Sabine's current work is focusing on the subversive and subliminal mechanisms associated with language, chronicles and spatial constructs.

TD page 211

Thorsten Deckler is an architect (educated at Wits) with 18 years local and international working experience. He loves graphic novels, films and books as well as living and working in Brixton with his wife, Anne, their 2 children, and the amazing team at 26'10 (who do not live with them). A Namibian farm childhood, teenage skateboarding and a love for DIY collude in a no-nonsense, pragmatic approach to design.

TK page 34

Tania Katschner is a Senior Lecturer in the Department of City & Regional Planning at the School of Architecture, Planning and Geomatics, University of Cape Town (UCT). Her research interests are around human nature relationships, urban nature, and around reconnecting ecological questions to an expanded sense of care, responsibility and obligation. She loves socially transformative practices that bring more life, more warmth, and more charge.

TS page 250

Tuliza Sindi is a candidate architect in practice as well as a lecturer at various schools of architecture. Her interests include re-configuring past, present and future social 'orders'. Her architectural firm EXTRA- explores ways in which these social 'orders' are spatially reinforced. Ma(i)de, the firm's collaborative production house, attempts a holistic form of spatial practice.

WM page 127

Wandile Mahlangu is a true product of the University of Johannesburg. He spent his high school days at UJ Metropolitan Academy (formerly known as RAUCALL) and later graduated from the University of Johannesburg in 2015. He is currently studying at the GSA, University of Johannesburg. He is fascinated by the stories and the possible re-imagined future manifestations of the city.

YL page 170

Dr Yashaen Luckan is a practicing architect and an academic at University of KwaZulu-Natal. He serves as President of the South African Council for the Architectural Profession and is actively engaged in educational-quality bodies such as the Council on Higher Education (CHE) and the South African Qualifications Authority (SAQA).



Fig.1: Painting of *Mirabilis jalapa*.

‘A Rose by Any Other Name’: the long journey of *Mirabilis jalapa* to Europe, Gugulethu

— Julian Raxworthy

Painting by **Thozama Mputa**, drawings by **Amy Thompson** and photography by **Jared Coetzee**, who, together with **Michael Brown** and the author, are collaborators on the ‘Gardens of Europe’ project.

Abstract

Using a hedge of the Latin American plant *Mirabilis jalapa* in the garden of a Xhosa man in the informal settlement of Europe in Gugulethu as an exploratory device, this essay uses Mignolo’s method of ‘epistemic disobedience’ to problematise plant categories like ‘indigenous’ and ‘weeds’. The essay traces the route of the ‘Marvel of Peru’, as it is known through the world, to Cape Town and finds that indigenous people have happily adopted this non-indigenous plant because it performs in multiple ways including ornamentally, medicinally and, as it turns out, as a soil remediation device. In doing so, the fetishisation of indigenous plants is revealed as trope of colonial identity, quite divorced from the pragmatic incorporation of alien species into a continuous land practice by indigenous people for whom culture and nature are not separate questions.

Sam Miziwake’s house, located in the informal settlement of Europe, adjacent to the township of Gugulethu in Cape Town, is set on a hill with a panoramic view of Table Mountain that can be viewed from his courtyard. The courtyard is minimal, comprising only its surface and a single hedge running along the wall of his house.¹ The hedge along Sam’s house is wide and sprawling, a

¹ While Sam’s house might be referred to as a ‘shack’, I refer to it as a ‘house’ to acknowledge it as a home that he has made: a house by any other name. Sam was interviewed and photographed on 25th May 2015, according to guidelines established during a University of Cape Town ethics approval process.

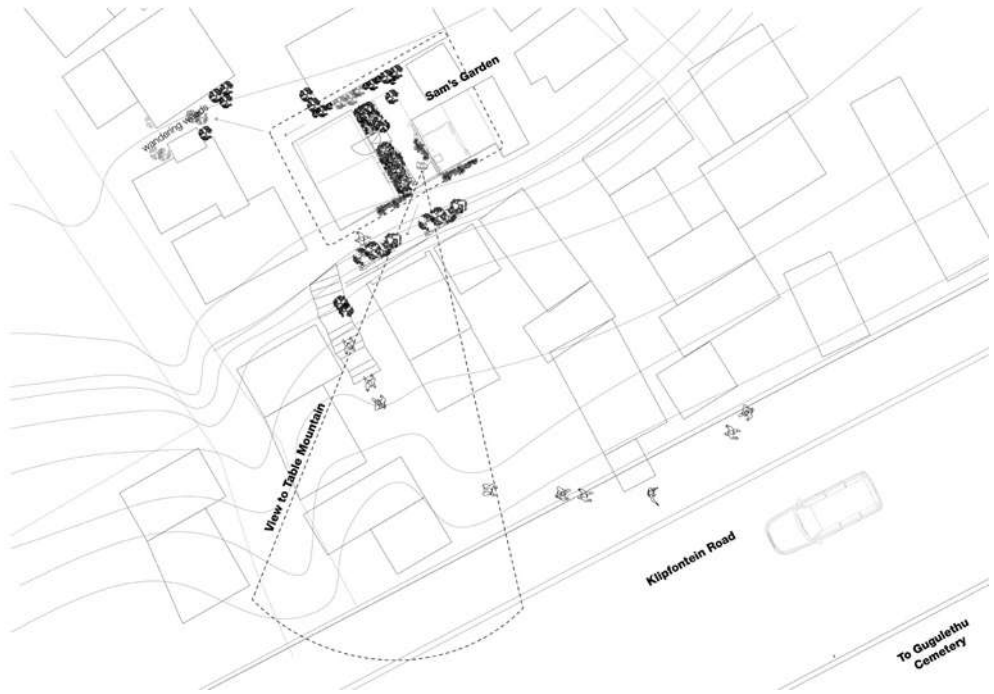


Fig. 2: Context plan of Sam's house and garden.



Fig 3

hedge of consistent mass rather than a series of strictly cut planes, since he prunes it by breaking off protruding branches, and is covered in pink flowers. The plant is called *Mirabilis jalapa*, also known as the ‘Marvel of Peru’ or ‘four o’clock’ because its flowers open in the late afternoon and overnight. From the family of Nyctaginaceae (the same as the Bougainvillea), the plant is said to originate from Peru. The inherent displacement in the name ‘Europe’, a name appropriated from a place far away, alluding to the colonisation of South Africa and home to many ‘great’ gardens, provides us with an opportunity to reconsider plant categories of ‘indigenous’ and ‘weeds’, using Sam’s hedge as a starting point to explore origins and belonging through examining the journey of the ‘Marvel of Peru’ to Cape Town.

Argentinian theorist of coloniality and Professor at Duke University, Walter Dignolo, proposes a way of tackling the coloniality of discourses, which he calls ‘epistemic disobedience, [taking] us to a different place, to a different ‘beginning’.² By being ‘disobedient’ to plant categories, it is possible to address, as Descola and Pálsson argue [in their edited volume], the recurring charge that the ‘nature-culture criticism hinders true ecological understanding’ by considering the ‘epistemological implications entailed by the dualist paradigm’.³ An anthropologist working in the Amazon forest examining the relationship of people and plants – the ‘true ecological understanding’ to which Descola refers – maintains a scientific understanding that ignores cultural divisions in the ecological sphere, thereby breaking a duality where people and plants are kept separate. Plant categories like ‘indigenous’ or ‘weed’ are a colonial overlay because they remove plants from an ecological continuum that is also occupied by people who distinguish a plant only on the basis of how it might be used, whether pragmatically or culturally, as do inhabitants of Europe like Sam, who effortlessly incorporate weeds like *Mirabilis jalapa*.

The voyage of the ‘Marvel of Peru’ to Cape Town was a long one. Despite being a Peruvian marvel, the earliest reference

² Walter D. Mignolo, ‘Epistemic Disobedience and the Decolonial Option: A Manifesto,’ *TransModernity* 2, no. 1 (2011): 45.

³ Philippe Descola and Gísli Pálsson, ‘Introduction,’ in *Nature and Society: Anthropological Perspectives*, ed. Philippe Descola and Gísli Pálsson (New York: Routledge, 1996), 3.

to *Mirabilis jalapa* was Mexican, in the *Libellus de medicinalibus Indorum herbis*, the ‘Little Book of the Medicinal Herbs of the Indians’. This book was a Latin translation of an original Nahuatl (or Aztec) manuscript, composed by Martín de la Cruz while at the Colégio de Santa Cruz de Tlatelolco, the first school of higher learning in Mexico, established in 1532, where *Mirabilis jalapa* was called ‘Tlaquilin’. Cruz proposed a number of uses for Tlaquilin, mostly for its roots, including ‘when you see a festered spot gathering worms, [grinding it] together [with] the leaves of the quetzal-mizquitl, cimatl, tlal-cacapol, bramble bushes and the bark of the xilo-xochitl, and put into our best wine, applying the liquor to the affected spot morning and evening’.⁴

Joseph Ewan, the preeminent historian of American botany, argues instead that the earliest record of the plant may have been in a drawing by the botanist Clusius. It was mis-identified as jasmine but is actually *Mirabilis jalapana*. Clusius stated that this specimen was from Francis Drake’s visit to Chile, Peru and Mexico between 1578-79, and was grown from seed in Italy. Clusius visited Drake in 1581.⁵ Its incorporation into ornamental gardens in Europe was swift, considering the plant was included in John



Fig.4

⁵ Joseph Ewan, ‘Seeds and Ships and Healing Herbs, Encouragers and Kings,’ *Bartonia*, no. 45 (1978): 24.

⁴ Martín de la Cruz, *An Aztec Herbal: The Classic Codex of 1552*, trans. William Gates (Mineola, New York: Dover Publications, 2000), 87. Despite Gates translation referring to *Mirabilis jalapa* as by this name, other ethno botanic resources ascribe the name to other Ipomea (*Morning glory*) species (http://www.tlahui.com/herbolaria/xihuitl_completo.php?fotoplanta=Tlaquilin)

Gerard's Herbal, published in 1597. Of its origin, Gerard said 'the seed of this strange plant was first brought into Spain, from Peru, whereof it tooke his name *Mirabilia Peruana* or Peruviana: and since dispersed into all parts of Europe: the which my self have planted many yeers, and have in some temperate yeeres received both flowers and ripe seed'. According to Ewan, the Peruvians called it 'Hachallndi'.⁶

The plant was included in Andrew Marvell's poem, 'The Mower Against Gardens', from 1681: 'another world was searched, through oceans new/To find the Marvel of Peru'. Commenting on herbals such as Gerard's, Benedict stresses the interaction of the global and the local in their discussion of the places in which each plant can be found. It is interesting to note that, despite an earlier reference in Mexico, the name of the plant has stuck. The 'Marvel of Peru' results not from any inherent quality of the plant, but from its sequence of colonial propagation and dispersal. After having been transposed from Peru to Europe, *Mirabilis jalapana* travelled to other new colonies, including America, with Favretti & DeWolf listing 'the Marvel of Peru' as a 'colonial garden plant' from the 18th century.⁹

In Africa, Alpern suggests that the 'Marvel of Peru' 'may have been the first ornamental plant introduced to west Africa', noting that, 'Barbot said the forests of Príncipe (an island off Guinea) contained large numbers [from a visit in 1682],' suggesting that the plant had naturalised in Africa within 100 years of its arrival in Europe. Indeed, it seemed so clearly to belong in that environment that Vogel collected a specimen in Sierra Leone in 1841, presumably thinking it was an indigenous plant.¹⁰ Perhaps the earliest *Mirabilis jalapa* close to Sam's garden were those noticed in 1793, in wealthy gardens in Cape Town by Carl Peter Thunberg, student of the great botanist Carl Linnaeus.¹¹

⁶ John Gerard, *The Herbal, or, Generall Historie of Plantes* (London: Adam Islip, Joice Norton and Richard Whitakers, 1632).

⁷ Benedict S. Robinson, 'Green Seraglios: Tulips, Turbans, and the Global Market,' *Journal for Early Modern Cultural Studies* 9, no. 1 (2009): 100.

⁸ *Ibid.*, 97.

⁹ Rudy J. Favretti and Gordon P. DeWolf, 'Colonial Garden Plants,' *Arnoldia* 31, no. 4 (1971).

¹⁰ Stanley B. Alpern, 'Exotic Plants of Western Africa: Where They Came from and When,' *History in Africa* 35 (2008): 91.

¹¹ C. J. Skead, *Historic Plant Incidence in Southern Africa: A Collection of Early Travel Records in Southern Africa*, vol. *Strelitzia* 24 (Pretoria: South African National Biodiversity Institute, 2009), 11.

Presently in South Africa, the National Environmental Management: Biodiversity (NEMBA) Act 10 of 2004 lists *Mirabilis jalapa* in its National List of Invasive Species, giving the plant a designation of 1B.¹² At the heart of the act is the definition of an ‘alien species’, which is ‘a species that is not an indigenous species’ – a ‘weed’, in other words. South Africa has excellent environmental legislation, which is effective within the formal economy of land tenure and planning policy, where developments require approval on the basis of their adherence to legislation and policy. However, the scale of informal housing in the same catchments – without the provision of sanitation – make it almost impossible for desired environmental outcomes to be achieved without dealing first with infrastructure in informal settlements. Like inequality and white privilege, environmental legislation and policy is adjacent to, but seeks to be autonomous of, the urban reality of the South African city. The sense of the environment in Cape Town, ‘The Cape Floral Kingdom’, and the designation of *Mirabilis jalapa* as a ‘weed’ rests on the notion of a pristine pre-colonial indigenous landscape to which the ‘Marvel of Peru’ is ‘alien’.

Calling something a ‘weed’ is a designation that arises from the idea that particular plants that are indigenous to a place are better suited to it. However, as Stephen Jay Gould suggests, ‘any argument for preferring native plants must rest upon some construction of evolutionary theory’.¹³ Speaking as a key contemporary theorist of evolutionary theory, Gould says that it introduced ‘the revolutionary idea that anatomies and interactions arise as transient products of complex history, not as created optimalities’,¹⁴ adding that ‘natural selection’ is only a ‘better than’ principle, not an optimizing device’.¹⁵ Consequently, Gould argues, ‘the first-order rationale for preferring native plants – that, as locally evolved, they are best adapted – cannot be sustained’.¹⁶ Gould’s idea of traits as results of ‘complex histories’ suggests that the resultant nature of a plant is a record of a journey, analogous to

¹² Republic of South Africa, ‘Nemba Invasive Species Lists,’ in Government Gazette, 29 July 2016, ed. Department of Environmental Affairs (Pretoria 2016).

¹³ Stephen Jay Gould, ‘An Evolutionary Perspective on Strengths, Fallacies, and Confusions in the Concept of Native Plants,’ *Arnoldia* 58, no. 1 (1998): 4.

¹⁴ *Ibid.*, 5.

¹⁵ *Ibid.*, 6.

¹⁶ *Ibid.*



Fig.5

the complex movement of *Mirabilis jalapa* around the world – its ‘transience’, in other words. Interestingly, the ‘Marvel of Peru’ is also tied to evolutionary theory, since, in the 19th century, Mendel used a single pollen grain to fertilise *Mirabilis jalapa*, thereby refuting the view of Darwin that a single pollen grain was not enough to fertilise an ovule.¹⁷

If the rationale of ‘best-fit appropriateness’ as a scientific rationale is removed from the discussion around the definition of a weed, then a cultural agenda remains: preference. The rationale for preferring native plants is inherently political. Mastnak, Elyachar and Boellstorff argue that preferring native plants might allow the possibility of ‘botanical decolonisation’.¹⁸ Interestingly, native plants were advocated during the 20th century for precisely the opposite reason: to affirm the identity of colonists. In the early 20th century, ‘Table Mountain [and its flora, *fynbos*] became the ultimate symbolization of national unity’ between Afrikaans and English South Africans who had been enemies during the South African wars,¹⁹ leading to a ‘reification of ‘the land’.²⁰ Contemporary views of the indigenous continue and Comaroff and Comaroff note that ‘white Africans’ are disproportionately represented in current conservationist circles’,²¹ noting the rise of ‘hack groups [to remove alien vegetation] in upper-middle class rural white areas’ in the 1970s.²² Speaking of this desire for indigeneity in South Africa, Murray notes that ‘design-led innovation [constructing indigenous identity] gave the issue of indigenous form and content and unprecedented popularity among white South Africans, transforming the more overt, even threatening discourses of indigeneity as they appear in the arena of political workplace into a ‘reasonable’ and desirable style repertoire’.²³ In essence, Murray is proposing that an

¹⁷ Curt Stern, ‘The Continuity of Genetics,’ *Daedalus*, 99, no. 4 (1970): 885.

¹⁸ Tomaz Mastnak, Julia Elyachar, and Tom Boellstorff, ‘Botanical Decolonization: Rethinking Native Plants,’ *Environment and Planning D: Society and Space* 32 (2014).

¹⁹ Simon Pooley, ‘Pressed Flowers: Notions of Indigenous and Alien Vegetation in South Africa’s Western Cape, C. 1902–1945,’ *ibid.* 36 (2010): 601.

²⁰ Jeremy Foster, ‘Land of Contrasts’ or ‘Home We Have Always Known’?: The Sar&H and the Imaginary Geography of White South African Nationhood, 1910–1930,’ *Journal of South African Studies* 29, no. 3 (2003): 659.

²¹ Jean Comaroff and John L. Comaroff, ‘Naturing the Nation: Aliens, Apocalypse and the Postcolonial State,’ *Journal of Southern African Studies* 27, no. 3 (2001): 637.

²² *Ibid.*, 640.

²³ Sally-Ann Murray, ‘The Idea of Gardening: Plants, Bewilderment, and Indigenous Identity in South Africa,’ *English in Africa* 33, no. 2 (2006): 54.

interest in indigenous plants, by being a-political, dehumanises the indigenous landscape: an interest in indigenous plants is not the same as in interest in indigenous people.

This tendency to equate ‘weeds’ – plants that succeed but do not belong – to people has a history in the discourse of landscape design. Michael Pollan says that ‘until the Romantics, the hierarchy of plants was generally thought to mirror that of human society’, continuing to quote 19th century landscape gardener J. C. Loudon, who urged his readers ‘to compare plants with men, [to] consider aboriginal species as mere savages and botanical species . . . as civilised beings’.²⁴ It is interesting to note that Loudon’s quote demonstrates a time where the exotic, the ‘botanical’, was preferred to the indigenous, the ‘aboriginal’, reflecting the conjunction of colonisation and science, where a collected plant reflected the prestige of empire in conquest.

In contrast to the interest in *fynbos* by white conservations, Comaroff and Comaroff note that ‘informal communities (in Cape Town) have burgeoned . . . in close proximity to healthy populations of combustible trees.’²⁵ While arguing for native plants as a decolonising device, Mastnak, Elyachar and Boellstorff also note that ‘myths of the “noble eco-savage” have been shown to be inaccurate . . . [because] native people actively managed and shaped their environment.’²⁶ Their assertion of the primacy of native plants as a decolonizing act, I would argue, places indigenous people back in this place if those same indigenous people are utilising alien plants in a similarly non-judgemental, pragmatic way now.

Having naturalised in Príncipe by the 17th century, after hundred of years on the continent, it is not surprising that *Mirabilis jalapa* has become a part of traditional African medicine. Despite being an introduced species, the *Encyclopaedia of the History of Science, Technology and Medicine* says that ‘recent photo-chemical analysis has shown that the roots of *Mirabilis jalapa*, used in South Africa as a purgative to treat [child] diarrhoea, in fact exhibits anti-bacterial activity against an impressive

²⁴ Michael Pollan, *Second Nature* (London: Bloomsbury, 2002), 109.

²⁵ *Ibid.*, 642.

²⁶ Mastnak, Elyachar, and Boellstorff, ‘Botanical Decolonization: Rethinking Native Plants,’ 374.

array of child diarrhoea-causing pathogens',²⁷ this despite the fact that the plant is regarded as poisonous in NEMBA material. By coincidence, the same page of the *Encyclopaedia* is illustrated with a picture of a *sangoma*, or traditional African healer, in Gugulethu (adjacent to Europe), from 1982. Clearly categories such as 'weed' are irrelevant, further demonstrated by the fact that urban Xhosa initiations (called 'going to the bush') in the Cape Town township of Langa, occur within a forest of the Australian invasive species of wattle, or 'Port Jackson', *Acacia saligna*. It would seem in the schema of the Xhosa plant world, utility trumps the abstract, since the Xhosa term for weed 'Ukhula' means 'growing uncontrollably' and refers to its competition with agricultural plants in a productive landscape, rather than with 'indigenous plants'.

Under the heading 'Why is it a problem?', the website *Invasive Species South Africa* notes that the plant is a 'minor environmental weed or "sleeper weed" . . . capable of withstanding extended periods of drought due to its tuberous roots.'²⁸ Ultimately, the same qualities that make *Mirabilis jalapa* a weed also make it perform in Europe. While Sam does water his plants occasionally, it can withstand the dry conditions, and indeed thrive enough to begin to spread into the adjacent landscape around his house. Initially moving along the side of his house, it has now appeared in properties further away, but still in the proximity. As an ornamental plant, a source of colour requiring no maintenance, it has a clear aesthetic function and is a beautifying element in a very harsh environment, which, once separated from its 'weed' designation, should be welcomed. Further, if one broadens the discussion from the artificial construct of the weed, the 'Marvel of Peru' has an additional environmental role that makes it appropriate at Europe, the site of a former rubbish tip, since *Mirabilis jalapa* has also been found to have potential for bioremediation of soils containing heavy metals, such as cadmium, a common feature of tip sites.²⁹

²⁷ John M. Janzen and Edward C. Green, 'Medicine in Africa,' in *Encyclopedia of the History of Science, Technology and Medicine in Non-Western Cultures*, ed. Helaine Selin (Berlin: Springer, 2008), 1505.

²⁸ Invasive Species South Africa, 'Four O' Clock: *Mirabilis Jalapa*,' <http://www.invasives.org.za/legislation/item/677-four-o-clock-mirabilis-jalapa>.

²⁹ Zhiguo Yua and Qixing Zhou, 'Growth Responses and Cadmium Accumulation of *Mirabilis Jalapa* L. Under Interaction between Cadmium and Phosphorus,' *Journal of Hazardous Materials* 167, no. 1-3 (2009).

There is one additional journey to be made for ‘The Marvel of Peru’ that we find in Sam’s garden. When we ask how the plant ended up in his garden in the first place, and in that configuration, he describes the arrival of his wife on her first visit to his house at Europe. Travelling from the Eastern Cape, a thousand kilometres away, she collected *Mirabilis jalapa* seeds from her garden before her departure and brought them with her in her bag. When she arrived, in a theatrical gesture, she threw them along the ground by the house. In theories of landscape architecture, distant from this intuitive gardener’s actions but linked to the ‘Marvel of Peru’, French landscape architect Gilles Clément has long been working on a type of garden that could describe Sam’s garden, the ‘Garden of Movement’, which ‘refers to the physical movement of plant species on the land, which the gardener interprets in his own way.’³⁰ Clément’s description of ‘how to make a garden of movement’ recalls Sam’s wife’s actions: ‘Plunge your hands into the oilseed flax . . . make the sweeping gesture of the sower, pushing your arms forward and letting the seeds sift through your fingers. Start again, following the rhythm of your steps, until you have sown all the seeds.’ In a plan that accompanies the text, the form of the planting is the result of the kinaesthetic and tactile actions of the gardener, in the same way that the form of the hedge results from the way Sam’s wife laid down a row of seeds that became a hedge.

In his discussion of Andrew Marvell’s poem, Benedict says that ‘the garden the mower describes is a hybrid site, a place for the cultivation of the “adulterate” and the “strange”.’³¹ This could be a description of Sam’s garden, a place where a desire to create a home has catalysed a weed invasion into becoming an ordered, formal garden. Sam’s garden urges us to recognise that people and plants move and live together, and have – and will – for a long time to come and that artificial, colonial ecological categories have no place in peoples’ spontaneous search for beauty and utility.

³⁰ Gilles Clément, ‘The Garden in Movement,’ in *Planetary Gardens: The Landscape Architecture of Gilles Clément*, ed. Alessandro Rocca (Basel: Birkhauser, 2007).

³¹ Robinson, ‘Green Seraglios: Tulips, Turbans, and the Global Market,’ 100.

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Fantasies & *fantastical* Creatures

— Tania Katzschner

All that is un-human is not un-kind

— Donna Haraway

*Why is it that all that tirelessly occurs in front of us, that functions
in such an effective way and is also obvious, remains unseen?*

— François Jullien

Introduction

Today's social and ecological crises are deepening far beyond the capacity of technological or instrumental approaches to find a way through. Engaging with today's problems requires a new understanding of our sustainability 'dilemma' and a re-working of the traditional modernist idea of sustainability in order to accommodate dynamic complexities, what I call 'aliveness' and what biologist philosopher Andreas Weber calls 'enlivenment' (Weber, 2013). Industrialisation encourages us to focus almost exclusively on the organisation of inert (dead) matter in efficient ways. Dead matter, mechanical causality and the exclusion of experience in our understandings of ecology and economy are largely responsible for our failure to protect 'aliveness' in our world (Weber and Kurt, 2017).

PERSPECTIVES

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The Anthropocene has been brought about due to the impact of humans' activities on this planet, to the extent that this impact will likely be seen in the geological structure of the earth far into the future (Zalasiewicz, in Lewis & Maslin, 2015). 'In the Anthropocene, human beings are the agents around whose actions and intentions the story is written' (Timothy Mitchell, in Kirksey, Schuetze & Helmreich, 2014). We need to engage the 'Anthropocene Paradox' in which we foreground ourselves as the solution to the problems that we have created through foregrounding ourselves. It is impossible to build and sustain a life fostering, flourishing, and enlivened society within our prevailing economic, political and cultural operating system. We appear distracted, inattentive and preoccupied, instead of being present and attentive to our surroundings and the world we inhabit so carelessly. Multi-species studies, which do not focus solely on humans, can perhaps offer us a glimmer of hope.

The intention of this article is to help search for significantly different ways of contributing to the discourses around sustainability in a global situation that has become increasingly intractable, fragile and unimaginative. By drawing on multi-species work and the idea of 'love' (more on that below), it is hoped that we can learn to see in such a way that things come alive again. We need to resist our tendency towards 'violent care' (van Dooren, 2015) and work towards more compassionate care and conservation. Multi-species thinking offers a point of entry to rethinking respectful coexistence across species. It can also push our thinking about sustainability, cities, justice and equity in new directions, moving beyond the borders of the known. In the West, our understanding of nature remains steeped in colonial patterns of power and knowledge. Given the recent demands for a decolonised, transformed curricula across all disciplines, it seems particularly necessary to pursue strategies for composing stories that foster modes of living together with radical difference, rather than well-meaning fantasies. Multi-species work reveals delicate 'other' worlds, which can turn our modern world into an entirely different and more transparent space. There may be a different way of seeing, rather than just different things to be seen.

In this article I will review the work of two prominent social scientists, multi-species ethnographers and scholars, both based

at the University of California, Santa Cruz. Professors Anna Tsing and Shiho Satsuka's work has focused on multi-species connectivities, a more humbling positioning of human beings and on shedding light on entangled and unstable ecologies. They both contest anthropocentrism and presumptions of human exceptionalism, which hinder communal wellbeing of all living species. Their work makes us acutely aware of our lack of understanding of the living process of all species, not just humans. Both scholars challenge the dominant current 'one world' world, what Satsuka terms 'mono-ontology' (Satsuka, 2015). They question our obstinate enduring binaries of the subject/object and nature/culture divides. Multi-species thinking prompts us to think of the 'multi' as opposed to the 'uni'. It provides us with an awareness of the multivalence of a situation, which offers caution and hope for future, pluri-versal (as opposed to universal) perspectives and pragmatic hope. By introducing new kinds of ethnographic attention and extending our 'relational tentacles', (Tsing, 2013) they show how scientific thinking and a doctrine of human mastery have encouraged us to think we control nature, rather than fostering an inter-dependent and mutually respectful relationship between and across species. Both scholars acknowledge Donna Haraway's pioneering work and her commitment to re-thinking humans as a 'companion' species. They are also influenced by Bruno Latour's 'Actor-Network' theory, which opened the door to social theories where communities of the living (animals, plants, microbes) play an important role.

Both scholars have been involved in the collaborative, multi-sited, ethnographic mushroom project, 'Matsutake Worlds'. *Matsutake* are a highly valued, wild aromatic mushroom, which makes both an impressive gift and a fine meal. The project looks to diverse *matsutake* mushroom forests around the world to show that 'human nature is an interspecies relationship' (see References). The global project gathers stories from *matsutake* scientists, forest managers, pickers, buyers, grocers, chefs and consumers. The intention of the project is to tell us of lively worlds emerging from every *matsutake* forest and marketplace. They depict many different kinds of lives, simultaneously distinctive and connected across the globe. The research group is interested in *matsutake*

cultures and ecologies as multi-species worlds where life continues in the midst of great disturbance.

This article will review some of these new insights and questions in relation to Cape Town, the author's home. I will argue that their work, attention, and multi-species 'love' is helpful in imagining socio-environmentalism differently, without destroying relationships and awakening us to the possibility of a world where genuine care and concern flourish. It allows us to recognise that we are defined by relationships only partly within our control – a hard recognition to come by – and to refute our widespread assumptions about our control and autonomy. Their work, I will argue, helps us to develop greater attention, awareness and openness.

Inverting Stories and Unruly Ecologies

You who search for a world of mutually flourishing companions – consider mushrooms

— Anna Tsing

Multi-species landscapes and mushroom collecting take us outside our conventional understanding of the world. Multi-species ethnographies are lively, irreverent and remarkably compelling studies that stir the reader to take seriously the supposedly inconsequential environmental imprints.

In her canonical contribution 'Unruly Edges: Mushrooms as Companion Species' (Tsing, 2012:144) Tsing writes:

Domestication is ordinarily understood as human control over other species. That such a relationship also changes us is generally ignored. Domestication is imagined as a hard line: you are either in the human fold or out in the wild. This dichotomization stems from an ideological commitment to human mastery, it supports the most outrageous fantasies of domestic control, on the one hand, and wild species self-making on the other. Through such fantasies domestics

are condemned to life imprisonment and genetic standardization, while wild species are 'preserved' in gene banks while their multi-species landscapes are destroyed. Yet despite these extreme efforts, both species on both sides of the line - including humans - live in complex relations of dependency and interdependence.

This dense and iconic paragraph carries so much wisdom. It helps invert and unsettle dominant logics that are currently accepted as fact. She shows how conventional 'wisdom' obstructs an understanding of deep commonalities, deep particularities and deep interdependencies. Attention to multi-species diversity may be the beginning of an appreciation for inter-species being. Her studies open up the story of 'companion' species and transgress the divisions of nature/culture and technology. Through multiple modes of refining attention - feeling, walking, foraging, smelling and discovering - she skilfully shows how our modern sensibilities have been blunted. She invites us to look for our 'relatives' in other species. She further suggests that the challenge is not only to reclaim and humanise non-human species, but humans also.

Tsing suggests that fungi are helpful indicator species for the human condition because they are ubiquitous and follow all our human experiments and follies (Tsing, 2012:145). Neither plant nor animal, they belong to a group of their own. For example, she draws attention to the way in which British imperial expansion and dry rot (fungi) moved across the globe together (Tsing, 2012:145). She examines the biological transformation of plants *and* people that accompanied intensive cereal agriculture (plantations, for example) and shows how, as farmers have intensified their efforts to feed larger and larger human populations, they have turned to an ever-narrowing range of crops and, simultaneously, of family norms (Tsing, 2012:146). She shows how humans have failed to notice a potential lively cosmopolitanism in agri-business plantations, coercing plants to grow without the assistance of other beings, including fungi. She describes how fertilisers gained from mining and chemicals plants are used, leaving a trail of pollutions and exploitations (Tsing, 2012:146). Crops are simplified and bred for isolation and lose the ability to participate in multi-species

*You who search for
a world of mutually
flourishing companions –
consider mushrooms*

Anna Tsing

worlds and the ability to welcome ‘strangers’. Since plantations have shaped how contemporary agri-business is organised, they also shape the way we think about farming. With all the attention focused on the super-abundance of a single crop, she shows how a vital ingredient is missing: love. The boundaries of ‘home’ correspond to conventional boundaries of ‘love’, whilst the home cordons off and prevents inter- and intra-species love (Tsing, 2012:15). She skilfully inverts ideas and agencies around private property, the state and family. She suggests that cereals ‘domesticated’ humans, and not the other way around. While domestication is ordinarily understood as human control over other species, the notion that those relations also change us is generally ignored. She disrupts the colonial stewardship and mastery idea. Could we instead be lovers of non-human beings?

She artfully shows the absence of love by turning the lens on the feeling, learning and empathising presence of the writer and reader. Instead of the romance connecting people, plants and places, European planters introduced plantations through coercion (Tsing, 2012:148). Only through extreme order and control could anything flourish in this way. With hierarchy and managed antagonism in place, enormous profits (and complementary poverties) could be produced (Tsing, 2012:148).

Tsing considers what mushrooms tell us about the human condition and makes visible the invisible. In sketching the parallel patterns of nature and society, she reveals a powerful biosocial plan, which our modern blunted sensibilities seem unable to see. Mushrooms resist common models of space and time with their expansive and overlapping geographies that do not respect territorial exclusivity. Our dominant spatial logic foregrounds ‘separation’ as a ‘way of life’.

In another fascinating piece entitled, ‘Sorting Out Commodities’, Tsing (2013) examines how capitalist value is made through gifts. She shows the importance of *assessment practices* in creating commodity value from non-capitalist value forms. She follows the detailed performance of sorting mushrooms, which illustrates different systems of value and reciprocity. Tsing suggests that a project of capital un-mapping is required to re-work our thinking tools (Tsing, 2013). Mushrooms congregate at edges, and, noticing the seams and margins, Tsing maintains, is a good place to begin.

In ‘Testimony of a Spore’ (Tsing, 2014), she narrates the life-world of a desiccated spore that floats freely until a downdraft blows it into another mushroom. Fungal spores again guide attention to a *more-than-human* nature. The study reaches for a new kind of aesthetic perspective and practice that imagines entities as elemental assemblages that especially disable human expectations of agency freedom (Drum and Lewison, 2015). Tsing attends to un-knowability, acknowledging fields of risk and vulnerability that are tied to the elusive, mysterious and invisibility of other beings’ intelligence and experience. What appears to animate all of Tsing’s work is a reaching for and understanding of the intricate, continually fluctuating relationships and interdependencies of humans and non-humans across multiple spaces and species.

Fungi Fascination: Translating Ecological Knowledge

*Matsutake live actively with their internal intentions and rhythms
– that may or may not synchronise with our rhythms of human
cognition – but play an important role in making the world*

— Shiho Satsuka

In a paper on the Satoyama Movement, Satsuka (Satsuka, 2014) describes and explores efforts to restore *satoyama*, traditional arable Japanese landscapes. She describes how, in recent years, Japanese citizens have mobilized to restore *satoyama* as a strategy to fight the damages modern life *was thought* to inflict on both humans and the environment (Satsuka, 2014:87, emphasis added). Different environmental publics in Japan work together to restore what Satsuka calls a ‘new common’ in a landscape deteriorated after rapid industrialisation. The Satoyama Movement has become not only the locus of nostalgia for harmony between humans and nature, but also the site for biodiversity conservation for a better future (Satsuka, 2014:87).

Satsuka focuses on the politics of translation between expert science and other forms of knowledge and the emerging discourses of a ‘new commons’ that envision alternative social and human/non-human relations. Her paper focuses on one particularly vibrant wing of the movement, the mobilisation to

create forests that create highly valued *matsutake* mushrooms. *Matsutake* can only be harvested in the wild; no one has yet been able to artificially cultivate them. *Matsutake* require a specific, elusive and symbiotic relationship with the host tree (Satsuka, 2014). The specific mechanisms of this symbiosis still evade scientists, which is wonderfully humbling for humans. Satsuka describes how these mushrooms can only exist in *degraded* landscapes, in the unintentionally created niche conditions which arose in Japan after the decline in agriculture gave way to landscapes of suburban communities, factories, golf courses and industrial waste sites. The *Matsutake* forest thus needs human disturbance. They exist in a space of human cultivation, not wild nature. They disrupt the more common idea of wild ecologies and industrial forestry being in opposition. The firm line between mushrooms and humans posits the idea that the two might even consider one another useful! Haraway's term, 'companion species', is particularly and poignantly apt (Haraway, 2003).

Satsuka goes on to describe how this unpredictable, untamed and charismatic mushroom has been adopted and mobilised by people to re-fashion both the landscape and history (Satsuka, 2014). She considers the *matsutake* 'crusaders' in Kyoto, a grassroots network of citizens who experiment with bringing back biodiversity into monotonous landscapes. She suggests that activists show potential for a 'new commons'. By attending to the charisma of the mushroom, and understanding its 'sociality', the crusaders discover multi-species connectivity and more-than-human sociability (Satsuka, 2014). *'The Matsutake Crusaders demonstrate that the revitalization of natural ecology is inseparable from social ecology, the constitution of society and mental ecology, namely, the construction of people's subjectivities by finding a niche in the complex web of life consisting of humans and other beings who share the landscape'* (Satsuka, 2014:92).

This story illustrates the value and significance of 'not knowing'. When 'normal' is falling apart and expected maps and registers are no longer helpful, embracing the unknown, slowing down and stillness are necessary in order to find hidden treasures outside of one's understanding. The crusaders allowed themselves to listen to more subtle guiding. The *matsutake's* natural elusiveness propelled the crusaders to tune their senses to the rhythm of

symbiosis formed by fungi. The charisma of *matsutake* also has the potential of shaping new sensibilities of scientists (Satsuka, 2015:18).

In another more recent piece on 'Nature in Translation: Entangled Enchantment of Mushroom Ontology', Satsuka (2015:17) describes what I understand as the pleasures of not knowing and uncertainty:

'Many members told me that it would be nice to have matsutake, but getting the mushroom has become a secondary issue. They learn the existence of other beings, and found the joy of feeling the connectedness and the entanglement with their existences. The bodily engagement of re-creating traditional agrarian landscapes stimulated the participants' koto sensibility. The charisma of matsutake drew human attentions to the relational ontology in the forest being mediated by scientists' work.'

It appears as though the members of the movement connected with something deeply important to them and they changed and transformed. This is a wonderful lesson that could bring more healing and protection to the earth, allowing the process of getting oneself out of the way and apprenticing oneself to the organism which calls forth different ways of engaging.

In the 'Nature in Translation' article she continues to work with 'fungi fascinations' and the knowledge and sensibilities suppressed by a modernist scientific knowledge system. She illuminates the struggle in articulating science that works with intuition and the charisma of non-human beings and that evades conventional time-space assumptions (Satsuka, 2014). She is drawn to Eastern attitudes that 'see' the 'form of formless things', and can better listen to the voices of voiceless beings. She questions how to refine sensibilities towards invisible occurrences that evade the modernist desire of capturing all in a spatial, representational scheme. Inspired by psychoanalyst and philosopher Kimura Bin, she works with the idea of shifting our conceptual framework from that of 'mono' (things) to that of 'koto' (events) and the simultaneous

reconceptualisation of time (Satsuka, 2015).

Working with this in the realm of the *matsutake* puzzle – the lack of success of artificial cultivation – it seems clear to me that we ‘moderns’ are limited by our sensibilities and thinking tools. Eyes that see ‘form’ and ‘appearance’ alone aren’t sufficient. Despite our modern obsession with boundaries, things aren’t always as clear as we might think, between life and death, growth and decay, urban and rural, for example. *Matsutake* are simultaneously a ‘thing’ and ‘event’. Again she reveals blind spots of a mono-ontology. If our attention is only above the surface, we will fail to apprehend and grasp other dimensions.

She describes a PhD study that measured biomass over several years in unconventional way, outside the parameters of scientific protocols (Satsuka, 2015). The study seemed to suggest a comfort with ‘not knowing’ and being cognisant of the lack of tools for apprehending a vivid sense of mutuality (Satsuka, 2015). The researcher was not preoccupied with identifying names of species (mono) and situating them in Newtonian space and time, but rather tried to feel the rhythm and syncopation in the flow of energy that allows a diversity of beings to exist, even though he does not know what they are (Satsuka, 2015). She shows how the scholar is keenly aware that these unnamed existences in the undivided entanglement help constitute our presence (Satsuka, 2015). Measuring biomass was the researcher’s way of communicating with these fantastical creatures, occluded, yet surely *existing* as subjective beings. This sensibility that shapes such scientific work is rooted in the fascination with the fungi. The researcher is quoted as saying ‘the allure of fungi is that they don’t show us their presence all the time, but surely they are there’ (Satsuka, 2015:20).

Towards More Abundant Socio-Ecological Futures – Hope in Ruins

These engagements on the edges bring us to the idea of hope. Both Tsing and Satsuka’s work invites us to act with appropriate humility and tact in a world where our arrogance appears increasingly as a threat to the planet’s continued existence. Throughout the discussion so far, I have explored and highlighted what we can

learn from both Tsing and Satsuka's work about the relationship between social and ecological development more generally. The mushrooms allow us to reflect on knowledge tools we use for understanding human as well as non-human social relations. The work of both scholars demonstrates that the revitalisation of natural ecology is inseparable from social ecology.

Scholars across the social sciences and humanities have traced the (predominantly Euro-American) nature conservation movement's idealisation of pristine, unpeopled rural environments juxtaposed against developed, inhabited urban terrain to a particularly American construction of 'wilderness' that has since been exported and adapted across the global South through hegemonic processes of colonialism, and, more recently, neoliberalism (Cronon, 1996; Büscher and Dietz, 2005; Brockington, Duffy and Igoe, 2008; West et al, 2006).

The project of measuring 'objective' biodiversity loss is not easily wrested from the scientific positivist discourse that understands conservation as 'a project of protecting non-human (wild)life'. Disrupting the idea that there is only one, universal truth and refusing the 'becoming' of other creatures in this context is particularly difficult. Situated interactions and inter-relations such as those learned about through 'fungal adventures' are too easily discounted in this realm. A substantive shift towards justly integrating cultural, biological and human and other-than-human values in conservation and natural resource management is urgently required.

Scientific accounts of change can also propound particular narratives. For instance, Andy Stirling (2014) argues that dominant scientific narratives about global environmental change, where a unified humanity is portrayed on the verge of collapse, obviate the 'messy realities' of local engagements of humans with the world around them and obscure emergent and plural forms of local stewardship. There is much we have learnt about these messy human and non-human realities from Tsing and Satsuka's work. Stirling maintains that the solutions proposed by the dominant narrative of environmental change - 'sound science,' curtailments of democracy, technology fixes - embody a 'fallacy of control', where it is imagined that complex change can be unilaterally navigated by knowledgeable authorities (Stirling, 2015). Mushroom

adventures certainly engage this fallacy of control and suggest that a humbling is required.

While the Anthropocene claims to step beyond the dualism of human-nature opposition, culture is everywhere. In other words, what is saluted as the ‘end of dualism’ is a hidden, new, self-aggrandisement of humankind, an attitude that again threatens to convert nature into a project of cultivation and control (Weber and Kurt, 2017). Weber and Kurt (2017) tells us that psychologists call such a situation a ‘double bind’, that is, to assert something but to do the opposite.

A big question and challenge is how to make multiple perspectives, multiple conceptions and multiple claims commensurable, or at least able to converse, across difference to live together better. The work of Tsing and Satsuka suggests that letting go of urgency, stridency, knowing, and working with more subtle realms, energies and essences, welcoming mystery and obscurity can be tremendously and unexpectedly rewarding.

Local Knowledge

Cape Town’s urban nature is a particularly contested terrain, both materially and ideologically. The clash between social justice and conservation in South Africa is perhaps nowhere more apparent than in the city of Cape Town. It is renowned for its unique ecological resources, yet Cape Town simultaneously carries a post-apartheid legacy of social and environmental marginalisation based on race, class, and gender.

In this place where it is so key to hear the voiceless - both human and non-human that have been rendered object, ‘other’, passive and changeable - learning from mushrooms could help Cape Town conservationists dissociate ‘conservation’ from narrow ‘biodiversity’ and colonial agendas and build it anew as an agent of social and ecological justice. The conservation milieu lives with a legacy tethered to the Western colonial project of racial apartheid and with a world-view that relies on the separation of ‘self’ from the ‘other’. At a conceptual level, this ‘self’ has agency and is capable of making change, whilst the ‘other’ is passive, and itself changeable. Mushrooms destabilise these deep-seated ideas and approaches.



All photographs by Riaan van Zyl

Historically, Euro-American nature conservation practices focused on protecting nature from people, seeing them as separate from natural systems. In South Africa, creating unpeopled parks – where only whites were deemed capable of appreciating the purity and primal vitality of ‘wild’ nature – were an easy fit under the apartheid-colonial regime (West et al, 2006). ‘Territory’ is classically conceived of as single-use where either nature or humans (but not both) have access to land. The South African conservation context conforms perfectly to the fantasy of domestic control and wild species ‘self-making’. Cross-species entanglements thus fall entirely outside the dominant conventional optic. Fungal adventures have elegantly shown us the blind spots of this territorial approach to the management of non-human species. Further, mushrooms have illustrated that the concept of territoriality is precisely part of what produces relations of transgression.

Since the advent of democracy in South Africa in 1994, people live as equal citizens before the law, but both the spatial and less-tangible fractures of discrimination and inequity have proved hard to mend. The nature conservation sector’s work in Cape Town reflects and mirrors the social fragmentation of the city, despite such separate social and ecological imaginaries. Mushrooms are key in stressing the significance of giving expression to a landscape approach to planning in which people are seen as part of a live, multi-species landscape, interdependent, messy and entangled.

Emerging Engagements

Globally, the pressing question is: what kind of philosophy and public culture will nurture life beyond the Anthropocene? Experiencing the world as ‘alive’ helps us to rethink our relationships to other humans, to other beings, and to matter. We can stop fashioning these connections into a means of exploiting resources. ‘We will only decently survive the Anthropocene by realizing that humans not only pervade nature but consist of something not consciously made by humans: a self-organizing aliveness profoundly enmeshed with ecosystems in terms of metabolism and metaphor’ (Weber and Kurt, 2017).

Working with mushrooms challenges the dominant understanding and fantasy that environmental problems are issues that manifest themselves primarily in the environment itself, and that natural scientists alone should research these problems and suggest solutions, aided by technology, economics and policy.

Mushrooms are what I would call a ‘fantastic indicator’ species. Paying attention to their struggle to survive can tell us much about the ‘state of our state’ and generate helpful questions for our times. Are we continuing to fight battles we cannot win? Are we engaged in battles against ourselves that are run by un-examined scripts rather than ongoing reflection? The way we typically conceptualise non-human species is too habitual, static and object. Mushrooms invite us to become more intimate with non-human beings and to see them through a lens of appreciation. We can learn more about our place in nature. This might lead to more cautious behaviour and a little less enthusiasm for dramatic intervention and management.

There are no simple answers when it comes to some of our ‘super-wicked’ complex problems, such as climate change. Accepting that humans are not in control could be the first step towards a more viable and thriving future by acknowledging our place within an entangled, evolving, adaptive world: a world which allows for messiness, for emergence, for the openness to new ways of doing things with a new range of collaborators. We seek to control our environment with fences, air conditioning and satellite tracking. What if we relinquished the illusion of control by paying attention to those things that seek entry in different ways? Gregory Bateson (1979) suggested that we would do well to hold back our eagerness to control a world that we so imperfectly understand. Further, the fact of our imperfect understanding should not be allowed to feed our anxiety and so increase the need to control (Bateson, 1979). Rather, our work and studies could be inspired by a more ancient, but currently less honoured, motive: a curiosity about the world of which we are part. The rewards of such work are not power but beauty. This is what the work with mushrooms represents for me. I believe that a practice that foregrounds observation can play a healing role in the world. Multi-species ethnographies develop and open new sensibilities and look out at our world from a place *interested in the world*.

Tsing and Satsuka invite a quality of attention and to observe with respect. With keen powers of observation and a devotion to detail, we can mobilise deep reservoirs of sympathy and an intuitive understanding of the fathomless mysteries of multiple species, the intricate connections and bonds that connect us to the world.

Above all, Tsing and Satsuka present us with what I call a ‘mental flossing’ – a brushing of our minds – and I believe we would do well to ‘normalise’ some of their radical, unorthodox ideas and practices that contribute to the birthing of a new, less fantastical story, and to spread the vibration of love and life.

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A Tale of Two Cities: a Public Goal for the Private Sector in Urban Management

— Berend van der Lans, Paul Morel & Maryam Mansab

The following article describes an on-going project of historic restoration and contemporary property development in Stone Town, Zanzibar. It looks at an established Dutch model, Stadsherstel Amsterdam, founded after World War II and narrates the challenges – and successes – of adapting the model to Zanzibar by **Hifadhi Zanzibar**, a consortium of private owners, governmental agencies and NGOs.

Stone Town: Outstanding Urban Heritage

Stone Town, the historic centre of Zanzibar Town, is recognised by UNESCO as a World Heritage Site since 2000. It is described as an ‘outstanding’ example of a Swahili trading town, a typology that developed on the coast of East Africa and expanded further under Arab, Indian and European influences, while retaining its indigenous elements. Stone Town is of exceptional value, partly because its urban fabric and townscape are still mostly intact. Many of the buildings reflect the variety of cultures that have been brought together in Swahili culture. The buildings are mostly built in coralline rag stone and mangrove timber, set in a thick lime mortar, then plastered and lime-washed. They reflect a complex fusion of Swahili, Indian, Arab and European influences and town planning.

a tale
of two
cities

Stone Town: Divided and Decaying

However, there is another side to the picturesque historicity of this almost mythical town. Maintenance of many of the buildings is lacking. For many of the owners, compliance with the strict heritage maintenance rules is a challenge. There is a lack of knowledge, lack of capacity and, not least, a lack of finance. The Stone Town Conservation and Development Authority was founded in 1985 to support the World Heritage Status application; to supervise building and restoration activities in Stone Town and to provide assistance for owners of buildings in following the conservation guidelines. Its capacity is limited, however. There is also no mechanism in place that supports owners of buildings financially through subsidies or 'soft' loans, for instance. Many owners do not see the point in investing in their property, not least because maintenance of the buildings is highly labour-intensive, due to the materials used and the harsh climate.

Many of Stone Town's buildings are in the hands of the government or government-related institutes, such as the Zanzibar Housing Corporation, and whilst renovation and upkeep is expensive, the rental market targets low-income tenants and revenue is correspondingly low. As a result, many of the buildings are in a poor state, a danger to inhabitants and passers-by due to instability of the main structure and water ingress, which, combined with poor electrical installations and open-fire cooking in wooden structures, can have disastrous consequences. Those residents who can afford it move out of Stone Town and settle in safer housing. Over the past fifteen years, the socio-economical profile of Stone Town has changed accordingly, and shops focusing on the middle class have closed down, or moved out as well.

A growing contingency of the building stock is being restored, however - often successfully so - but in general, restored buildings are in the hands of hotels, restaurants or other tourist-related functions and ex-patriates living in Stone Town. The majority of commercial activity is now focused on tourism. Large stretches of Gizenga Street, Soko Muhogo and Hurumzi Street are chains of small shops that offer very similar

goods, shopkeepers hoping that this time, a tourist will choose him over the competition.

Stone Town is thus divided between relatively affluent tourists and low-income residents, threatening the very life-blood of the city. A discarded and function-less city heart loses all attraction for tourists – and tourism is of vital importance to Zanzibar.



Fig.1 & 2: Alleys are sometimes almost completely blocked by intermediate support of instable buildings (Photos: Berend van der Lans)

Amsterdam: from Dilapidated to Thriving City Centre

In the 1950s, the historic centre of Amsterdam - in poor and deteriorating condition since World War II - was not seen as particularly valuable. At the time, the Amsterdam Municipality was developing plans to make space for modern life and change the city centre into a Central Business District *avant la lettre*, with wide roads, car parks and new high rise buildings. Although popular enough, not everyone was in agreement with the new plans. A group of critical inhabitants, some with substantial financial means and connected to successful companies in Amsterdam, saw a different kind of potential in the city's built heritage. They believed that it was unique in the world and that maintaining this would contribute greatly the development

of Amsterdam as a characteristic city with its own identity. Crucially, they realised that residential use was of great importance to the attractiveness and safety of the urban environment.

In 1956, they became the founding shareholders of a company called Stadsherstel Amsterdam (City Restoration Amsterdam). The company began acquiring historic property in ruinous shape in strategic positions throughout the city centre. For each new acquisition, a feasibility study was developed that proved the profitability of the project while maintaining a restoration respectful to its architecture and history. Once restored, the buildings were never sold but only rented out. The shareholders would receive a modest dividend, while the remainder of the profits were reinvested in extending the portfolio of the company. With this continuous extension, the amount of accumulated capital within the company was also growing, resulting in a solid financial basis.

The restored buildings provided a better streetscape, attractive housing and new residents in the heart of the city. It consequently encouraged other owners to also invest. In 1968, the municipality was persuaded that built heritage can play an important role in the development of the city, and changed city policy accordingly. The city began a formal partnership with Stadsherstel, becoming a shareholder. For the shareholders, mostly representatives of the local private sector, it was essential that governmental or municipal shareholders would not have a majority position in the shareholders' meetings. Until the present day, the strength of the company is still the fact that it is a collective of shareholders in which no one is dominant. The number of shares in hands of governmental shareholders is therefore limited.

Stadsherstel's approach was not fast, but it was effective. In the first 10 years of operations, the number of restored buildings was low, but by the 1990s, it owned 450 single buildings in the city centre, out of a total of 6,000. Over a period of forty years, Amsterdam's city centre has changed from being a dilapidated and unattractive part of the city abandoned by residents who moved to the Modernist suburbs to a thriving city centre that has managed to maintain its historic character and yet at the same time accommodating commercial, retail and residential uses. It has successfully combined preservation and development, making it stand out as a top tourist destination into the bargain. Stadsherstel's growing





portfolio has undoubtedly contributed to the understanding of Amsterdam's history as a source of pride and identity *and* as an engine for development and investment.

Almost coincidental to the Zanzibar context, UNESCO recognised the unique qualities of the Canal Zone of Amsterdam by declaring it a World Heritage Site in 2010. Whilst the declaration of a World Heritage Site usually requires additional protection and management measures, this was not the case in Amsterdam; in the previous years the city had developed its own systems to evolve into a city that is primed and ready for the future but at the same time respects and values its historical past.



Fig.3 & 4: The Amstelveld in the city centre. On the left in the 1970s, when the car was still dominating the city. On the right in the 2010; the Amstelkerk was transformed by Stadsherstel into a shared space for religious and socio-cultural events and exhibitions, combined with office space, while the square is one of the rare larger open spaces in the city centre (Photos: Stadsherstel).

Zanzibar Visits Amsterdam

In 2011, a group of representatives of the Zanzibar government and para-statal organisations paid a visit to Amsterdam to see first-hand the working relationship between history, development and the private sector's role. The group were particularly intrigued by Stadsherstel's pivotal engagement in the process. They were inspired by a more recent collaboration between Stadsherstel Amsterdam and a group of investors in Paramaribo, the capital city of Surinam, a former Dutch colony. Modelling themselves on the Amsterdam-based example, *Stadsherstel Paramaribo* was in the process of restoring their first building.



Fig.5 & 6: The first building of Stadsherstel Paramaribo before and after restoration in 2011 (Photo: Stadsherstel).

Several key commitments were made as a result of the 2011 Amsterdam-Zanzibar visit:

- To bring representatives from the private sector in Zanzibar together;
- To form a collaboration with StadsHertsel Amsterdam to initiate a feasibility study;
- To involve the Amsterdam Municipality in the partnership where possible;
- To involve African Architecture Matters (AAMatters), an Amsterdam-based NGO with projects in the region to facilitate the collaboration between the Netherlands and Zanzibar.



Fig.7: Hifadhi Zanzibar guiding Dutch Minister Liliane Ploumen through Stone Town in 2014 (Photo: Daniel Hayduk)

A Clear Message

Nicola Colangelo, one of the first local investors that backed the initiative, stated that:

‘Tourism is the most important economic driver for Zanzibar. Zanzibar is a unique tourist destination, that distinguishes itself from other beach destinations through the cultural heritage of Stone Town. For the development of Zanzibar, it is essential and urgent to invest in Stone Town and keep it a thriving area for all, not solely for tourists. Only then can Zanzibar maintain its position as an attractive tourist destination.’

As tasked, at the end of 2012 the initiating group brought together a group of *Zanzibari* private sector representatives to present the achievements of Stadsherstel in Amsterdam and to discuss the possibilities to start a similar company in Zanzibar. They realised that the government lacks capacity and funds to turn the tide. If they could combine efforts and take action into their own hands, they would be able to maintain a healthy socio-economic climate that is important for the future of their businesses. An initiating core team was formed, with AAMatters as consultants and Stadsherstel as advisers at distance. The team commenced with a market analysis and a search for potential buildings that would be attractive as first projects. This attracted attention from the Dutch embassy in Dar es Salaam, who provided support for a study on the feasibility of the company and on how the Amsterdam model could be adapted to the *Zanzibari* context.

Hifadhi Zanzibar

It was understood by all parties from the outset that marketing and branding would be an important component of the initiative among potential investors, governmental institutes, other stake-

holders and property owners. It was time to say goodbye to the graceless working title ‘Company for City Restoration.’ ‘Hifadhi Zanzibar’ means ‘preserving, taking care of Zanzibar’. The new name landed well and was quickly picked up in local networks. Again, a number of key components quickly emerged:

Shareholder Base

It was clear that additional investors were required. The tourist industry stood to be a major beneficiary of the initiative but in recent years, the industry had been under pressure due to the world-wide economic crisis. Attempts were made to include investors from other sectors and to target larger investors with capacity to extend their participation in successive years.

Proprietorship in Zanzibar and Stone Town

Ownership of buildings in Stone Town can be divided into three categories:

- governmental or government-related bodies, such as para-statal and ministries;
- Wakf, a religious trust that operates according to Islamic law, taking care of property that is given to the community by gift or through inheritance;
- private owners or businesses.

In principle, Hifadhi may engage with all three categories. Governmental parties share a public goal with Hifadhi but in general, the decision-making process takes time. With Wakf the possibilities depend largely on the conditions that were given at inheritance, which may differ in each and every case. Private owners would appear to be the most straightforward. Decision-making processes are generally smoother than in the other cases, although ownership structures may be complicated due to inheritance divided over a large number of relatives.

Financial Modelling: Cost to Profit

A market research on building costs and the rental market was conducted. It was helpful that the potential shareholders all were active in the market themselves and could share valuable information. In this way, it was possible to build a model of basic data for the rental market. The building industry in Zanzibar is highly stratified and dispersed. In Stone Town itself, it is highly specialised due to the specific traditional building techniques that need to be followed and is generally not done by middle size and larger contractors. This is a playing field of individual *fundis* (craftsmen). As the research report was being compiled, it was initially difficult to estimate accurate building costs but with the help of an experienced restoration architect, cost estimates for a number of buildings were developed, which provided a good basis for feasibility studies.

Feasibility Studies

The outcomes of the market research, together with other data related to managing and maintaining property in Zanzibar, were the basis of the major feasibility study. The initiating team has set up studies for a number of buildings with different ownership, character and size. The following is an example of an early feasibility study of an impressive almost free standing building along Soko Muhogo Street, one of the main arteries in the tight network of alleys in Stone Town.

The building has an imposing elevation towards the main street, with on the ground floor shops with a *baraza* (an elevated surface for meeting and displaying goods) running along the street. The higher floors were providing residential space for the shop owners. The rear side of the building is partly collapsed and the previous owner haphazardly started erecting a new concrete structure for a new use, but these efforts stalled. The building is structurally unstable and supported and braced on all sides. For safety reasons, the building is empty and not used.



Fig.8 & 9: Exterior and interior of the building

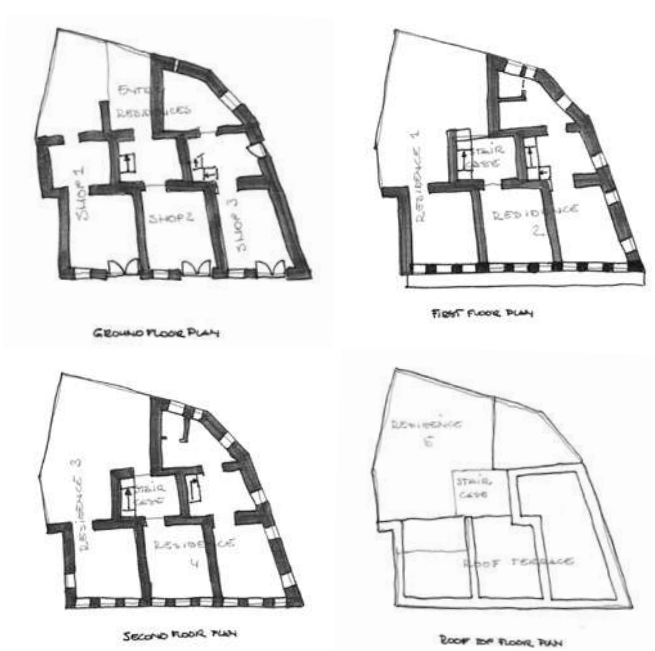


Fig.10 - 13: Quick sketch studies on the potential of the building at Soko Muhogo Street

The building comprises of three levels of roughly 120m^3 and a potential for 90m^2 extension at roof level, making it a total of 510m^2 . With big steps, the basics of the feasibility study for this building is explained:

REVENUES

120m ² Retail/ Commercial Use At Ground Floor	\$	10,000
240m ² Residential Use First And Second Floor	\$	14,400
90m ² Residential Use Top Floor	\$	8,100
Total	\$	32,500
Annual Costs	\$	5,500
Net Revenues	\$	<u>27,000</u>

Based upon a modest Internal Rate of Return of 7%, this results in the following investment overview:

INVESTMENT COSTS

Break Even Total Investment	\$	386,000
Estimated Redevelopment Costs	\$	320,000
Acquisition Budget	\$	66,000

The model shows the obvious relation between the offer Hifadhi is able to make in combination with the expected building and other costs in relation to the expected revenues. Since Hifadhi will not *sell* property, the return on investment is stabilised over a longer period of time, helping to keep rents affordable. The model also showed that different markets can be targeted to make projects feasible. For example, a building can be used by a combination of commercial use, as well as middle and high income residential use.

Legal Structures

Translation of Stadsherstel's *Articles of Association* was not solely a linguistic exercise: clearly, Dutch law operates quite differently to Zanzibari laws, particularly around property, inheritance and profit. The required company structure that ensures that Hifadhi will remain operating with a public goal and that guarantees that profits are used for extending the company's portfolio rather than for the direct benefits of shareholders was carefully translated to Articles of Association that could be registered in Zanzibar.

Building Hifadhi Zanzibar

In April 2015 a group of eight investors decided that the business plan that was presented to them formed a good basis to start the company. A quarter maker was hired to prepare the legal steps for setting up the company. The company's management is formed by a Board of Directors, an honorary function and an office manager, again with assistance from Stadsherstel Amsterdam and AAMatters through support of the Dutch government. On a part-time basis, specific services were hired for cost estimations and structural analysis of buildings. A selected list of preferred projects was discussed with the shareholders. Feasibility studies of these buildings were elaborated further and formed the basis for negotiations with the owners of the buildings.

Hifadhi is professionalising step by step and ready to take up the challenge of its first realised project. A number of candidate shareholders with other background than tourism have registered for a next issue of shares, making the company more firmly rooted in Zanzibar's business world. Hifadhi is an inspiring example of how development and public goals can be brought forward by the private sector.



Fig.14: The founding shareholders meeting in 2015 (Photo: Berend van der Lans)

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Ritual Architecture and Political Power: Ceremonial Architecture as a Propaganda Tool to Reinforce the Power of the Monarchy in the Kingdom of Swaziland

— Afua Wilcox

Glossary of terms:

Ritual Architecture: For the purpose of this article, ‘ritual architecture’ refers to architecture that is integral to rituals and ceremonies that take place in Swazi culture. It may also refer to architecture that is the by-product of a ritual ceremony, e.g., the Queen Mothers boundary wall that is the by-product of the ‘reed dance’ ceremony

iNgwenyama: A description of the King; the literal translation from siSwati is ‘lion’, and refers to his powerful connection to the ancestors.

iNdllovukati: Description of the Queen Mother. The literal translation from siSwati is ‘elephant.’

Indumba nomsamo: A Swazi vernacular hut that typically contains *umsamo*, (a traditional altar).

Umsamo: A built-in altar for indigenous Swazi ancestral worship.

Inhlambelo: The King’s ritual space for *Incwala* (the Kingship ceremony).

iSibaya: Cattle *kraal* also used for ceremonies and national community meetings.

Incwala: A Swazi kingship ceremony, giving thanks to the gods for the year that has passed. It is also held to enact certain rituals that will ensure a good year ahead.

Umhlanga: The literal translation is a ‘reed’. This is also the name given to the Swazi ‘reed dance’ ceremony.

Lusekwane: A species of the acacia tree used for the structure on the *inhlambelo* (see above).

Umbondvo: An indigenous shrub of Swaziland used for the structure of the *inhlambelo*.¹

‘Many people will find it hard to endorse the notion that space has taken on . . . a sort of reality of its own, a reality clearly distinct from, yet much like, those assumed in the same global process by commodities, money and capital . . . that, in addition to being a means of production, it is also a means of control, and hence domination, of power; yet it escapes in part from those who would make use of it. (Lefebvre, 1991)

This article highlights the ways in which Ritual Architecture has been used as a device to heighten monarchical power in Swaziland. Drawing on the social logic of space from Bill Hillier and Julienne Hanson, it argues that the ordering of space fundamentally orders relations between people. Understanding the connections between *iNngwenyama*, *iNdllovukati* and the ancestors is paramount in



Fig.1: The building of *inhlambelo*.
Photo/source: (Kuipers, 1970)

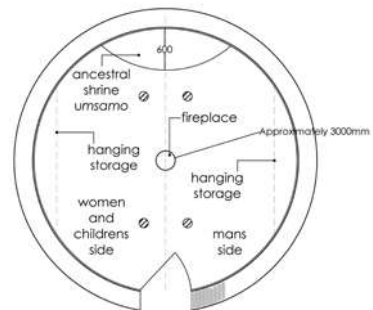


Fig.2: Layout of *indumba*. Photo/source: (Kuper, 1985)

¹ T. Makhubedu 28 January 2017 interview

understanding the ordering of relations between the monarchy and its people. Similar to many monarchies, the Swazi monarchy assumes 'divine right', asserting the religious or spiritual right of the king to rule, which, in present-day Swaziland, is utilised for political influence. Carlsons view of the King playing a priestly role as a mediator between nation and supernatural powers grounds these ideas (Carlson, 1993). The King of Swaziland has spiritual supremacy over his people. He is respected for his spiritual superiority, and this respect is synonymous with political power. We then begin to understand why it is important for Swazi people to respect and take part in certain Swazi rituals that endorse the Monarchy and Swazi traditions. In most cases, taking part in these ceremonies gives the Swazi people an opportunity to be blessed by their ancestors and also to make amends for the sins of their forefathers to prevent the suffering of future generations. The Queen Mother and King, often referred to as the 'dual monarchy', play the most important roles in the two main Swazi ceremonies, namely, *Incwala* and *Umhlanga*.

The five main architectural structures that have been used by the dual monarchy are:

- *isibaya*;
- the Queen Mother's boundary wall, built during *Umhlanga*;
- *indumba nomsamo*
- *inhlambelo*;
- the composition of the Royal *Kraal*.

In this article I will elaborate on three of these: *inhlambelo*, *indumba nomsamo* and the composition of the Royal *Kraal*.

Ritual Architecture Device # 1:

Inhlambelo

Inhlambelo is the structure that the Swazi King inhabits during the *incwala* ceremony. The word *inhlambelo* is derived from the verb 'hlambulula' which is translated as 'bringing towards the light' (Bongi, 2017). This *inhlambelo* raises the idea of ineffable space, a space too great or extreme to be described in words, as it is a space

for the connection of King and the supreme God (Wilcox, 2013). This structure comprises of three key architectural attributes: structure, source and sustainability.

Structure:

The *lusekwane* tree and *umbondvo* bush are used as the basic structure for the *inhlambelo* (Shark, 1999). Only young boys can pick the *umbondvo* since they are considered 'pure' (i.e., have not yet reached puberty). The cleansing qualities that the *umbondvo* bush holds are also an important addition to the ceremony and permeability of the structure. The *lusekwane* tree is also a way of distinguishing the 'impure' volunteers from the 'pure' volunteers. During the collection of Incwala, the branches of the 'impure' boys will break, and those of the 'pure' boys will stay intact (Makhubedu, 2017). The two types of vegetation allow different ranks of males to play their part in the ceremony and show allegiance to the King. Due to its lighter weight, *umbondvo* is collected by the younger boys, while young men collect the heavier *lusekwane*. This inclusive process of sourcing labour accommodates the social interaction of men and boys of all ages. Allowing for different ages to take part ensures a steady influx of volunteers to take part every year. As the older men leave, so younger men will take their place.

Inhlambelo is infamous for the privacy it affords. It is the most visually impermeable structure in Swazi ritual architecture, and rightly so, as it houses the secrets to the King's power. *Inhlambelo* is created out of a tight layering of *lusekwane* tree trunks and branches. After these trees are stacked, the walls are filled with the *umbondvo* bushes to make sure that it is completely blocked off from its exterior (see Fig. 1).

'Walls, enclosures and facades serve to define both a scene (where something has taken place) and an ob-scene where everything that cannot or may not happen on the scene is relegated: whatever is inadmissible, be it malefic or forbidden, thus has its own hidden space on the near or far side of a frontier.' (Lefebvre, 1991)

Lefebvre speaks of the close connection between hidden spaces and the power they hold. The *inhlambelo*'s enclosed; extremely private and impenetrable design conceals the secrets behind the King's power. Would the King be as powerful if secrets of *incwala* were revealed? Traditionally the *inhlambelo* is positioned within the *sibaya*, ensuring a double layer of privacy and jurisdiction. According to Swazi custom, the rituals that are enacted within the *inhlambelo* are directly linked to the well-being of the Swazi nation in the coming year. Yet in spite of the concern for the public – or larger – good, the ceremony is completely sealed off and allows for no opportunity of regulation. The power of the King rests on the walls of the *inhlambelo*, a closed, walled-off and exceptionally private space.

Source:
the sourcing of labour for *Inhlambelo*

The participation of the community of boys and young men in the *incwala* ceremony allows them to fulfill an important rite of passage, filling them and their families with a great sense of pride. It is also a form of recreation and an opportunity to have fun with their peers. *Incwala* is the time of year that men are 'up for promotion' in terms of their position in the royal regiment. Their manual labour is an opportunity and honour to show their worth to their superiors and be a part of the upliftment of the King and Kingdom. It may be argued that the voluntary labourers are also 'free' labour for the King, allowing him to enact his rituals. Over a period of several days, the volunteers source both the materials to build the structure, and the items used within the ceremony. The elders of the group are co-opted to build the *inhlambelo*. This labour intensive structure suggests the reinforcing of Kingship, and reminds both the monarchy and the people of their allegiance towards the King. The building of the *inhlambelo* by the volunteers is thus a form of reinforcement of the power the King holds in his position as the leader of the Swazi nation.

Sustainability:
the sustainability of *Inhlambelo*

All ritual items and construction materials are sourced within a two-day pilgrimage radius of the Royal *Kraal*. All materials are indigenous and have to be, owing to the spiritual significance they possess in the Swazi context. This allows the trees to be cut and grown for the following year, complementing the annual cycle of *Incwala* and ensuring that the King will always have enough of these materials for the coming year. It means that every year, a suitable amount of volunteers to take part in the process must be sourced, thus ensuring the endless cycle of the fortification of the Swazi monarchy.

Ritual Architecture Device # 2:
Indumba nomsamo

‘Different types of social formation, it would appear, require a characteristic spatial order, just as different types of spatial order require a particular social formation to sustain them.’
(Hillier & Hanson, 1984)

According to the Swaziland 2012 International Freedom Report, the government estimates that 90% of the 1.1 million people in Swaziland are Roman Catholics or Zionists, who practice a blend of Christianity and indigenous ancestral worship (U.S. Department of State, 2012). This suggests that the majority of Swazi people take part in ancestral worship and thus have *umsamo* (an altar) in their homes.

In Fig 2 of the *indumba*, we can clearly see the *umsamo*, which is positioned at the opposite end of the doorway. This placement promotes the importance and dominance of the ancestors in the lives of the people who live within these structures. The altar is placed front and centre of the home, where the inhabitants of that particular residence will have their family rituals and give thanks to their ancestors. *Umsamo* is an altar in the form of a ledge or clearing traditionally made from earth. It is approximately 1 metre wide and 60 centimetres deep and allows for the

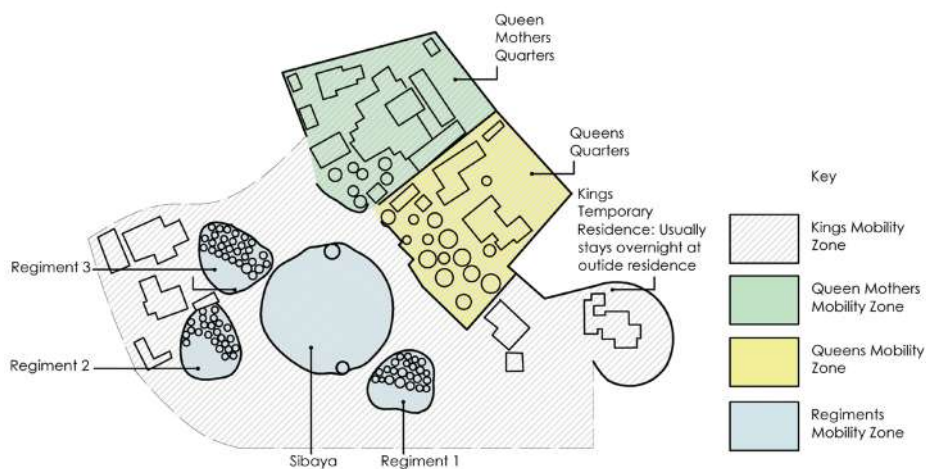
positioning of traditional ritual paraphernalia such as traditional gourds and incense. It is a place within the vernacular hut that Swazi people are very proud of, and when they open their door, are happy for people to peer in and see that they are giving thanks to their ancestors.

There is a strong link between Swazi ancestral worship and the role of the monarchy. If the King is a direct mediator between the nation and superpowers/ancestors, then we can safely assume that people who still take part in ancestral worship believe the King to be powerful. *Umsamo* is just as much a symbol of the tight bond of the inhabitants of *indumba* and their ancestors, as it is a symbol for the exaltation of the King. The *umsamo* can then be seen as an architectural manifestation of the King's power in every home of Swazis who believe in ancestral worship. It is thus a powerful tool of propaganda for every *indumba* and its residents, as well as their visitors.

Ritual Architecture Device # 3: Composition of the Royal Kraal

'Space is not an empty dimension along which social groupings become structured, but has to be considered in terms of its involvement in the constitution of systems and interaction.' (Giddens, 1984)

The composition of the Royal *Kraal* and the spatial relationship between the inhabitants of traditional *kraals* is a contentious one. We can deduce from the mapping in Figure 3 that the King has the most freedom of movement within the *kraal*. Following Giddens, we begin to understand how the ordering of a space can relate to the ordering of a society. The ordering of the Royal *Kraal* allows us to see power in terms of the freedom or lack of freedom of movement that the residents of the *kraal* have. Power, in this instance, is expressed through ease (or restriction) of movement. Here, too, rank plays an important role. If 'freedom of movement' were to function as an indicator of power, the Royal *Kraal* would fare poorly indeed. It is full of spatial limitations for everyone but the King. The Royal *Kraal* is the most exclusive space in Swaziland. It is home to the Royal family during traditional ceremonies



‘Abstract space is the space of strategies. It is a master’s project, a “dominated” space, transformed and mediated by technology and practice. Dominance coincides with practical power.’
 (Mavridou, 2003)

such as *Incwala* and *Umhlanga*. The monarchy having the power to move freely within a space that is so exclusive exhibits his power within the Royal family and within a Swazi political system. With the rise and spread of modern democracies, religious beliefs across Africa begin to change, yet the majority of Swazi inhabitants still believe firmly in ancestral worship. The King is accepted as the mediator between man and spirit. In order to remain in this position, he and other members of the Royal family must perform a number of ritual duties. The majority of these ritual duties are performed within, or produce in themselves a form of ritual architecture. The design of the overtly opaque and privatized *inhlambelo* has allowed the King to retain his sovereignty. The positioning of *umsamo* in traditional Swazi homesteads has maintained deeply-held connections to the Swazi ruler. In the space of ultimate jurisdiction, the Royal *Kraal*, the restrictions on freedom of movement enable us to understand the role of architecture in maintaining political, spiritual and physical control. Space has political affiliations and implications; it enacts and

enforces social divides and confluences, and can also be used as a tool to build (or even break) power. Architecture is intrinsic to the political ecosystem of Swazi spirituality and politics. For now – and perhaps forever – the Swazi King is the last reigning absolute monarch on the African continent.

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FOLIO—Pupae

Some interesting facts about

FOLIO: Journal of African

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61 submissions from 16 countries, including Ghana, Nigeria, USA, Canada, Germany, UK, Kenya, Zimbabwe, Senegal, Namibia, Cote d'Ivoire, Cape Verde and Eire;

•

6 peer-reviewers read 11 submissions;

•

Nearly 60% of submissions were rejected by the editors and reviewers;

•

6 cover options were considered;

•

60% of original submissions were made by women architects and academics;

•

South African architects and academics submitted the highest number of articles for inclusion;

•

Very few practicing architects put forward their work;

•

Most contributors had to be persuaded!

FOLIO—Pupae

POLITICS

MODEL CITIZENS

Online

Bryans Mukasa's *original thesis is only available in the online version of FOLIO*

80

Issa Diabaté

Billboard: the 'Model Citizen' Ad Campaign

82

Stephen Steyn

*Long Division**

* peer-reviewed



Billboard: The ‘Model Citizen’ Ad Campaign

— Issa Diabaté

One of the main roles of any architect is to provide novel solutions to urban issues as perceived and experienced in his or her local environment. This is equally true of architects practicing on the African continent, where innovation and novelty are often sadly lacking in terms of urban infrastructure and culture.

In this short photo-essay, it is argued that the role of the African architect should be expanded to include the role of the citizen, and in particular the ‘responsible’ citizen, no longer a mere bystander or spectator of his or her environment, but one who actively participates in restoring, shaping and building his or her city. Given that the percentage of urban ‘works’ (housing, retail, transportation, commercial, etc.) carried out by licensed architects across the continent is so low, this piece argues for a re-interpretation of the terms ‘architect’, ‘citizen’ and ‘model’, allowing each to accommodate and accept wider responsibility for the urban landscape.

It is fashionable (and all too easy, perhaps) to apportion blame for the myriad challenges of contemporary African cities: weak infrastructure, weak governance, corruption, poor mobility, etc., but beyond the responsibilities of government, we would argue that there is an even more pressing responsibility that needs to be acknowledged: that of the citizen.

A glance at many African cities reveals a citizenry engaged in activities that might be called ‘uncivic’. Opposing this view, we view the ‘Model Citizen’ as someone personally engaged in finding solutions to challenges that are more generally left to politicians.

Billboards are an integral part of West African cities. Our main goal in this project is to locate the ‘model citizen’ at the heart of the discussion, emphasizing those behaviours that require adoption, encouragement or ‘correction’.

The campaign is both site-specific and general. It can be re-‘modeled’ to fit the specificities of different African cities.

Long Division: a Political Critique of Parametricism

— Stephen Steyn

The following piece is a brief critique of Parametricism through an analysis and contextualisation of the final year thesis project, *Imaginary Landscapes of Hillbrow: The Velo City*, by Beresford (Barry) Felix of Unit 10 at the Graduate School of Architecture, University of Johannesburg. The project takes the form of an autopsy, a de- and reconstruction, a quip and a coup d'état, investigating our inheritances from Metabolism, Modernism and the self-proclaimed contemporary global avant-garde. It is Parametricism by abacus, a hand-made machine for testing the soul of architecture in the twenty-first century.

Samo . . . 4 The So-Called Avant Garde

The Dark Side Club – a ‘Salon for Conversation’ at the 11th Venice Architecture Biennale – was the setting for Patrik Schumacher’s grand unveiling of Parametricism, a brand new ‘style’ in architecture (or, as its fans would have it, *the* brand new style in architecture), instantly recognisable by its complex curvature, its sleek aqueous surfaces and the high-technology methods of Zaha Hadid Architects. Through the lyrical enthusiasm of its proponents, Parametricism has been made to appear as something of an epistemological break, one which is finally possible now that computing technologies have become sufficiently sophisticated. However, it could be argued that it is, in fact, a manifestation of a much older desire – the desire to set generic standards for the discipline of architecture – and that, as such, it has its own antique forms.¹ A primitive Parametricism lies within the rules,

¹ It is no coincidence that the word ‘generic’ has its etymological roots in ‘genus’ and that treatises on Parametricism are invariably saturated with Darwinist metaphors. Schumacher’s *Manifesto*, for example, is vividly reminiscent of the narratives of the primordial birth of the world where ‘swarms of buildings . . . drift across the landscape’ and ‘hyberdize (sic), morph, deterritorialize, deform, [and] iterate,’ before they eventually ‘crystalliz[e] into a solid new hegemonic paradigm for architecture.’ (Schumacher, 2008).

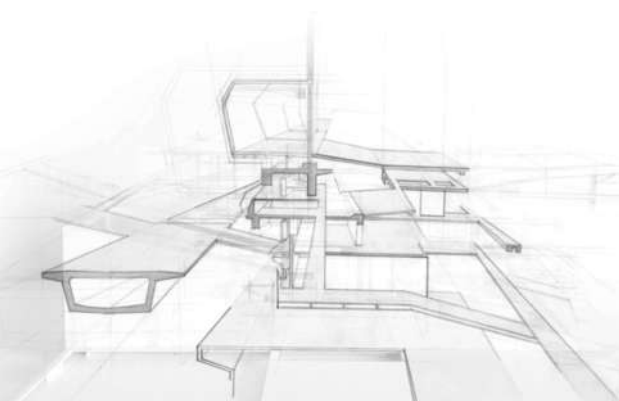
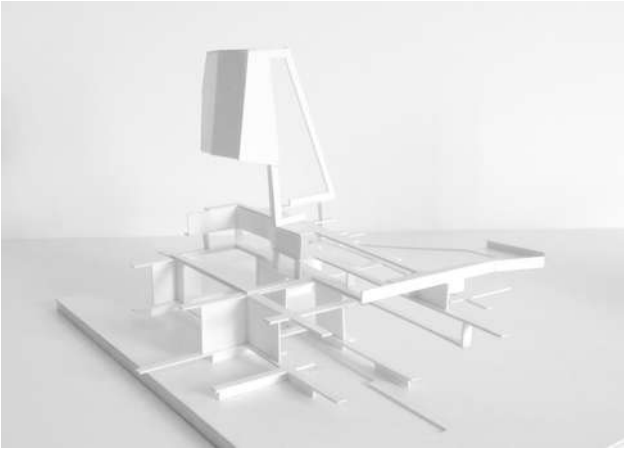
regulations, laws, and by-laws that invisibly govern architecture at its most fundamental levels: those of scale, envelope, programme, and ownership. There is also a sinister, invisible double of Le Corbusier's 'pure forms in light' in the *filling in of forms*. Such regulations describe a rudimentary architectural form which, through mediation by paper or digital templates, takes on the appearance of objectivity and inevitability. Parametricism, both as a style and as a philosophical movement has, by claiming extreme novelty, distanced itself from this history – from the politics of how urban and architectural forms are really produced – but it is an essentially similar modality, one where sets of parameters determine forms.

Velo City's critique and exploration of this lineage begins with scale. One of the purported advantages of Parametricism is its applicability at a variety of scales. Its complex, computational modes of making allow for aesthetic consistency (even continuity) from the urban scale to the detail. Traditionally, it is the designer's mind and gestures (drawing and building) which form the 'plane of consistency' on which, through concepts, the appearance of elements at different scales is subjectively mediated. *Velo City* brings this subjective dimension to the fore self consciously as its very first conceptual gesture - its invented context. The setting for the project is an 'imaginary space', an alternative version of Hillbrow, where parallel histories are used to determine new forms. Felix switches Le Corbusier's automotive urban fantasies of the 1920s and 1930s (La Ville Radieuse in particular) for a world dominated by bicycles. In doing so, he adjusts the temporal scale (the speed at which the city is perceived) as well as the physical scale (the size of the city's most basic unit).² It is poised between Le Corbusier's visionary urban forms and the popular contemporary critique of that vision: pedestrian cities (as described by, among others, Jan Gehl). Le Corbusier increased the speed of the city, Gehl slows it down. *Velo City* maintains a position of balance between the opposing forces in this dialectic and posits an unusual urban grain, somewhere between the exhilarating elegance of

² The basic unit of architecture had always been the human body, Le Corbusier's genius lay in his toppling of this ancient empire at the urban scale and replacing the human with the machine, the body with the automobile and, in the process, producing a startling and seductive novelty.



Fig.1-7



the automobile, and the messy density indicative of slow-moving pedestrians (Figures 1-7).

Turn To The Left, Turn To The Right . . . Ooooh Fashion

A pivotal term in the arsenal of Parametric doctrine is the categorising word *style*. It seems unusual for anyone who considers themselves a serious theorist in the post-postmodern era (as Schumacher no doubt does) to use this oft-derided term, since the explosion of kitsch that accompanied its popularity during the latter half of the previous century has made its use somewhat contentious. But Schumacher's aggressive revival of this term serves a dual purpose; firstly, it allows for direct communication with the general public (and a pool of clients who are, almost invariably, not architects themselves) and, secondly, it refers to Parametricism's most significant defining feature; the way that its products are made (or their *means of production*, if you will). Calling an ideological movement a 'style' is a clever device to garner support. The battle for dominance is unlikely to be decided by practitioners within the discipline, since, through the system of patronage, the architectural profession is generally dictated by clients. In lieu of a dedicated and thoughtful education in architectural history, the idea of coherent and visually recognisable styles quickly and effectively communicates a simplified history of architecture to an audience. As such, the trick to being the new 'style' in architecture is to announce it as such to the public. Schumacher put it most succinctly when he said that '[o]utside architectural circles, "style" is virtually the only category through which architecture is observed and recognised. A named style needs to be put forward in order to stake its claim to act in the name of architecture' (Architects' Journal, 2010).

The second function of the term is more complex and refers to style as a 'manner of appearing' or, to clarify, a 'manner of coming into being'. The way in which something 'comes into being' and what it *looks like* are somewhat confused in the word 'style'. The word 'fashion', is perhaps a simpler example of the same confusion. Both these words function simultaneously as verbs

and as nouns (one could fashion a pot out of clay, and one could be in fashion; one could style hair and one could have a style). As such, a new style refers both to an architecture that looks like something you've not seen before and something which was made in a new way. One of Parametricism's most defended zones is that of its novelty, which is what maintains its status as 'avant-garde'.³ Through contemporary computing techniques, it is claimed to be able to do what has never been done before, implying, however subtly, that the novelty lies in the style, in the way in which the architecture is made, as well as its appearance. While it is clearly true that its forms are unlike its predecessors - the machine aesthetic of both early 20th century Modernism and 60s Metabolism is decidedly boxy - what *is* novel is its resulting form and not, as is claimed, its style. Its appearance, yes, but not its manner of coming into being. The making of forms through the mediation of machines has a very long, and very well-documented history.

In Albrecht Dürer's *Draughtsman Making a Perspective Drawing of a Reclining Woman* (ca. 1600) a man (the draughtsman) looks through a device (a gridded screen) at a nude woman. The screen divides the image of the woman into thirty-six sections, the contents of which can then be transcribed onto a sheet of paper, similarly divided. Leaving aside the political implications of the gender divisions depicted (through the device, the woman's body is divided, labelled, controlled, copied and made consumable) the unusual fact that the topic of this image is the making of another image is notable. What makes perspective drawing, as a technology, so significant, is its ability to produce images that resemble reality. Far from the abstraction of ancient Egyptian murals, perspective allows for the imitation, representation and reproduction of reality. It is artifice, but it looks like nature. In Dürer's woodcut print, the use of a rudimentary machine in the making of reality is represented (or 'made present again').

Jumping to the 1960s, when Andy Warhol's art-machines-for-machine-people philosophy progressed from being *about* popular culture, to becoming popular culture itself, the ideas that it contained, represented, and produced could also be seen to be

³ 0.6% of the total content of the *Parametricist Manifesto* is the word 'new'.

manifesting in architecture and perhaps most notably, in the work of the Italian radical collectives, Archizoom and Superstudio. In 1969, Archizoom created a series of seductive dioramas, collages and drawings known as *No Stop City* which satirised the eternal city of the future. The multiplication of identical components is simulated through the reflection of architectural and sculptural components, arranged in mirrored boxes. Working in a parallel idiom to Warhol, they experimented prolifically with bad taste, reproduction and simulation. While Warhol used the screen printer as a machine to create 'meaningless' art, Archizoom limited their use of mechanistic production (the mirror is a rudimentary mechanism, but doesn't seem likely to be making the same comment as the screen printer). It is only with Parametricism that Warhol's irreverent dystopia of a world for machines made by machines can be glimpsed.

The Golden Rationality

A significant problem with the computer-model ideology is that it ignores the influence of debate, persuasion, ideology and the histories of power *on* the template, as well as the rather convoluted differences between consensus and fact. Previous attempts to politicise parametricism have focused on adding more 'human' and 'social' parameters (or categories) to its existing formal and geometric tendencies (Castellano, 2011). Such processes *could* produce interesting results, but any possible elegance of the output would be achieved by enacting a violent simplification of human affairs to fit into a template. Violent because the audience will effectively be blinded to all the values not considered in the production of the categories 'human' and 'social'. The author's point of view is projected, along with its limitations, onto the subjects in question, and everything that falls outside of that frame of reference becomes invisible (sometimes even to the subjects themselves). Rather than simplifying the world to fit the model, *Velo City* instead uses models to violently simplify the computer and produces some architecture in the process. Figure 8, for example, describes a rudimentary mechanism which harks back to the origin of modern computing in punched cards while producing

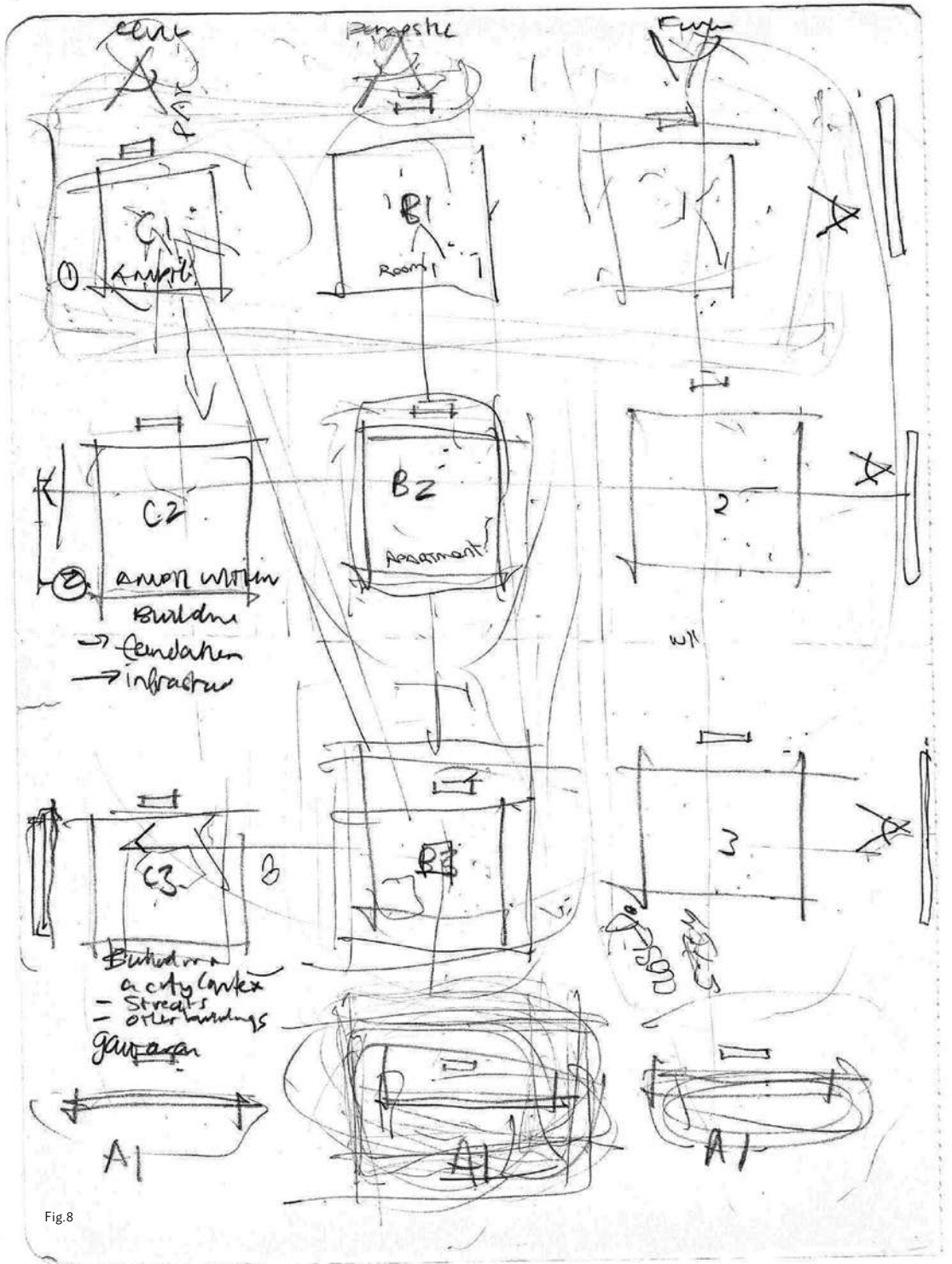


Fig.8

a legible game of inputs, processes and outputs.

In *Zaha Hadid Architects and the Neoliberal Avant-Garde*, Owen Hatherley eloquently summarizes the connections between the ideologies of Parametricism and global neoliberal democracy. The ideals of the free market revolve around the theoretical possibility that we could be more directly represented by what we consume, than by how we vote and debate. Since consumption takes place through transactions, and transactions are recorded, it produces a much bigger data set of individual desires than voting does. They are recorded more legibly than debates, which require substantial intellectual effort to interpret. Accordingly, the myriad compromises and frictions of democracy could be short-circuited through the aggregation of direct, individual desires, *as they are captured*, when we purchase what we desire. Instead of the complex bureaucratic and infrastructural systems needed to manage civilian power, democracy could be automated. But this ideology ignores the limits of the template. Hidden within is the arrogant assumption that products available for purchase can (or could eventually) represent all possible desires. In other words, if your desires cannot not be satisfied with only two types of peanut butter, they *could* be if only the peanut butters available to you were increased exponentially to include an incalculably large number of different textures, flavours, viscosities, even origins and artisanal modes of production. Long gone are the quaint days when the best things in life were free. In this model, nothing can exist that is free. Things can only exist once they have a product category. Historically, complexity has made certain things difficult to commodify, but luckily computers are sophisticated enough to do so now. Finally, the best things in life can commence their existence.

There is a moment of genius early in Jean Baudrillard's *Simulacra and Simulation* where he explains why, even when things are not what they seem, they also *are* what they seem. In this world, to *seem* is to *be*, since appearance, Baudrillard argues, is also a form of being. It is against the intuited discrepancies between appearance and reality that 'classical reason armed itself with all its categories'. But without an objective point of view from which to separate appearance from reality, no such discrepancy can be confirmed . . . it can only ever be suspected. And we remain

suspicious, despite Baudrillard's insistence that the matter is settled (Baudrillard, 1995). The answer to this problem has been the addition of more categories. Keep adding more categories until, eventually, they will average into objectivity.⁴ In principle, this idea is not entirely unreasonable since, subjectivity, which relies on a particular frame of reference, can be diluted – and consequently moderated – by other subjectivities, other frames of reference. It is a founding principle of democracy. But when tested at its fringes, the ideology is revealed to be a myopic assumption that eventually there will be a moment, a watershed, where opinions actually become facts. All that is required is a large enough number of people who share the same belief. If anything, this feels even more suspect than the possibility that *there are no facts at all*. But computers can hide this discomfort because, as we know, they can see things that we cannot and we continue to hope that they may, with their superior senses, be able to reach into the 'real' world.

The more persuasive parts of Parametric ideology have to do with mediation by computers and the concurrent appearance of moral and political neutrality, or naturalness, (not entirely dissimilar to the way in which the machine aesthetic attempted to borrow objective authority from modern machines). Through invoking the authority of Nature-with-a-capital-N, one can not only gain access to powerfully rational techniques of persuasion, one can do so with relative moral impunity. Dr. Strangelove, Stanley Kubrick's 1964 satirical masterpiece, presents a critique of the assumed neutrality of computers. When President Merkin Muffley is faced with the task of having to choose between those who will live and those who will die in an impending apocalypse, Dr. Strangelove attempts to soothe the President's moral anxiety by suggesting that a computer would be placed in charge of such decisions. Sets of desirable human characteristics would be fed into a computer which would then, objectively, determine ideal candidates for rebuilding the human race. Females, he adds, would have to be selected for their 'sexual characteristics' since sexual desirability will be of utmost importance in restocking the population. Most

⁴ This is similar to the belief, common among artificial intelligence enthusiasts, that the key to artificial consciousness is the addition of an ever-larger number of calculations per second. For a convincing refutation of this idea, refer to John Searle's *Chinese Room Experiment* which, using an architectural device, describes the difference between consciousness and its simulation.

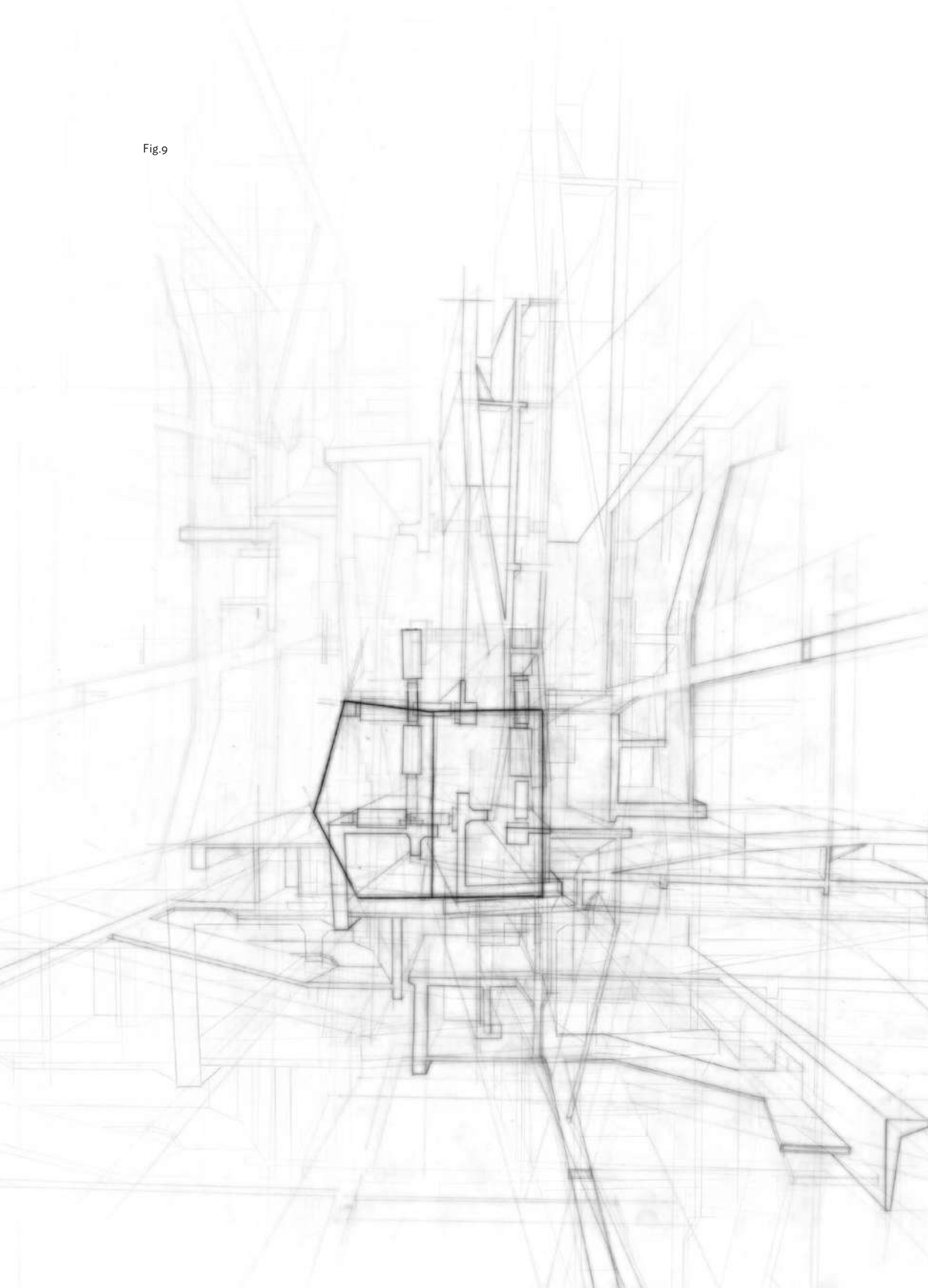
members of his all-male audience seem suddenly persuaded that the future is, despite appearances to the contrary, quite bright. The comedy of this situation relies on the audience recognising the very obvious bias in the parameters that Dr. Strangelove proposes, while the characters, seduced by having their biases confirmed, do not. Smoke and mirrors, similar to Parametricism. . . We are, through this mediation, able to maintain the appearance of innocence while perpetrating the ‘crimes’ deemed necessary for the maintenance of the world.

Intelligent Design

Darwinian evolution could be summarised crudely by the following: mutations occur more or less randomly (under the influence of physical and chemical forces) and the characteristics caused by these mutations either improve chances of procreation; impede them, or have no effect on them at all. Should a mutation improve procreation or have no effect, it is retained; but if a mutation *impedes* procreation, it is either swiftly or gradually bred out of the population (Dawkins, 2005). But design is not like evolution. (Or rather, design is only somewhat like evolution). Critique looks like natural selection (options are presented, and are selected from); iterative design processes have some commonalities with mutation (options are produced without necessarily knowing their outcomes), and the history of architecture seems to operate similarly to ‘genes’ (history and theory code our frames of reference and old ideas perpetuate themselves). But to apply Darwinist metaphors too directly to this process is to momentarily misunderstand either evolution, or design, or both. What evolution never does (D’Arcy Wentworth Thomas’ flirtations with Vitalism notwithstanding) is to project, to plan, or to *intend*. In evolution, mutations are arbitrary and incidental. In design, these mutations are moments of self-conscious agency.

Architecture is what we occupy; it is, quite literally, our environment. And in the Darwinist idiom, the environment is the ultimate arbiter since it is the environment that is the test for *fitness*. Fitness, of course, here refers to an ability to fit into a

Fig.9



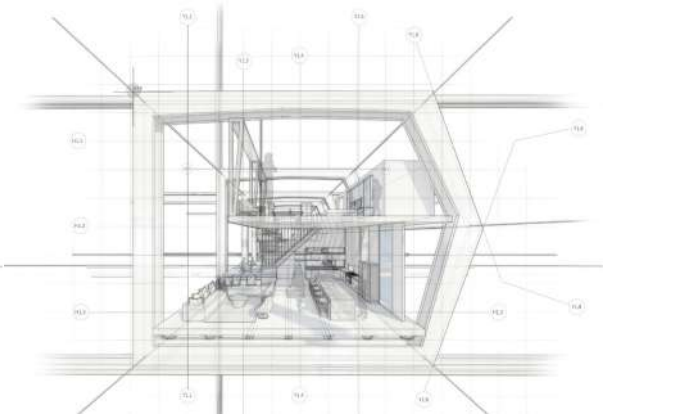
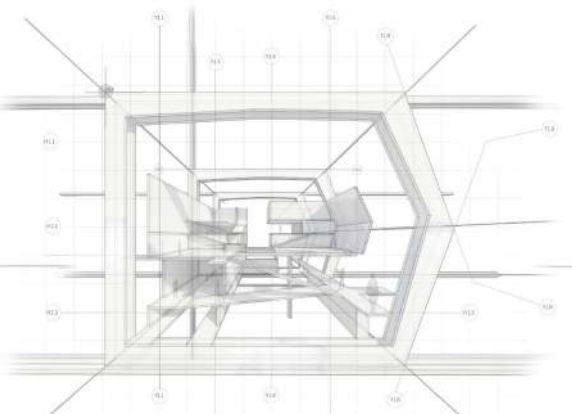
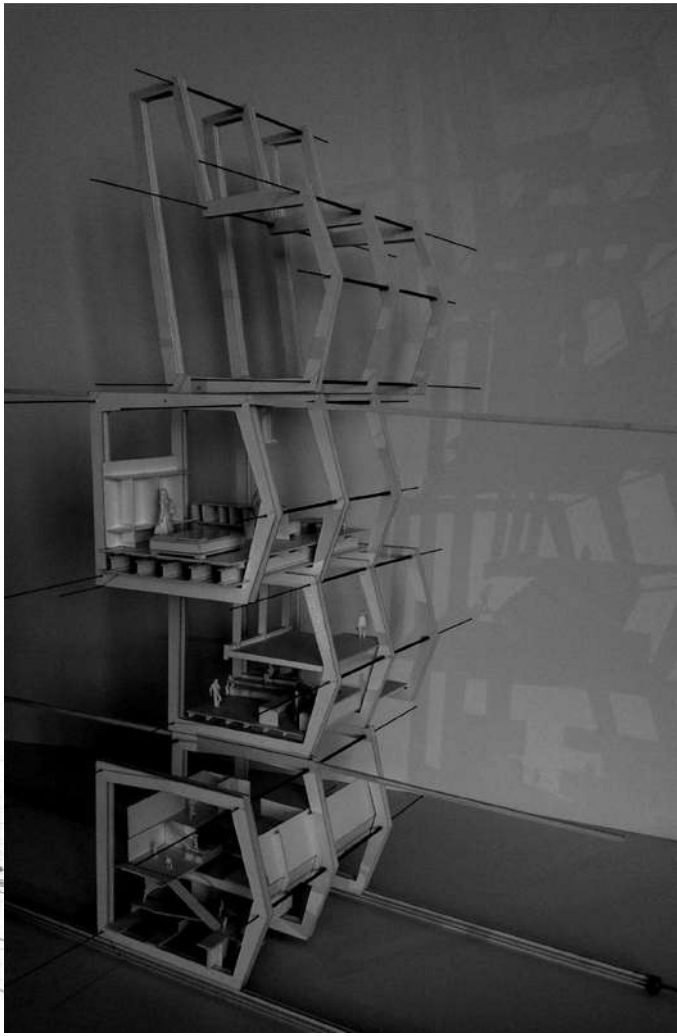
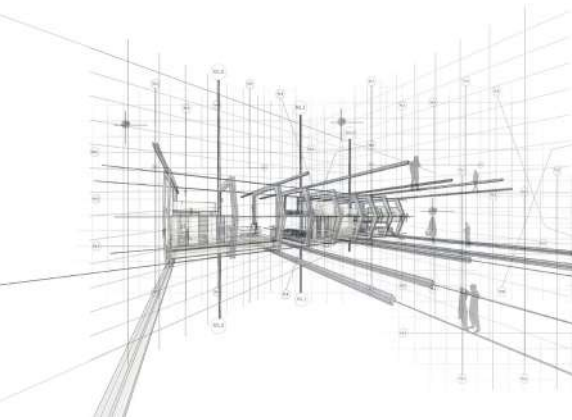
particular environment, not to strength or agility. One reading of the word 'fitness' is a 'characteristic or attribute' (e.g., one is fit), the other a relative term (one fits *in*). In the context of a wilderness, where the rate of change in the environment is very gradual (compared to the relative speed of generational mutations), the environment is seen as the passive receptacle of fitness, the puzzle piece into which organisms either fit or die. Something rather complicated begins to happen, however, when the environment becomes more immediately editable than organisms - as it does with the development cities. We are now forced to attempt to anticipate the outcomes of interactions between environments and organisms, rather than simply adapting to relatively passive environments. Methods for doing so vary from designer to designer, and from ideology to ideology. For *Velo City*, the stage for anticipating and testing the interactions of people and environments is the *room*.⁵ 'Room' is here intended to refer to all designed spaces varying from the civic scale (a concert hall or a court of law) to the scale of furniture (a bed or a couch).⁶ Figure 9 marks a significant moment of transition in the project where the room is introduced to the radical framework, represented by a rectangle with a single broken side inserted into the superstructure. Though reminiscent of the 'pods' of Metabolism, these units are subsequently developed as unique designs and not economised for mass production as would have been the case if it were a straightforward continuation of Metabolism.

Through this gesture, Parametricism is, in this project at least, kept in its place - the urban scale. Felix accepts and navigates around the inherent limitations of the style. The disguise, and consequent apparent absence of subjectivity and agency in design is less keenly felt at the urban scale and at the scale of the detail. At the urban scale, historically accepted parameters such as laws, bylaws, rules and regulations have long since made us comfortable with a sense of 'fields' of possibility that suggest basic but

⁵ Related to the German word *raum*, which is synonymous with *space*.

⁶ Beyond introducing waves to walls and ceilings, Parametricism has little or no effect on interiors. As with Deconstructivism, Parametricism's claims of revolutionary effects are somewhat complicated by the fact the *floor* has to remain both flat and free of gaps and interruptions for safety. *Space*, the modern preoccupation which it eschews in favour of 'fields' included the domain of activity within its purview but Parametricism limits architecture well before that point. More often than not, Parametricists deal with furniture as modulations of a wall surface. Since it cannot deal with space, a chair cannot be made architecture unless the wall or ceiling begins to absorb it.

Fig.10-13



malleable forms. And at the scale of the detail, ergonomics, use and material restraints have the upper hand in determining form. It is at the scale of the room that the idiosyncrasy of the individual designer in the interpretation of everyday life and ritual is at its most apparent.⁷ While complex computer processes serve to hide that agency, *Velo City* dares to mark its mutations with the subjective will of an author (Figures 10-13). A radical proposition in an automatic age.

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⁷ In places where rituals are most formally expressed, and where contingency, chance, and 'fields of possibility' reside in the daily rituals of *using* that space (rather than in the production of forms that appear dynamic while, in fact, being static in the extreme), Parametricism is at its weakest. Due to its inability to deal with movable objects as parts of architectural programme, it is difficult, if not impossible to imagine, for example, a Parametric kitchen.

FOLIO—Pupae

PUPILLAGE

WORK FROM UNIT SYSTEM AFRICA 2016

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The Idea Bank

— Sarah de Villiers

Trade-Table: a graphic précis, a formal and spatial device that brings highly developed forms of trade back to a flat plane, a single piece of furniture over which discussions and advice might be negotiated on an equal footing, two people, one sitting before another.

This proposition is derived from a larger body of research¹, which deals with spatio-political analysis of 21st century financial institutions, engines of efficiency, which are often largely inaccessible. But what would happen if we could reorganise and challenge the existing standards of traditional financial institutions in such a way so as to facilitate accessibility to budding entrepreneurs, offering an alternative type of trading space?

¹ Research as submitted for Masters Thesis Dissertation at the University of the Witwatersrand: de Villiers, S. (2014). <http://hdl.handle.net/10539/17845>.

Today's 'money' institutions - banks, shopping malls and casinos - reveal a largely hidden system of militarisation in the form of surveillance, protection and near-impenetrable security, both virtual and real, generally in proportion to the risk of loss to the institution. Yet these measures, upon which the 'safety' of the institution rests, are both illusory and subversive. Banks are still designed to be inviting, welcoming and safe - comfortable seating, cosy waiting areas, cashiers behind bullet-proof glass, personal bankers and assistants perpetually 'on hand' to assist you - whilst at the same time armed guards keep out the unwanted, unsafe and inconvenient. Through a complicated sequence of thresholds, colours, textures, thematic allusions and multiple flashy *coup d'œils*, the bank, shopping-mall and casino are all smoke and mirrors, simply out to get our money.

Beating You at Your Own Game: So here's the proposition - a system with which to beat capitalism with capitalism. The design proposition uses the two major backbones of the traditional banking system. First, an attention to detail in terms of the process for entry and access; and secondly, by creating a 'separate universe', similar to a casino floor where participants escape the confines of the 'real' world and enter into a world of their own making, a separate but parallel space of hopes, aspirations and dreams.

In the Idea Bank, particular attention is paid to the creativity and innovation that exists in Third World countries, the majority of which are locked into the world's financial systems as passive participants, not active agents. From Johannesburg to Rio de Janeiro to Mumbai, the same pattern emerges: on one side of the fence, a population living below the official poverty line with incredible energy and inventiveness towards their daily problems and, on the other, secure behind gates, people with capital, investment portfolios and wealth, who likely will not touch a risky investment, someone without a credit rating or a salaried payslip. These two sides are brought together through transaction.

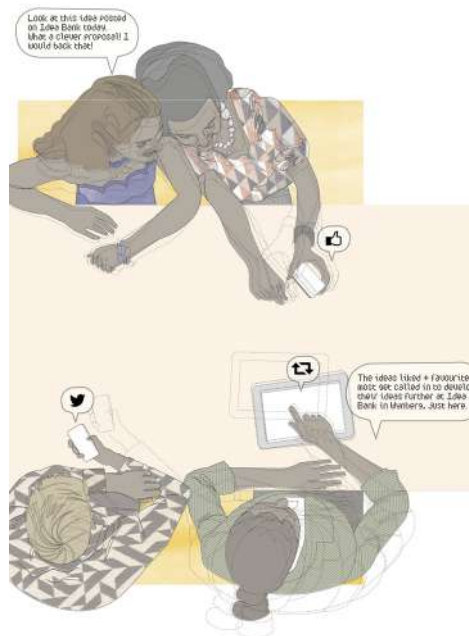
The Trade-Table:

The following drawings represent six steps to a transaction.

1. A person with an idea or concept may, at no cost, submit their concept to the Idea Bank, which is both an abstract space, a 'cloud' of indexed ideas for new products and services, and a real-world space in which these ideas are maintained and processed by real people. The submission of an idea is made on an App, via the Internet, either from one's smart device or from an IdeaATM (micro stalls dispersed in the city which provide online access to the Idea Bank App). Part of the submission involves immediate copyrighting of the concept, where simultaneously the submitted idea is verified against other submitted patents to deter copying.



2016/02/06, 20400 - 52 LONDON RD, ALEXANDRA INFORMAL SETTLEMENT, 3#B
01/SUBMIT IDEA



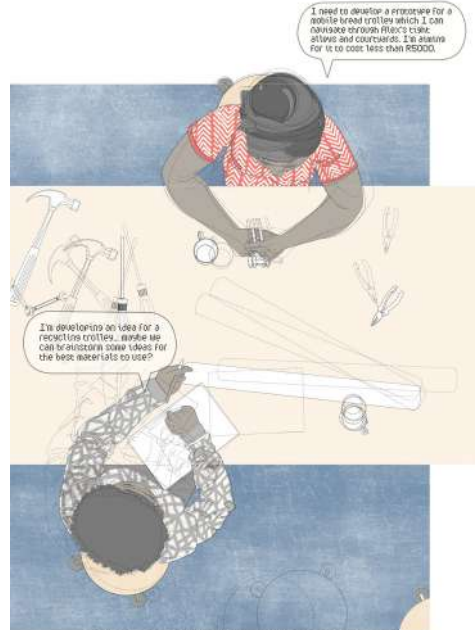
2016/02/12, 18446 - THE BARRON BRK, SPADTON, 3#B
02/ POPULARISE IDEA

- The copyrighted idea is then promulgated upon social media for a period of two weeks. Idea Bank tracks Facebook and Twitter (among others) for the number of ‘likes’ or re-Tweets accrued to particularly innovative ideas. ‘Likers’ or ‘Favouriters’ accrue free ‘Coin-Its’, an Idea Bank-specific currency, which may be spent on crowd-funding ideas at the Idea Bank.



2016/02/26, 10:40 - SECOND FLOOR, IDEA BANK, MANNBERG, 3HG

03/ SERVICING (LEGAL + FINANCIAL)



2016/03/07, 13:00 - THIRD FLOOR MICRO FACTORY, IDEA BANK, MANNBERG, 3HG

04/ PROTOTYPING

- Authors/owners of the thirty most-popular ideas for that two-week period are invited to the specific Idea Bank in their locality, where each is ‘serviced’ by administrative professionals to develop it into its most economically and legally sound form.
- Winning authors/owners are invited to prototype the idea, using the advice from (3) in a micro-factory space, where an open source of resources and tools is available to build and

*Across a table, one is
never too far to smile
or shake your hand.*

fine-tune the proposed product or service. This would produce a product with an exact known value, ultimately assisting in the finalisation of the value, known to be needed in order to make a profit.



2016/03/22, 11:00 - LOWER GROUND FLOOR (IDEA MARKET), IDEA BANK, NUMBER 318
**05/IDEA TRADING FLOOR
 (CROWDFUND)**



2016/04/01, 09:00 - GROUND FLOOR (EXPERIMENTAL RETAIL), IDEA BANK, NUMBER 318
06/ACTUALISED IDEA

5. Winning authors/owners are invited to present their ideas on an 'idea trading floor' on a certain day, together with other similar field innovators. Potential investors purchase a set sum of 'Coin-Its' with which to pay innovators. Depending on the amount, the author may provide the investor with a guarantee in the form of a product or service should the project be successfully funded in final.
6. Finally, the idea has been successfully funded, and the author has successfully hop-scotched into the world of capital. People on the street may purchase the original patented product or service, and may even be encouraged to begin the cycle again by submitting an idea of their own.



Networks Which Bind

— Megan-Louise Alana Wilson

Part 1: Cabo Verde: A History of Movement

Located about 500 kilometres off the Atlantic coast of Senegal, the archipelago of ten islands and islets contains a turbulent history. Their discovery is attributed to Genoese seafarer Antonio da Noli in 1455 (Duncan, 1972:18), although multiple sources reveal conflicting dates of their initial discovery. Soon after, the islands were inhabited by Portuguese, Spanish and Genoese settlers, becoming the first European colony in sub-Saharan Africa. The Portuguese plantation owners began to import West African slaves to cultivate the land, and over the next two centuries, the islands became an important transit point in the trans-Atlantic slave trade. As the slave trade grew, so too did the ratio of slaves to freeman, producing a rich, intermingled and distinctively créole culture of racial, religious and ethnic diversity.

During the eighteenth century, climatic changes which resulted in extended periods of drought and famine forced the first wave of emigration of young Cape Verdean men overseas. Many took to the American whaling ships which routinely docked in Cape Verde in order to restock provision and the ‘all-male’ pattern of immigration began, primarily to the United States. According to Marilyn Halter, once established in New England (ca 1790), these enlisted young men began sending money home to family members still residing in Cape Verde, a practice and pattern which endures to this day (Halter, 1993:5). This initial migration link set up further opportunities in fishing, textile and agricultural labour (particularly the cranberry bogs) along the Eastern Coast of the United States.

The nineteenth century brought a sharp decline in the Atlantic whaling industry due to the depletion of whaling stock, pushing whalers further into the Arctic region. The industry collapsed altogether in the 1860s, and with it, there came about a fall in the price of old whaling vessels. The Cape Verdean emigrants took advantage of this opportunity by converting the

former whaling ships to passenger vessels known as ‘packet boats’ (Halter, 1993:5). These passenger vessels sailed between fixed destinations in Cape Verde and the Eastern seaboard of the United States, thus obtaining a self-created and voluntary means of passage (unlike most other immigrant groups). The most significant of transatlantic voyages between Africa and the United States occurred between 1880 and 1920 (Halter, 2016). Cape Verdeans continued this steady migration until the strict enforcement of U.S immigration laws between 1921 and 1924 restricted travel. However, in 1975, when Cape Verde gained independence and policies in the United States were liberalised, the migration flow picked up once again.

Historically, there have been three major patterns of migration in and out of Cape Verde. The first is that of the individual working for several years in the United States, who would eventually return home to live out his or her remaining years in relative prosperity. The second is of Cape Verdeans working in the United States who make at least one trip back to Cape Verde, returning to the U.S. with family members or a spouse. This includes pregnant mothers returning to Cape Verde to give birth, but leaving shortly thereafter to return to the U.S. The final pattern is that of continuous movement back and forth between the homeland and the U.S., both to visit and to bring home their hard-earned wages.

Part 2: The Cultural Production of Diasporas

The desire and need to emigrate is so deeply rooted within Cape Verdean culture and society that it is almost expected that people will leave in search of better opportunities and financial stability. Going abroad, working hard and returning with savings in order to provide families at home with a better life has been part of Cape Verdean history and culture for hundreds of years, dating back to the whaling industry. (Halter, 1993:74). The reasons for this cultural history of diaspora are multiple, including a desire for social mobility within their home community; Cape Verdeans’ view of themselves of a personal trajectory of expectations and their nation, as well as natural factors (drought and arid climate conditions) which impact their daily lives. However, the histo-

rian Lisa Akesson writes that the aspiration to migrate is not simply catalysed by an 'economic calculation', it is shaped by the individual's ability to discern their own ideas about a 'good' and 'right' life (Akesson, 2008:269). Ideas about 'the good life' are a result of continued and maintained connections between origin and destination. The dynamics of cultural diaspora are complex in nature and rely on multiple factors. Akesson proposes three fundamental variables, namely: social conditions, historical references and homeland trans-nationalism. There is a Cape Verdean Creole phrase called *paród*, which means a stagnation of social conditions and therefore one's inability to progress in life. Culturally, this metaphorical phrase is positioned next to an undesirable existence: comparatively speaking, therefore, mobility is seen as 'a good life'. The ability to move allows a stabilising or normalising of life. Indeed, history itself in Cape Verde is taught through the perspectives of movement and mobility. Stories of heroic pioneers are taught through literature and song; as a consequence, from a young age, Cape Verdeans' expectations of migration are played out through the stories of cultural heroes. The act of leaving is a destiny that unites the Cape Verdean people and it is a way for them to inherit the legacy left behind by earlier generations. The cultural diaspora can also be linked to trans-national dialogues, which exist in what Homi Bhabha describes as 'third space' (Bhabha, 2004:55). This can take many forms: social conversations, letters, remittances, child fostering and house building projects. These trans-national occurrences yield enduring links between home and abroad (Batalha & Carling, 2008:280). Letters between families in the United States addressed to family members still residing in Cape Verde reveal the level of encouragement of the prospect of eventual immigration (into the U.S.) and later the arrangements (employment and financial security) set up families to assist relatives in relocating. As Marilyn Halter notes, there is a 'considered strategy for survival that depends on one's relationship and networks of resources set up by relatives living abroad' (Halter, 1993:74).

Marcia Rego, author of *Cape Verdean Tongues: Speaking of 'Nation' at Home and Abroad* sheds further light on the relationship between destination (East Coast of the United States) and origin (Cape Verde). The *Myth of Origin* explores three themes,





often depicted in literature, songs and everyday conversations in Cape Verde (Rego, 2008:145).

'In the beginning, Cape Verde was part of the African continent. The Cape Verdeans were a rowdy bunch though, always buying and selling stuff, always taking disorder and making noise wherever they went. They caused so much confusion that the rest of Africa got together and decided to separate Cape Verde from Africa by sending it far away, to the middle of the ocean. But it wasn't long before the Cape Verdeans invented the ship and were out and about, causing a ruckus once again. The rest of Africa then decided to break Cape Verde into ten little pieces, in the hope of keeping them apart and quiet, but they readily found a way to get together and make a noise again. It was then that the Africans did the worst thing they possibly could have done - they took the rain away from Cape Verde. From then on, Cape Verdeans scattered throughout the world, taking noise and confusion everywhere they go.'

The first theme refers to Cape Verdeans' relationship to the rest of Africa. Cape Verdean identity is often initially described as 'complex'. Cape Verdeans routinely identify themselves as both 'African' and 'not-African', as being of 'not-Portuguese' descent, but not Portuguese. This double negative can be understood as a feeling of 'neither here nor there', perhaps underscoring the strong nostalgic need for Cape Verdeans to identify with some form of a root and thus to hold tight their bonds that tie them back to their homeland.

The second theme is the image of history itself being played out geographically, which is still prevalent today. The third theme relates to noise and confusion, which, I would argue, also relates to the origins of créole, the mother tongue of Cape Verdeans. It is often described as a 'hodge-podge', noisy and chaotic language. What is particularly important to note is the mixture of both Portuguese and African dialects in the formation of Créole, signifying the encounter between the coloniser and the colonised. Créole is

one of the many tools that Cape Verdeans in the Diaspora use to identify themselves as their own people and the way in which they are able to express their innermost feelings. Creole is a language that is uniquely ‘theirs’ and inaccessible to ‘others’. It is a language Marcia Rego critically recognises as seeking to be differentiated from Portuguese-speaking people, whilst still being inherently fabricated *from* Portuguese and thus ‘paradoxically, both within and outside of the Portuguese language’ (Rego, 2008:147).

The city of Boston is an important node for the Cape Verdean Diaspora, owing in part to its historical association with the now-defunct whaling industry. Gina Sanchez Gibau writes in her account of *Cape Verdean Diasporic Identity Formation* that Cape Verdean diasporic communities located in Boston are fragmented and fractured. She describes a typical Cape Verdean household in Boston as descendants of the initial settlers; individuals who migrated just twenty years ago and those who have arrived just a few days ago. Each of these generations goes through their own frustrations with the gap between the ideal and the reality of life in the United States. For reasons of racial and xenophobic oppression, often Cape Verdean people have assimilated into the larger African-American community. During an interview with Fernando Fox Barros Jorge, conducted during our April 2016 field trip to Cape Verde, he revealed that he personally identified with the Dominican and Columbian people living Boston while he resided in Roxbury, Massachusetts. He left the United States ten years ago and has never returned. A steady influx of Cape Verdeans has contributed to different diasporic identities in the United States, which are created, revised and recreated according to older versus newer diasporas.

Laguerre refers to a Cape Verdean culture of second-generation Diasporans who maintain a symbolic connection to Cape Verde. Although they were not born there, nor have they ever visited their homeland, they still claim the Archipelago as ‘home’. If they do travel to Cape Verde, these transnationalists often experience a form of culture shock (Laguerre, 1998). In my interview with Fernando Fox Barros Jorge, he recalled a similar feeling of culture shock having to both learn the mother tongue as well as adapt to the ‘slower island pace.’

'Mantenhas' refer to the verbal messages given to trusted family members going back and forth between the Diaspora and the homeland, passing on news, gossip and overall good tidings. (Halter, 1993:81). Information is said to travel just as fast between Wareham, Massachusetts and Providence, Rhode Island as it is between the U.S. and Cape Verde. Both cities contain fragmented Cape Verdean communities, similar to the scattered islands of Cape Verde itself. Rego states that there is an important relationship of imagining, nostalgia and memory of the homeland, which allows the immigrant who does not return home the ability to maintain a sense of Cape Verdean identity. Thus, this feeling of nostalgia or imagined memory (as they may not have their own memories, only those of other family members) is felt by third or fourth generations who still seek some kind of connectedness as they reconstruct destination communities around a memory of their homeland.

Part 3: Conclusion

This paper is an inquiry into invisible and physical networks between the Cape Verdean 'homeland' and its Diasporans. Rego makes reference to Basch, et al., who critically define the notion of 'transmigrants', those individuals who 'take action, make decisions and develop subjectivities and identities embedded in networks of relationships that connect them simultaneously to two or more nation-states'. (Basch and Schiller, 1994). Diasporans can be said to be 'active' or 'passive' in varying degrees, maintaining networks or catalysing the nexus of both the imaginary and the real. The material and emotional links between Cape Verde and the U.S. appear to be so complete that the physical distance involved between home and abroad begins to shrink. It appears as though family dynamics have resulted in a 'maintained cultural continuity' between the transplanted community in the United States and the origin community in Cape Verde. Batalha describes the distance between the United States and Cape Verde as almost 'non-existent.' (Batalha and Carling, 2008:282). There is an overlapping or a 'transposing' of the comforts and familiarities of the homeland ever-present in the streets of America (Batalha and



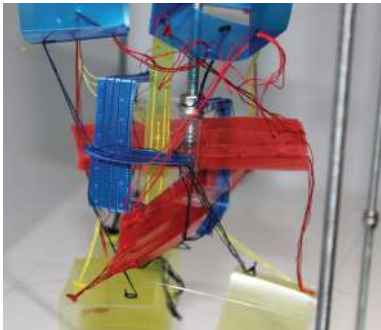


Carling 2008: 282), existing as their own off-shoot community of their major origin point and always connected back to their homeland in active and imaginary rituals of their daily lives.

Akesson, author of *The Resilience of the Cape Verdean Migration Tradition*, once more draws our attention to the history of migration as an establishing condition of culture very early on in the history of Cape Verdean movement and sees it therefore as a fulfilment of a historical trajectory. There is a fluidity in the network, a sort of back-and-forth, both here and there, that is desirable and perpetuated (within the nexus). The diasporic condition of Cape Verdeans can therefore be said to be fuelled by three complex conditions: 1) a continuous history of transnational movement; 2) a sense of nostalgia of one's homeland (experienced by all levels of immigrants); 3) a personal search for a Cape Verdean identity. The culture of leaving to '*N Kré fazé nha vida*' ('make one's life') is continuously stimulated and catalysed by those who return to Cape Verde. Thus, the existing diasporic culture has produced a resilient Cape Verdean tradition of migration that manifests in overlapping and interconnected ties binding the origin and the destination.

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A City Inherited: On Memory and Democracy

— Sabine Waskow

It is often overlooked in the architectural world that our spatial constructs have the ability to contain memories and knowledge. Just as the human mind is able to store and retrieve information (in addition to being constituted of it), our cities are animated constructs, continually reverberating in form, substance, and meaning. Memories – material or immaterial – are the natural instrument that generates our personal identities, and, through agglomeration, our cultural identities. The memories that have been physically manifested into our built environments can either be personal in nature, or hold a deeper significance that can affect an entire culture.

A Perpetual Library of Memories

Memories are an unavoidable existential essence of being human – Juhani Pallasmaa described an existential reality ‘as a thick, layered and constantly oscillating condition’ (Pallasmaa, 2013:18). We are all constructed of an amalgamation of memories, past and present. Memory is what we base our identity and sense of self upon; it creates a reference library to which we refer continually. As Pallasmaa puts it, ‘one who cannot remember can hardly imagine, because memory is the soil of the imagination. Memory is also the ground for self-identity; we are what we remember’ (Pallasmaa, 2013:19). Our memories also include the histories – or stories – of the people that have gone before us. It is human nature to either sustain the traditions of respective cultures, or to learn from and build upon mistakes and victories. In *Spatial Recall: Memory in Architecture and Landscape*, Marc Treib touches on the influence of the dead when he states that ‘we live with their achievements and residue in our traditions, our laws, our cities, and our buildings’ (Treib, 2013:XII). These memories are lingering echoes from the past. They can exist both as tangible elements in our physical

surroundings, and as a lingering mental presence. Similarly, Pallasmaa writes that, 'we do not only exist in a spatial and material reality, we also inhabit cultural, mental, and temporal realities.' Our existential space (lived space) is a 'multi-sensory space, saturated and structured by memories and intentions' (Pallasmaa, 2013:18,23). We cannot help but embed and project our memories onto everything we make. These two dimensions – the tangible and mental – cannot be separated from each other; they are entwined, making it an intricate coalescence and nearly impossible to differentiate individual strains.

It is also possible that collectives – even nations – can share certain aspects of their 'reference libraries' in relation to the space they occupy. Treib unfurls the relationship between individual and collective memory: he perceives 'collective recall' as being the aggregate of personal recollections (Treib, 2013). As such, the accumulation of personal memory (generated through experiences and interpretations) is the origin of collective memory. If memory is the ground for self-identity, it can therefore be argued that the accumulation of personal memories constructs the nation's identity. It is through this identity that we create a platform for the generation of new memories, which will further develop our identities, both personal and collective.

Codes

The fundamental anatomy of memories is that they are encoded, stored and retrieved. They are embedded in writing, music, physical objects and the built environment, which we inhabit daily. Roland Barthes describes writing as 'a space of many dimensions', which is no longer original, and states that 'the text is a tissue of citations, resulting from the thousand sources of culture' (Barthes, 1977:4). The act of decoding memories – ones of history, culture and civilisation – from their manifestations creates a relationship between the 'writer' and the 'reader'. An allegorical relationship exists between the memory itself and the reader through the act of decoding. As we inhabit spaces, we interact with them, unconsciously causing us to recollect memories of either personal experience or recollections of histories learnt.

A common understanding is that memories are seen as a *subjective* renditions of events, while history is seen as the *objective* portrayal of events. History can be described as the storing of objective information to be used in collective memory. It is selective about the information it stores, starting out with the memories of individuals and communities, refining them until they have been stripped of all subjective biases, giving history ‘authority’ over memory. But if history is distilled, and all subjective characteristics removed by human beings who are in themselves always subjective, is it ever truly possible to have an objective history? Pierre Nora describes history as ‘the reconstruction, always problematic and incomplete, of what is no longer’ (Nora, 1989:11). This difference between memory and history is integral to understanding how our country’s narrative is shaped. Nora writes further that memories are ‘by nature multiple and yet specific; collective and plural and yet individual [taking root] in the concrete, in spaces, gestures, images and objects . . . history belongs to everyone and to no one, whence its claim to universal authority’ (Nora, 1989:3). If our histories, which we have innocently (or perhaps naively) accepted as fact, have been rendered from a subjective human being’s interpretation, can we blindly place credence in history? Or should we view history as a process in which memory is constantly being subjectified *before* being disseminated as fact? Shouldn’t we take history with the proverbial ‘pinch of salt’?

Architecture can be seen as a ‘container’ of knowledge.’ We need ‘to understand the role they [buildings] play in shaping, rather than sustaining, memory’ (Shotton, 2013:5). Having said that, ‘our built world may choose not to engage communication or memory as its primary vocation [my emphasis] . . . it records and transmits history nonetheless’ (Treib, 2013:XI).

As cities are inherited by new generations, we are left with the decision of whether to preserve the memories of previous generations, or to start the process of converting memories into history through different mechanisms. This process will subliminally alter the identity of the nation with which it is associated. These efforts have ‘extended beyond the monument to the site, and beyond sites to increasingly larger areas of both cities and rural landscapes. This tendency may likewise be a reflection of the

uncertainty of a future identity and of the nature of the collective.’ (Shotton, 2013:3). As we are consciously transforming memories into history, we must also be conscious of the effects that the built environment (as a ‘container’ of knowledge) has, and how these containers may be altered and transmuted by its inhabitants.

Sculptor Juliana Cerquere Leite explores how seemingly invisible actions affect the environment around her. She develops the interior of a sheath of clay, creating an environment that accommodates her body ‘with laborious pushing, crawling, scratching and climbing’ (Shamman, 2013). She then casts a sculpture of the interior of the sheath to demonstrate the effect that her actions have had, how the ‘impressions of feet, knees, elbows and fingers defining the surface condition, frozen imprints of her movements’ have embodied the effect she has had on her environment. Leite describes her work as the antithesis of ‘a body fixed and defined by its social functions, by its temporal and political contexts. A body that isn’t allowed to change is a body as prison’ (Shamman, 2013). Similarly, if we do not allow the environment around us to change and are ignorant to the effects that inhabitants have on their environments, we render our environments virtual prisoners of time. We should permit new inhabitants of the city to shape and mould the city in their own way, since the built environment catalogues the marks we have all left behind.

Democratic Catalyst of Change

The 1972 film, *Roma*, by director Federico Fellini, portrays the ‘collective nightmares shared by the engineer, the builder, the cineaste, and the archaeologist.’ While tunnelling for a new subway line underneath Rome, a huge hall is discovered. Upon entering the hall, the characters are confronted with ‘painted figures who seem to be looking at them’. Before they realise what they have done, the fresh air that has chaperoned them into the hall ‘catalyses a chemical reaction that destroys the pigments’, resulting in these ancient frescoes ‘disintegrating before their very eyes — the process is rapid and irreversible. The destruction of these ancient images has erased these likenesses, their histories,



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and the memories that accompany them' (Treib, 2013:XI).

Democracy has been the 'fresh-air catalyst' that has entered our cities and accelerated the processes of change, responding to the urgent need to more accurately reflect the spirit and identity of citizens. It has altered the social and political dynamics of our country and the relationship between them. The catalyst was the undertaking to fulfil the constitutional mandate of South Africa – to grant equal freedoms and opportunities to all its citizens. This radical change has only recently begun to manifest itself in the built environment through attempts to create equitable spaces for *all* people in our diverse nation. Democracy also marks a temporal pivot, where the memories of *apartheid* begin to be transformed into 'subjectified' history, which will transform our nation's collective memory and identity.

As we move through this transitional period, we must be conscious of the role that architecture plays in transforming not only our inherited urban- and rural landscapes, but also the broader, wider culture, primarily through interpretation and use. We are in the midst of creating a new identity for cities such as Johannesburg, whose identity is being translated both by its spectators *and* its participants. If we are aware of the role of interpretation in history, we may be better able or more conscious of the narrative that the city portrays. But the question remains: which memories should be retained and which should be forgotten?

The Reverberating Echo

The primary options available to us to shape a city's history are removal and/or distortion of the existing urban fabric. However, this also distorts or erases the memories associated with the buildings that we demolish or alter. Consequently, our identity is being altered as, piece by piece, the city is slowly altered to reflect our new democratic 'breath of life'. Christopher Grau postulates that 'although *removing* memories is not the same as *distorting* them, the removal of *all* the memories of a person does account to a form of distortion: [t]hrough a voluntary "lie by omission", the narrative of your life has been, in part, fictionalized' (Grau, 2006:127). However, our city has been built on past social

constructs and *should* metamorphose into something new. If we do not welcome this change, we could find ourselves suffocating in our own past, leaving no room for growth. An epoch-defining moment could be the realisation that remembering something from the past does not necessarily mean that it has to dominate our present and possible futures.

Partly in reference to the film, *Eternal Sunshine of the Spotless Mind* (where characters remove painful memories) Grau theorises that ‘if a memory-removal procedure can function in such a way that it brings about more happiness than would otherwise be possible, the use of such a procedure is not only justified, but in fact *morally required*’ (Grau, 2006:120). Yet, as was witnessed in the film, happiness was not achieved through the memory removal process, but rather one saw the development of a vague discomfort as the characters intuited that something was missing from their lives. When toying with the concept of memory removal, we should remember that ‘just as we want our mind to accurately represent the world, we also want the world to accurately represent us’ (Grau, 2006:127). If we distort – or rehabilitate – existing memories, Grau argues, following Kant, that ‘is actually no more than an attempt to mould people into what we think they ought to be.’ (Grau, 2006:124).

There will inevitably be a time and place to remove the antecedent narrative of our city – to erase it from being. Our past should be remembered, leaving its echoes reverberating into our present. We should remember that we are in our current condition because of the mistakes and achievements of those who have preceded us, and because of the sacrifices that others have had to make. Grau deduced that removing memories harmed the people who’d had them eradicated, but also that ‘we naturally think that this procedure involves harming those who are erased as well’ (Grau, 2006:126). An excerpt from Jorge Luis Borges’ poem ‘*Limits*’, explains this poetically:

*If there is a limit to all things and a measure
And a last time and nothing more and forgetfulness,
Who will tell us to whom in this house
We without knowing it have said farewell?*

(Borges 1973)

‘One might plausibly argue that painful memories stay with us for good reason: they allow us to learn valuable lessons from the past and thus be better prepared for the future.’ (Grau, 2006:120). It is important to learn from the mistakes of the past while recognising the struggles and sacrifices of people who have come before us. We hold the privilege of telling their stories when reassembling the fragmented inherited landscapes which were designed to segregate different kinds of people. This has been the topic that has divided us for many years, but is now ‘the issue that brings people together because it divides them’ (Latour, 2005).

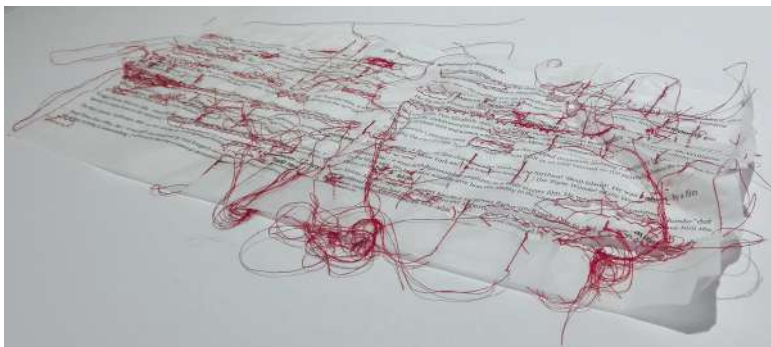
Common Ground

Our cities need to be altered in order to heal the wounds that have been inflicted upon our societies. We are left to cope with cities that need to be shaped into our new identity, using the existing material at hand. At the same time, we are dealing with an exceedingly diverse population – a democratic pluralism – and the interstices of these multiple cultures are still fragile. Chantelle Mouffe argues for an ‘agonistic’ approach to creating a *common ground* where we can eventually ‘acknowledge the real nature of its frontiers and the forms of exclusion that they entail, instead of trying to disguise them under the veil of rationality or morality’ (Mouffe, 2000:17). If we view our democratic politics as ‘agnostic pluralism’, the aim is to construct others in such a way that they are no longer perceived as an ‘enemies to be destroyed’, but as ‘adversaries’, i.e., ‘somebody whose ideas we combat, but whose right to defend those ideas we do not put into question.’ (Mouffe, 2000:15). We are still blinded by the ideology that a pluralist democracy would be able to reach a rational consensus in the public sphere, but we have to realise that ‘such a consensus cannot [ever] exist [my emphasis]’. We have to accept that every consensus exists as a temporary result of a provisional hegemony, as a stabilisation of power, and that it always entails some form of exclusion’ (Mouffe, 2000:17).

Present-day democratic South Africa has inherited urban landscapes and cities that were engineered along lines of racial and economic segregation. Remembering this period is natural, if painful. However, we now have the opportunity

to choose what gets archived, retained and inscribed into the environments around us. Our task, as architects, is to make sure that our inherited landscapes and cities have conscientiously rehabilitated the pain and trauma of the past into buildings, monuments and public spaces that are supportive of our attempts to form a new narrative and culture. As a nation, we refute our past by attempting to treat each other as equals but in the difficult transition from a segregated society into a new, heterogeneous cultural identity, a great deal of friction has arisen, as we still subconsciously think of each other as enemies, 'us' and 'them'.

Mouffe further explains that, 'politics aims at the creation of unity in a context of conflict and diversity; it is always concerned with the creation of an "us" by the determination of a "them". The novelty of democratic politics is not the overcoming of this us/them opposition - which is impossible - but [enabling a] different way in which it is established' (Mouffe, 2000:15). We should rather strive to create a *common ground* in which we



can view each other as legitimate adversaries, not enemies. ‘To accept the view of the adversary is to undergo a radical change in political identity. It is more a sort of *conversion* than a process of rational persuasion’ (Mouffe, 2000:15).

Realising that we can create a space, a *common ground*, where we can recognise our differences even as they are juxtaposed against one another, is the first step towards this process.

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Going Digital: a Digital Platform Integrating the BRT Rea Vaya and the Mini-Bus Taxi Systems in Johannesburg

— Wandile Bongwa Mahlangu

What if the categories ‘formal’ and ‘informal’ did not exist in our urban lexicon? What if all we saw was a city, a hodge-podge of inter-related economic activities, some more successful than others? How would suspending these binary lenses allow us to imagine, create and design a transport system in a city like Johannesburg?

Drawing on the workings of the Rea Vaya and mini-bus taxi systems in inner-city Johannesburg, this article designs a digital transport platform that integrates the Rea Vaya and mini-bus taxis systems in Johannesburg. The Indlela Digital Platform provides consumers with multiple payment options, comprehensive transportation information, route planning opportunities and alert notifications to fulfil their journeys within the city. By simulating this platform, this research provides a potential policy solution to Johannesburg’s fragmented transport system. It also integrates the formal and informal divides through which we conceptualize the city, a city in which the Rea Vaya – a government funded transportation system – is considered formal, while the mini-bus taxi industry, operated by individuals, is considered informal. Indeed, suspending these binaries allows us, if only for a moment, to be free of our value judgments where formal systems are considered superior and organised, and informal ones chaotic and inferior. Taking off our bifurcated lenses enables innovation that draws on the best aspects of both these systems.

This article explores the integration of transport systems in Johannesburg using a digital platform, which is called *Indlela*. The term *indlela* in the Zulu language refers to a process by which a task is completed but also refers to the word ‘path’ or ‘road’. In the context of Johannesburg the BRT is classified as formal and the mini-bus taxi is considered part of the informal economy. The integration of the two transport systems is done to showcase that improving public transportation

does not require the eradication of informal public transport systems. Multiple payment options, comprehensive transportation information, route planning opportunities and alert notifications to fulfil their journeys within the city are the improvements of the city's public transport systems contained within the digital platform. This approach learns from the two systems rather than simply formalizing the taxi system or eradicating it all together. The digital platform draws from the strengths and opportunities of the transport systems, while minimizing the weaknesses and threats of the two transport systems. The outcome is the *Indlela* cell phone application, a speculative solution to integrating and improving mobility in the city.

Background

Up to 70% of sub-Saharan Africa's employment is derived from informal economies, while the number sits at 62% for North Africa (ECA, 2015). These numbers demonstrate the importance of informal economies within the continent. The South African taxi industry transports 15 million commuters per day nationally, with more than 600,000 people being employed in the mini-bus taxi industry (Dolan, 2014). Mini-bus taxis carry 65% of the 2.5 billion annual passenger trips in the urban environment of South Africa (Santaco, (n.d)). The large number of people transported to work, school and other spaces using the mini-bus taxi system showcases the importance of the informal transportation system within the city. There are those policy-makers and actors who seek to eradicate informal activity either by destroying it or formalising it (Hall and Pfeiffer, 2000). In doing this, they destroy the positive aspects of informality such as ease of access to goods and services, affordability and convenience of acquiring goods and services (Kay, 2011:13; Devey, Skinner & Valodia, 2006:10; Roy, 2005:147).

Rather than eradicate informality, this approach looks to the integration of formal and informal economies (Roy, 2005:1470, integrating both to create an improved method for users to access price, routes and 'languages' (referring to the hand

gestures used to communicate with taxi drivers). Integration of these economies can create better access to the spatial, economic and social opportunities available in the city (Kitchin and Ovens, 2008:4). This approach has been demonstrated by the Warwick Junction development in the Durban CBD, an urban renewal. The development is an urban renewal project which sensitively integrates informal traders into the urban plans of the city (Dobson and Skinner, 2009:82).

Digital Technology

Digital technology is playing a significant role in bringing about social and economic development and the dissemination of information within the African continent (Langmia, 2005:144; Waema and Ndung'u, 2012:5). Projects like Safaricom's mobile money service M-PESA, which strives to create a more inclusive city by turning the ordinary cell phone into the client's mobile bank, are helping shape the African continent (Yonazi, Kelly, Halewood and Blackman, 2012:92). The service has increased financial accessibility, increased the amount of people which have convenient timely services and created a movement which seeks the integration of services with other sectors (for example, the ability to pay school fees using the mobile service) (Yonazi, 2012:93). This project uses cell phone technology as the medium for *Indlela* as there has been a significant rise in the usage of the internet and cell phone activity on the African continent. Evidence of this can be seen in dramatic increase in mobile phone penetration in Africa which changed from 1% in the year 2000 to 54% in 2012 (IT News Africa, 2015; Sambira, 2013).

The Joubert Park precinct has been selected as the focus area for two main reasons. Firstly, the close proximity of the BRT Rea Vaya station to the Hancock street mini-bus taxi rank. The close proximity of the two transportation systems makes it easier to document the similarities and differences between them. It is also important to understand how the two transportation systems are used within the context of the city. The second reason relates to the various users of the precinct. The first method of data collection will be usage, using the two transportations

systems over a period of a week to see the similarities and differences from a user's perspective. Here it is important to note that I have been using the two transport systems for a number of years. The second method will be through site observations. These observations will be photographed, sketched and mapped out. The last form of data collection will be through interviews. Site interviews with taxi marshalls reveals important information about prices and routes used by taxis in the Hancock Street taxi rank. Site interviews with eight members of the public were also conducted (four members who use the BRT system and four that use the mini-bus taxi system). Each of the respondents was asked to rate their preferred mode of transportation on the following criteria: cost, convenience, safety, accessibility and distance travelled. From the conversations, it was discovered that many commuters face various challenges. The conversations also showed that commuters would appreciate if the two systems could learn from each other.



Photo 1: Hancock Street with informal traders and mini-bus taxis (Author 2016).

Developing the *Indlela* App

The mini-bus taxi and Rea Vaya bus systems are very different in the manner in which they work in terms of their regulations and policies. Prices, routes and language are just three aspects

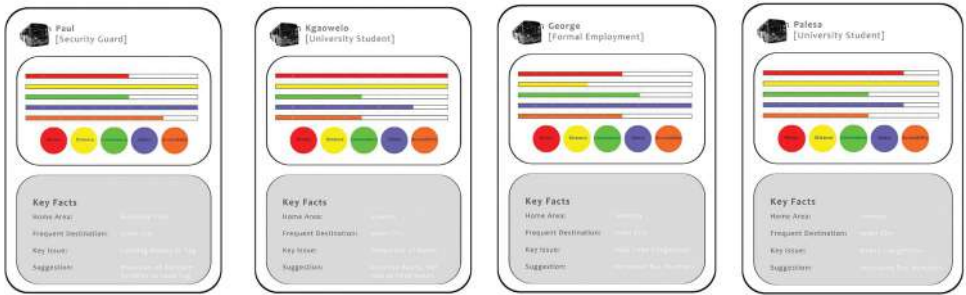


Fig.1: Site interview respondent cards for the BRT Rea Vaya system (Author 2016).

of the taxi industry which are self-regulated. This article uses a SWOT (strength, weaknesses, opportunity and threats) analysis as a means to look at the characteristics of the two transportation systems. This SWOT analysis derives the foundational principles for the digital platform. The analysis looks only at characteristics which affect the end user of the system - transportation passengers. The following key points were uncovered, not The mini-bus taxi system relies on its strength of reasonably-priced trip fees and the flexibility of the individual driver to access different routes when the need arises. The opportunities in this system include the incorporation of technology to better the service for the consumer and the extension of road networks in response to new housing developments, business parks and shopping developments. Weaknesses and threats, such as lack of information about prices, routes and access to mini-bus terminals, and change over points, poor customer service and the development of rail and bus transportation all hinder the development of the informal transportation system.

Swot characteristic	Principle classification of characteristics	Maximization/ minimization of SWOT characteristic	Integration into digital platform
Swot characteristic	Principle derived from SWOT characteristic	Speculated method into minimize the threats and weakness/ maximizing the strengths and opportunities to benefit the end user	Suggestion hoe the minimized/maximized characteristic can be implemented within the digital platform

Table 1: Developing the tools within the digital platform.

The SWOT analysis for the BRT Rea Vaya system uncovered the following points: threats and weaknesses such as spatial layout of bus network connecting to very few existing major transportation nodes; only one bus tag loading facility within stations; heavy congestion at peak hours. Protests or strikes by employees which render the system un-operational can also hamper the development of the system within the city. Reliability in terms of time and efficiency; provision of safe environments within the built infrastructure and the provision of multiple information platforms to access information about prices, routes and access to bus terminals are vital strengths for the BRT system. Opportunities within the BRT system include links with other economic, social and recreational opportunities; diversification of routes; diversification of monetary transfer systems and the increase of smaller buses that could act as feeder buses for more locations in and around the city. Referencing the SWOT analysis, five key principles are discovered as the essential tools for the development of the digital platform: affordability, safety, information accessibility, reliability and convenience. Table 1 outlines the procedure for developing the tools which are integrated into the digital platform.

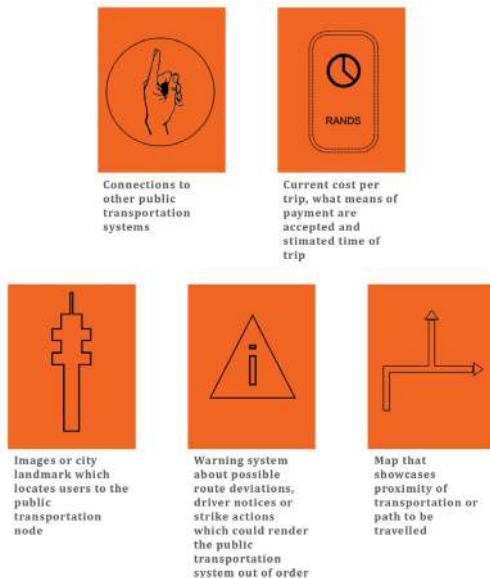


Diagram 1: Five tools required in the Indlela App.

The procedures outlined in Table 1 generate five tools required for the *Indlela* App. It is important to note that the extracted tools are pulled from both transportations systems' SWOT analyses, thus forming the basis for the integrated platform. The tools required are detailed in Diagram 1 (previous page). The relationship between the principles and the tools are detailed in Diagram 2 (below).

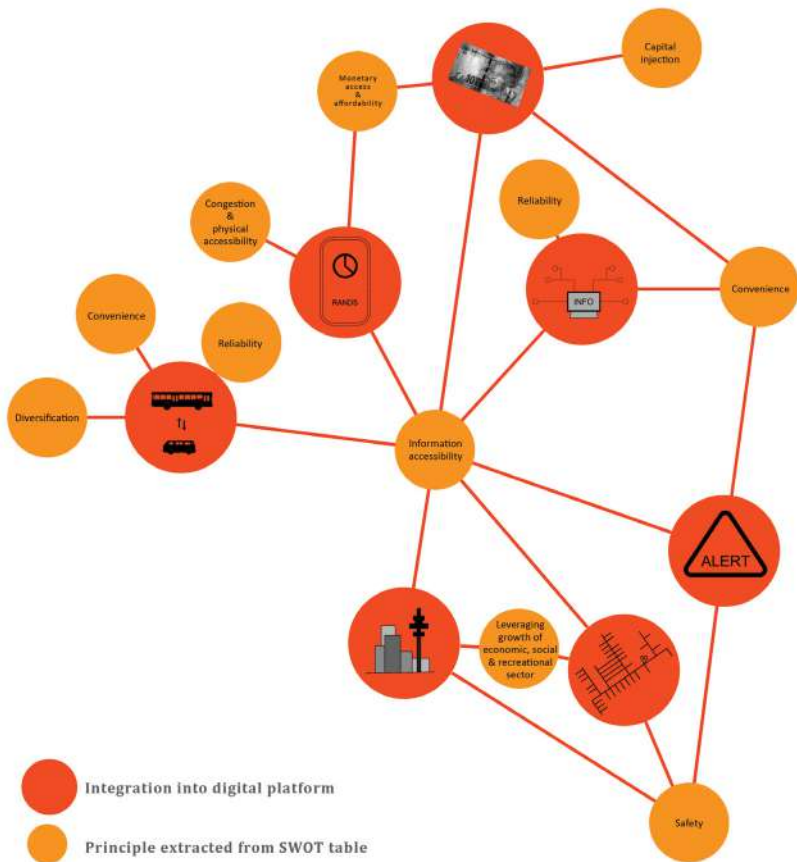


Diagram 2: Relationship between extracted principles and six tools required in the *Indlela* App.



Fig. 2: Opening page of the *Indlela* App (Author 2017).

The App

Indlela works by finding the best possible means (using walking, BRT bus system and the taxi network system) to get to the users' destination(s). The App sets out guidelines to reach a pre-determined destination and also shows the user the road(s) that will be used to reach their destination. The App is separated into three main pages. Page one is the logo and start up page. The second page sets the start and end points of the journey. The last page communicates the information required to make the journey a successful one. The application uses icons and visual language to show the user the best possible way to reach their destination. For the purpose of this article, the journey from the University of Johannesburg Soweto Campus to 13th Road Midrand is used as a case study to reveal the inner workings of the cell phone application.



Fig.3: Opening page of the *Indlela* App with transition to the journey setting page.

Price and estimated time

Price and estimated time are placed on the main screen to quickly relay these two important factors to the user. The price shown is the real time cost of the trip. The minutes shown are an estimation of how long the journey will take. These two factors are the same for walked trips and trips taken using a minibus taxi or the BRT Rea Vaya.

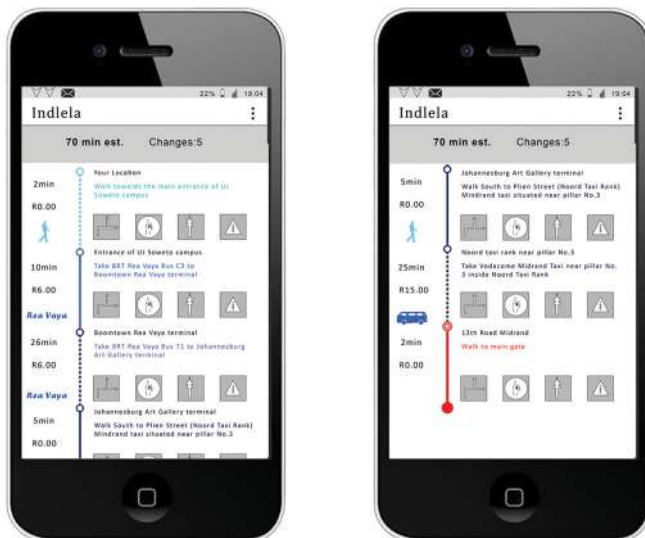


Fig.4: Information page of the *Indlela* application.

Map function

The map function is the first of the four essential guidance mechanisms inside the phone application. This function shows the user the path or direction that they should walk (or via public transport) to arrive at their predetermined destination. This function is complemented by written text explaining the journey or the area in which the user will be able to find the taxi stop or taxi rank/BRT Rea Vaya station they require.

Hand language function

The hand language function shows the user what hand signal to show to a taxi driver. The hand gesture function is not required when taking a taxi from a taxi rank or using the BRT Rea Vaya system. Taxi ranks operate by having taxis that go to a particular destination queued up in the same line constantly. This makes it easy for taxi users to find the required taxi.



Fig.5: Information page of the *Indlela* application with transition to the map direction page.



Fig. 6: Information page of the *Indlela* application with transition to the hand language page (Author 2016).

Landmark function

The landmark/image locator function is a visual representation of a landmark, well-known building or the actual taxi rank/BRT station that the user must get to. Furthermore, by placing a landmark or city building image users can navigate the city. This function allows users to travel having a visual representation of the place they seek.

Alert function

The alert function is the last of the four essential guidance mechanisms. This function makes the user mindful of any special notes or information. These alerts are specifically set out for the routes to be taken, or used in case the user needs to communicate with the driver.

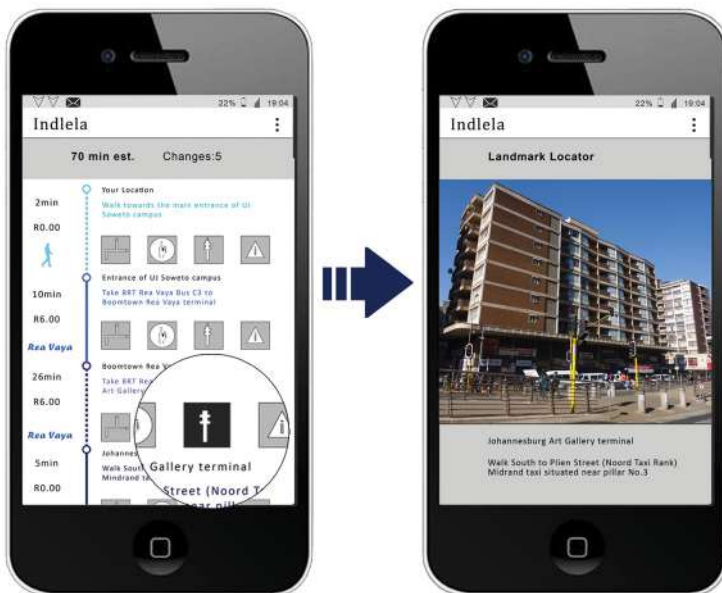


Fig.7: Information page of the *Indlela* application with transition to the landmark locator page.

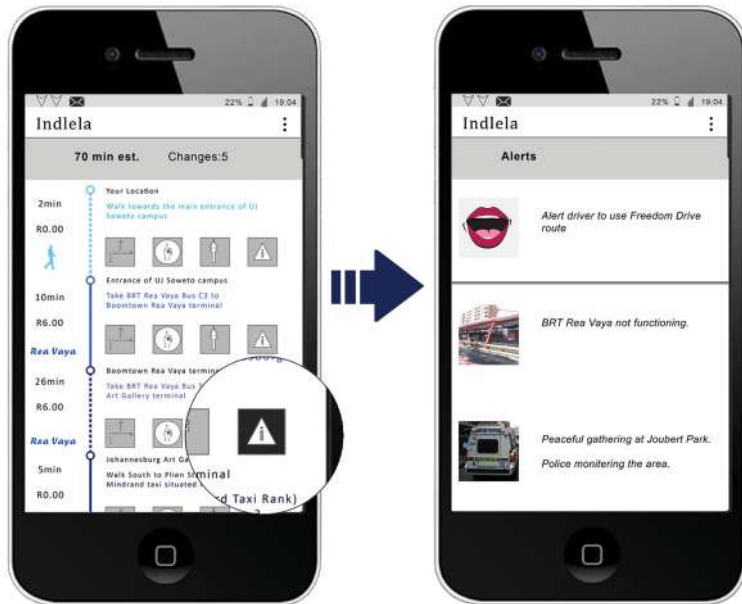


Fig.8: Information page of the Indlela application with transition to the alert function page.

Rea Vaya money access page

The Rea Vaya money access page is a supplementary function page specifically designed for the bus system. This page provides three Rea payment options to access the bus service. The traditional manner of gaining access is via the kiosk counter positioned inside the bus terminal. This page allows users to either load money directly onto their access cards using cell phone banking; use their phones as their card (which is also linked to their bank account) or to load money onto their BRT card via convenient stores within the city, which are in partnership with the bus service.

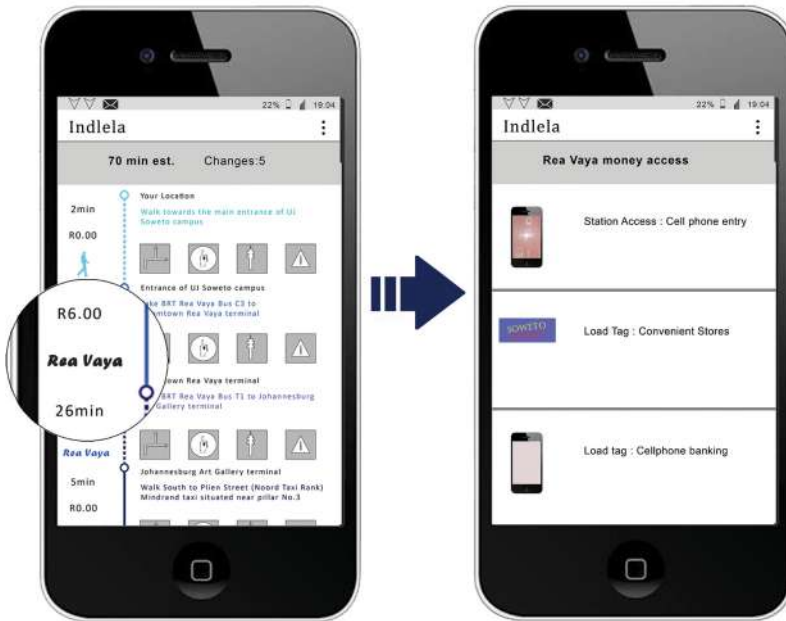


Fig.9: Information page of the *Indlela* application with transition to the Rea Vaya money access page.

Conclusion

This article demonstrates that improving public transportation does not require the eradication of informal public transport systems. Furthermore the application can help city planners and policy makers understand where major transitions within the city take place. This can be done by tracking the data provided by the cell phone application. Capital can thus be injected into those specific routes to provide growth of economic, social and recreational sectors in those areas. The application can also show mini-bus taxi owners where a larger market for taxis in a particular area can be developed. This will help to create more job opportunities in those routes. Although it focuses on transportation, the lessons drawn can be applied or emulated in other sectors of the city. Perhaps if we looked at improving both formal and informal sectors in general within our city, we

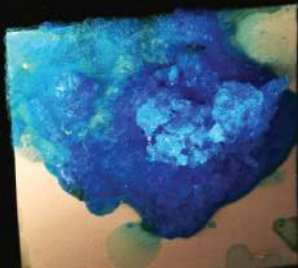
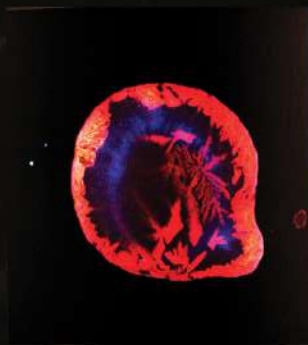
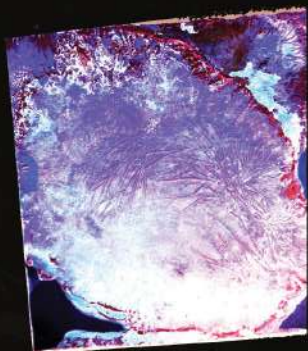
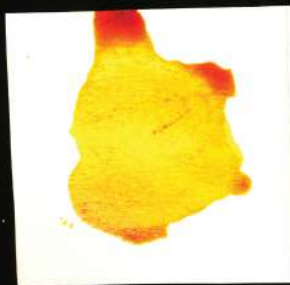
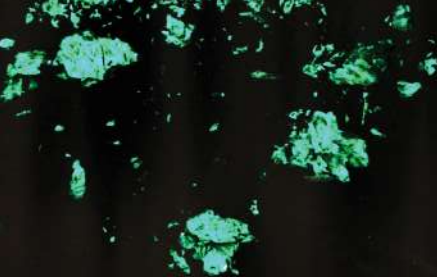
could achieve a city which functions better for its citizens. By changing the perspective with which we look at informality within the city, we can potentially avoid situations which harm the city. By allowing optimal integrated system to flourish we can create better city conditions; which are conducive for social, economic and recreational conditions to thrive.

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Jo'burg Stardust,
1886 - 2056

— Sumayya Vally





'I went to the little window and inhaled the country air. One could hear the breathing of the night, feminine, enormous.' – Octavio Paz

In the beginning there was nothing-ness. Blackness. Just black. A blast of white light shattered into infinite speckles of dust, each snowy sprinkle a billion brilliant colours. The stars surveyed the new city, formed by humans from the cosmic dust of the Earth. Dust was formed and fashioned into shapes – monuments, platforms, machines. All of Citée was made from the Earth's dust – clay, sand, lime, silica – made into bricks and concrete and glass. Minerals – steel and copper – were in every bone of Citée, all the way down to her tiny, jointed screws. Paint too came from the pigments deep inside Earth's belly . . . everything from her *terra*. Earth was happy to see Citée grow, pleased by her ability to generously afford her what was needed.

Citée grew, slowly at first, then she began to sport new structures, quicker and faster, feeding herself greedily on Earth's flesh. But as she grew taller and denser, it became harder and harder to get the opiates she needed. She was growing faster than Earth could replenish. Some of Earth's precious dust had taken millennia to form. Gold and copper and black coal were marks of her age and wisdom, emblems that were eons in the making. Each time Citée took from Earth, she poisoned her a little more, infecting her with the posions she needed to surgically remove the nutrients she craved. She grew stronger, her body expanding in all directions – east, west, north and south, especially south. She laughed, her laughter growing louder and louder. Now she was the centre of Earth's surface, clothed in opulence, height, riches. She produced her new embellishments more and more rapidly, extracting and storing away the excess, forgetting that her wealth was stolen from Earth in the first place.

2016

*Imprisoned by four walls
(to the North, the crystal
of non-knowledge
a landscape to be invented
to the South, reflective memory
to the East, the mirror
to the West, stone and
the song of silence)
I wrote messages but
received no reply.*

— Octavio Paz



Earth was drugged. An amnesiac. Her once generous and healthy belly was fit for no one, no habitation possible, a haven for only the vilest. Inside her, Creature had slowly formed, a mutation of the poisons Citée had pumped into her as she extracted Earth's opiates. Creature was intent on destroying Citée just as Citée had destroyed Earth. She cried when she thought of Earth's suffering and the tears rose up through Earth's soil, forming rivers, cascading through Citée's streets.

On December 31, 2016, Citée stirred to a new morning out of a nightmare of hauntology, of ghosts in endless tunnels and passages, of dark spaces, of angry waters. Citée lay quiet for a moment longer, trying to recall the nightmare and the sense of foreboding that it carried, suppurations of a thing diseased. But it was like holding water in cupped hands, it leaked carelessly away. She looked around her. She was no longer the thing of beauty, of wonder, that she'd once been. She had long ago run out of supplies. Everywhere around her, the Earth bled. She bled in hues of brilliance, rivers of emerald, cobalt blue, Prussian purple, neon pinks and sunrise orange. She knew the blood and tears and sweat belonged to Creature. She had made him, called him into being, fashioned him through her own greed. Creature was revenge. His blood ate into the structures which clothed the Earth, forming rusted crusts all over her once tall and shiny embellishments. Everywhere around her, Earth was sad and listless. She had become a luminescent poison, glimmers of sulfur slipping through her cracked and weeping skin. Earth became thinner and thinner. She became fragile, delicate, fearful. With the slightest touch, she shuddered and heaved and her skin ripped apart, swallowing whole chunks of Citée - people on their way to work; children walking

*‘Modernity breaks with
the immediate past
only to recover an age-old past and
transform a tiny fertility figure
from the Neolithic
into our contemporary
We pursue modernity in her
incessant metamorphoses
yet we never manage to trap her
She always escapes.’¹*

¹ Paz, O., quoted in *Knowledge, Differences & Identity in the Time of Globalization*, Kusch, J. (ed). (2011). Cambridge Scholars Publishing: Newcastle, p.114.

to school; whole suburbs and settlements; a cow's head market with its yard of wailing cows and strong-stomached men; the looping, spaghetti-like bridge that connects Citée to suburb and township. Dogs, cats, rats, cows . . . all disappeared into the gaping black hole.

She shuddered again. This time, it was larger and swallowed nearly three quarters of the lake by the zoo. The two adjoining golf courses disappeared. Seven towering apartment buildings and the iconic cylinder . . . all disappeared. Soon, Citée herself was gone, leaving only a para-normal wilderness restored to a state of stardust, brilliantly coloured and hued. A poisonous rainbow.

The new inhabitants of Earth were very different to those the Creature had swallowed. They roamed about the stardust gently and looked at the inhabitants, the trees and plants around them, even the poisoned rivers, with wonder. They lived in light, little nomadic structures made from the debris they came upon. They delighted in the rainbow hues of Creature, and saw his beauty through his pain. They lamented the diseases they found. Intuitively, instinctively, they began to fashion structures along the poisoned waters to draw the toxins out. The steel masts they placed in the waters felt familiar to Earth and Creature. The masts drew out the toxins, and the brilliant, visceral colours from the waters started to crystallise onto the structures.

They were astonished by their own discoveries. They realised that they could mould their habitats in this way. They placed the masts like scaffolds along the water at different heights and in different configurations, and as time went on, the architectures grew, slowly printing beautifully coloured pigments onto the scaffolds they had placed. Nouvelle Citée began to grow, languidly, wondrously, harmoniously.

A New Metropolis.

Archiving Against the Grain: the Subtle Collective Imaginations Of Black Urban Music Under Apartheid

— Mxolisi Makhubo

The archive commits a society's most cherished cultural attributes to history. Archives are both physical institutions and processes through which history is safeguarded, retold and remembered. Through the processes of selecting, curating and capturing, an objective narrative is formed, stored, and transmitted to future generations. But what happens to the omissions (deliberate or procedural) that simultaneously *erase* so-called *truths* about the past, particularly if those truths reside in the experiences of the least powerful in society? As Winston Churchill famously asserted, history is always written by the winner who records events, that, in turn, reconstruct a diffused form of power, if only through repetition.

Post-*apartheid* South Africa, like many other postcolonial nations, has had to face its own uncomfortable past as its citizens and government attempt to address its troubled history; heal past wounds and move towards a more just future. As part of the post-1994 reconciliatory narrative, South African archives have largely been left unaltered (both in form and content) and in the relatively distant hands of academics. Under *apartheid*, the tenor of the national archive shifted between British Unionist and Afrikaner Nationalist Party narratives of conquest. In post-*apartheid* South Africa, archiving in general runs the risk of creating a singular heroic narrative about the African National Congress' role in bringing democracy to South Africa, arguably continuing the pattern created under *apartheid*.

In this essay, I propose archiving the *everyday* as a way of disrupting current archival processes and the professional methodology institutionalised through selective choice. I look at black urban music that was popular in black townships under *apartheid*, inserting the *everyday* into South African *national* memorial narratives. The *everyday* thus becomes a means to insert *otherness* into traditional linear methods of recounting history and subverting the content of officially sanctioned memory.

The choice of black urban music preservation directs attention to *ordinary* black social life and the role it played in making the *everyday* an act of defiance, particularly during apartheid, which made *ordinariness* difficult for the majority black population: the act of being *ordinary*, in environment that deprived *ordinariness*, itself became a political act. Black urban music, formed by mixing indigenous South African music with music from the African Diaspora, became a way for people to imagine themselves beyond the control of the state and for them to think of themselves as part of global popular cultural movements. These emergent musical forms had more to do with Black North American civil rights movements than the strict categories permissible under the newly created apartheid categories of *traditional* music.

Introduction: Memory, the Archive and Power

Power, like control, has been undergoing critical analysis since Michel Foucault's seminal publication, *Discipline and Punish* (1975), which tracked the shift of power from the state and monarchy to the individual. Foucault links the relationship between the audience and punisher in public exhibitions, leading to the public self-censure of 'unlawful' acts. The state and its apparatus disperse authority through multiple institutions, which allows the state to absolve itself from the administrative burden of instituting *order and discipline*. This marked a shift in the conception of the role of the oppressed in *power* relations, making the oppressed equal stakeholders in their own oppression. The very act of living, of being in the world, is dependent on the existence of power structures, which ensure compliance, either through habituation or dominance. In this context, archives, I would argue, are extensions of authority, dispensing and disseminating the agendas of those in authority through a more nuanced form of *power*, reaffirming historical narratives for those who make them.

Research on South African archives (Harris, 2002; Stoler, 2009; Schwartz and Cook, 2002) demonstrates that archiving in South Africa has historically been a product of power structures in society and that archivists are re-enforcers of 'general' politics. This makes the archive a crucial tool in mediating the past and the

present, particularly for those interested in using the past to weave favourable futures.

Since the act of archiving embeds its own power relations and structure, and since it is susceptible to shifts and changes as various groups attempt to weave favourable (selective) memories into a coherent and compelling retelling of the past, it is important for contemporary societies to advance their own political agendas. For example, the destruction of archives in South Africa in the early 1990s represents an attempt to sanitise official memory, which has led to contestations about aspects of the past and how the country arrives at justice for the previously disadvantaged (Harris, 2002). Following Achille Mbembe, this process of ‘civilising’ the archive renders it devoid of value, making officially-sanctioned archives a commodity that turns memory into a product of mass consumption and removes its nascent subversive potential (anger, guilt, nostalgia or resentment). A sanitised archive is one that removes aspects of the past that are not palatable to official national narrative.

Apartheid archiving in South Africa aimed to deliberately exclude and erase the black majority out of societal memory and public space, thus creating a myth of consensus about representations of South African history (Harris, 2002; Feinberg, 1986). Under the stewardship of Nelson Mandela, from 1996 to 2000, archiving took on a reconciliatory theme. The implications were that state institutions would remain largely intact and evolve over time to become inclusive of the black majority, while taking advantage of the expertise inherited from the apartheid state. However, one can argue that, as a result of the failure to dismantle the structural apparatus of apartheid, archiving *post*-apartheid has retained the same methodology and a Western bias value system. This has led to tensions about shared memories and myths woven after apartheid; recent examples are the protestations about statues of apartheid-era leaders still in South Africa’s public domain (see Hess, 2015; Coovadia, 2015). These statues explicitly represent the contradictory narratives of South Africa’s history.

Black Urban Music as Re-imagination in Apartheid South Africa

In the 1960s, South Africa's national broadcaster, the SABC, started echoing the state's policy direction. Language separated broadcasts were instituted as a way to categorise people according to historically tribal/ethnic groupings. So-called 'traditional' music was commissioned and broadcast to ensure that the different tribes produced music that was 'in line' with state-identified tribal cultures. For instance, Zulus were expected to make and listen to music exclusively in the Zulu language, using only 'traditional' Zulu musical instruments and broadcast on Zulu-only radio stations. This was done to discourage social mixing, ensuring ethnic groups were easier to control.

Mixed-race urban environments like Cato Manor, Sophiatown and District Six were viewed by the state as subversive, but they existed due to labour demands of cities such as Durban, Johannesburg and Cape Town. These areas became territories that the state was not able to control entirely and the intermingling of different tribal, ethnic and racial groupings was inevitable. Hybrid survival networks were formed that blurred the dichotomous lines the state tried to entrench (Ballantine, 1993). This served as fertile ground for seeds of dissent, as people from different *homelands* (rural areas allocated to black people under apartheid) started conceiving of a country that might be organised along different, more inclusive and equal racial lines. Music in these areas played an important social, cultural and political role. Soundtracks were composed, made up of meshing traditional sounds with the music of the black Diaspora. On the surface, this was a mixing of black American pop music of the 1960s and 1970s, but it also represented a powerful rebuttal of the apartheid state's definition of 'blackness'. This 'new music form' became synonymous with illegal gatherings, in which ideas of toppling the state were being formulated. Black urban music became defiant by its very existence; the *everyday* or the *popular* was also defiant and living itself became political. Music became a vehicle for people to give materiality to their memories and became a vehicle for memorialising history, much like the oral tradition had done in previous decades.

Memory and History

The historian Moses Finley (Finley, 1965) suggests that memory is not merely historical, but is also a subjective recollection to sustain myths. He argues that this recollection is habituated and becomes a subconscious way people navigate the world and learn 'how to respond and defend themselves from threats and similarly [bring] themselves closer to those things that make their lives richer' (Finley, 1965). His proposition acknowledges that the past can be used to mediate current conditions and to sustain a semblance of predictability. Focusing on this aspect of mythology, or myth making, draws our attention to the value systems of memories that people choose to carry forward into the next generation. David Berliner proposes that memory is 'the transmission and persistence of cultural elements through the generations' (Berliner, 2005:201), making it more subjective than history.

Collective memory is a deliberate carrying forward of the past into the present, in order to manage or deal with the present. Since memory is subjective, it follows that what is retained is also subjective, or at least subjectively remembered. The 'truths' that people choose to remember remain subjective. In South Africa, where a minority group subjugated the majority, these 'truths' are never collectively or consensually instituted, making the very idea of memory a threat to the stability of the present. South Africa post apartheid has responded to this threat through institutionalised, collective amnesia, paving way for the concept of the Rainbow Nation. Post apartheid, we are still divided on the question of what constitutes legitimate and public knowledge, and what ought to remain buried in state archives, protected by the official secrets act(s). The Truth and Reconciliation Commission was set up in 1995 by the government of National Unity as a way to mediate the pain of the past. However, one can also argue that the process effectively buried the undesirable historical conversations in order to resurrect the Rainbow Nation from its remains. One consequence has been that much of South Africa's history has been curated to fulfil this narrative.

Following the fall of the apartheid government, a rush to replace 'old memory' buildings with new images ensued. To suit these new narratives, certain aspects of the ANC's armed struggle

were suppressed or muted and the reconciliatory spectacle was celebrated through a splatter of memorial buildings all over the country. Wittingly or unwittingly, the ANC thus reproduced the same apartheid patterns of public infrastructure celebrating the power of authority. This has led to a number of skeletons re-emerging to destabilise the present, as the ghosts of our pasts attempt to claim their place in history, most notably the protestations about the PAC members who did not receive amnesty for their apartheid crimes (De Wet, 2015). These omissions have led to sections of society alleging that the ANC government is using these symbols to exaggerate its role in liberating South Africa.

This illustrates the problem of solutions for creating democratic content being concentrated in the hands of one institution or power structure. We need to allow for multiple stakeholders to create and curate content. This ensures that the content is processed rigorously and ensures that multiple experiences are reflected, even if views may be contradictory. Rather an attempt to be conclusive, history is fluid and interpretative, precisely because content remains accessible and in the public domain. This ensures content is dynamically re-adjusted to suit new and previously hidden truths.

Arriving at a More Nuanced Postcolonial Archive

Archives preserve and protect records whilst simultaneously sanctifying aspects of history through the categorisation and access control of documents at various times (Jameson, 2006; Mbembe, 2002). This system creates value. As a result, 'other' material, deemed less important, receives lesser attention.

Frederic Jameson (Jameson, 2006) argues that archival bias was never deliberate, but is endemic, since archiving is constituted through power. He proposes that, rather than archivists ignoring their power, they need to embrace it in order to understand its manifestations. He describes three ways in which power in the archival process is made manifest:

- Control over social memory;
- Control over preservation and records;
- Mediation between records and users.

This, Jameson argues, allows the archiver an opportunity to *deconstruct* their presumptions by embracing power and opens the possibility for a different kind of archive when acknowledged and challenged. One way to meet this challenge is to make the archive more transparent and inclusive, increasing its accountability to multiple actors in society. The archive manifests itself as a result of rigorous debate, which should also acknowledge the mediums and methods by which communities engage the archivist. The archive then becomes not only a product of scientific methodology, but its interpretation becomes as crucial as the form the content takes. In its new form, the archive transcends bias towards those in power and helps democracy thrive by ensuring that the 'debris' of everyone's actions remains intact and memory symbols are constructed through consensus.

Historically speaking, South African national archivists viewed the black population as subjects, not authors, of content. A lack of black professionals working in major archives has created an archive lacking nuances of the black South African experience. McEwan (McEwan, 2003) reflects on a pattern that reproduces black victimisation at the hands of apartheid, without countering an alternative narrative of black people actively steering their own lived experiences. The emphasis has been to historically focus on the Struggle while neglecting aspects of the apartheid period that are deemed to be too ordinary. However, I would argue that these ordinary events are precisely those events that blacks invented outside the control of the apartheid state - the unspectacular events in their lives. Countering this argument, cultural theorist Alice Bellagamba (Bellagamba, 2006) notes the general symbolic trend of recently independent states in Africa in the 1970s of countervailing white dominance by 'the preservation and exhibition of relics from authentic and uncontaminated African cultures.' This tendency reproduces the apartheid condition of black life as Other, denying black society control over its own mythological narratives by cutting out an aspect of their lived experiences, particularly those under colonisation and replacing them with an idyllic, pre-colonial past.

The postcolonial archive is thus obliged to look back at the historical *everyday* in order to allow black South Africans weave their own stories. In turn, this ought to help South African

society navigate the future in an equitable and inclusive way. The archive is then free to take on a new form, one that does not have to conform to the standards prescribed by Western archival norms and propose regionally- and culturally-appropriate mediums for memory and history-keeping, at the same time allowing for more diverse value systems. This new way of understanding and constructing the archive will have to take into consideration the oral tradition in Africa and the cultural rights of access to information through incorporating cultural experts in the forming of the archive. This reconceptualisation of the archive goes beyond the sacred and looks at the 'grains' of the archive: ordinary activities become as valuable as those that are deemed sacred.

Digital Archiving and New Methods of Weaving a Complete Image of History

The digital space has emerged as a major disrupter to traditional hierarchal flows of information: old reliable gatekeepers are replaced by ordinary citizens who are dictating the content they desire to see and how they wish to access it. Although these platforms create their own challenges in terms of access, high costs and lack of peer-review, they also hint at ways that archives can be more democratic. One example is the advent of African-related music blogs in the early to mid 90s, which resulted in much of the music recorded on the African continent being archived digitally and made available for free. This has seen community archivists emerging and contributing from all corners of the world in what has become a powerful resource, showing the influence of colonisation on the continent's musical heritage, and showing how citizens are actively evolving new ways of being African in a colonial Africa.

Electricjive, an online archive, was founded by Matthew Temple, an ex-patriate South African living in England, and Chris Albertyn, who currently lives in Durban. It makes South African recordings available that were out of print or were prohibitively inaccessible due to their high costs on auction sites. The blog has seen music – some previously unknown – shared by music fans all over the world, making it available for download freely. Individuals are able to create a narrative of the recordings by contributing to

a comments board. These comments have been useful in creating multiple narratives from various contributors over time. Over the years, this commentary has become useful in creating a clearer image of the musical scene under apartheid and the relationship of different stakeholders involved. Such blogs illustrate an alternative way of creating archives through citizenry and consensus, which, I would argue, makes for a more textured and nuanced historical recollection.

One could argue that impact is limited by cost, particularly in terms of data access for the poor, but this is slowly changing as costs decrease. However, the alternative ways in which these examples contribute to historical narratives cannot be denied. More than any other medium, the Internet has disrupted the linear flow of information, making a crucial instrument for reimagining how information and knowledge are created. Rather than make information and truths static and fixed, the medium has allowed for incrementally varied ways to arrive at the truth.

In conclusion, the archive can be an advocate for inclusion of those who are excluded from national memory. This process of democratising the archive does not propose the erasure of the status quo, but rather the irritation of it, to ensure that society constantly challenges itself about who is included and excluded from national narratives. Traditional perceptions and ideas about 'traditional' knowledge need to face the same critical scrutiny in the public sphere to allow multiple interpretations and versions to exist. Over time, what will emerge is a more distilled national memory, reached through consensus, but malleable enough to allow society control over the ghosts of its past or at the very least, be able to face them.

The reflection on the role that music played under apartheid South Africa shows that South African society - even under oppression - found ways to exist outside the state's gaze and foster imaginaries of its own. These ways of surviving, even as people's identities are suppressed, offer new ways that cultural practices evolve. Not only do these new environments offer challenges to normative cultural practice, they illustrate the malleability of varying cultural practices and how culture survives. Urban music, when given attention, gives clues about how people subvert their environments to insert themselves into history, even as their

environments try to repress them. The process of reimagining the archive requires that prejudices about what is credible for memorialisation be challenged, and all aspects of a society be first viewed as credible before being incorporated into the making of public memory. A new path emerges for postcolonial nations to deal with the transition from oppression to freedom. Rather than looking at spectacle to inform the national narrative, the everyday offers a grain of these values. The everyday is foregrounded and given the attention it deserves, allowing for a more equitable distribution of power. Churchill's statement about the drafting of history by the winners is expounded by increasing the number of winners that can contribute to its writing.

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Hopeful

Regenerative Urban Landscapes Unit 15(X): New Stories for Hopeful Graduates

— Edna Peres & Finzi Saidi

Within a fast transforming world, the promotion of broader perspectives in the practice of architecture is becoming increasingly important. One such expanded perspective has been promoted by Unit 15(X) at the Graduate School of Architecture, University of Johannesburg, and titled *Regenerative Urban Landscapes*.

Graduates

The Unit offers students three key skills in the practice of architecture: an ability to see potential where few others do; an ability to integrate complex issues, viewpoints and scales; and lastly a sense of personal development and empowerment. Unit 15(X)'s core aim is to enable students of architecture (in its broadest definition) to see potential beyond their obvious assumptions of the status quo, and to encourage them to find ways of being active change-makers in the world. From that initial starting point, we encourage them to craft their individual architectural responses. Creativity and grounded speculation are also encouraged in an attempt to create a more resilient and regenerative urban landscape for an uncertain future. However, while the aim appears quite clear, the outcomes and solutions are not. In exploring these themes, this essay aims to fulfil two goals: one, to share the aims and pedagogical processes undertaken during this founding year of practice as a Unit, and two, to reflect on the successes and anguishes experienced in this unfamiliar territory.

When 'this is how we do things' falls short

South Africa's tertiary institutions are currently at a tipping point, one which has taken a long time to manifest, and one which, following the establishment of a new democracy, has been long overdue. The underlying concerns are those of access to education, as well as an overall critique of the nature of tertiary education on offer versus the harsh material realities of life for many South Africans. While volatile student protests have dominated this time of transition from an established norm to a new and unpredictable future state, one of the less publicised, yet powerfully positive disturbances has been the adoption of the Unit System into South Africa. It is our contention that, given the space that has been created to re-think tertiary education, the Unit System is forcing architecture schools in South Africa to re-think architectural mentorship and the established norms of academia and practice in a vastly different context than their historical precedents. In most traditional professional programmes in South Africa, the final year requires students to demonstrate

that they have mastered the skill of architectural design through the completion of a dissertation, normally a solo effort by a student to resolve, present and write about a complex building. We would argue that today, architects increasingly venture into territories that are more complex than the design of any single building, and that the documentation of a building is not enough to prepare a graduate for life in the built environment. In addition, the inclusion today of many voices, comprising a multiplicity of races, cultures, education levels, privilege and importantly, increasingly more females studying architecture than males, it becomes obvious that we need to re-think teaching as well as the practice of architecture. In response to these gaps, the Unit System Africa (as it has been 'branded' at the GSA) offers students (and tutors) a genuinely 'safe' space for speculation, a space to unpack evolving urban issues and political influences and a space from which to imagine new narratives for resilience and regeneration in our cities.

The opportunity to refine a postmodern (or in contemporary South African jargon, 'decolonised') curriculum has presented itself, almost unwittingly. This new paradigm for teaching focuses on multi-disciplinary thinking, where content is organised around themes and specific contexts, rather than facts and checklists. It offers sensitivity to the different learning styles of individuals, as well as the varied backgrounds and cultures that make up the school. The focus on teaching is co-operative and collaborative, with students defining and driving their own research, rather than a teacher-dependent or teacher-centred approach.

Students are encouraged to investigate and determine their own areas of interest within the integrated umbrella themes of sustainability, resilience and regeneration. Central to Unit 15(x)'s approach is a 'transformative pedagogy' that develops the student's ability to practice architecture empathetically and inclusively. This transformation of self begins by addressing their own thoughts about architecture and their role as architects (and humans) in an evolving social-ecological system. Our approach is premised on the assumption that it is not the design of a building that makes an architect, but rather the intensive investigation into the hidden potential of a place, site, and systems, that can then be harnessed in a network, building, landscape or urban intervention. The role of the architect in this

scenario is therefore extended, to make responsible choices as to how these latent potentials can be tapped into and allowed to enhance qualities of place. The students' duty is to make visible this investigative process through various media - images, writings and films. Thus, the process of investigation within the Unit is as important as the design of a building. This emergent practice of investigation and observation underpins the shifts of the architect from being the sole creator of buildings to a facilitator of progressive and regenerative processes within a social-ecological system.

The Theory

In its first year, 2016, Unit 15(X) explored the work of Walker and Salt (2006, 2012) in 'ecological resilience' theory as well as Mang and Reed (2012) in 'regenerative design' as starting points in finding potential for resilience and regeneration within what are often perceived to be 'redundant' landscapes. Both theories are based on systems-thinking theories refined by Allen and Holling (2010), and their relationship to complex adaptive systems, which are non-linear and constantly changing. This constant adaptation can be described by the on-going cycle of change called the 'adaptive cycle' (Holling & Gunderson, 2009). It consists of four phases: growth, conservation, release and reorganisation, which mark various opportunities for active engagement and intervention. Using these perspectives, the Unit turned to one of Johannesburg's most 'redundant' spaces - Soweto wetlands - to interrogate how our perceptions as architects (and urban citizens) may be limiting potential for the city to flourish. We examined this redundant space as a source of inspiration, not to 'fix the problems', but rather to learn new ways of seeing flows between humans and nature and only then responding. The focus area is a derelict site in the middle of Soweto - the Orlando Power Park - formerly a coal-fired, electricity-generating plant. The plant was decommissioned in 1998 and lies within a sensitive wetland system, surrounded by mostly residential, some commercial and institutional areas. It is a visual eyesore and spatial disjuncture.

Methodology

The Unit's theme of resilience and regeneration provided students with an opportunity to identify projects, systems and ways of thinking that went beyond the typical visual aesthetic of a traditional Master's project. Students began to explore and realise the potential of the site, which could be used to transform their understanding of the site, make connections and allow for flows of human and natural energy. The structure of the briefs during the year aimed to encourage students to explore their ideas of 'site' and 'self' in Semester 1, working towards the definition and refinement of a spatial intervention in Semester 2. The year was structured into ten projects, which worked together to assist the students in achieving milestones in the investigation of their major design project for the year. As a rule, the Unit does not prescribe whether students should design a building, landscape or strategies of participation, so long as the student has undergone a personal transformation in the way they think about what their architecture projects can be and their impact as architects. To facilitate this process, their briefs were:

RL 001 THIS PLACE MAKES ME FEEL!

Outcome: to understand the value of a place.

RL 002 'OPPO(SITE)'

Outcome: to understand redundant sites can hold emotional and imagined value, in addition to real value.

RL 003 'CONNECTIONS'

Outcome: to understand the intangible and hidden systems that flow through a site.

RL 004 LATENT POTENTIAL

Outcome: imagine the existing connections and components of the living system that your site forms.

RL 005 BEYOND SUSTAINABILITY

Outcome: understand that sustainability is much more than green technology.

RL 006 THE QUALITIES OF RESILIENCE

Outcome: to apply resilience thinking to the site.

RL 007 ACUPUNCTURE

Outcome: Propose a sketch design that acts as an acupuncture point for regeneration.

RL 008 REPRESENT

Outcome: define and represent the boundaries of the site for the proposed intervention.

RL 009 DEFINE

Outcome: identify the scale, boundaries, systems, nature and working of the intervention as it grows out of the site.

RL 010 REFINE

Outcome: refine and detail the intervention in terms of technology, materiality, texture and scale, or the theoretical speculation proposed.

Selected Projects

The Unit's theme of 'resilience and regeneration' challenged students to produce responsible design projects and processes to address the adverse impacts of the derelict Orlando Power Park site. At first, the students reverted to their 'comfort zones' of identifying a building they could resolve by trying to fit it into the site. However, with each brief they were drawn away from their assumptions, to deepen their understanding of the resilience and regenerative potential of the site while broadening their own frames of reference. The students' work investigated these themes at various scales, from the whole wetland to a specific building, as well as through different lenses (e.g., ecological, human and networks). Within these explorations, two student projects emerged from the sixteen students involved in the Unit, which were exemplary, not only for their theoretical investigations, but also for their personal transformations as graduating architects.

Orlando Power Park is located within the broader wetland system of Klip River, a critical water system in the Gauteng region. Over the last century, the system has suffered high levels of ecological and social disturbance, including but not limited to industrial pollution. Two students, Ruairidh Macleod and Diana Wolny, were initially overwhelmed by 'trying to fix the pollution problem' until they realised that, as a source of latent potential, it could form a turning point in the revitalisation of the wetland. Their schemes respond to the polluted water system and subsequently deteriorated landscapes, where they also utilise filtered water to regenerate the broader social systems. Both students partnered up to undertake a macro-study of the wetland system over a few kilometres to understand the social-ecological dynamics taking place. This understanding allowed them to identify places and practices along the river that could form turning points in the regeneration of the wetland and the neighbourhoods along its path. While Ruairidh focussed on the regeneration of social systems as a device to remediate the natural system, Diana focussed on the regeneration of the natural system as a basis for the rejuvenation of social exchanges.



Fig.1: An exploration of the broader potentials of the site by Ruairidh Macleod (2016).

Ruairidh’s project explores resilience through linking people to each other and to natural systems to establish new value-systems and regenerate social-ecological networks. He explores design processes that are designed to mindfully influence people to develop skills; provide supportive services for vulnerable youths; and take advantage of urban spatial arrangements that revive the resilience of wetland systems as well as the social-economic opportunities that they present. His architectural response is a complex assembly of materials, building and landscape interventions and layered programmes. The building itself is used to develop skills in the community using earth from site as a building material. Through the phased process of building the centre, the building also adapts its functions to the changing needs of the most vulnerable members of the community, children, adolescents and women. The idea of exchange became pivotal in generating the architectural proposal.



Fig.2: A section through the building intervention, built from site by residents as proposed by Ruairidh MacLeod (2016).

Diana's project rejects the notion that a building can provide a regenerative solution to the wetland system. Instead, she explores the resilience of the most polluted tributary into the dam, tracking the destructive effects of the deteriorated water system downstream as far as the Atlantic Ocean. Through various studies into the water quality of the tributary and dam water she asks whether the neglect of the dam is not of a more serious consequence than its pollution, and perhaps this negative state can be used as a turning point for a positive intervention?

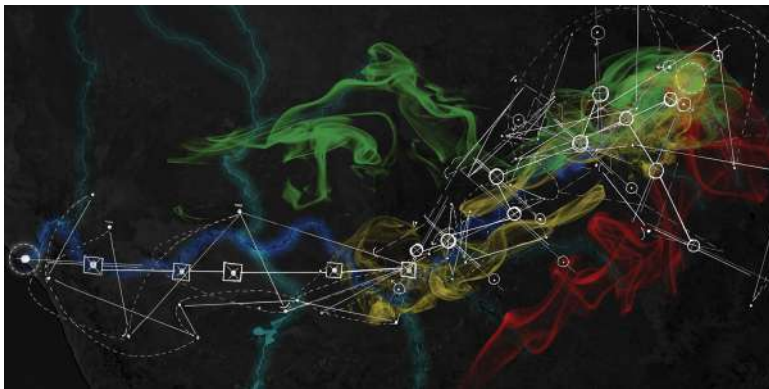


Fig.3: Graphic exploration of the effects of ecological disturbance at Power Park dam on the rest of the watercourse downstream by Diana Wolny (2016).

To curb this, she proposes the establishment of an *experiential* water station near the footprint of the former power station that can monitor water quality and filter it on a practical level. On an ephemeral level, it fosters emotional links between residents to positive experiences in nature, by unlocking creative recreational activities and viable economic opportunities. Within this parkland scheme she proposes several interconnected interventions that are aimed at increasing biodiversity, as well as providing opportunities for locals and visitors to the site to enjoy and reconnect with nature. This approach marries practical and poetic concerns, which she terms a *hydrophilic* architecture, a spatial solution rooted in place.

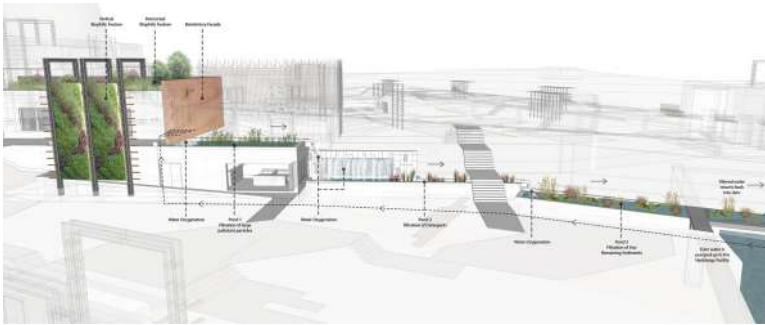


Fig.4: Sectional through a proposed hydrological intervention at the dam by Diana Wolny (2016).

For both students, the realisation that an architect's role can extend beyond the detailing of generic building to much broader avenues of investigation and speculation proved to be liberating and inspiring. Their engagement with the broader urban terrain and its tangible ecological and intangible social layers allowed them to identify intervention points that provided alternative design avenues. Their personal transformation was evident in the way that their initial programs developed to empathetic, articulate and well-grounded interventions at various scales that change the way we see and act in our world.

Reflections and conclusions

As with most journeys of exploration, a reflection on the years' work encompasses moments of genuine anguish as well as elation. Some of the anguish came from the process of 'unlearning' that happens in adopting new methods and processes. Students had to quickly learn that they were not going to be 'given' a project to execute on site, but rather that projects would have to rely on their own justifications and beliefs. For many, the process was unnerving. As Unit Leaders, anguish came from navigating the unfamiliar administrative expectations and framework of the Unit System while also managing the expectations and concerns of the students.

The greatest transformation has been in knowing that telling the story of the site or the individuals on site is a 'legitimate' design tool in arriving at a valid design proposal. As Unit Leaders, we witnessed first-hand how students changed from seeing themselves initially as separate to the site and its systems, to being wholly integrated. These projects reflect a hopeful speculation that in every context, even the most seemingly desperate, there are meaningful lessons to be learned, and that in the future our practice may involve entering a community, listening and learning from them and *then* using architecture as an object around which we begin to transform the site, its people and ourselves as practitioners through the process of regeneration.

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decolon
isation

Decolonising Education: An Ethical Duty to Society

— Yashaen Luckan,
University of Kwazulu-Natal, Durban, South Africa

Decolonising education has reached new levels of urgency due to the recent ‘fees must fall’ protests by students throughout the country. This has raised the altitude of emotionally-charged voices and opinions on the subject. A strident rejection of the status quo and all that is deemed ‘colonial’ features most prominently in the cries for a liberated and free education. Ultimately, students are taking the challenges of a democratic state to the authorities whom they perceive as the gate-keepers of their economic freedom – universities. Although seemingly separate, the issues of fees and decolonising education are actually intrinsically connected. I argue here that the call for fees to fall is related to the issue of having the right to advancement of one’s potential to contribute to nation building and socio-economic redress. The euphoria of democracy during the mid-nineties and early 2000’s has weathered away and the reality of a country which has not seen significant change in the wealth of the masses has emerged. Amidst the chaotic turmoil of protest and apparent destruction, is a conscious uprising, where the democratic rights of citizens to own their futures poses new challenges to higher education in general. Architectural education, as a consequence, has to find creative ways of responding to this reality – perpetuating the status quo is not an option. This paper provides an interpretation of decolonisation in relation to human potentiality, which consequently highlights the call for decolonised education. This is followed by the suggestion of alternatives to the current prevalent models of architectural education in South Africa, which could permeate the broader higher education landscape in responding to the demand for a free and decolonised education. People, place and time become critical constituents in this response.

Methodology

The paper accesses both primary and secondary sources. Auto-ethnographic enquiry defines the primary research, based on the experience of the author as a practicing architect and academic, who is actively involved in legislative bodies governing higher education and the architectural profession. These bodies include the *Council on Higher Education (CHE)*, the *South African Qualifications Authority (SAQA)* and the *South African Council for the Architectural Profession (SACAP)*. The literature review will look into the concept of identity and the advancement of human potentialities as vital to decolonisation. Against this framework, the literature review will further seek to understand the possibilities for an alternate, humanistic education model.

The intention of this paper is not to provide solutions, but rather it seeks to raise issues around the meaning of decolonisation in the context of society, education and practice. Although some suggestions are provided, the paper aims to contextualise the subject against the background of a new democracy seeking its identity within the global context. The intention is that this may ultimately guide further dialogue and debate on decolonisation of education, whereby architectural education could find itself in a prime position to effect change.

Decolonisation: the freeing of human potentiality

Decolonisation is fundamentally about humanism, which cannot be based on ideals, but embraces the chaos of human existence to afford opportunities while expanding human potential. Indian philosopher P. R. Sarkar's neo-humanist ideology is particularly relevant in this instance, which challenges the 'single future' ideals of humanism that emerged during the European Renaissance, at time when Vitruvian man represented a universal scale for the measure of all things. Sarkar (1998), alternately proposes neo-humanism as a 'multiple futures' approach defined by infinite networks of interrelationships and possibilities. This implies the advancement of human potentiality beyond the paradigms of Marxism, post-

structuralism and even post-modernism into a critical space where, according to Sarkar (1978), ideology cannot be defined as a coherent philosophical system, but one that constructs a sense of self, purpose and meaning in context. This is a direct move away from idealism to pragmatism; a space where geo-sentiment and socio-sentiment have no place; where cultures overlap and synergise for individual and collective advancement of society. According to Sarkar, ideas and ideology must become lived, bringing together objective realities with subjective realities, wherein humanity and human aspirations are at the core; this has great value in the decolonisation of education.

Fundamental to the process of decolonisation is a response to the crisis of identity, which relates directly to place, belonging and ownership. In essence, decolonisation implies the freeing of human potentiality to be able to contribute to the identity of one's self, environment and society; it advances knowledge, skills and the wealth of communities. It is a move away from exploitation of resources, which has been a trend since the early 19th century, a period when education served as a mode of social engineering, seeking to control human capital for the benefit of industrial production (Bussey, 2010). Within such mode, a few in power benefitted at the expense of the vulnerable masses, perpetuating a widening gap between the rich and the poor. The wealth of society suffered, and, I would argue, continues to suffer.

A further outcome of the factory pedagogic mode, is a myopic definition of technology which is overtly skewed towards technical production, wherein human aspiration and the making of place is grossly understated. Technology, however, must be considered a cultural construct and therefore cannot be disconnected from the aesthetic aspirations of society; it must be considered as an intrinsic part of people living in place, and therefore reflect the evolution of time. Preventing people from defining their own places, making their own spaces and expressing their cultural aesthetics is a consequence that is arguably beyond the acts of colonialism and rather of broader universal bases for the exploitation of humanity as labour for production. It is essentially about training for productivity within a paradigm which I refer to as the 'factory pedagogy', otherwise known as the 'industrial pedagogy', rather than the freeing of human potentiality. In fact, human

potentiality is inhibited in favour of skills training for industrial use – the exploitation of human potential.

Architectural education, ever since the mid-17th century, witnessed a gradual disconnection from the aesthetic craft and the making of place – a shift from culture to academy (Cret, 1941). The industrial era further shifted the discipline into the paradigm of the factory pedagogy, focusing on efficiency and quality in the production of architectural objects which served as containers for habitation or visual pleasure, while giving little consideration to culture and society – place. The intrinsic and subjective experiences of people in place as a vital stimulus for creativity (Menin, 2003) has been almost entirely disregarded. The predominant mode of professional and vocational education in South Africa continues to be based on the academy, which promulgates education for employment. The traditional role of architecture as an expression of culture and a means of the making and crafting of place has been lost. This architectural practice has in fact disempowered society and culture, opting for efficient production of ‘lifeless containers’ handed down for habitation / use. This has significant impact on architectural education, which must focus on the freeing of human potentiality with due response to people, place and time; a much deeper value than the rejection of what may be deemed as colonially inherited knowledge.

Decolonisation, as such, cannot simply imply a rejection and replacement of what has existed, albeit colonially inherited. It is also about critically reviewing, and synthesising all knowledge with the new realities of a democratic state. It must not be rejectionist or exclusive, but should bring together difference in order to define new identities cohesively. Ideologically, decolonisation implies a departure from hegemony, dogma, power and control to an alternative ideology which is diverse and inclusive; generated from, and building upon, the local context within the global community. It should therefore focus on bringing together person and society where consciousness is unlocked from person to engage with the collective/society – a significant departure from Habermas’ interpretation of consciousness locked within the individual, and Derrida’s notion of ‘difference’ as binarily opposed. Decolonisation is, however, more synonymous with Homi Bhabha’s notion of ‘hybridity’ and the ‘third space’, which

speak to the rejection of a dualist/binary nature of difference to opening up 'in-between' spaces for translation and alternate perspectives (Bhabha, 1994). This space, according to Bhabha, is not about cultural dominance but rather about overlaps between cultures, race, gender, class, nation, generation and location. There is no single interpretation, single narrative or single ideal within such space; it is an interdisciplinary space from which overlaps of cultural boundaries spark creation and the making of forms.

The discussion has led to a definition of decolonisation which is about inclusivity, embracing difference, affording opportunities and freeing human potentiality. Education and practice must consider this in order to adapt to the realities of a transforming context. People, place and time have to be at the core of education and practice, to reflect the identity of cultures; these may be multiple cultures with hybrid overlaps; it is essentially about people in place and time. Fundamentally, decolonisation is about ownership and belonging; it is about co-existence and society and it must therefore embrace difference and stimulate diversity, also of knowledge for the betterment of people in place – society/culture.

The above interpretation is, however, somewhat different to the general perception and interpretation of decolonisation, by students.

Decolonisation as perceived by students

Students' attitudes to the decolonisation of education, at the surface, seems to be a radical rebellion against colonial inheritance. However, my discussions with students reveals that there is actually an underlying deep concern with finding the relevance of their learning to their societies. The call for decolonisation of the curriculum is based on the view that prevalent curricula and modes of learning are irrelevant to the realities of the local context - Western sources have naturally faced much criticism and rejection, especially during the recent student uprisings; the bulk of evidence of this is, however, largely in the domain of social media platforms. A look into the conversations, comments, remarks and opinions of students on these platforms as well as in my theory and

design studios reveals a high degree of frustration and alienation by schooling. Students express their emotions and views either through intellectual dialogue, or via social platforms or student protest groups. For example, some students have formed lobby groups to debate the issues of free education and decolonisation with academics and peers in order to express their needs, and to work toward solutions, while others raise emotionally charged voices in mass protest action. Looking beyond the apparent chaos and disruption, it has been somehow encouraging to witness a consequent rise in critical consciousness, where students are seeking responsibility in defining their education and defining their identities in their society, albeit more than twenty years into democracy. The downside is that emotions have generally fuelled rejectionist and protectionist attitudes toward education and culture respectively. My interaction with students has, however, revealed that what they generally perceive to be 'colonial' and irrelevant, is actually largely due to the lack of being able to situate their knowledge in their own socio-economic and environmental contexts. Furthermore, there seems to be a lack of understanding of the importance of contributing to the global knowledge society, which requires that global knowledge is essential and should be embraced while promulgating local knowledge. Given the disparate secondary schooling background in South Africa, young minds must therefore be afforded the opportunity to expand their world views through active engagement within the global knowledge society, and not be limited by their socio-economic circumstances or education.

Decolonising education - suggestions

As a function of culture and society, according to Bussey (2010), I posit that education has an ethical duty towards the freeing of human potentialities and the generation of the wealth of society. This paradigm requires a shift from dominance to humility, respect and inclusivity. Education must break free of the linear transmission model which is fundament on exclusion, hegemony, doctrine and industrial exploitation, and shift to a learning paradigm that engages all stakeholders, which may extend

beyond the confines of the school to an engaged and inclusive model for the socio-economic, intellectual and conscious advancement of society. Within this paradigm, knowledge itself must be generated, which is inclusive of ordinary people in context. Research cannot therefore be predominantly abstract or generated in the comfortable silos of laboratories and studios, but must rather emanate from active engagement with all people affected by such research. The experiences of ordinary people in place cannot be overstated, especially in the context of the developing world where a wealth of knowledge resides in the oral tradition. Such model is one that must be characterised by a dual/synergistic approach to knowledge transfer whereby the university could benefit as much from society as society does from the university – a need to break away from intellectual dominance over society.

While the local context provides layers of knowledge that needs to be excavated in order to reveal new experiences, nuances and truths, this must be seen as valuable to the global knowledge society. I therefore posit that the success of a decolonised education model would ultimately manifest in the vital contribution that South African research and situated knowledge makes to the global knowledge society. A truly decolonised model should therefore be able to contribute to the global knowledge society through research that draws from the local context, its people, culture and technologies – people in place must be considered as vital and active participants within a necessary broader research community. The complex, multicultural, diverse and difficult context which defines South Africa could catalyse strategies, fuel research and generate knowledge that could be of great use to the global knowledge society as well as the global architectural community.

Decolonising architectural education

Although architectural education and practice does indeed reveal much reference to western sources and precedent, my observation is that there is a gradual shift of focus to the local socio-economic, environmental and political contexts. Architectural education and practice in South Africa have, however, struggled to effectively engage with the nuances

of a new multi-layered and multicultural context since democracy, characterised by apparent chaos and deep layered complexity. The overt reliance on discipline-specific curricula and pedagogies, possibly due to convenience, perpetuate quite obviously to this rapidly transforming context characterised by indeterminable human dynamics. While schools are making effort to become more contextually relevant, the threads of hegemony and doctrine continue to constrict the potential for transformative responsive pedagogies. There is still a 'flatland' or 'one-size fits all' mentality about education, which cannot seem to break out of this silo to respond to rather inconvenient realities of multiple cultures and diverse contexts. A decolonised model for architectural education ought to be developed within a synergistic, indeterminable and open system which promulgates local knowledge, embraces basic universal principles and rules while actively participating within the global knowledge society. Within such model, it is vitally important that knowledge is drawn from context and synthesised with such universal principles and rules. Within the global context, students could, thereby, benefit immensely as their own contextually situated knowledge may present unique opportunities for intellectual and practice contribution to the global knowledge society. It is necessary that there be an outright rejection of totalitarian ideas which undermine human potential for control and industrial exploitation.

The prevalent model of architectural education in South Africa, however, continues to focus on a homogenous / monocultural cohort of students undertaking similar learning tasks in order to achieve the predetermined academic outcomes and professional competencies. This paradigm is defined by common design projects generally supported by a predefined theory and practice curriculum for all students in the cohort up until the design dissertation in the final year of study. Students, especially during the earlier years of study, don't have much choice in what they learn, which is often not related to their own life experiences and therefore seemingly foreign to them. It is a system which has continued to undermine the value of student diversity as a key to unlocking the potential of architectural education, which goes beyond the curriculum and is rather much about pedagogic

transformation. The diversity of students as representative of a multicultural society within, is a valuable feature which has generally been overlooked in the quest for an efficient education system. This multiculturalism must be acknowledged and actively promulgated in the learning environment. I argue that therein lies the potential to generate South African architectural identity.

While such a system develops academic and professional competence, it completely disregards the inherent attributes of a diverse student body, which, inevitably marginalises students and compromises excellence in design research and publication at the post graduate level and in practice. The very nature of the current system of accreditation and validation has also not adequately evolved to reward excellence for architecture that responds to the complexities of multicultural societies or the inconvenience of research within challenging contexts; it merely evaluates minimum competencies and professional skills sets; a situation which severely compromises the intention to decolonise architectural education. I postulate that minimum competencies for professional practice must be assessed before Master's degree level, which frees up space for real research-led design in these complex and difficult contexts.

In conclusion, I affirm that education, including architectural education, must be decolonised however the meaning of such decolonisation must not be defined by totalitarian or rejectionist attitudes towards education that may be perceived as colonially inherited. All knowledge has to be accepted as valuable, however greater emphasis must be placed on establishing relevance of education to the local context. Active participation within the global knowledge society is vital to expanding world views of young and critical minds exposed to diverse life experiences within the complex South African context. This should be recognised, respected, valued and nurtured. The rhizomic complexities of the South African context may provide new areas of research which could importantly unearth new knowledge and contribute vitally to the global knowledge society. Indeed, education has an ethical duty to the advancement of human potential and the cultural, social and economic wealth of society and this should be fundamental to a decolonised education model. Such model must ultimately afford every citizen the opportunity to build a

better society and economy; the failure to afford this opportunity has already severely compromised the potential growth of South Africa since the advent of democracy in 1994. I strongly reaffirm that architecture is in prime position to play a vital role in expanding human potentiality by actively engaging with people, place and time in order to uplift society while simultaneously increasing its own wealth of knowledge which is still to be unearthed; which may be hidden in oral narrative and which may be of indeterminate value to the challenges at the global scale.

While this paper outlined some suggestions towards decolonising education, the subject can only progress through wide dialogue which must sincerely acknowledge the concerns of students and society at large; they must be heard; reactive and emotive expression must be allowed to naturally expire, which could pave the way for proactive and collaborative strategies toward decolonisation. After all, inclusivity and active participation are vital to decolonisation.

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There is still a 'flatland' or 'one-size fits all' mentality about education, which cannot seem to break out of this silo to respond to rather inconvenient realities of multiple cultures and diverse contexts.





Geometries of Access: from Panoptical Layouts to Soft Surfaces

— Solam Mkhabela & Kirsten Doermann

*'How can you say that you're not responsible?
What does it have to do with me?
What is my reaction?
What should it be?
Confronted by this latest atrocity'*

Driven to Tears, The Police (1980)

Introduction

South Africa's urban footprint is ruled by geometries of fear. In part, this can be read as a legacy of *apartheid's* spatial segregationist policies, but it is important to note that the use of geometry in the service of power is neither new nor unique to South Africa. It echoes Deleuze's 'societies of control to organise the spaces of enclosure' (Deleuze, 1992:4) that he refers to in his analysis of Foucault's work, in the same way geometry was the ordering element in urban agglomerations in 2500BC in the city of Ur. Harley talks about urban layouts as maps of 'political geography' (Harley, 1988:277), which Cosgrove introduces through the reading of spiritual, political or moral measures as embodiment of intentions in notions of shape and area (Cosgrove, 1998) of particular landscapes.

Under apartheid, South African cities were divided into three distinct zones: the so-called suburbs and inner city districts (white), townships (black and colored population) and commercial (with limited, pass-controlled access for black African users). Military principles of control and right of entry imposed a rigid and unbending order, which progressively began to break down in the years leading up to the first democratic elections in 1994. After extensive international economic sanctions were imposed on South Africa in the 1980s and the rise of increasingly militant

internal resistance, the declaration of a country-wide State of Emergency in 1996 led to the detention of more than 26,000 people until 1987, when the National Party begun bilateral negotiations with the African National Congress. The official emergency status however only ended in 1990, the same year when the Group Areas Act was lifted. At that time, political exiles and other South Africans who had left the country under apartheid began to return and the laws against racial segregation slowly began to loosen.

Post-1994, after the first democratic multiracial elections, the situation began to shift rapidly. Designated ‘group areas’ were legally abolished and the freely accessible, previously white suburbs, generally nestling around ridges and mountains, felt too open and exposed for the few, now facing the many. With a strong and often obsessive emphasis on the ‘self’ – self-protection, self-identity, self-rights – gated communities, secure enclaves and walled-off properties have become the norm, resulting, once again, in the condition of being ‘apart’ that the fledgling democracy sought to end.

It is in this context that we have begun to look at ‘geometries of access’, both in their local and global contexts, seeking ways to override and subvert them by translating the rule of law creatively. We approach the subject from two angles: from panoptical street layouts planned in the 1950s in Soweto with high mast lights (Project 1), to changing sidewalks in the northern suburbs today – a phenomena we call the *soft surfaces* (Project 2). They range from dirt and pebble, to grass and flowers. Our proposals are speculative imaginaries that are based on factual realities. We consider them *emerging possibilities*.

Project 1

Zwakala kaneno (‘come closer’): *Suburban Hotspots in Soweto*

‘Now, curiously, the stadium lights and watchtowers, that were so integral to the state’s efforts to surveil African communities under the old regime, remain. The lights are now justified as a practical matter – a way of offering the most light during hours of darkness, to the greatest number, by the cheapest means. [...] They recall an era

when the provision of infrastructure [...] went hand in hand with covert military operations that sought to use community development projects in the winning of hearts and minds. [They] were of course linked to the overt presence of the security apparatus.'

Anne-Maria Makhulu

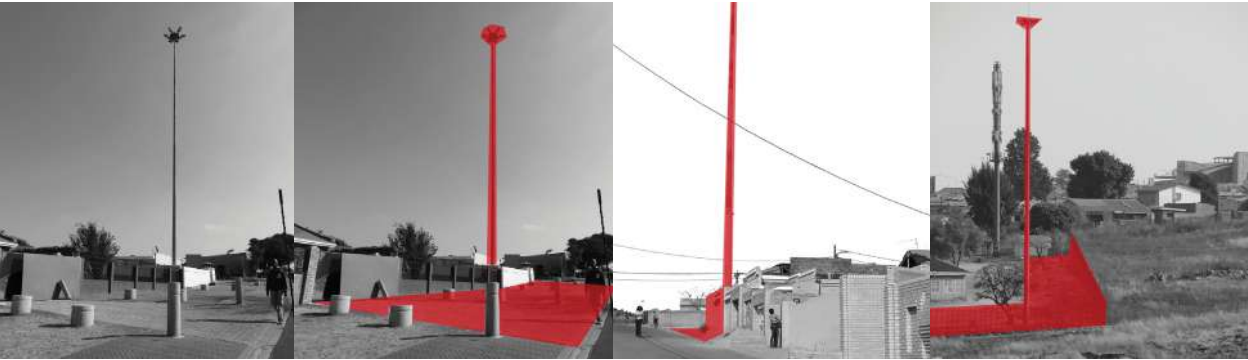


Fig.1: High mast lights, Soweto.

The re-use of military infrastructure is intended to transform civic space and provide un-restricted access. Our proposition rests on three premises:

High mast lights in Soweto are decommissioned military installations of the apartheid government;

Soweto will remain largely separated from its physical context due to large surrounding buffer zones and inadequate public transport;

In May 2011 the UN declared access to the Internet a human right.

Background

Soweto (South Western Townships) is the collective name given in 1963 to a series of settlements designed for blacks under apartheid, cemented by the Natives (Urban Areas) Act) of 1923 and the Group Areas Act of 1950. It lies 15km south west of Johannesburg. With an estimated 2 million inhabitants, it is the biggest township in the country. It was intentionally designed as an isolated entity and lawfully separated through natural and man-made barriers from its

immediate and larger context. In his investigation on the apartheid city, Frescura identifies a number of markers that uncover a system of racial discrimination and oppression that goes far beyond a residential policy of racial segregation. One such marker, we argue, is military control. Apart from being located close to a military base, the layout of many townships was planned to facilitate military operations. The geometry of Soweto's radial streets, which are connected to a series of vacant hubs, strongly relates to the layout of the high security prison in close proximity to the township, and suggests the idea of an urban panopticon. 'The theory was that, in times of civil unrest, nests of sub-machine guns could be located on this land, covering the radial roads and enabling troops to isolate trouble spots in a series of pincer-like movements' (Frescura, 2000). The entire area had few access points (four), so that it could be easily controlled on a daily basis and sealed off in moments of conflict. High mast lights, also employed in the high security prison, supplied public illumination for the residents. They also gave insights into every aspect of their daily life to the ruling powers.

Today, twenty-odd years after the first free elections, the spatial implications of apartheid planning stubbornly remain. The high mast lights are floodlights, puncturing the urban landscape, visible reminders of a militarised past and an uncertain future. Like the buffer zones, dusty, wide-open fields and refuse dumps, the army's tools of yesterday linger on.

Proposal

Our proposal is to transform Soweto's high mast lights into hotspots for a wireless mesh network, re-imagining them as part of the contemporary public realm, albeit digitally. Wireless mesh networks can easily and effectively connect entire cities using inexpensive existing technology. The network connection is spread out among multiple nodes that talk to each other to share the network connection across a large area. Mesh nodes are small radio transmitters that function in the same way as a wireless router.

The proposed re-use transforms a system of military control into a system of free communication and Internet access.

The spaces around the hotspots stage domestic narratives of the everyday: an overlay of past, present and future, exploring the dependencies of urban infrastructure, politics and public art. *Zwakala kaneno* means ‘come closer’.



Fig.2: Panoptical Street Layout, Orlando East

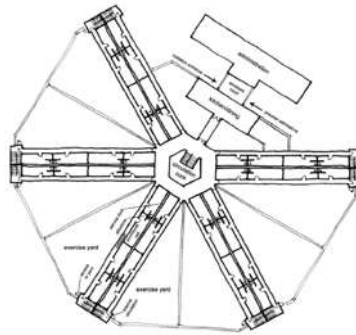


Fig.3: Ground floor plan of Medium B, Diepkloof Prison

Project 2

Lusentse lemgwaco (‘on the side of the street’): *Sidewalk Manifesto*

Background

The sidewalk is a ‘highly endangered species’ in the South African suburban landscape. This pedestrian component of the street was considered by Jane Jacobs (Jacobs, 1961) as central element of self-regulating order and safety in a neighbourhood. In contrast to the apartheid era, which saw the street as public space for some and not for others, nowadays sidewalks are meant to provide space for free movement and exchange. However, sidewalks have continuously and purposefully been rendered more and more inaccessible to the public, in particular, in affluent residential suburbs with high private car ownership. Instead of serving the pedestrian as a rightful walkway and the neighbourhood as active threshold between public and private space, many sections have been trans-

formed into extended barriers, camouflaging as extensions of front gardens in older neighbourhoods, or, in newer residential developments, have not been constructed at all. There are approximately 9,435km of roads looked after by the Johannesburg Road Agency, to be accompanied by sidewalks ‘preferably be provided on both sides of all streets’ (CoJ, 2014:15). This amounts to an estimated surface area of more than 21million m², which comes close to the total floor area covered by the nearly 2,000 malls in the country.¹

Despite the City’s efforts to design better streets for all, as outlined in the Complete Streets Guidelines (CoJ, 2014), private, motorised transport has rendered the sidewalk redundant. The middle-class car owner shies away from any unwanted, unscripted encounter with the ‘other’ – a poor, generally criminal class of citizen whom they see through tightly wound-up windows en route to work or leisure. How is it possible to perform the narrative play of the every day when the centre stage is disappearing or unusable?

Proposal

Our project began with walking the streets of the greater metropolitan area of Johannesburg. Its innercity sidewalks are often overcrowded, over programmed and poorly maintained (see Photos 1, 2, 3 & 4 for approximate use percentages). The suburban context is peculiar, and sees inhabitants creating inaccessible walking spaces. Bizarre examples such as using stones and rocks, or planting over the adjoining property’s sidewalks as densely and quickly as possible, in an attempt to make them disappear all together, often separated from the private interior lawn by walls and electric fencing. The innuendo of *‘feel free to walk here – but not in front of my house,’* is an attitude that renders the suburban homeowner an urban criminal, breaking the public road and miscellaneous by-laws in terms of section 80A of the National Road Traffic Act, 1996, as published in 2004, and amended 2011 in the Provincial Gazette. It states:

¹ South Africa has close to 2,000 shopping malls with a total floor area covering 23-million m². <http://www.sowetanlive.co.za/news/2016/04/29/mall-of-africa-not-biggest-in-south-africa.#SaveSidewalk> is an imaginary and speculative projection of a neighborhood initiative associated with the City of Joburg administration, sometime before the next general elections in 2019.

4

(i) No owner or occupier of land -
(c) May erect, or cause, or permit to be erected, any electrified fence, railing, wall or other electrified barrier referred to in paragraph (b) without the prior written permission of the Council, in terms of the National Building Regulations and Building Standards Act, 1977 (Act No. 103 of 1977).

7A

No person shall, within the municipal area of the Council, display in any manner to the view of the public, except as an article for sale in a shop window or on a sidewalk, any article of clothing or any

household, domestic or other linen or any other fabric (except when used as curtains) from any window or on or from any wall or balcony or veranda fronting on any street or public place.

20

No person may plant or cause to be planted, any tree, shrub or other plant on any public road or sidewalk, footway or road reserve forming part thereof, which obstructs or interferes with pedestrian traffic on such sidewalk, footway or road reserve or allow any such tree, shrub or plant to remain on that sidewalk, footway or road reserve.



Photo 3 & 4: Sidewalks in a suburb and the township, where one is empty and the other full and over-flowing, © Authors.

Our project makes a claim for public infrastructure – specifically the sidewalk – to be treated as a cultural necessity. It introduces the #SaveSidewalk movement in the form of bilingual infringement flashcard notices that serve simultaneously as cultural learning tool. All information is in Zulu and English. #SaveSidewalk aims to save the sidewalk in suburban neighborhoods in and around the City of Johannesburg. It works from ‘street to street’ and relies on the participation of local residents. These simple rules apply:

All sidewalks along a specific street have to be continuously wheelchair and pram accessible at least on one side of the road. Should the access change from one side to the other, due to existing trees or other natural obstacles, pedestrian street crossing points called ‘African Zebra Crossings’ will be provided. These crossing points offer a limited number of informal trading permits to small scale entrepreneurs with excellent products and services. If property owners have replaced pedestrian access through soft surfaces, like grass or flowerbeds, or hostile materials such as

rocks, the continuous walking surface has to be re-instated, as stated in the first rule.

Once continuous wheelchair and pram access has been granted, the following fines apply:

1. Any grassed sidewalk has to provide a bench for passers by to sit and rest;
2. Any flower bedded sidewalk is 'on sale' for any passer-by. Flowers may be picked for a competitive amount;
3. Any cobbled surface that replaces a sidewalk will be fined with a 'provide vegetables for passers-by' tax;
4. Any house owner with electric fencing along a sidewalk has to do seven hours of 'sympathy' service per month.

All sidewalks must be illuminated at night. Each month, all properties along the best pedestrian friendly sidewalk get a 7% reduction on municipal levies.

	infringment ukwephula komthetho	penalty inhlawulo
	▲ grass utjani	comments imibono <input type="checkbox"/> yes <input type="checkbox"/>
street umgwaqo	▼ ► install bench to sit yakha isihlalo sabantu	▼
house nr inombolo yendlu	▲ flower imbali	comments imibono <input type="checkbox"/> yes <input type="checkbox"/>
save	▼ ► share to sell ukwabelana ukuba uthengise	▼
sidewalk	▲ stone amatje	comments imibono <input type="checkbox"/> yes <input type="checkbox"/>
londoloza	▼ ► grow free vertical vegetables mila mpo isitshalo mahhala	▼
khona emgwaqweni	▲ electric fence lukagesi	imibono <input type="checkbox"/> yes <input type="checkbox"/>
joburg	▼ ► 7h neighbourhood sympathy 7h ukuzwelwa umakhelwane	▼
	issuing sidewalk saver londoloza isikhulu	date idethi
	signature ukusayitha	
	infringment notice number <input type="text"/> ukwephula komthetho isaziso inombolo	

Fig.4: Design: Infringement flashcard notices, Zulu-English, © Authors.

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Feet On Today, Eyes On Tomorrow

— Francis Carter

*The road that I follow calls me on my way
Got my eyes on tomorrow and my feet on today*

— Miriam Makeba

The ‘driving beat’ of Miriam Makeba’s 1991 freedom anthem, *Eyes on Tomorrow*, calls for a journey that is grounded in current reality in order to reach a better future, despite ‘people’s fears, living day to day and thinking nothing’s safe and nothing’s clear.’ (Masondo, 1991) Twenty-five years later, as we continue along this road, the majority of urban citizens still live in conditions of high population density and low physical bulk – a lived reality embodying problems of overcrowding, compounded by structural poverty and crime. Despite these tough challenges, the duality of high-density/low-bulk does generate a spatial and constructional economy of means which is inventive and collaborative, legible in the flexibility of space and inhabitation which develops under conditions of scarce resource.

An introductory Honours-level design studio at the University of Cape Town investigates how this spatiality, in the case of the township of Gugulethu, could inform architectural design strategies for the production of public buildings today (alongside the building of institutional arrangements which improve livelihoods tomorrow). While this research work of the studio could be contextualised in relation to Fraser’s discussion of ‘experimentation through an conscious engagement with the normative practices of everyday life in the contemporary city’, or Cruz’s directive ‘to ‘hit the ground’ and engage the particularities of the political inscribed within local geographies of conflict’ (Fraser, 2013:217,208), the focus of this article is the pedagogy of the first few weeks of fieldwork, which kick off the studio inquiry.

Rather than the testing of field observations in design studies, my interest here is in the fieldwork drawings produced by students: how drawing as seeing – the use of disciplinary tools for visual thinking – might be a basis for method in empirical research for design. Review of this work, done during the first years of the studio in 2014 and 2015, informs the improvement of methodo-

logical rigour and research protocol in the subsequent two year cycle of course development which is now underway.¹ However the limited data set of drawings derived from a short introductory survey of a small geographic area requires cautious extrapolation, while review of literature on architectural drawing lies beyond the scope of this short article.

Knowledge and pedagogy

Learning architectural design knowledge in this studio is based on two lines of inquiry. The first of these is theoretical: application of design theory evident in the early writing and works of Bernard Tschumi and Rem Koolhaas in the cultural context of 1960s progressive social movements, particularly the flexible and non-hierarchical use of space (as event disjunction or across programme) (Tschumi, 1979; Koolhaas, 1978). The second is practical: application of design practice which explores a cross-disciplinary overlap of engineering and architectural knowledge in the early writings and works of Ove Arup in the context of progressive professional practice – particularly the configuration of interior volume (environmentally, structurally and fabricationally) (Arup, 1970).

The limits of context are both geographic and programmatic: the human geography of urban townships (of which some characteristics have been mentioned above) and public assembly programmes (which provide opportunities for considering the calibration of space and inhabitation across temporal and permanent patterns of use, between interior and exterior, and across scale).

The fieldwork connects this inquiry and locality, by using drawing as thinking in an interplay between knowledge and context. Its pedagogy is informed by two crucial aspects of architectural design learning. Firstly that design thinking is visual, requiring a productive process of using drawing methods as tools for visual thinking while doing design. In this way drawing serves

¹ The drawings selected for review here were produced by members of the following cohorts: 2014 - Phillipa Abrahamse, Kristi Badenhorst, Claire du Plessis, Devin du Plessis, Ashleigh Killa, Nicole Lai Lan, Luc le Grange, Mabasa Mashazhu, Mathew Mills, Sebastian Rolando; 2015 - Johan Bronkhorst, Kayla Brown, Alexia Comminos, Michele de Villiers, Rupert Jordi, Tanya Moodaley, Frans Pieters, Jochen Schmidt von Wuhlisch, Patrick Schuster, Baliwe Sibisi, Simone Swanepoel, Stephanie Terwin, Tiaan Zietsman.

as a representation (of a thought process) rather than as a presentation (of solutions 'to be built') or as an illustration (of abstract ideas). Secondly that design thinking is collaborative, requiring the value and necessity of teamwork to be established during the design process and involving analysis, invention and synthesis (rather than mere production of documentation).

These considerations of knowledge and pedagogy inform methodology in this fieldwork, which aims to transform subjective experience through thoughtful observation into objective analysis, from the ground up rather than the drone down (keeping 'my feet on today'); to discuss these observations as a group, advised by members of communities, establishing analytical criteria from the empirical evidence rather than imposing oversimplified or preconceived descriptive categories ('living day to day' where 'nothing's clear'); to develop students' confidence and caution when working in conditions where there is both inspiring community activism and possible danger ('people's fears...nothing's safe'); and to do this all within a two week timeframe, the scope limited to a manageable study area which has reasonable variety of private, public and institutional inhabitation, with vacant spaces and active street life ('the road that I follow').²

What kinds of observations do postgraduate entrants record as they begin to understand the complexity and generativity of patterns of space and inhabitation in this field? Four main types of fieldwork drawing have been produced in the 2014 / 2015 studios, which I have called notional, conversational, inner and outer.

Notional

The first impressions gained of the built form, spatial organisation and social inhabitation are noted in sketches made or photographs

² The study area was limited to part of Gugulethu North from Klipfontein Road to NY111, for two blocks either side of Steve Biko Street. This study area includes a range of housing (hostels, 'carriage' and 'corner' houses, backyard shacks and informal settlements), institutions (school, recreation hall, trade union office, permanent and temporary churches), a variety of public open space (formal parks, informal kickabout spaces, sports fields, abandoned land, unsafe infrastructure), heritage sites (migrant labour mess hall undergoing conversion to a theatre, Luyolo Community Hall, Gugulethu 7 ambush site and memorial, Amy Biehl attack site and memorial), a variety of formal and informal trade, and manufacturing (pavement metalworks, car repair yards and furniture manufacturing).

taken while walking the streets. These develop as elevational studies, through compilation of the visual notes. Observations are generally of the small scale of repetition, or of interruptions to these repeat conditions.

Nicole Lai Lan (Figure 1) uses the exaggeration of photomontage to depict the fixed and temporal spaces of the life of a street. Liquor looms large, and taverns range in scale from carport at 'Pira's Place' to the 'GQ Club' built across two corner houses (its 'Peroni Courtyard' opening to the street party through a garage door). Shops range in size from Mike's hole-in-the-wall food kiosk to Godsend's double storey hair salon. Stacks of recycled building materials line the kerb, and the mobile architecture of prefabricated shacks are designed to fit the size of a small pickup truck.

The spatial condition which Nicole represents is the porosity of the elevation - the boundary breached by holes in the wall and trading alleys which generate public interiority within the residential exterior.



Fig.1: Manana Sendlebe and Goodwell Z Botha street elevations (Nicole Lai Lan 2014).

Conversational

Conversations held with residents are translated into plans identifying the territorial conditions of permanent or temporary claims to land, or of the distribution of social hierarchies across place.

Baliwe Sibisi (Figure 2) uses portraiture in combination with quick interviews to narrate the social and spatial conditions which connect both sides of the street (Mama Madelane's home on one side of the street with her collectivised 'Masithandane Food Garden' situated on the public land directly opposite, Ncumisa's crèche which timetables use of a public playground on



Mami Madhane:

Mami Madhane is a member of the 1970s East London Township. She has lived in the area since she was young. She is currently living with her family in a township in the Eastern Cape. She and a group of 13 other individuals, who came from the Eastern Cape, started the township. They work in the area and are working on getting the township to be a better place. They will then provide an alternative to the township, with the hope of providing a better life for the community. Madhane has lived in the township for 12 years and has a vegetable garden of about 100m². She says the township is a good place to live in as it provides the community with a sense of belonging and a place to live in the garden that has been there since the township was first started.



Nicotiaz:

Nicotiaz was born in Gugulethu in 1986. She currently lives with her mother and other family members. She is currently working for her family, but she has a small business of her own. She is currently working for her family, but she has a small business of her own. She is currently working for her family, but she has a small business of her own. She is currently working for her family, but she has a small business of her own.



Simphiwe:

Simphiwe was born in Gugulethu in 1982. He currently lives with his family in the Eastern Cape. He is currently working for his family, but he has a small business of his own. He is currently working for his family, but he has a small business of his own. He is currently working for his family, but he has a small business of his own.

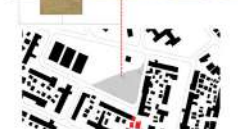
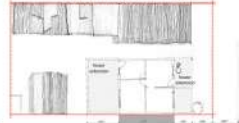


Fig. 2: Co-option of public land and intensification of private land (Baliwe Sibisi 2015).

the other side of the road), or which connect the front and back of a plot (as a gendered sequence of space in Simphiwe's extended family homestead).

In Baliwe's drawing the focus is on the humanity of the subject (in the spatial context of the vegetable garden, playground or backyard), while the object has straight forward delineation in plan.

Conversations with traders interrogate the boundary condition of street and home as an opportunity for trade, with retail and residential uses deeply embedded and overlapping both the public sidewalk and private yard or rooms.

Plans by Patrick Schuster and Simone Swanepoel (Figure 3) examine these territorial inversions – a front yard container operates internally as the 'Image Hair Salon' during the day and externally as a sports bar at night; 'Kwaai All Trading' is strategically located to benefit from soccer derby days; an outdoor tavern connects the desire lines at the hostel entry. In all cases shade is the place making material.

In following the road from one place of trade to another students develop an understanding of the strategic contingency



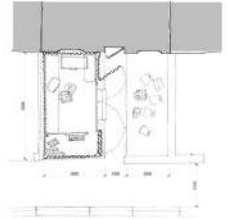
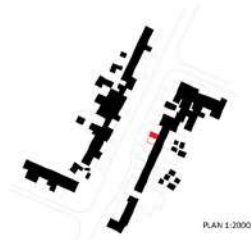
2. IMAGE HAIR SALON



double use as bar
the provision of a television and fridge turns the stall into a meeting place to watch football from the extended gallery seating



security
a sliding door allows the salon to be closed against the elements, while closing doors allow it to be secured



4. KWAAI ALL TRADING

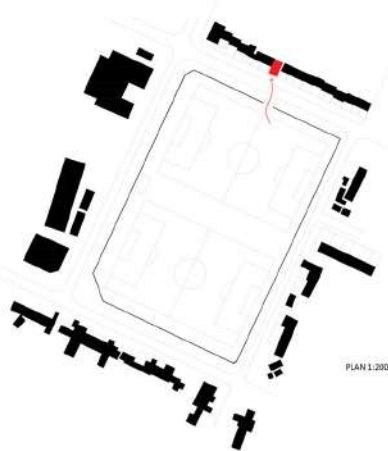


signage
Coca Cola sponsored signage on a roof provides visibility from afar

Smaller chalk boards near the hatch allow for changeable signage

hatch
lock up hatch provides security for when store is not in use

shading
the shading provides cover from the elements



6. LINGELIHLA HOSTEL LIQUOR STORE

security
small access hatch is the only access between buyer/seller



shading device
the shade around the liquor store makes it a natural place to gather

gathering
the central location of the Linglehla liquor store makes it a natural place for people to gather

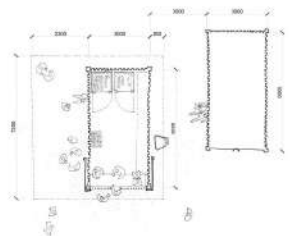


Fig.3: Residential / retail boundary conditions (Patrick Schuster and Simone Swanepoel 2015).

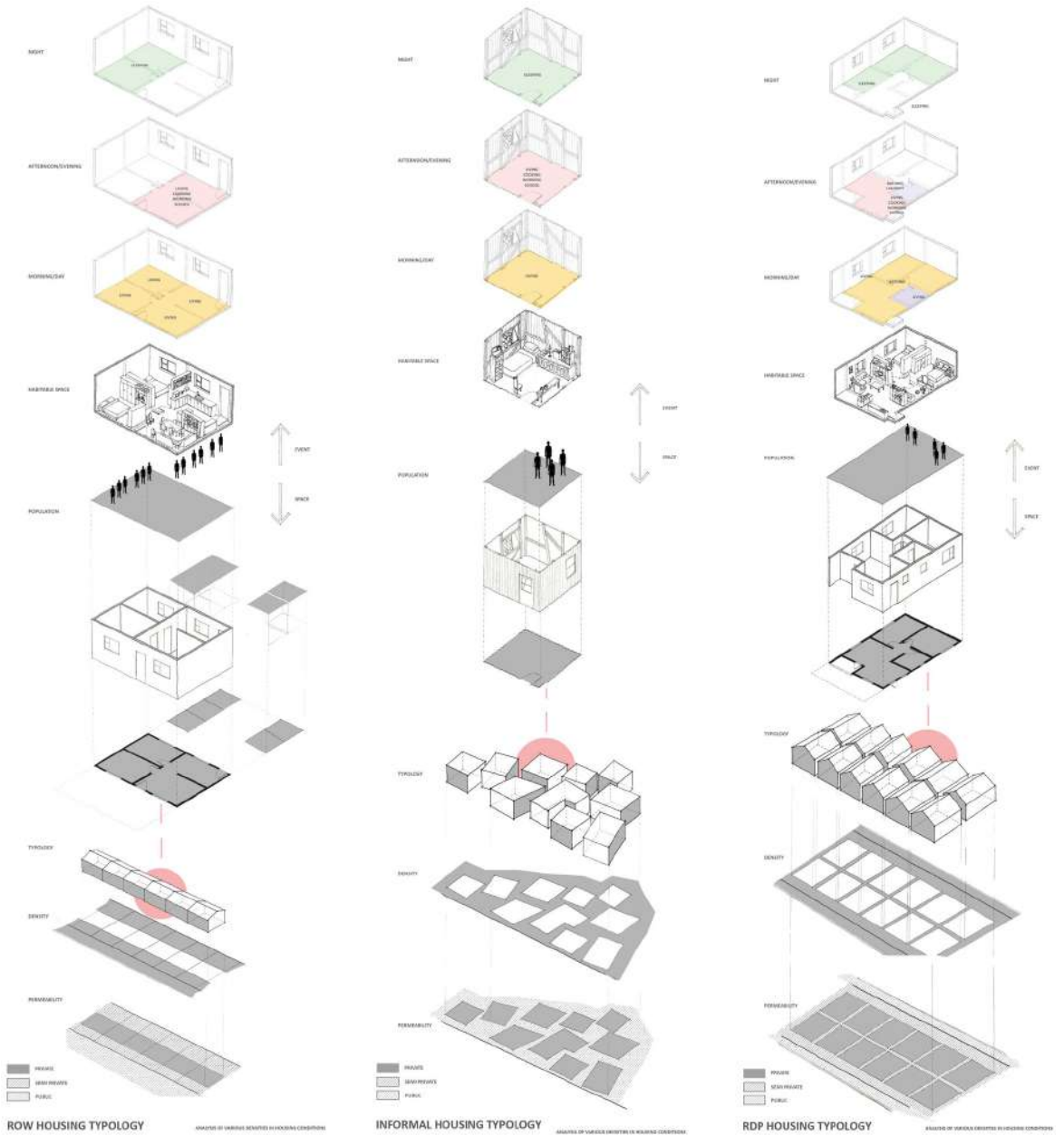


Fig.4: The inner life of residential buildings (Tanya Moodaley and Jochen Schmidt von Wuhlisch 2015).

of urban space and inhabitation which, while legible in this bottom up investigation, is illegible in top down study of town plans (e.g. the figure-ground study erases this rich microcosm of social and spatial practice).

Inner

Interiority affords a powerful counterpoint to the life of the street, a refuge from the daily hustle, bound in small dark rooms which are dignified with 'front-of-house' finishes and symbols or densely packed with domestic or trade goods, activated by overlapping uses. Here the drawn analysis of living day to day in these interiors tends to be sectional or isometric, diagrammatising the conditions of volume.

Tanya Moodaley and Jochen Schmidt von Wuhlich (Figure 4) define living space typologies from part to whole, with classification of event and space in the daily cycle of multiple use of rooms (using repeat annotations of the floor surface, a stop-frame solution).

Outer

Outer forms of space and inhabitation can then be understood as a complex mesh of everyday use and public event, the profound as either transient overlay or permanent punctuation of the profane. Occupancy ranges from five families using one living room for all the daily activities life in a migrant labour hostel, to a church congregation of thousands gathering each week on a wasteland. As students develop confidence in exploring the field, and as subjective observations begin to be discussed and compared by the team of students, analytical categories are uncovered from the ground up which focus further investigation. These categories are captured in comparative matrices which analyse relationships of space and inhabitation – e.g. form in relation to use (which quickly reveals that formality and informality are deeply enmeshed), or of one kind of activity in relation to another (which quickly reveals that domesticity and trade are deeply embedded rather than being separate spatial conditions and analytical categories).

A team comprising Kayla Brown, Michelle de Villiers and Rupert Jordi analyse the multiple spatial disjunctions of formal meaning and social event (Figure 5) - the architecture negating 'the form that society expects of it' (Tschumi, 1979). Here furniture creates public place (the kitchen table as classroom), private thresholds are inhabited publicly (the home as tavern or as crèche), temporary structures occupy abandoned land (the dump site as church), the profound and profane overlap on street edges (the petrol forecourt as memorial), the micro invades macro infrastructure (the retention pond as housing).

Discussion

Key social and spatial findings of this initial stage of representational work done in the field - seeing and thinking through drawing - are the intersections of urban and rural existence (seen in the spatial arrangements of small urban farms and the kinship structures of house form), of domesticity and trade (where trade might occupy the entire home and yard at certain times of the day) and of formality and informality (where less permanent structures are present permanently). Inversions of form and meaning proliferate. The variety of small-scale and localised spatial conditions, of minimum form but maximum and overlapping inhabitation, suggest that generic urban design prescripts of over-scaled 'build-to' edges misapprehend the relationships between built form and social practice in high-density / low-bulk cities.

The generative teaching and learning idea emerging from this pedagogy of fieldwork is the contrast of investigative methods provided by notational drawing of 'space / event / sequence of time' and orthogonal drawing of 'place / activity / moment in time'. The investigative radar of these visual tools pick up the exteriority of social event, dispersed horizontally across public / private boundaries, in the first case and the private dimension of interiority in the second. Lived experience is evident in the first method, while the second has potential to unpack patterns of inhabitation at the scale of domestic and urban artefacts.

In this fieldwork the apparently simple conventions of architectural drawing - orthographic (including montage, in the

Walter Benjamin sense of the fragmentary and festive experience of public-private porosity) (Elliot, 2011), isometric (with notational overlay in the Tschumian sense of a sequence of temporal events delinked from form) (Migayrou, 2014) and scheduled (in the CIAM / Team 10 sense of the exhibition grid) (Risselada + van den Heuvel, 2005) – do have disciplinary power of analysis and which endures. The important pedagogic point is that these same visual thinking tools connect empirical investigation in fieldwork with creative imagination in studio work.

In memoriam

Tobias Mzwandile Poswa

(24 November 1956 - 10 June 2015), fieldwork guide.

Ukulunga nokuhlekisa kwakhe akungekhe kulibaleke. Siyabulela ngexeshana elifutshane esithe salichitha naye. Inkumbulo yakhe iyakuhlala ihleli kuthi. Ngombono wakhe nathi sitsho sabona.³

Through his eyes our eyes were opened.

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³ Testimonial of Nicole Lai Lan and Simone Swanepoel: Your kindness and laugh will never be forgotten. We are grateful for the brief time that we got to spend with him. In his memory we give thanks. Through his eyes our eyes were opened.



Pata4Two

— orthner orthner & associates



‘Functional’, ‘buildable’ and ‘economical’ seem to be the primary concerns of both clients and architects in Ghana today. The criteria permeate across all areas and levels of society and are drilled into Ghanaian architectural students, resulting in professionals who are good technically, but often lacking creativity. Although such considerations are not necessarily negative in themselves, over the past thirty years, the emphasis on cost and functionality over any other consideration has contributed greatly to the proliferation of the ubiquitous concrete jungles, seen everywhere in Ghanaian cities. Sustainability, creativity and imagination have fallen by the wayside, and although clearly thriving in other industries and disciplines, architecture seems to have lost sight of any other goal.

But Ghana is changing. On July 1, 2011, the country officially moved from low-income status (as classified by the World Bank) to lower-middle income status. With a young and growing middle class demanding excellence and taking greater pride in all things African, the potential client base for good architecture and design is also changing. Informed by a local, global and pan-African ‘Renaissance’ trend, popularized on the cover of Time Magazine as ‘Africa Rising’, they have taken matters into their own hands. Wearing Afrocentric fashion, listening to Afro-pop and hip-life music, eating at African restaurants, it is only logical that they are beginning to demand an architecture that speaks to them in an authentic ‘voice’, placing their aspirations, identities and tastes at the centre, rather than the margins.

By all accounts, then, this *should* be a great time for Ghanaian architects to exhibit creativity and innovation. This *should* be an epoch of new types of buildings, which respond to the climate of Ghana and also have a uniquely Ghanaian aesthetic appeal. This ought to be the moment where ‘sustainable’, ‘creative’ and ‘diverse’ replace the tired old standards to become the new drivers of urban development.

Sadly, it is not. As ever, the reality is rather different. Ghana’s economic growth and rapid urbanisation over the past two decades has contributed to a huge housing deficit, particularly in big cities like Accra and Kumasi. Government housing provision is almost non-existent. Town planning as a discipline has all but ceased to exist and unsustainable, unaffordable and privately-owned housing developments both command and steer the market. There are no mechanisms in place to encourage integration within the cityscape: high, middle and low-income housing is segregated and unstable, and the vast majority of developers target the upper-class, luxury end of the market. This has pushed many middle-class households into the periphery, where housing and land costs are much lower. But even there, the cheapest, new-build by a formal developer is too expensive for the majority. Building costs on the periphery are high because a significant percentage of the developer’s costs are spent on providing infrastructure. Uniform houses, concrete landscapes and urban design layouts lacking in public space, individuality and flexibility have become the norm. No one really expects more. More and more, middle-income households are forced to buy a small piece of land and self-build, without an architect in sight. But these individual developments often turn out to be expensive and unsustainable, generally because the owners want to build their ultimate extended family home at once ending up with huge buildings they cannot afford. As a result, construction is done incrementally, sometimes taking five, ten or even fifteen years to complete.

A Nod to the Past

The current situation is especially regrettable since the knowledge required to improve it, is available locally. Traditional

Ghanaian building methods are naturally sustainable and creative. Optimising building orientation, sun protection, cross ventilation and light weight construction to avoid overheating are just a few of the techniques that Ghanaian builders have been practising for centuries, if not millennia. Traditional village layouts consist of small and simply built houses, with many diverse open and public areas to integrate the community and foster social interaction.

Pata4Two

At OOA in Accra, we have designed a housing type that both acknowledges the past and its traditions *and* embraces the future needs of a growing, sophisticated middle-class. It is a small house, designed for the affordable areas around Accra as a showcase unit to test acceptance in the market. It has already been affectionately nicknamed ‘Pata for two’ by us (‘Pata’ means ‘little hut’ in Twi, one of Ghana’s main languages). The design follows the three main concepts learnt from traditional buildings: small, simple and local, which we think are key to building more cost-effectively and rapidly. As the smallest in a series, it is designed as a house for two people, based on a single 3-bay floor grid.

‘Pata4Two’ only occupies 10% of the plot, leaving space for another building, either the same size, or one grid longer, or even with the same footprint and a second floor, if the family grows bigger.

The first building could then be used as an office, or studio, or rented out to another young couple, who desire a stylish and affordable home.

The first model has an area of 55m², consisting of one bedroom, designed as a traditional enclosed room, whilst the other is designed as a flexible space to be opened up for other uses or more living space, as the occupants prefer.

There is a ‘bonus’ space in the open roof structure, which can be used as storage/study/gym, or simply to relax. It is accessible via a multifunctional piece of furniture that acts as both staircase and storage. This bonus space is one of the key

design features to let the small area appear much bigger and airy; to improve thermal comfort and enhance living experience.

Thermal comfort is further enhanced by the orientation of the house along a non-traditional north-south axis with all the main window openings protected from the low standing east/west sun, allowing for optimum natural ventilation and lighting throughout the year.

Verandas are utilized on the north and south sides to provide additional sun shading as well as private outdoors areas for the residents. The main entrance opening on the west wall is protected by an entrance pod that serves as both sun shading and an opportunity for outdoor/ garden storage.

The walls facing the east-west direction are deep, multi-functional furniture elements for storage, laundry, living and kitchen use. The window bands are high and recessed for shading. These walls made out of rammed earth also act as protection against thermal heat gain, and regulate the humidity in the inside of the building.

Lightweight traditional construction methods have also been adopted to aid in the control of thermal gain. These materials include wooden roof shingles with coconut fibre insulation, and timber frame walls with various claddings including shingles or timber external cladding.

We believe that 'Pata4Two' is the first step for us to motivate young architects and developers to innovate through the use of local technology and materials.

More of such housing innovations could also help to push government towards building code regulations so that sustainability is not an option but a requirement. Once it becomes a statutory requirement, industry will respond by using technology to develop, standardise and stretch the use of local materials for contemporary use. Even without the regulatory framework in place, we are working towards a future where a sophisticated home will not necessarily be an expensive one; where the ordinary Ghanaian can afford a shelter that is not just a roof over the head but a sanctuary and a haven, which speaks to, and represents, the Ghanaian soul.

Lufhereng

post-occupancy documentation

— 26'10 South Architects

Lufhereng forms part of the South African state's subsidised housing programme for extreme low-income groups. To date, 2.5 million standard free-standing houses have been rolled out country wide, at low densities on the margins of cities and towns. In the case of Lufhereng, some hard-won departures in terms of design to a seemingly immutable norm were achieved: rather than a single house typology, the project offers a choice of nine different options, thereby avoiding the monotony that is endemic to this type of settlement. Whilst Lufhereng still forms a low-density suburb, the intimate relationship of houses to the street; their proportions as well as the inclusion of verandas as semi-public thresholds contribute significantly to the quality (and safety) of the settlement.

Housing

However, it is unlikely that the original architecture of Lufhereng will be recognisable in twenty years' time. Legal ownership of land finally affords occupants the opportunity and security to invest in their properties over time, customising the standard housing types to suit their needs for additional space and income-generating activities. Following an invitation to exhibit the project in Denmark the architects returned to Lufhereng after five years to document some of the original 40m² two-bedroom houses, many of which are now being used as shops, crèches and shebeens (informal taverns). Despite having no formal title, residents continuously alter their homes to accommodate constellations and configurations, which depart from the nuclear family norm, often including rent-paying tenants. Large-scale urban agriculture is planned for future phases of Lufhereng, but it is interesting to note that this has already begun out of necessity, with many suburban plots being used for farming, both for immediate consumption and sale.

Documenting the various post-occupancy realities reveals the limitations and potential of the spatial and institutional framework underpinning the settlement. These examples demonstrate people's capacity to transcend the static nature of architecture, treating it as a mutable base from which to actualise their desires and needs. As such, the examples challenge the customary representation of architecture as a finite object. By documenting a lived reality, architecture can also be understood as ever-changing and evolving building blocks of the city.

The current 2.3 million backlog in subsidised housing, its high costs and slow implementation means the formal delivery of housing is exhausting itself. The cost of providing shelter, which most people are quite capable of building themselves, has resulted in the poorest of the poor being settled on cheap land at opportunity-crushing low densities, far away from the economy of the city. The high costs of transport to access work, education and services further entrenches the poverty cycle. In the shadow of this formal rollout, informal settlements have been expanding all over the country, often on better-located land. Here, new approaches to living are being developed out of necessity by ordinary people. A unique moment exists in South Africa, as the state embarks on the upgrade of existing informal settlements, for a major housing

delivery process to be carried out in parallel to the formal housing rollout, of which Lufhereng provides a recent example.

Urban design carried out as kWA Urbanism comprising: 26'10 South Architects in partnership with Peter Rich Architects and Prof PG Raman.

Subsidised housing design and roll-out carried out by 26'10 South Architects:
Thorsten Deckler, Anne Graupner, Sue Groenewald, Shameema Davids, Janet Lauder, Stephen Reid, Carl Jacobz, Nadine Naidoo, Dustin August, Paul Devenish, Kebafentse Mogoshi.

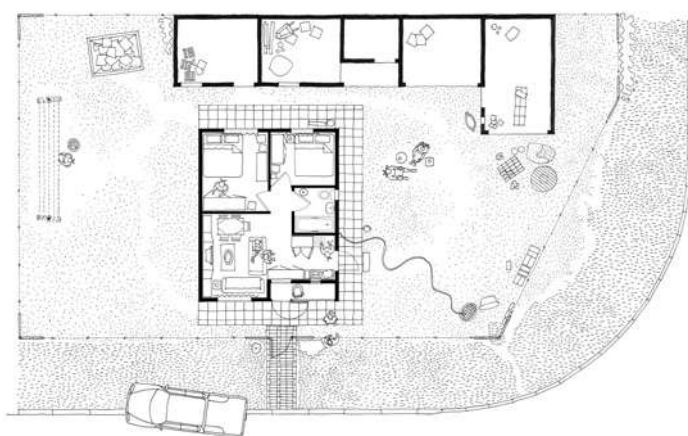
Post-occupancy documentation by 26'10 South Architects:
Anne Graupner, Thorsten Deckler, Carlo van Aardt, Kegan Stokes, Ntate Modimokwane, Rusha Malan.

Photography by David Southwood



SH1 Sophie Shivambu

After waiting 13 years for their house, Mr and Ms Shivambu along with their 2 children and 3 grandchildren moved to Lufhereng from Protea South Informal Settlement. During the day Mr Shivambu is at work as an assistant driver and Sophie runs the household as well as a tuck shop from their living room. Despite not having formal title deeds as yet, she is also busy overseeing the construction of 4 additional rooms, a garage and a bathroom in their backyard which will eventually house their children and grandchildren. Sophie's youngest daughter, Bonani (17), is busy constructing a make-shift carwash across the road from their house in order to contribute to the construction of the rooms. Both women are happy to be away from the 'cold and unsafe' Protea South. Even though Lufehreng has a high unemployment rate they feel they now own a 'proper house and a roof'.



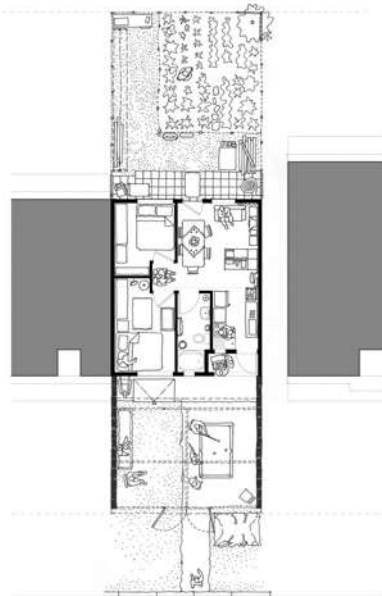
SH2 Rose Mhlanga

Ms Mhlanga's house is neat and clean with fine wooden furniture taking pride of place. Her back garden is teeming with vegetables and mealies (maize) which spill onto the empty properties next to hers. In the front garden the mealie kernels are being dried in the sun before being ground into mealie meal (a staple food). Ms Mhlanga is a single mother of a teenage daughter and son, and the produce from the garden provides her with a modest income. She lived on the original farmland which became Luffereng and after applying twice for housing (in 2002 & 2008) she was awarded her current semi-detached house. She says she is mostly happy here because it is safer and her quality of life has increased. However, she is struggling with maintenance after the Soweto Tornado damaged her roof which has been leaking ever since. There is nobody to fix it for her and she can't afford her own contractor. She intends building storage and rental rooms in her backyard but wants to wait until she receives her title deeds.



SR3
Rambilali Mokwebo

After living in a shack for 23 years, Mr Mokwebo, his 81-year old mother, his wife and 3 young children moved into their Luffereng row-house. The house is small and cramped but it is well maintained with a hand-crafted ceiling made by Rambilali and his brother. The house is always busy as Rambilali runs a spaza (convenience) shop from his entrance area. From here he sells sweets and snacks to his customers who frequent his pool table and arcade machine. In order to shelter his customers he has constructed a lightweight roof. The 'games room' (one of the few recreational venues in the area) together with occasional commissions to make ceilings form his only income. According to Rambilali, too few people have jobs and thus don't have the money to support him, which would allow him to in turn better support his family.







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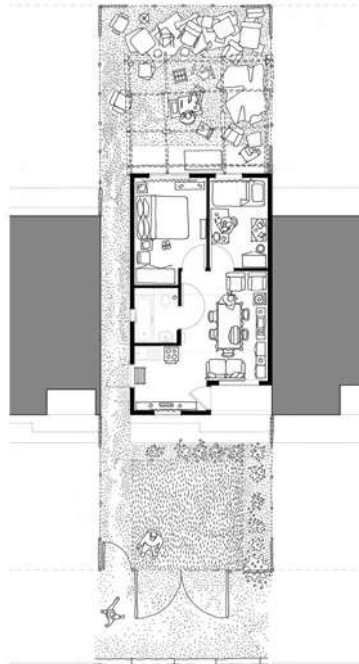
SR2 Cyril Mamaila

Mr Mamaila (35) is the beneficiary of the two-bedroomed duplex which he shares with his two older sisters (aged 38 and 42) and their 5 children. Inside it is sparsely furnished and damage done to the roof by the Soweto Tornado in 2014 left a gaping, still-leaking hole in the ceiling. Cyril's only income is from irregular 'peace jobs', and what little money he makes is shared between him and his sisters. But Cyril is upbeat and grateful to live in Luffereng: their previous accommodation was a one-bedroom worker's dwelling on Doornkop Farm which he describes as 'unsafe and dirty' and without the sense of community offered by Luffereng. He likes it here, but hopes for future developments such as a library, sports field and more job opportunities.



SR1 Stanford Banda

Mr Banda is a pensioner born in 1933 and has lived in the Protea South informal settlement before moving into this row-house with his wife and last born son. Like many Luffereng residents, a well-tended garden beautifies the front of his house. In the backyard, under a self-built shade structure, he repairs and re-upholster old furniture together with his son. Mr Banda acquired these expertise during his 22 years of formal employment in the upholstery industry. He remarked that the only stores in the area are spazas (informal shops) and that the transport he is compelled to use due to his age is too expensive. His favourite space of the house is the garden and the shaded veranda where he can sit and look into street. Mr Banda appreciates that he can walk around his house. This is practical in that he can run his business from the backyard, which is often quiet messy, with ease and out of direct sight.



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Context and Collaboration:

Investigating the Value of Collaboration in Understanding Context Through the Case Study of Two Public Mural Projects in Westbury, Johannesburg

— Lorenzo Nassimbeni

In the practice of architecture and urban design in South Africa, much emphasis is placed on the relevance of context. This text will look at how the notion of collaboration within a professional team might influence the design of a project and its interface with context. It analyses the collaborative process in two mural projects, both sited in Westbury, Johannesburg: the Rahima Moosa Mother and Child Hospital, in collaboration with 26'10 South Architects; and the mural at the Westbury Park, in collaboration with IYER Urban Studio, Local Studio Architecture and Urban Design, Counterspace and the Westbury Youth Centre.

The Rahima Moosa Mother and Child Hospital (Architects: 26'10 South Architects)

Central to the design ethos of 26'10 South Architects is the idea of a thorough consideration of context. In an economy where resources are limited for the inclusion of artwork to complement an architectural piece, a rare opportunity was provided in the form of a pristine 'canvas' overlooking the suburb of Westbury. The collaboration between architect and artist was instrumental in understanding the nuances of the community, which the building serves. It also allowed me to understand the background narrative regarding the work of the hospital itself, which produces research and medical results that have attracted world renown. On visiting the site, I stood on the roof of the building, overlooking Westbury. The layers and folds of the landscape, which are unique to Johannesburg, spread outwards in every direction. A drawing was formed in the mind's eye, an impression, which in turn, would form the basis of the mural design. An interpreted view of the landscape would become layered onto the facade of the building, which looks onto and addresses that same landscape.

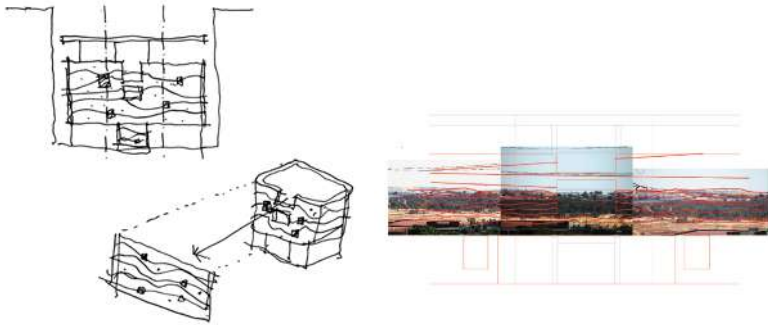


Fig.1: Initial concept sketch for mural. 2015.

Fig.2: Concept graphic - interpretation of view of landscape from the roof of the building. 2015.

The greatest challenge (and success) of the collaboration came in the technical design of the mural. The brief stipulated the use of ceramic tiles, a medium that I had not used before in a mural. Anne Graupner’s refined eye and appreciation for detail elevated the impression of the landscape to a precise and resolved architectural piece. Together, we found solutions to express the architectural language of the mural, which complemented both the building and the landscape to which both respond. In this way, the mural melded with the context of the building. The results affirm the belief that the interface between architecture and art is ‘real’, a space in which a collaborative practice can flourish and thrive. The process also introduced the use of non-freehand geometry, which extended to the subsequent project.

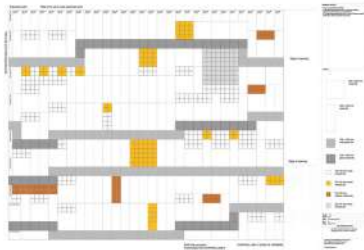


Fig.3: Technical drawing; tiling layout. 2015.



Fig.4 Final mural design. Photograph: David Southwood.

The idea of a new geometry began to take hold and gave rise to the concept for another collaborative project in Westbury, the Westbury Park mural, in collaboration with IYER Urban Design Studio, Local Studio Architecture and Urban Design, Counterspace and members of the Westbury Youth Centre.

The Westbury Park (Urban Designer: IYER Urban Design Studio in association with Local Studio Architecture and Urban Design)

The brief encouraged the inclusion of the community of Westbury in creating the mural. Through collaboration with Tahira Toffa of IYER Urban Design Studio, the idea of including both physical and historical boundaries in the context of Westbury emerged. Following this, Sumayya Vally of Counterspace developed a strong body of research regarding the boundaries of Westbury. The design strategy harnessed the site analysis skills of the members of the Westbury Youth Centre. In a guided process, the members ventured into the suburb of Westbury with cameras and began to document their understanding of and insight into the idea of ‘boundary’ with respect to Westbury’s past and present. The physical boundaries between Westbury and Sophiatown, Westbury and Newclare and Westbury and Coronationville were all included. In a workshop format, the photographs were presented and the associated narratives expressed.



Fig.5: Photograph of Westbury/Sophiatown boundary. Austin Robinson (2016)

The photographic information was used to generate a collaged geometry, which paid homage to both the composition and narrative. Seeing the park as a physical microcosm of Westbury, the collaged geometries were painted onto the walls, which refer spatially to the boundaries in the collage: an image derived from contextual analysis refers in turn to its context. Of the collaboration, Tahira Toffa commented, ‘the collaboration has inspired me to always look for opportunities to co-create our public work with the communities who will use them. This is key to making the work relevant and to getting buy-in from the community on projects they may have a resistance towards.’

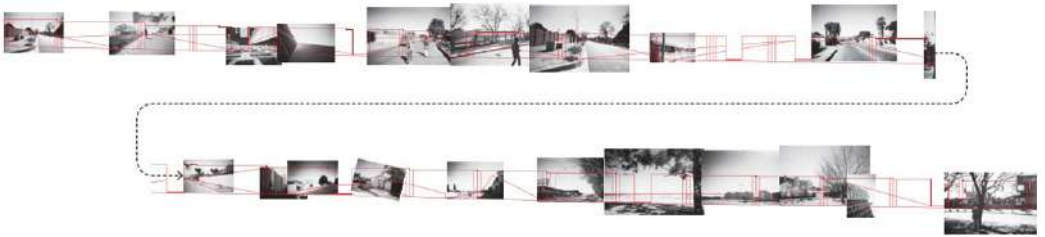


Fig.6: Process drawing: composing the photographs of the Westbury Youth Centre members to construct the mural. 2016.

Fig.7: Central wall of the park. The mural refers here to the Westbury/Newclare boundary.

Fig.8: Boundary wall of the park. The mural refers here to the Westbury/Sophiatown boundary.

Fig.9: Boundary wall of the park. The mural refers here to the Westbury/Sophiatown boundary.

Fig.10: Feature wall of the park. The mural refers here to the Westbury/Coronationville boundary.

Unless otherwise stated, all drawings and photographs by Lorenzo Nassimbeni



WHEN DARKNESS CALLS

— Leon Krige and Amlanjyoti Goswami

The night is lonely, bewitching company, Things are stark when the dark of night meets the light of buildings. A solitary photographer and a roving poet- climb stairs, a step at a time, only for a view. Each alone, in different cities. The night watches them quietly. They stumble upon photographs and poems about solitude in the city. It is an exile born from distance, if not the very condition of being urban. The dark slowly makes room. This brings perspective, and from perspective is born the need to share, with others perhaps not so lonely. This collaboration is trans-continental, Johannesburg to New Delhi to Johannesburg, crisscrossing the Internet's oceans and highways along the way.

Night 2

You shrug past
automobile repairs, radiator leaks,
Cars steaming down blank concrete.

The night is lonely as you.

Break a red light,
No one's looking.
Cross over, the other side is also
looking away.

Learn hurry, the art of
not staring - too long -

at strangers, familiar with these strange shores.

At cops wheeling past, with spinning blue tops,
leaving you behind.
Just avoid them.

Find refuge from cold
The departmental store, among cut fruits, frozen meats,
A thousand wrapped dreams – yours-
Waiting to be born

The waters from the aquarium gaze by, Mediterranean cold
It doesn't carry
the salt you come from
the stink of raw fish the beach where turtles nest on
full moons only you see
with eyes closed.

On the way,
You point the store to someone asking directions,

and wonder, startled,
if arrival is
just another journey.



A Marriage Party

A moonlit night, a rickshaw.
Decked with jewels, shining silver.
A bride and groom made room.
How did I come to be here?
Another drunk night, or sleepwalking?

Come, come, the groom said,
Tell us your story.

I started slow.
I come from the moon, I said.
And stars below.

We talked till end of night.

He asked me if I had any roots,
Or wings were all I got.

I looked around,
They are going to build a flyover nearby, I said.

Where we speak,
These roots will soon touch the sky.



Another World

These letters dance on a page.

I struggle
To grip they wouldn't
Run away.
To remember, I must
Forget the moment
Else they disappear.
I forget, so often,
To remember.

Pictures appear as stories.
Drumbeats hoove, in
The shadows of my head where
Music once stood
Calm and serene as
Winter's fading sunlight.

A different clock
Winds constant
In me.
The hours are
Seconds,
Nights pass by in
a speeding car.
But months, years,
What are they?

There are worlds
Outside these letters, these pictures
I must tell you about-

They tremble
When you let out a sigh,

When the pages flip by,
Without warning,
To a different world, a bird's cry

I taste a leaf to know

Leaving the building

I
 know
 the
 spiral
of
 night
all
 too
well
to
 descend
a
s-i-n-g-l-
 -e
 s-
 t-
 e-
 p
 further

I climb the steps back
one by little
one
till no steps are left and
I go plumb the air
till I am
the only one

fly-ing



When Logan goes walking...

...he meets petrol bombs, comic-book avengers,
the bullet he refused to fire, ghosts walking home

and that crazy thing he keeps looking for, which eludes him,
no matter where he goes. It answers his cry with silence.

It is an empty feeling, the top of the world, where Roark and Tennyson's
eagle turn into one dark, mysterious being, full of longing.

He is a bladerunner, an omnibus of possibility,
a weaver of stories, a stitch at a time.

When he spans, god-like, the dark sky of universe, the lit buildings
glint back, smiling. Ah here you are again, they say.

He is the only one left. Now that the night is fully awake.
Gotham, dark city, sinned and sinning.

His tripod rests on one foot. He –and tripod– stay frozen– on the city's lit Everest.
Movement brings murmur, attention. Pistol trigger, empty threat, release...

To be one with it all, he has to cut it all out. The irony.

He opens his arms, closes his eyes. The darkness is silent with anticipation, almost saying: your turn. He waits. The night must move first. A chess game.

The dark makes room, it spreads like colour on canvas.

The caw of day, the buzz of street, the crowd of conversation, the witchdoctor of healing, the golden sunlight. All signs of day, another life.

The beauty of night is perfect. A night owl streaks the air,
pecking a long, patient shot.

The danger of beauty. The beauty of danger. Together, alone.

But danger lies in waiting, in foreboding. Danger can only
be sensed, never understood.

In the moment, there is no danger, only beauty.

The hours drip slowly, into seconds, into moments.
Time stands still as Logan.

The moment leaves no trail. The city's history, swept from dust,
born of gold, the long day, has no place here. In perfect darkness,
there are no shadows.

Moments come together and make cities. The city changes,
a blink at a time. Shutters click, close, click, recording the
instant, for posterity. Transience is forever.

The universe is one eternal close-up.

Transforming the Poor Man's Building Block

Value Creation, Translation and
Circulation for Upcycled
Indigenous Building Materials

— Mae-ling Lokko (AMBIS Technologies Inc.)
& Ron Eglash (Rensselaer Polytechnic Institute)

Introduction

In sub-Saharan African cities, imported building materials support between 50-80 per cent, of building sector construction, making both housing and infrastructural development highly vulnerable to material price inflation from global markets (Oruwari et al, 2002:6; UNHCR, 1991:4-6). Motivated largely by the demand for affordable construction alternatives to meet rising national housing deficits, progress in the production and technical development of indigenous and renewable material streams have been gaining traction globally (Youngquist et al, 1994; Madurwar et al, 2013). While such studies have largely focused on the technical development and upgrading of production capacity for indigenous technologies, much less attention has been paid to addressing the deeply-seated social, economic and cultural barriers to their adoption that have sedimented over decades of importation.

In his book *Reading the Architecture of the Underprivileged Class*, the Nigerian architectural theorist Nnamdi Elleh offers a link between this class-associated material hierarchy and the Modernist agenda, which created ‘an elitist diametrical opposite narrative to itself by refusing to acknowledge buildings that were planned, designed, and built by the economically underprivileged who could not afford architectural services’ (Elleh, 2016). Cultural theorists have also begun to explore the historical and contemporary cultural underpinnings that European modernist and post-modernist thought played in furthering development agendas in post-colonial Africa through their employment of dichotomies (traditional/modern; backward/advanced; sustainable/unsustainable) (Celik, 1997; Le Roux, 2004).

In Ghana, where the national housing deficit has reached 1.8 million units (GMWRWH, 2015:9), recent research has focused on the use of industrial wastes for natural fiber-reinforced concrete or indigenous abundant earth materials as aggregates for cement block production. Such attempts have had limited success in terms of market penetration and do not attempt to decrease reliance on the imported materials infrastructure. Barriers to the use of indigenous materials for urban construction have been attributed to inconsistent supply chains, higher initial costs due to specialized equipment, the lack of local technical knowledge for proper

manufacturing and maintenance, lack of building performance data on local material technologies, and skilled labor and higher maintenance costs stemming from the aforementioned problems (Baiden et al, 2005; Danso, 2013; Baiden et al, 2014; Opoku et al, 2016).

A key finding in Opoku’s study, which investigated the barriers to adoption of indigenous building technologies from the vantage point of Ghanaian design and construction professionals, was that their role in influencing the use of indigenous technologies was seen as the *least* important factor and their lack of knowledge in how to use such materials as the *most* significant barrier (Opoku et al, 2015:85-86). Such studies are essential to understanding that any long-standing intervention addressing the complex construction of poor social acceptability must address not only the role of different stakeholders in creating value but also what frameworks (economic, academic, industrial) exist for the creation and circulation of value itself.

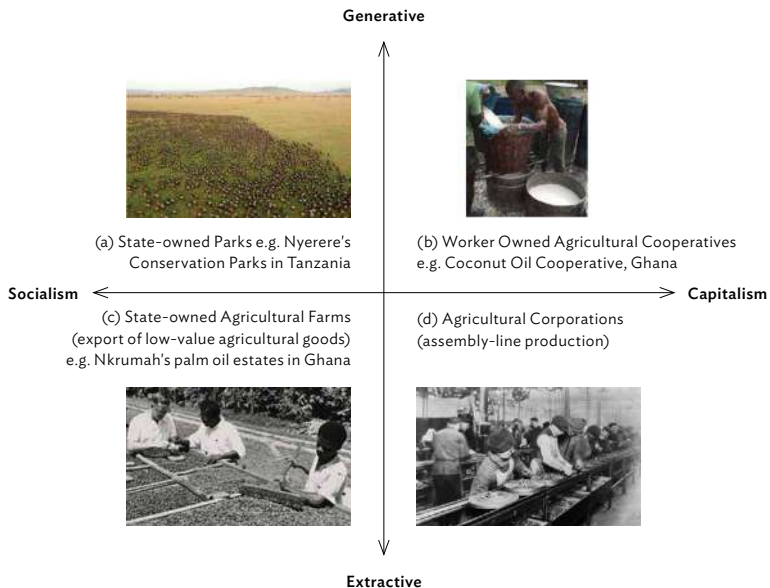


Fig.1: Situating the Proposed Coconut Upcycling Generative Justice Framework Relative to Examples from Socialist and Capitalist Systems of Value Extraction.

If we think of ‘value’ in the context of capitalism and socialism, which have in common the top-down extraction of value that is ‘alienated’ from its production mechanism, generative justice (Eglash, 2016:249) has been proposed as a fundamentally different approach characterized by the bottom-up circulation of ‘unalienated’ value (Figure 1). Alienated value is defined here as: (i) extracted natural capital that is poorly managed and insufficiently valued; (ii) cultural capital (as defined by the French sociologist Pierre Bourdieu) that is ignored in the creation and circulation of different types of capital, and (iii) social capital in the form of lack of agency in the determination of their labor value by low-income labor groups. This article uses generative justice as a framework for addressing value construction around indigenous building materials as well as understanding new roles for design professionals within this framework.

Bottom-Up Value Creation for Agrowaste Building Materials through Academic-Industrial R+D Partnerships

Grown throughout the year in 93 countries on 12.17 million hectares, the coconut palm tree is the most economically cultivated palm by small-scale farmers (Figure 2) (Gunn, 2011:1). The coconut husk is a large-scale waste by-product from the production of coconut oil and coconut water industry (Figure 3). Traditionally, the coconut husk is down-cycled into soil erosion control and tertiary household products like floor coverings, doormats, nets, ropes, and brushes (Stevens & Mussig, 2010:212-4). Ecofibers Ghana Ltd., a small-scale factory based in Ghana’s industrial center, processes coconut husk waste from large urban markets into peat blocks and fiber-rolls for agricultural soil conditioning or soil-substitute applications. However, recent advances in coconut husk research have opened a vast range of applications due to the husk derivative’s intrinsic mechanical and chemical properties (Rowell et al, 1997). Coconut agrowaste building materials pressed into flat sheets using bio-based adhesives under low energy conditions were developed sustainable material alternatives to wood and reconstituted wood products such as fiberboards, acoustic panels and environmental modules (Lokko et al, 2016).



Fig. 2: Coconut Farmer Holding Young Coconut Seedling.
Photo Credit: John Kamau.

In partnership with Ecofibers Ghana Ltd., architectural academic researchers at the CASE, RPI + SOM (Center for Science, Architecture and Ecology) investigated and optimized coconut husk processing to reduce their cost structure of production while exploring high-value added building applications. Significant research within the architectural panels market, which includes ceiling, wall, decorative and acoustic panel systems, show that increasing scale and product customization features can substantially increase product revenues. Priced at \$15-60 per square foot, depending on its performance data and finishing options, customized decorative and acoustic architectural panel systems represents a three to twelve-fold increase per square unit area over the cost of a flat sheet, again depending on finishing and panel performance features.

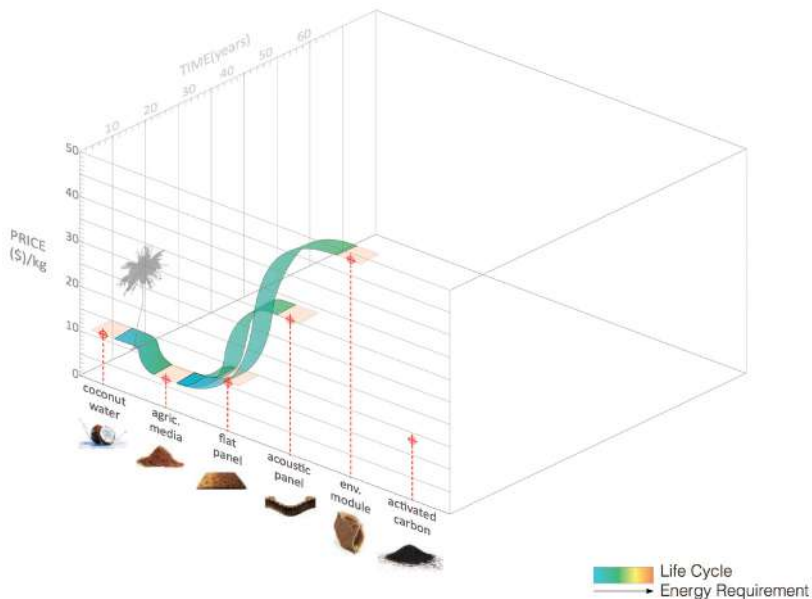


Fig.3: Bottom-Up Creation of Value from Coconut Waste by Academic, AgroIndustry, and AE&C (Architecture, Engineering and Construction) Partnerships.

Value Translation through Recognition of Alienated Capital

The identification of alienated value within the agrowaste upcycling generative justice framework addresses key economic and environmental performance gaps that have historically disadvantaged stakeholders, particularly producer groups, from participating within waste conversion value chains. As shown in Figure 4, the coconut upcycling framework consists of coconut farmers, coconut traders, distributors, architects/designers, manufacturers and building owners. Coconut farmers and traders, who make up 8-10 per cent of Ghana's rural population, serve as the engine of Ghana's coconut industry, leveraging environmental resources, shared property, political assets, and their social networks to sustain the production of 6000 metric tons annually (Amponsah, 2010:2-5).

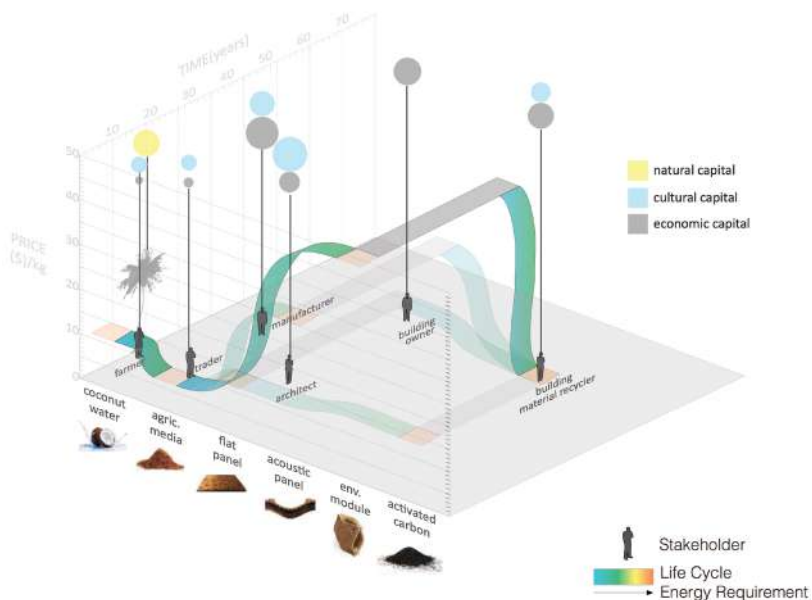


Fig.4: Identification and Translation of Value within an Upcycling Stakeholder Framework.

Advancing the conversion of cultural capital possessed by coconut producer groups into economic capital, Bourdieu introduces the core idea of 'conversion-capacity', which describes the ability to establish a monetary value on the labor market for which the holder's institutional cultural capital can be exchanged. Analogous to academic qualifications and institutional memberships that guarantee material and symbolic profits to an individual, membership to a farming community can be thought of as a manifestation of such capital. Such membership immediately bestows a range of privileges in terms of access to land security and protection, financial credit and debt extension, shared farming resources, as well as farming oversight and community regulation. Institutional capital among labor groups can be estimated in terms the monetary savings and 'equivalent cost of services' that non-members are not afforded. A tangible example of this is the distributed waste collection and processing services provided to urban coconut traders (Figure 5) who are prohibited by law from disposing of husk waste at municipal garbage collection points. Not only can the cost of services for coconut traders be estimated in terms of providing costly waste collection, their low-energy preprocessing alleviates the environmental pollution caused by conventional open-combustion practices.



Fig.5: Urban Coconut Trader at work in Accra, Ghana. Photo Credit: Mae-ling Lokko.

Activating Value Circulation through Cooperative Business Models

Due to the distributed small-scale and ‘informal’ activities of coconut traders, the cooperative business model (Figure 6) provides a mechanism for the organized collection of husk waste and opportunities for investing cooperative profits in projects that improve social security, coconut land farming practices, upcycling training and education. This differs from traditional capitalist business frameworks in which producer groups are excluded from the manufacturing optimization and profit investment decisions. Key examples of success in the cooperative business model for small-scale distributed producers have been demonstrated by local companies like Kuapa Kokoo, Ghana’s largest cocoa farmer cooperative, as well as Global Mamas Inc., a fair-trade company that supports the products of home-based enterprises run by women.

As a bridge between the agricultural farming and building material industries, the upcycling cooperative’s functions include the collection of husk waste, manufacturing production of value-added husk products, distribution sales profits according to the recognized capital contributions of various stakeholders and financial planning for the cooperative. The choice in a cooperative model is critical for its historic and political success as an alternative platform for disadvantaged labor groups in the absence of state-provided social and economic security. Historically, cooperative development has led to significant

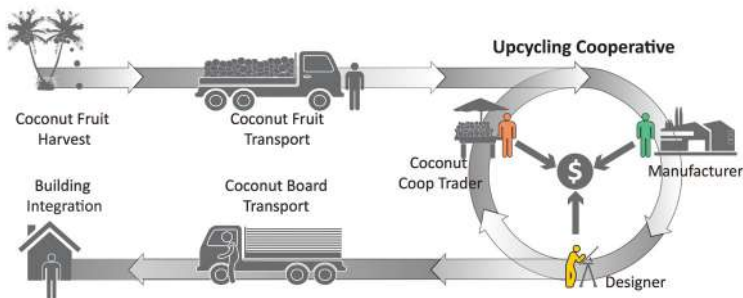


Fig.6: Stakeholders within Upcycling Value Chain from Coconut Fruit Harvest, Waste Processing, Board Production to Building Integration.

changes in the agricultural value chain, eliminating high costs associated with ‘middlemen actors’, who retain low purchase prices from farmers, despite high profit margins. More importantly, the cooperative group has the cumulative capacity to develop formal relationships with the government, and in conjunction with AEC communities, leverage state resources towards the research and commercialization services, increasing the capacity of agricultural-building sector cooperatives to diversify and generate different streams of profit from agricultural by-products.

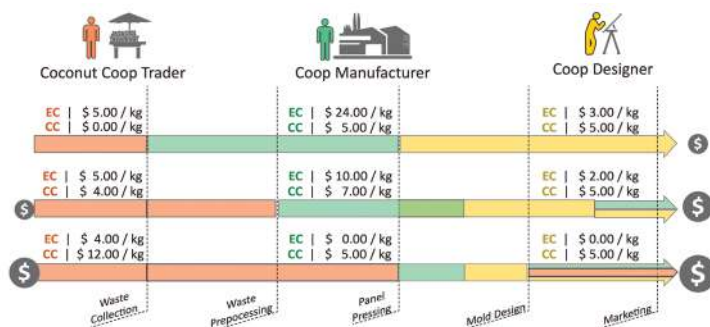


Fig.7: Near to Far-Term Profit Distribution Cycles within Upcycling Cooperative According to Economic Capital (EC) and Cultural Capital (CC) Contribution of Upcycling Cooperative Stakeholders.

Once coconut building materials are sold directly to target customers, an example of the near- and long-term decision-making frameworks for redistribution of capital by the Upcycling Cooperative is shown in Figure 7. For each upcycling stakeholder, the economic (EC) and cultural capital (CC) contribution is shown in terms of an economic value. To derive a common currency, cultural capital values are estimated as economic values, based on time and production cost-savings, as well as projected contributions to market identification and expansion. The proposed value production and distribution cycle shifts from a short-term semi-industrial to a longer-term, distributed grassroots model. The first cycle of profit distribution estimates that the coconut traders earn only \$5 per for each kg of coconut panel sold while coconut manufacturers, \$29. While this is a huge disparity in earnings, this is proportional to the economic and cultural

capital contribution of manufacturers who have to provide an initial heavy investment in processing and production equipment, while the role of coconut traders is mainly limited to waste collection. The second cycle shows how the design and building of small-scale milling machines for producer groups that substantially reduce transportation costs of bulky husk waste, as well as eliminate a critical step for board manufacturers in processing the husk into fiber sheets before pressing. In the third cycle, the production process of building panels is operated by distributed groups of coconut producers who are able to collect and manufacture waste into building panels, while manufacturers and designers support production by iterative experimentation and advancing new applications for agrowaste into building and other industrial sectors.

Projecting New Roles for the African Built Environment Professional Within Upcycling Frameworks

Leveraging renewable agrowaste resources as an alternative material feedstock for the building sector can play a pivotal role in ‘closing’ material life cycle gaps between interdependent sectors of African economy. Yet, because the valorization of agrowaste within the building sector is dependent on matching its intrinsic properties with waste-conversion processes that satisfy composite, deep-seated building performance criteria, the built environment professional is challenged with the task of constructing value proposition frameworks to maximize and sufficiently characterize the impact of upcycling applications to various stakeholders. The implications of this upcycling framework on the traditional architecture and design professional’s domain of expertise, expands their role from that of ‘technology-recipients’ to ‘drivers for material innovation’.

Within this case-study, upcycling framework, involving multiple academic disciplines and their own funding boundaries, built environment researchers are consistently required to venture outside their domain of expertise and engage in highly experimental propositions. Partnerships with industrial stakeholders are critical in narrowing with industrial stakeholders are critical

in narrowing experimental goals and accelerating the development process. African built environmental professionals play a pivotal role in understanding and expanding the design criteria for performance that guide the research and development agenda. In the context of high performance materials development, using low-tech waste resources, parallel work in contemporary Ghanaian art practices have been instructive in their methods of production, formal material logic and their ability to construct and translate value within the art market.

Ghanaian artist El Anatsui, through his intricate use of fragmented metal tins and bottle tops, transforms conventional metal can tops into sculpted installations reminiscent of traditional Ghanaian patterned cloth worn over the body. His artworks have opened up a complex discourse centered on industrial mass consumption patterns that rely heavily on both the historical exportation of low-value added goods from developing nations and importation of high embodied energy material systems for development. His work has influenced a generation of contemporary Ghanaian artists who use commodity artifacts like cocoa export hemp sacks, domestic plastic oil gallon containers and plastic water sachet bags to engage the economic, environmental and social issues around waste (Figure 9). In doing so, such contemporaries have expanded upcycling material criteria beyond ecological resource efficacy and non-toxic production to include culturally-situated design and wide-reaching generative justice agendas.



Fig. 8: Transformation of Commodity Waste Within Contemporary Ghanaian Art (a) El Anatsui's use of waste aluminum bottle caps and copper. Photo Credit: Muzina Shanghai. Permission Granted by Flickr Creative Commons (b) Serge Attukwei Clottey use of plastic oil gallons. Permission Granted by Owner (c) Benjamin Okantey's 2015 'Chale Wote' art festival installation using water sachet bags. Permission Granted by Owner (c) Ibrahim Mahama's use of cocoa export sacks made of hemp. Photo Credit: Mae-ling Lokko.

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The People vs. The Rainbow

— Tuliza Sindi

What is the prosecution being judged for? Youthful idealism. The prosecution criticises who they are, rather than addressing the issues. They blame the youths' supposed blind spots for not understanding the full picture.

What is the defendant's agenda? The ANC's agenda is that, no matter what, they cannot be as bad as the apartheid regime, because at least wealth is now accessible to all because everyone is free.

Characters

Judge:	The Economy (Judge Feeder)
Defendant:	The ANC, representing a failed democracy & representing themselves (Mr Freedom)
Prosecutor:	The Born Frees (Ms Free)
Perpetrator:	The Rainbow Nation Ideology, created and sustained by the old (and new) ANC (The Rainbow)
Accuser:	The People (The Citizens)
Broadcast Journalist:	The Design Industry (Mr Stagnant)
Unofficial Trial Journalists:	The Democratic Alliance (Mr Righteous) & The Economic Freedom Fighters (Mr Ruffle)
Charges:	The Rainbow is a Lie.

Proceedings

Mr Stagnant: This is Mr Stagnant, reporting on ‘The People vs. The Rainbow.’ Now, there has been much talk about the way that the trial is unfolding, with many comparing this to the OJ Simpson trial and some even going so far as to label it ‘our Trial of the Century.’ We have with us Mr Ruffle of the EFF and Mr Righteous of the DA, the trial’s unofficial reporters. They have pledged to help us understand this comparison as we wait for the trial to begin proceedings. So, Mr Ruffle, Mr Righteous, thank you for joining me. Well, finally, we have one thing you can both agree on. *Can you explain this comparison to us?’*

Mr Righteous: Sure, Mr Design, and thanks for having us. Well, the OJ Simpson trial had very little to do with OJ Simpson. His celebrity status and reach simply became a vehicle for all kinds of other issues. The prosecuting team aimed to prove that no one is above the law, while the defence team aimed to prove that no one is above their ‘blackness’ in the face of the law. The jury’s mere four-hour deliberation showed the jury members’ clear choice of agenda and bias. Although it was a victory against police brutality and the unfair sentencing of minority groups, the bigger picture – and the one which came to stand in for the truth of the case – was a different story. A black

man allegedly kills his white ex-wife and he gets away with it by using the ‘race’ card. You have to remember, too, that not much has changed since then. We now have a case that is remembered not for shedding light on a serious issue – murder – but rather on the American justice system’s inability to enact fairness, because justice can be manipulated, biased, bought or bent.

Mr Stagnant: So what does that have to do with us, Mr Ruffle?

Mr Ruffle: Thanks, Mr Design. Well, imagine our prosecution team as ‘The People’, who have set forward an agenda: that equality is a verb, an act, if you will, that should be enforced through active forms of justice. ‘The Rainbow’ is the defence team and their agenda is to enact the inherited idea of progress, restitution and reconciliation. What The Rainbow have on their side at the moment is the threat that comes with violence. Violence is to this trial what OJ’s celebrity status was to his. In other words, violence is a vehicle for addressing all sorts of other issues.

Mr Stagnant: Hold that thought Mr Ruffle; we’re being told the trial is about to begin. Let’s cross over to the live proceedings.

Voice of court official. ‘All rise.

The court is now in session. The Honourable Judge Feeder presiding. You may all be seated.’

Judge Feeder: All right, here we are. The Rainbow ‘matter’. Welcome, counsel.

Ms Free: Can we approach your honour?

Judge Feeder: Oh? We haven’t even begun. Fine. Approach.

*Counsel approaches bench.

Ms Free: Your Honour, the defence has no qualifications that allow him to represent himself. He is making a mockery of this very serious case.

Judge Feeder: Well, he’s within his rights to do so, Ms Free. It should work in your favour, no? Let’s proceed. Rainbow, how do you plead?

The Rainbow: Unequivocally not guilty, Your Honour.

Judge Feeder: Let that be on record. Ms Free, you can commence with your opening statement. As this is an unusual trial, opposing counsel will be allowed to make objections to the opening statements.

Ms Free: Thank you. Your Honour, I can’t believe it’s come to this. Let me begin in 1994. The People were offered the world, some would say

rightfully so. The talk was of peace and reconciliation; economic freedom; access to education; access to housing and basic services and access to policy . . . things so many people died to establish. Rainbow is sitting over there. I’ll remind the court again: many died to have him here. It must make him special then, right? He’ll be twenty-three this year, and in those twenty-three years he hasn’t fulfilled any of the promises that were made. Let me tell you what he *has* done. He has kept a romanticised image of our freedom alive in the likeness of Nelson Mandela, so that we would think that we are more free than we feel and know. He’s given us the same houses as the apartheid government did, only he changed the name and placed them too far from schools, hospitals and other basic infrastructure. Then he bragged about quantity over quality.

“He has kept a romanticised image of our freedom alive in the likeness of Nelson Mandela, so that we would think that we are more free than we feel and know.”

He has prioritised nepotism and corruption at the expense of our access to good basic and higher education and has even denied that racism still exists! Now, Your Honour, how can he, who was supposed to help us, deny that the problem even exists? We need a real and better Rainbow, Your Honour. He's remained a pipe dream!

Mr Freedom: Objection, Your Honour. Speculation.

Judge Feeder: Accepted. Ms Free, please stick to the matter at hand.

Ms Free: Certainly, Your Honour. Rainbow promised to fill a role that no one else can. Why do we have tertiary education fees that only five per cent of our population can afford? Why do we still live in areas outside of the cities and their infrastructure? Why do we still feel like we are entering someone else's territory in our own land? Why has infrastructure not extended into our townships? What are we doing about inherited generational poverty? What are we doing about the graduates who sustain their extended families because they're the only ones carrying the load? Why does BEE make us feel like everyone is doing us a favour, as if we otherwise wouldn't be able to fill our positions, in spite of the qualifications we carry? When will we get our dignity back? Why are they still teaching us about everything foreign? Why are they not teaching us about ourselves, *our*

our fights, *our* innovations, *our* beliefs, *our* potentials, *our* greatness, *our* futures?

Mr Freedom: Objection, Your Honour! *Can she bring proof of those claims?*

Judge Feeder: *Ms Free?*

Ms Free: I *do* have evidence, Your Honour, but I would like to point out that there have been many cover-ups from the defence, which is why he can object so confidently! I *do* have proof of my claims. I *do* have proof of our low levels of access to education, our low basic education standards and revised history books, tweets from the official government profile and public statements that deny the presence of racism and the many corruption scandals that have been corroborated by our then Public Prosecutor, Thuli Madonsela. The Rainbow has and continues to violate the Constitution, Your Honour. The figure that was brought to uphold it is violating it. Now that, Your Honour, sounds awfully like a Trojan Horse to me! Nothing further.

Judge Feeder: Thank you, Ms Free. Mr. Freedom, you're up.

Mr Freedom: Thank you, Your Honour. Now, I hope that the law is still about facts and not emotion, as was clearly the whole basis of Ms Free's victim-like argument.

Ms Free: Objection, Your Honour!

Judge Feeder: Yes, Ms Free, agreed. Mr Freedom, please refrain from making pointed insults at the prosecution.

Mr Freedom: Your Honour, the truth hurts, but it is important to say it anyway. When I was tasked with the role of magically healing a very divided country, I was told that it would be the job of *all* of us, every single one of us. It was written into the Constitution! *I* would argue then that the whole nation has violated the Constitution on those terms, not just me. I was not the present – pun intended, Your Honour – I was the future, what we were supposed to be working towards. If The People did nothing, I would become nothing. *It's taken them fifteen years to raise the alarm?* Look, I am not denying that I've failed, but I will not take the

"I was not the present – pun intended, Your Honour – I was the future, what we were supposed to be working towards. If The People did nothing, I would become nothing."

blame. I failed because *they* failed. They pretended for so long that nothing was wrong! They skirted round the issues, smiled too broadly at those with power, especially if they could benefit. They took unfair pay, started to accumulate money, rather than fight the national fight. They painted me as more corrupt than the past, they kept their own people down in order to get a corporate upper hand! After political freedom they simply stopped fighting. I did everything I could, but this fight wasn't mine alone. They became selfish individualists and so did I. I am simply a reflection of The People. If I am on trial, then they must be too! Thank you, Your Honour.

Judge Feeder: Thank you, Mr Freedom. Calling the prosecution's first witness to the stand, Lonmin.

Ms Free: Thank you, Your Honour. I won't keep you for long, Lonmin, considering your very recent trauma. What was the reason for your protest and the resulting tragedy between August 10th and September 20th of 2012?

Lonmin: What else? We tried to demand higher pay. The low-income wage rate is too low, while our bosses and international bodies accumulate more and more wealth at our expense. It wasn't the first time we said it, and it won't be the last. It is not just me

saying this, every single low-income wage industry is saying it and we'll kick down all the relevant doors to change it, even if we die in the process.

Ms Free: You feel very strongly about this, I see, and with reason. Now how did Rainbow respond to your claims and pleas?

Lonmin: He attacked me. He shot and wounded me in the back, from afar. It was the most lethal use of force by the South African security forces against my kind since the Sixties. It was literally as bad as in the times of apartheid. There are parts of me that no longer function. Who shoots at the people they are supposed to protect? How can my asking for what I need be a nuisance to the person who is supposed to provide it? Is that not making his job easier? He is just like the past.

"There are parts of me that no longer function. Who shoots at the people they are supposed to protect?"

Ms Free: Lonmin, is it safe to say that, on top of not having your relevant pleas heard about low wages, Rainbow

has made it even harder for you to work to earn that very little income?

Lonmin: Without a doubt. All Rainbow has done is to make everything harder and, at the same time, upholding a false picture of freedom. That picture makes it even harder for us to say how much is still so wrong. We made history that year in the worst possible ways: we were involved in the highest recorded strikes since freedom and we were killed off more times than ever. You tell *me* what good he has done. I can't think of any and I don't want his freedom.

Ms Free: Thank you, Lonmin. Your scars are a sobering reflection of the reality Rainbow has made. No further questions. I'm sorry for what you had to endure at the hands of the defendant.

Mr Freedom: Lonmin, I'm going to get straight to the point because my job is to work with hard facts. I have nothing to ask you Lonmin, because I won't deny that what happened to you was criminal. What I'd rather do is make the desperation I felt at that time clear. The mines do not belong to us as a nation; they belong to business entities. As much as that is a problem, it is a big factor in what sustains our economy. If you were in government, we could have done more. But you're not in government. You work for private interests and just like so many other private firms, they

pay too little. It's not easy for us to just take ownership of our mines. Our economy would collapse in a second. We also can't easily increase wages. Now, imagine my having to weigh out those options all the time. The image of freedom helps ensure that we keep getting investors. It ensures that our economy doesn't collapse and, sure enough, it also ensures your low wages. I doubt that you would get more pay in the alternative scenario, so I'd prefer to see you where you are, less worse off. Ms Free has filled your head with fantasy scenarios that will not solve the big problems any time soon. Nothing further.

Judge Feeder: Alright, if there is nothing further for Lonmin, he may leave the stand. I'll now call prosecution's next witness, the Strategic Defence Acquisition or Arms Deal of 1999, hereinafter referred to as the SDA.

Ms Free: Now, SDA, Rainbow brought you in just four years into freedom, between 1998 and 1999, while Nelson Mandela was still in rule. *Is that true?*

SDA: Yes, that is correct.

Ms Free: The Defence will probably think that I'm out of my depth with you because I was only four years old when you came along. It's a criticism that persists, that I am too young to know our country's truths. Let me ask you this ...

Mr Freedom: Objection, Your Honour! That's hear say. She can't speak on my behalf!

Judge Feeder: Noted. Proceed.

Ms Free: SDA, we can talk about how you initiated corruption, but I would prefer to begin by talking about our country's moral fabric. Nelson Mandela set the tone. He was a true reflection of our country's heroic, humanist and righteous moral stance. Early on, however, you crept in and corrupted that, again with the help of the Defendant. You pulled in some of our other heroes, Mbeki and Zuma, and we now hear how they channelled money through the Nelson Mandela Children's Fund under the pretence of building schools. I have no questions for you SDA. Your guilt has already been proven. What I want to make clear is the fact that *you* started it. The destruction of our freedom began as soon as it was won! What chance do we have as a people if our greatest heroes start destroying what they were once prepared to die for? You made it happen, from police corruption to tenders; to the Hawks, Nkandla, Home Affairs, Eskom . . . you name it. If a system is rotting from the inside, what are our chances of saving it from the outside? Maybe that question should be directed to the Defendant. I want your presence here to be captured by all of our

current newsmakers, because you remain as newsworthy now as you were then. Oh, how you've bred!

Judge Feeder: Mr Freedom?

Mr Freedom: SDA, my old friend, I'm glad you didn't say anything. It would have actually worked against the Prosecution, they just don't know it. Let me salvage your reputation and I'll make this quick. I did it, yes, and I did it to ensure that I have a lasting legacy that doesn't include systemic poverty. I do things that allow me to survive. The People forget that we were not given a 'sweet' deal. We inherited the *look* of freedom, not freedom itself. We have inherited an environment that requires constant hustle because it is rigged. It's what I do and will continue to do:

"The destruction of our freedom began as soon as it was won! What chance do we have as a people if our greatest heroes start destroying what they were once prepared to die for?"

hustle. You can't survive in this place any other way. What am I supposed to do with a rigged system if not collapse or destabilise it? And that will have casualties, you know. It is not possible for me to win *with* The People, because they never won in the first place! So you, SDA, are the truest reflection of survival in a system that will kill you if you don't make a plan. My only crime is that I didn't tell The People that this is how it would be.

Ms Free: Your Honour, are you really going to accept this mockery? This is all deeply offensive!

Judge Feeder: Ms Free, calm down, please. He has the right to argue his point! Put your emotions aside. Mr Freedom, if you're finished with this witness . . . ?

Mr Freedom: I am, Your Honour.

Judge Feeder: Then we shall proceed with the prosecution's last witness, Facebook.

Ms Free: Thank you, Your Honour. Facebook, you've managed to gather the most personal information, impressions and opinions from the world for the past ten years now. How biased are you?

Facebook: Not at all. People are biased, but *I* am not. If I block someone, it is

because someone else asked me to. I do nothing of my own volition.

Ms Free: Does that mean, Facebook, that your data could find me as equally at fault as our Defendant and that I could be putting my own defence at risk?

Facebook: Absolutely. At the moment, although one in four users falsify facts, Facebook inspires more truths than untruths. Lies are made primarily about careers and material possessions, sometimes physical appearance, age and relationships but seldom about politics. Users prefer to *not* say anything, rather than lie about their political beliefs. I am the greatest repository of true human thoughts and opinion. I think that makes me quite legitimate.

Ms Free: Now, we've seen how you've been used to start revolutionary movements and gather mass support, so, can we safely say that the people that use you are not just bored citizens with strong personalities behind a screen? Is that a safe assumption?

Facebook: Yes, that is true, and I cannot prevent or enable any of it. That is also further evidence that I am unbiased.

Ms Free: Can you briefly breakdown how South Africans use Facebook?

Facebook: Certainly. Twenty four per cent of your country uses me.

Mr Freedom: Your Honour, I don't see the point of this line of questioning. What does this have to do with the trial?

Judge Feeder: Ms Free, where are you going with this? Get to the point.

Ms Free: Facebook, is it possible that the strikes that have occurred in the universities throughout our country were instigated through you and the other networks?

Facebook: Hmmm. Well, I certainly helped. What increased its reach and impact was by students that became reporters as well. Where mainstream media failed them with false reports, they used me to create a media truth. They made sure *their* truth spread further than that of conventional media. That helped them keep the momentum going.

Ms Free: Now why would a happy population do this?

Facebook: The People are not happy. They talk all the time about the crimes of the past. The young are carrying the pain of the old. There are fear-inducing groups on both sides – whites who make other whites believe a white genocide is about to happen, blacks believing they will forever be oppressed. Hope wins over once in a

while with reconciliatory-type groups but they're usually reacting to destructive patterns.

Ms Free: So, is it safe to say that The People are dissatisfied, frustrated and betrayed? With good reason?

Facebook: According to my data and storage, yes. You understand politics and discuss it. In fact, you use good humour to deal with the reality of your politics. It doesn't, however, make them *less* unaware. Their anger is founded in truth. I think the majority of people are looking for people to accept responsibility; their part; whether that's the government, schools and academics, white people . . . foreigners. I don't think they need it in order to absolve themselves of responsibility. I think they are doing it partly because they feel like they are the only ones who've see things for what they really are; and they feel alone. So, I suppose The People feel a bit like The Rainbow does, like they've been carrying the weight of the national project on their own. More similarities between them than they might realise.

Ms Free: So, to be clear, The People, according to your data of people's deepest thoughts and opinions, feel as though they've been failed?

Facebook: Yes.

Ms Free: And you make that assumption because they continue to take physical mass action?

Facebook: Yes.

Ms Free: Well, with that . . . thank you and nothing further from me.

Mr Freedom: Facebook, thank you for clarifying how many lies go through your system. Now, did you not help me sustain the Rainbow vision?

Facebook: Yes, but as I keep telling you, it wasn't me. It was my users.

Mr Freedom: Sure, but if they're as unhappy as you say they are, why would they sustain the lie?

Facebook: That's a human glitch, not mine. I am unable to provide an answer for that.

Mr Freedom: You actually have, thank you. Nothing further.

Judge Feeder: With that, we move onto the Defence's witnesses.

Mr Freedom: Your Honour, permission to approach the bench.

Judge Feeder: Approach.
Counsel approaches bench.

Mr Freedom: Your Honour, I would like to only call one witness in, but

he's not on my list. I've changed my strategy through the trial.

Ms Free: Your Honour, you can't allow it. We don't know who it is, so we haven't prepared an argument.

Mr Freedom: Your Honour, permission to recess until tomorrow to allow opposing counsel to prepare.

Judge Feeder: That's fine. Mr Freedom, who is your new witness?

Mr Freedom: Knowledge, the University system, Your Honour.

Ms Free: That doesn't make sense! I don't understand—

Judge Feeder: Then that should work well for you, shouldn't it, Ms Free? Let's pick things up tomorrow. Court dismissed.

Mr Stagnant: Well, folks, that's the wrap-up of the first day's proceedings. We'll reserve opinions from both Mr Ruffle and Mr Righteous after the end of the trial. Catch us tomorrow, same time for the live broadcast. Good night.

The next day:

Mr Stagnant: Hello again and welcome to 'The People vs. The Rainbow'. We're told that the trial is starting right away so let's cut straight to it:

All rise. The Honourable Judge Feeder presiding. You may be seated.

Judge Feeder: All right, let's wrap this up. I hope you are both prepared. I now call on the Defence's witness, Knowledge.

Mr Freedom: Knowledge, thank you for being here. I'll just get to the point. What do you do when you see what is happening in our society? In terms of making anger productive or dealing with the psychological aspects of the past . . . creating solutions or provoking deeper thought?

Knowledge: Well, one could argue that I created – or at least influenced – the students who reveal your lies. It is important to mention that I need time to disseminate my views and become a part of popular behaviour. To judge what I have done based on immediate moments is not the right way to approach my impact and influence. I am constantly changing and evolving.

Mr Freedom: How is that true if the demographics of your teaching staff have barely changed; not to mention the students, since the majority cannot access you? After all, it isn't just up to *you* to create diversity. If there are visible forces that prevent you from creating diversity, how are you evolving?

Knowledge: You're right, but those factors were supposed to be handled by you. You were supposed to put enough in place to alleviate those obstacles. You have done the opposite: you've made basic education worse and lowered subsidy funding for underprivileged students, which in turn forces me to have to ask them for more money. I don't know why you would mention a lack of diversity when *you* are responsible for that lack.

Mr Freedom: Oh, Knowledge, you forget yourself! You are averse to change. You are your main obstacle. What have you done with the bit of diversity that you've had so far? Why do you still look the same and why should we trust you with *more* diversity, when you ignore and neglect that which you already have?

Knowledge: Look, I'm fighting greater forces than myself! I have to answer to international systems of knowledge production. I don't exist in a vacuum. If I accept every tiny, little diverse truth, we run the risk of becoming too niche and irrelevant to everyone but ourselves! It is in our best interests that I do not change too much.

Mr Freedom: I was designed to change: *you* were designed to stay the same. The irony of it!

Knowledge: Well, we're all made for different purposes, right?

Mr Freedom: Let me tell you why I changed my strategy, Knowledge. I was going to go after big money, white monopoly money, but, you see, *you're* the one who nurtures and sustains it. Students who have inherited privilege do not leave *you*, our highest source of thinking, having learnt that something might be wrong with their inheritance. And our disadvantaged students do not leave you knowing how to create better or new realities. No, they simply leave with skill sets that position them squarely into the rat race. Now, Knowledge, *I* was not created to push the envelope of our thinking so you needed to step in and fulfil that role. But you haven't even begun! How will I ever evolve when you don't? Do you want to know the difference between my responsibility and yours?

Knowledge: Something tells me you're going to enlighten me.

Mr Freedom: My responsibility is founded on hope and imagination, yours is founded on truth. Your responsibility can extend into mine. You can create hope but I can't create truth, I can only become it. The People need you, but they don't necessarily need *me*. So I ask the court, why am I the one on trial? Nothing further.

Judge Feeder: Ms Free, your final witness cross-examination, if you please.

Ms Free: Knowledge, you have a huge responsibility, don't you? You're expected to exist on international standards' terms, while ensuring we have a pliant workforce in a nation with a 'barely-there' middle class. On top of that, you've got to ensure that our thinking evolves and affects society progressively. Can we sum it is as that?

Knowledge: Yes, we can.

Ms Free: Knowledge, can you be bought? Can the government or the economy of the law buy you?

Knowledge: Yes, but that depends on how I was designed. Part of me was designed for religion, part for politics. I belong to the public and the government helps sustain me. I am not, however, influenced by them in terms of what I pass on intellectually. I am more influenced by academics and students. They are who sustain me.

"Part of me was designed for religion, part for politics. I belong to the public and the government helps sustain me."

Ms Free: So, you need diversity, is that what I am hearing?

Knowledge: I would say so, yes.

Ms Free: Is it Rainbow's job to enable your access to diversity in the first place, or is it your job to evolve our thinking so that diversity has a place when it comes?

Knowledge: I think Rainbow would have to fulfil *his* role first before I can go about the business of evolving. My evolution needs force, because I was designed to *not* change, as we mentioned earlier. I cannot change if I am not exposed to a force that gives me no other choice *but* to change. There is only so much that I can control, because we must not forget that I, too, am created and am dependent.

Ms Free: That will be all from me, thank you, Knowledge.

Judge Feeder: Thank you counsel. Closing arguments, Ms Free?

Ms Free: Your Honour, I will be brief, because I think there has been clarity. We have been exposed in the court to Rainbow's admittance and actions from harm to corruption to mass societal dissatisfaction. It is clear that something is very wrong, no matter what the verdict is today. It cannot be denied and it must

continue to be the national project. Thank you.

Judge Feeder: Thank you, Ms Free. And you, Mr Freedom?

Mr Freedom: I'll also be brief, Your Honour. As mentioned, you have all heard my admittance and actions, but you'll have also heard how this task has always been bigger than me. I was geared to fail because I have not been assisted by the other components of the machine. Now, how can I be punished for doing exactly what I was given the capacity to do? That's all.

Judge Feeder: Alright, you both seem confident. We will recess and come back in an hour. I will review both sides and a verdict will be made. Court dismissed.

Mr Stagnant: What a round up! I can't tell which way it will swing. Let's cut to interviews and opinions on the ground until the court assembles again.

Broadcast of interviews on the ground

Mr Stagnant: Mixed opinions from the ground too. Well, our suspense is about to be relieved because they're going back into the court, so let's cross over to our 'Trial of the Century'!

All rise. The Honourable Judge Feeder presiding. You may be seated.

Judge Feeder: This has been an exceptionally difficult ruling. The topic is too complicated for one trial because the issues keep and will keep evolving. Allow me to explain. It is in my best interest to rule in favour of Rainbow, because he sustains me in both right and wrong ways. I have not fulfilled my own constitutional duty either because I myself have shirked my duty in terms of my own evolution. I am seldom held accountable. The likes of Mr Ruffle will talk about destabilising me rather than report the actual trial and Mr Righteous will attempt to demonise me. There are big choices to be made by you, The People, which will either destabilise you now or later. Either way, be prepared for immense discomfort and loss. We cannot for the moment afford to lose Rainbow because he fails *only as a result of our failures*. What will become of us if he disappears? What will the measure of our progress be? I rule that we put others who have failed to fulfil their national duty on trial, starting with Knowledge. And with that, the court finds the Defendant . . . NOT GUILTY! Court dismissed!

Mr Stagnant: What a turn of events! A new trial; a new defendant! I am in shock!

Mr Ruffle: This is incredible; I would say even a step in the right direction. What do *you* think of the verdict,

Mr Stagnant? I curious to hear your thoughts on this.

Mr Stagnant: Well, it looks like Knowledge was not only presented as outdated, but also untrustworthy. It was implied that Knowledge has managed to prove on a recurrent basis that he is incapable of giving a true reflection of its society. For someone who is supposed to make trends rather than follow them, we have to criticise his influence. The fact is, right now, to ask Knowledge to reflect society would be to exist outside of industries' interests. It would be an act of rebellion simply because we are not modelled to be accommodating of such forces.

Mr Ruffle: So, just as O J Simpson's trial now stands as one of the clear precursors of the trajectory of the #BlackLivesMatter movement today,

would you say we stand with our possible futures in sight?

Mr Stagnant: I can only speak for myself as Design, I cannot speak for the whole of Knowledge. Design thinking grants individuals the capacity to piece together enough factors to not just predict possible futures, but to also test them. In the face of society's call for those crucial skills to be put into effect, we can no longer afford to regurgitate old-fashioned, colonial Thought. At this point in time, we have to start listening to the things *not* being said; which is a revolution on its own in a country with a majority that feels unheard. I guess it's time to start confronting our industry demons!

Mr Righteous: To be continued?

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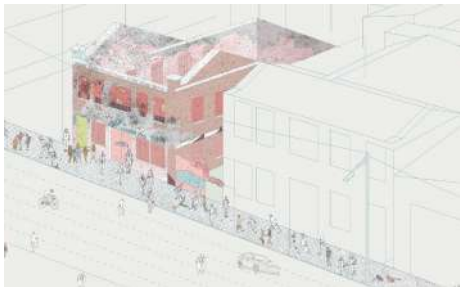
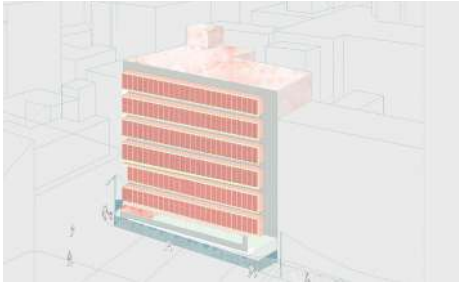
Facebook pages as discussed in the Trial: <https://www.facebook.com/stopwhiteSAGenocide/> , <https://www.facebook.com/www.SouthAfricanWhiteGenocide/> ; https://www.facebook.com/groups/1043668025644157/?hc_ref=SEARCH ; https://www.facebook.com/groups/174985422642759/?hc_ref=SEARCH

The Aesthetics Of Absence

— Counterspace (with additional imagery by Euridice Pavia)

The *Aesthetics of Absence* is a multi-disciplinary project that documents the fluctuating conditions of some of Johannesburg's so-called 'bad-buildings'.¹ Displayed through 'before' and 'after' spatial accounts in the form of drawings and short texts, the structures display Johannesburg's policy of erasure of the unsightly, an exquisitely superficial strategy in response to the city's complex urban problems. Counterspace sees the eviction policy in terms of an 'aesthetics of absence', documenting the eeriness of the erasure process – freshly painted colourful window panes; 'To Let' signs; benches for private security guards – rather than signs of progressive urban development.

¹ 'Bad buildings', as defined in the City of Johannesburg's 2009 strategy document (Charlton et al, 2009), are buildings which were once compliant in terms of structural integrity, management, occupancy and use, but which have become dysfunctional in these terms. Typically these bad buildings are informally occupied by lower income city residents and fail to meet the municipal, provincial or city by-law requirements in a manner that threatens the health and safety of occupants, neighbouring buildings and the environment.



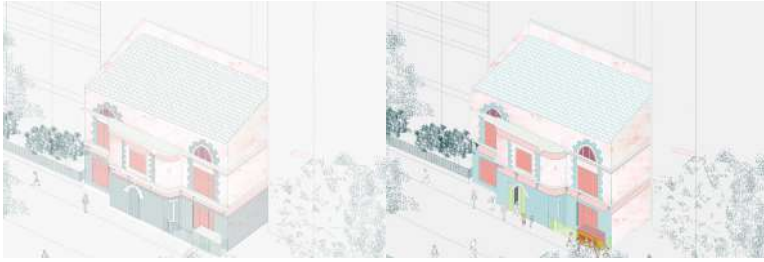
Not a 'No-Go' Zone

— Jhono Bennett

Twenty years into post-apartheid urban re-development, Johannesburg's Central Business District, or 'downtown Jozi', is still seen by millions as a collective 'no-go' zone, dangerous and crime-ridden, a narrative fuelled in part by Northern Suburban dinner party horror stories of 'smash-and-grabs' and popular films like *Jerusalema*. Myths abound. No one seems to really know who 'runs' the city south of its downtown train tracks.

The 'spatial truth'² reveals a different story. More than 250 000 residents from multiple national, cultural and economic backgrounds make up the CBD, with almost a million commuters passing through one of the most diverse and dynamic urban densities on the continent. While it may be true that there are a significant number of buildings that are 'informally' or illegally occupied, their residents are often unfairly blamed for the inner-city's dangerous stigma. In reality, they are often marginalised by both inner city crime and hard-line policing. Most pay rentals in excess (per square metre) of areas such as Sandton City's Diamond Walk for radically underserved and dangerous access to housing. When legal structures *do* intervene, the residents face the harshest end of law enforcement. Their assets are seized, including irreplaceable and important documents, women and children are physically and verbally abused and all are shipped off to undesirable and poorly located areas at the city limits. Often many return to the city weeks later, only to occupy similar spaces and continue the cycle, while those who orchestrate the control of the buildings, both legally and illegally, benefit greatly in this ebb and flow of building occupation.

² 'Spatial Truth' is a working term that Jhono Bennett, Counterspace and their various collaborators are currently developing as a means to actively dissect and re-examine the socio-spatial systems that make up Johannesburg. The drawings of this project are the first attempt at exposing these systems in a meaningful and engaging manner.



Since 1994, the South African government has attempted to meet its pledge to fulfil the expectations of the Freedom Charter³ by constructing over 3 million homes. Today, however, the housing backlog is greater than it was in 1994, and arguably nowhere more so than in inner-city Johannesburg. While current research has highlighted the need for addressing socio-spatial inequalities in the cities of emergent economies globally, little attention has been given to how this is manifested in inner city areas, particularly in Johannesburg. There is a lack of systematic and rigorous investigation on the potential of inner city areas as a focal point in addressing urban spatial inequalities. Jo'burg's so-called 'bad buildings' are not mono-programmatic spaces for criminal activities, but form part of a highly complex and adaptive socio-spatial system that provides important access to those on the margins of the South African economy. City-makers need to understand the complexities and nuances of these intricate socio-spatial systems in order to provide better and more responsive urban policies.

Aesthetics of Absence attempts to chart the complex relationships between people, buildings and systems in the hope of altering current policies that use evictions as a way of addressing the delicate, interwoven balance of need, myth and reality in downtown Jozi.

³ The Freedom Charter was a document collated by the major liberation forces during the height of the struggle against the Apartheid regime in South Africa. The charter held the collected voices and hopes of the people of South Africa and was signed during the Congress of the People in Kliptown, Johannesburg, on June 20, 1950. The document was the founding element of South Africa's current constitution and made specific provision for the right to housing, comfort and security: *'There shall be Houses, Security and Comfort! All people shall have the right to live where they choose, to be decently housed, and to bring up their families in comfort and security...Unused housing space to be made available to the people...'* (Congress of the People, 1950)

ABOUT FOLIO: JOURNAL OF AFRICAN ARCHITECTURE

FOLIO is published annually by the Graduate School of Architecture, at the University of Johannesburg. The next volume is scheduled for publication in **May 2018**. The editor will put out a call-for-papers in September 2017. Interested parties will have three months to submit abstracts. In the call-for-papers, full details of the theme(s), submission formats, image requirements and biographical information will be available.

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PRACTICE

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¹ FOLIO is produced by the Graduate School of Architecture, University of Johannesburg, located in the southern hemisphere. One man's winter is another man's summer.

² pu·pa (pyōō'pə) n. pl. pu·pae (-pē) or pu·pas. An insect in the non-feeding stage between the larva and adult, during which it typically undergoes complete transformation within a protective cocoon or hardened case. Only insects that undergo complete metamorphosis have pupal stages.