MOVEMENT AS A GENERATOR FOR TRANSIENT ARCHITECTURE:

Towards a design of a transport interchange in South Durban

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University of Kwazulu-Natal

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COLLEGE OF HUMANITIES

DECLARATION - PLAGIARISM

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Signed

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DEDICATION

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families and	loved o	ones.								

ABSTRACT

The theories of liminality, urban mobility, critical geography and spatialized critical theory are analyzed through a phenomenological enquiry attempting to understand the way people perceive place as they move and transform through space and time.

The concept of using movement as in informer for design has not been adequately employed in contemporary society, resulting in movement through spaces not being sustainable. Therefore, the infrastructure facilitating this movement does not respond in a dynamic and flexible way, resulting in harsh boundaries, discontinued urban node patterns and, most imperative to the discussion, marginalization on a global scale.

Isipingo is one of many marginalized communities in South Africa, also considered a third space of resistance. Development, however, is focused on efficiency of freight transportation rather than enhancing the vibrancy and dynamics of multifarious networks that have had the opportunity to develop organically and spontaneously, forming a 'melting pot of cultures,' (Makhathini, 2011).

These imperative survival networks can be enhanced through infrastructure which allows for choice, giving people the freedom to transform through space and time. Transient architecture, informed by movement and connections between people, can then adapt as these motions change over time, accepting a multiplicity of cultures and dynamics in a space simultaneously.

TABLE OF CONTENTS

ii

DECLARATION

ACKNOWLED	DGEMENTS i	ii
DEDICATION	i	V
ABSTRACT	v	/
TABLE OF CO	ONTENTS	/i
LIST OF ILLU	STRATIONS	ĸiv
	PART ONE	
	BACKGROUND RESEARCH ON ISSUES	
	No. of Pa	ages
CHAPTER 1	INTRODUCTION	2
	1.1 INTRODUCTION	3
	1.1.1 Background	4
	1.1.2 Motivation/Justification of the study	4
	1.2 DEFINITION OF THE PROBLEM, AIMS AND OBJECT	TVES 5
	1.2.1 Definition of the Problem	5
	1.2.2 Aims	5
	1.2.3 Objectives	5
	1.3 SETTING OUT THE SCOPE	6
	1.3.1 Delimitation of Research Problem	6
	1.3.2 Definition of Terms	6
	1.3.3 Stating the Assumptions	6
	1.3.4 Key Questions	6
	1.3.5 Hypothesis	7
	1.4 CONCEPTS AND THEORIES	7
	1.4.1 Liminality as a Tool for Analysing Move	ment 7
	1 4 2 The Experience and Shaning of Space	8

	1.4.3 Transient Architecture as a Platform for	
	Integration	8
	1.5 RESEARCH METHODS AND MATERIALS	9
	1.5.1 Research Methods	9
	1.5.2 Research Materials	12
	1.6 CONCLUSION	12
CHAPTER 2	LIMINALITY: THE EXPERIENCE OF MOVEMENT	13
	2.1 INTRODUCTION	14
	2.2 LIMINALITY AND TRANSITIONAL SPACE	15
	2.2.1 Introduction	15
	2.2.2 Movement, Space and Time	15
	2.2.3 Liminal Moments in Urban Spaces	17
	2.2.4 The Location of Nomadism across Time	19
	2.2.5 Dynamics of Urban Life	20
	2.2.6 Conclusion	22
	2.3 PERCEPTIONS OF TRANSFORMATION	22
	2.3.1 Introduction	22
	2.3.2 Temporal Nature of Space	22
	2.3.3 The Development of Movement	23
	2.3.4 Transforming Society	26
	2.3.5 Perceptions of the Marginalized	27
	2.3.6 Conclusion	29
	2.4LOCATING LOST SPACE	29
	2.4.1 Introduction	29
	2.4.2 The Experience of Transformation	29
	2.4.3 The Shaping of Spaces	30
	2.4.4 Understanding Anti- Space	33
	2.4.5 Reclaiming Space	34
	2.4.6 Conclusion	36
	2.5 CONCLUSION	36
CHAPTER 3	EXPERIENCE AND SHAPING OF SPACE	38
	2.4 INTOON ICTION	30

	3.2 PEDAGOGICAL PLACE	39
	3.2.1 Introduction	39
	3.2.2 The Human Experience of Place	39
	3.2.3 People- Place Relationship	40
	3.2.4 Imposition of Place on Society	42
	3.2.5 The Transition of Public Place	44
	3.2.6 Conclusion	46
	3.3 EFFECTS OF CONTEMPORARY SOCIETY ON PLACE	46
	3.3.1 Introduction	46
	3.3.2 Privatisation of Public Place	46
	3.3.3 The Movement of Globalisation	47
	3.3.4 Static Urban Places	49
	3.3.5 Places of Performance	52
	3.3.6 Conclusion	55
	3.4 DOMINANT STREETS AND SOCIAL EFFECTS	55
	3.4.1 Introduction	55
	3.4.2 Linkages and Urban Spatial Design	55
	3.4.3 Paradoxical Infrastructure of Movement	56
	3.4.4 The Transgressions of People	58
	3.4.5 Visionary Transformations	59
	3.4.6 Conclusion	62
	3.5 CONCLUSION	62
CHAPTER 4	TRANSIENT ARCHITECTURE AS A PLATFORM FOR	
	INTEGRATION	64
	4.1 INTRODUCTION	65
	4.2 SUSTAINABILITY IN SOLIDARITY AND INTEGRATION	66
	4.2.1 Introduction	66
	4.2.2 The Shifting Dynamics of Culture	66
	4.2.3 Solidarity for Transformation	67
	4.2.4 Integrated Approaches for Sustainability	69
		70
	4.2.5 Integrating Public Networks in South Africa	
	4.2 SUSTAINABILITY IN SOLIDARITY AND INTEGRATION 4.2.1 Introduction	66 66 67 69

	4.3 THE ROLE OF PLACE- MAKING IN SUSTAINABLE	
	SOLUTIONS	73
	4.3.1 Introduction	73
	4.3.2 Problematizing Contemporary Design	73
	4.3.3 The Location of Locality	75
	4.3.4 Spaces In- between	76
	4.3.5 Third Spaces as Places of Resistance	77
	4.3.6 Conclusion	79
	4.4 A PLATFORM FOR INTEGRATION	79
	4.4.1 Introduction	79
	4.4.2 Movement and Hybridity	79
	4.4.3 Multi- Culturalism in South Africa	81
	4.4.4 Improvisational Architecture	82
	4.4.5 Architecture as a Facilitator for Change	85
	4.4.6 Conclusion	87
	4.5 CONCLUSION	87
CHAPTER 5	SYNTHISISING SYSTEMS THROUGH MOVEMENT	89
	1.1 INTRODUCTION	90
	5.2 THE URBAN COMPLEXITIES OF MOVEMENT	90
	5.2.1 Introduction	90
	5.2.2 The Attraction of Florence	90
	5.2.4 A Dynamic Urban Phenomenology	92
	5.2.4 Disconnected Reality	93
	5.2.5 Conclusion	94
	5.3 CONCLUSION	95
CHAPTER 6	THE DYNAMICS OF ISIPINGO WITH RESPECT TO MOVEMENT	96
	6.1 INTRODUCTION	97
	6.2 JUSTIFICATION FOR ISIPINGO	98
	6.2.1 Introduction	98
	6.2.2 A Gap in Development	98
	6.2.3 Movement in Isipingo	98
	6.2.4 Conclusion	100

	6.3 LOCATION OF ISIPINGO	100
	6.3.1 Introduction	100
	6.3.2 North- South Corridor	100
	6.3.3 Proximity to the Margin	101
	6.3.4 Conclusion	102
	6.4 HISTORICAL AND SOCIAL CONTEXT OF ISIPINGO	102
	6.4.1 Introduction	102
	6.4.2 Competitive Beginnings	102
	6.4.3 Developing a Dystopian Society	103
	6.4.4 Conclusion	103
	6.5 EMPIRICAL DATA	103
	6.5.1 Introduction	103
	6.5.2 Socio- Economic Assessment	104
	6.5.3 Analysing Existing Development Schemes	105
	6.5.4 Conclusion	106
	6.6 CONCLUSION	106
CHAPTER 7	ANALYSIS: A MELTING POT OF CULTURES	107
	7.1 INTRODUCTION	108
	7.2 MOVEMENT AND PLACE	108
	7.2.1 Introduction	108
	7.2.2 First World Progress	109
	7.2.3 Third World Survival	110
	7.2.4 Conclusion	111
	7.3 THE DISCONNECTION IN BETWEEN LEVELS	111
	7.3.1 Introduction	111
	7.3.2 Top- down Scepticism	111
	7.3.3 Bottom- up Experiences	113
	7.3.4 Conclusion	114
	7.4 A HETEROTOPIA CONCEALED BY DUST	114
	7.4.1 Introduction	114
	7.4.2 Engineered and Organic Movement	114
	7.4.3 Romanticised Informality	115
	7.4.4 Conclusion	117

	7.5 CONCLUSION	117
CHAPTER 8	CONCLUSION (AND RECOMMENDATIONS)	119
	8.1 INTRODUCTION	120
	8.2 FINAL COMMENTS	120
	8.2.1 Introduction	120
	8.2.2 Summary of Results and Conclusions	120
	8.2.3 Conclusion	121
	8.3 RECOMMENDATIONS	121
	8.4CONCLUSION AND FUTURE RESEARCH	121
APPENDICES.		123
	I. RESEARCH NOTES	124
	II. ETHICAL CLEARANCE APPROVAL	133
	III. SUPERVISORS REPORT	134
	IV. TURNITIN ORIGINALITY REPORT	135
LIST OF REFE	RENCES	136

PART TWO

DESIGN REPORT

CHAPTER 1	INTRODUCTION 1	42
	1.1 INTRODUCTION 1	43
	1.1.1 Relation to Topic 1	43
	1.1.2 Context 1	43
	1.1.3 Approach 1	44
	1.2PROJECT DESCRIPTION 1	44
	1.2.1 Urban Design Project: Long Term Large Scale	
	Intervention1	44
	1.2.2 Transport Interchange: Medium Scale	
	Intervention 1	44
	1.3 CLIENT: NATIONAL TREASURY 1	45
	1.3.1 Background Information 1	45
	1.3.2 Client's Requirements 1	46
	1.4 DEATILED CLIENT BRIEF 1	46
	1.4.1 Typology 1	46
	1.4.2 Aim 1	47
	1.4.3 Objectives 1	47
	1.4.4 Key Theoretical Areas of Intervention 1	47
	1.4.5 Key Stakeholders 1	47
	1.4.6 Accommodation Schedule 1	48
	1.5 CONCLUSION 1	49
CHAPTER 2	ISIPINGO ANALYSIS 1	50
	2.1 INTRODUCTION 1	51
	2.2 SITE SELECTION 1	51
	2.2.1 Site Criteria 1	51
	2.2.2 Reunion 1	52
	2.2.3 Isipingo CBD 1	53
	2.2.4 Conclusion 1	55

	2.3 SITE ANALY	'SIS	155
	2.3.1	Site Location	155
	2.3.2	Site Survey	156
	2.3.3	Detailed Analysis of Site	156
	2.4 CONCLUSIO	N	159
CHAPTER 3	DESIGN DEVE	OPMENT AND RESOLUTION	160
	3.1 URBAN DES	SIGN CONCEPT DEVELOPMENT	161
	3.2 ARCHITECT	TURAL DESIGN CONCEPT	162
	3.2.1	Horology	162
	3.2.2	Spatial Planning	163
	3.2.3	Structural Concept	165
	3.3 FINAL DESI	GN PROPOSAL	168
	3.3.1	Urban Design Drawings	168
	3.3.2	Architectural Design Drawings	169
	3.3.3	Renders	174
	3.4TECHNICAL	DETAILS	176
I IST OF PEE	DENCES		100

LIST OF ILLUSTRATIONS

PART ONE

CHAPTER 1

- **Figure 1.1:** 1920 Elevation and Section of West Steet. Source: Sketch by Tomi Oyedej
- **Figure 1.2:** 2015 Elevation and Section of West Steet. Source: Sketch by Tomi Oyedej
- **Figure 1.3:** Summary of concepts and theories. Source: Graphic by Author

- Figure 2.1: Liso Lozano's Urban Interventions, highlighting spaces in urban settings that are unnoticed by society, altering perceptions. Source: lisalozano.com
- Figure 2.2: The Opte Project, a visual representation of cyber connections across
 the globe representing the interconnectedness and movement of contemporary
 society. Source: www.opte.org
- Figure 2.3: Sketch illustrating Heidegger's concept of 'nearness', illustrating how a
 many textured universe is characterised by near and far distances, changing
 man's position as he moves through space and time. Source: Sketch by Author,
 2016
- Figure 2.4: Right- Balla, Speed, 1913. Left- Edgerton, Speed Photograph of a tennis player, 1939 Source: Giedion, 1943: 367
- Figure 2.5: Boccione, Bottle Evolving in Space, 1911-12. An artwork representing the futurist movement of capturing objects in motion, multiplying and distorting as they move through space (Technical Manifesto and Futurist Painting, 1912 in Giedion, 1943: 365). Source: Giedion, 1943: 364
- Figure 2.6: Nude Decending a Staircase, Marcel Duchamp, View from Multiple Points of Perspective, Source: http://en.wikipedia.org
- Figure 2.7: Khronos Projector. Representing time through film. Source: http://www.k2.t.u-tokyo.ac.jp
- Figure 2.8: Picasso, "Guernica", 1937. Source: http://www.pablopicasso.com

- Figure 2.9: Aftermath of war in Berlin, a critical liminal moment in German Society, illustrating how liminality 'is likewise about how larger groups or entire societies undergo change and transition, how they live through uncertainties of the in- between, and how they com e out on the other side- if at all,' (Thomassen, 2014: 1). Source: http://theelephantgate.weebly.com
- Figure 2.10: Art Work by Natalie Couch depicting transformation through space.
 Source: http://www.xsectionjournal
- Figure 2.11: Train tracks ascending the Jacobs Ladder to the South Coast Junction. Source: http://grahamlesliemaccallum.wordpress.com
- Figure 2.12: Venezuela Capital, Caracus, illustrating the harsh boundaries formed by transport infrastructure, restricting people's movement and disabling selfemancipation from liminal experiences (Murrugarra, Larrison & Sasin, 2011).
 Source: http://www.sunnysidebaptistchurch.org
- **Figure 2.13:** Sketch depicting the differences between thoroughfares and places of performance and pause. Source: Sketch by Author, 2016
- Figure 2.14: Central Saint Martins, College of Art and Design, School of Graphic and Industrial Design, University of Arts London, former London Institute, United Kingdom. Source: Luz, 2014: 160
- Figure 2.15: Places of Pause Source: Luz, 2014: 161
- Figure 2.16: Monotonous Architecture, 'merging everything into the distanceless,' (Heidegger, 1971: 164); a new suburb in Moscow. Source: Norberg- Schulz, 1980:187
- Figure 2.17: Ludwig Hilberseimer, The Ideal City. Roger Trancik (1986:21) defines it as 'a program based on ideals of pure forms and unbounded, democratic or flowing space,' and recognises its success because of fast and economical construction and its support of high rise technology. Source: http://www.pinterest.com
- Figure 2.18: Walter Gropius, The Bauhaus, Dessau, 1926. An example of a modern building existing in isolation, not relating to its context, living 'abstract life in a kind of mathematical- technological space which hardly distinguishes between up and down,' (Norberg- Schultz, 1980: 190). Source: http://www.modernnow
- Figure 2.19: Herrington Kansas, 1887, American West Grid Source: Photo by John Reps in Trancik, 1986: 34

- Figure 2.20: Le Corbusier, La Ville Radieuse, Perspective Sketch, 1930. Le Corbusier's idea of freedom to the urban dweller, which incorporated large parklike spaces within the city, led to an inhumanly scaled city and alienated societies (Trancik, 1986: 27). Source: http://archidialog.com
- Figure 2.21: Le Corbusier, Plan Voisin, Paris, France, 1925. Source: http://www.mediaarchitecture.at
- Figure 2.22: Three Manifestos: Liminality meaning between things, marginality on the edge of things and inferiority underneath society; not to be confused with one another as perceptions from these points are directly influenced by the spaces they are confined to (Lashure, 2005). Source: Sketch by Author
- Figure 2.23: Dutch duo artists, Haas and Hahn changing the perceptions of the marginalised in Rio de Janero with paint. Source: http://intelligenttravel.nationalgeographic
- **Figure 2.24**: Lefebvre's rhythmanalysis in Interbellum Berlin, representing everyday life as the production of capitalism (Goonewarden, Kipfer, Milgrom, Schmid, 2008: 199) Source: http://citybreaths.com
- Figure 2.25: Formalist Architecture. International Port Terminal, Yokohama, 1996-2002, Source: http://www.archdaily.com
- Figure 2.26: Precedent illustrating accessibility and permeability of World Cities
 as 'it is the articulation and differentiation of solids and voids that make up the
 fabric of the city and establish the physical sequences of visual orientation
 between places,' (Trancik, 1986: 100). Source: http://www.pinterest.com
- Figure 2.27: Lefebvre's abstract space is hegemonic precisely because it 'incorporates difference in all its dimensions,' (Goonewarden, Kipfer, Milgrom, Schmid, 2008: 203). Source: http://anarchistwithoutcontent.wordpress.com
- Figure 2.28: Syracuse, New York, Lost Space at the Edge of the Freeway, 1983, Source: Carol A. Brower in Trancik, 1986: 5
- **Figure 2.29:** Houston, Texas, Aerial Photograph, 1985, An example of the 19th century phenomenon of rapid urbanisation (Giedion, 1943: 467). Source: Harper Leiper Studio in Trancik, 1986: 9
- Figure 2.30: Peter Cooke, Plug in City, Source: Sketch by Author
- **Figure 2.31:** Renzo Piano and Richard Rogers, Pompidou Centre, Beaubourg Source: http://alainelkanninterview.com

- Figure 3.1: Global Connectivity Due to Technological Advancement, 'look how one press of her foot sets a thousand threads in motion- how the shuttles dart to and fro, the flowing strands intertwine and a thousand interconnexions are made at one stroke!" (Knapp, 2003 in FOA, 2003: 640). Source: http://geographicaladvantage.aag.org
- Figure 3.2: Phylogenesis Classification System, Lines of descent connects us to a
 much larger system is the basis of phylogeny. 'A phylogeny also provides a
 framework with which we understand nature, and by analogy, our place in it,'
 (Knapp, 2003 in FOA, 2003: 647). Source: FOA, 2003
- Figure 3.3: Robert E. Simon's development for Reston, Virginia. A failure of the New Communities Program initiated by President Lyndon Johnson because of lack of attention paid to the economic circumstances of communities rendering self- sustaining, mixed income community's impossible. Source: Trancik, 1986: 55
- Figure 3.4: Milton Keynes New Town in England, 1970. Uniform grid of roadways intended to give maximum flexibility, but instead resulted in a lack of hierarchy and low density housing resembling an American Suburb. Source: Trancik, 1986: 32
- **Figure 3.5:** Berea Road lacking proficient amenities and services for pedestrian activity Source: Photo by Author, 2015
- Figure 3.6: Constrictions placed in the open public space outside St Peres in Rome Source: Photo by Author, 2013
- Figure 3.7: Mies' Infrastructure of Difference, Crown Hall. Source: Mertins, 2003
- Figure 3.8: Parking Lot at Fiar Lingotto, Turin, Italy, Source: http://www.interculturalurbanism.com
- Figure 3.9: Hitchhikers on the N3, Durban. Source: Photo by Author, 2015
- **Figure 3.10:** Rio-de-Janeiro.2013; Example of the spatialized economic equation. Source: Pedro Gadanho, http://moma.org
- Figure 3.11: Sketch showing the character of an informal shack land in Cato Manor, formed as a collective action as a result of fleeing township violence and its extreme densities or seeking economic opportunities near the city (Odendaal, 2003). Source: Sketch by Author, 2015
- Figure 3.12: Figure Ground depicting peripheral informal settlements. Source:
 Sketch by Author

- Figure 3.13: Le Palais Royal under Louis XIV Source: http://www.hotel-etats-unis-opera.com
- Figure 3.14: Shen Wei Dance Arts Public Performance in Times Square Source: http://nyclovesnyc.blogspot.com
- Figure 3.15: Protests in Public Spaces, 'People of Europe Rise Up!' was a huge banner held outside the acropolis purposefully to gain international attention. This influenced street protests in North Africa, Athens, Madrid, Brussels and London. Dutch intelligentsia occupied museum courtyard in a claim against culture budget cuts and 300000 people gathered in Lisbon streets, which resulted in the government resigning two weeks later. This movement of performativity is also evident in Banksy broadcasting subversive irony across cinemas, BIG embracing parkour to publicize one of his buildings (Gadenho, 2011). Source: http://www.trekearth.com
- Figure 3.16: Sebastiano Serlio Stage Design, Woodcut, 1545, showing 'how a strongly defined, simple framework of street space can accommodate great variations of scale and architectural style along its edges,' (Trancik, 1986:74). Source: http://www.lib.cama.ac.uk
- Figure 3.17: Diagram of Urban Design Theories, Source: Trancik, 1986: 98
- Figure 3.18: Street in Paris leading to the Opera House which has deemphasized its broader functions due to rapid movement through the city Source: Photo by Author, 2013
- Figure 3.19: Fumihiko Maki, Three Types of Spatial Linkage. Source: Trancik 1986: 107
- Figure 3.20: Pedestrian Bridge extending across the N3, Durban, to DUT Steve Biko Campus known as the 'suicide bridge' because of the risk taken when crossing it. Source: Photo by Author, 2015
- **Figure 3.21:** City in Ruins. A representation of the failure of the homogenized housing projects of the 50s, 60s and 70s designed to allocate migrants coming from the countryside to the big cities (Hernandez, 2002: 126). Source: Photo by Aubrey P. Graham in Murray, 2008: 172
- Figure 3.22: Map of Paris by Napoleon III illustrating Paris 'set in the midst of a thoroughly disorganized town, the monuments surrounded and isolated by a tangle of streets,' (Giedion, 1943: 469).. The Emperors own project for the transformation of Paris Source: Geidion, 1943: 466

- Figure 3.23: Boulevard Richard- Lenoir_1861-63, Planned by Haussmann to cover an old canal. Source: Giedion, 1943: 479
- Figure 3.24: Louis Kahn, Market Street East, Philadelphia, Perspective of Civic Centre 'A "room" is for him a place with its particular character, its "spiritual aura", and a building is a "society of rooms. The street is "a room of agreement" and the city "an assembly of places vested with the care to uphold the sense of a way of life" (Norberg- Schultz, 1980: 198). Source: http://bombmagazine.org
- Figure 3.25: Mies Van Der Rohe, Farnsworth House 'Mies's glass boxes provoke an existential approach to life, drawing the occupant back to the blankness and potentiality of the beginnings, over and over again, promoting self -determination within yet against the world while safeguarding alterity,' (Mertins, 2003 in FOA, 2003: 274). Source: http://www.houzz.com
- **Figure 3.26:** Temporal Infrastructure. Virtual Bridge Design for ASA International Competition entry. 'The New Basic'. Source: Sketch by Author

- **Figure 4.1:** Plan for Cedric Price's Fun Palace depicting the dynamic structure of the intervention. Source: Sketch by Author
- Figure 4.2: Wold Map illustrating the divisions between different forms of colonisation specifically on the African Continent. Source: Sketch by Author
- Figure 4.3: Women of multiple cultures protesting in Pretoria streets against the Urban Areas Act lead by Lillian Ngoyi. Source: http://artscomments.wordpress.com
- Figure 4.4: AA School Of Architecture, Inter- spatiality. 'It is proposed that interspatiality, through the exploration of new spatio- enviro identifications, can help
 locate, reframe and anchor architecture within the sustainability debate- by
 challenging and redefining the problems identified, re- orientating strategies and
 expanding the discussions beyond disciplinary limits,' (James, 2014: 48). Source:
 http://pr2010.aaschool.ac.uk
- Figure 4.5: Organic Development in Plant Cells. Source: Sketch by Author
- Figure 4.6: Integrated Urban Development Scheme. Source: National Treasury,
 NDP Urban Design Toolkit
- Figure 4.7: Cato Manor, KZN Source: Photo by Kauna Photography http://www.pinterest.com

- Figure 4.8: Integrated City Concept Source: Iyer Design Studio, 2014
- Figure 4.9: Section showing the infrastructure provided along Bellaire road and the disconnection between the formal and informal settlements, Source: Sketch by Author, 2015
- Figure 4.10: Sibaya Casino, 2006. Architecture using cultural constructs for commodification purposes Source: http://www.nightjartravel.com
- Figure 4.11: Rural High Speed Termina, Perafort, Spain, 2001. The objective of this project is to activate the relationship between the local topography and the infrastructure to enable continuity within the urban fabric (FOA, 2003: 93). Source: Sketch by Author
- Figure 4.12: Herman Hertzberger, Centraal Beheer, Source: http://loveyousomat.tumblr.com
- Figure 4.13: Space of no boundaries, Durban City, Source: Photo by Author, 2015
- Figure 4.14: In- between space in Durban City Source: Photo by Author, 2015
- **Figure 4.15:** Monastery in Spain. Example of a third space of mental liberation. Source: Photo by Author, 2006
- **Figure 4.16:** Example of a third space in Spain being highlighted by the skateboarding culture within the urban fabric. Source: Photo by Author, 2006
- Figure 4.17: Brook Street Market Place in Warwick Junction Source: Photo by Author, 2013
- **Figure 4.18:** Jewellery Bridge in Florence, Italy that has developed over time through the use of multiple functions and cultures. It is a space that is shaped by the users, reflecting hybridisation. Source: Sketch by Author
- Figure 4.19: Intothukne Junction, Cato Manor. Source:
 http://www.eastcoastarchitects.co.za
- Figure 4.20: Ground House, JDA with Archiscape Source:
 http://sustainablecities.org.nz and Sound House, JDA with Archiscape Source:
 http://www.allanwilsoncentre.ac.nz
- **Figure 4.21:** Samoan Architecture. Traditional Fale Tele under construction Source: www.jamesschollum.com Photograph by Thomas Andrew
- Figure 4.22: Traditional Samoan Lashing Technique. Source: Sketch by Author
- Figure 4.23: Tongan/ Samoan Catamaran known as a Kalia. Fijians also used similar, but called it Ndura. This construction technique inspired the design of the dwellings. Source: Sketch by Author

- Figure 4.24: The Bundle Tower, New York. 'An abstract machine in itself is not physical or corporeal, any more than it is semiotic; it is diagrammatic' (Gilles Deleuze and Felix Guattari. A Thousand Plateaus. 1987: 141 in FOA, 2003: 527). Source: FOA, 2003: 482
- Figure 4.25: Croation Pavilion, Venice Biennale, 2010. Source: http://anamanzo.wordpress.com
- Figure 4.26: Fun Palace, Interior Perspective, devised from Price's friend and structural engineer Frank Newby (Mathews, 2005). Virtually every part of the structure was to be variable, with the overall structural frame being the fixed element.'(Mathews, 2005: 80). Source: http://biennials.ch
- Figure 4.27: The Fun Palace, Source: http://www.jstor.org

- **Figure 5.1:** Florence, 2013 Source: Photograph by Author, 2013
- **Figure 5.2:** Interior Perspective and Technological innovation of design scheme. Source: FOA, 2003: 193 and 201
- **Figure 5.3:** Site plan showing larger connections and design plans for high speed railway. Source FOA, 2003: 189 and 194
- **Figure 5.4:** Winning design entry by Foster and Partners. Source: Foster and Partners, 2003
- Figure 5.5: Section depicting vertical connections across multiple levels. 'The
 hybridisation of the public space with the transportation infrastructure is one of the
 most distinctive features of the contemporary city,' (FOA, 2003: 190). Source:
 Sketch by Author

- Figure 6.1: Isipingo Market, Section C Source: Photo by Author
- **Figure 6.2:**Conflict between NMT and Motorised Transport in Isipingo, Source: Photo by Author
- Figure 6.3: Isipingo Local Area Plan and the C2 Corridor, Source: Photoshopped analysis by Iyer Design
- Figure 6.4: Kajee Street. Source: Author
- Figure 6.5: Gutter Pollution. Source: Author
- Figure 6.6: Only Formal Taxi Rank. Source: Author

• Figure 6.7: Proposed Plan for Reunion. Source: Iyer, 2011: 2013

CHAPTER 7

- Figure 7.1: Movement in African Cities. Source: Koolhaas, 2000
- Figure 7.2: Sketch of Cedric Price's Fun Palace Source: Sketch by Author from Mathews, 2006: 39
- Figure 7.3: Movement in Lagos, Nigeria. Source: Koolhaas, 2000
- **Figure 7.4:** Urban Fabric integrating with roadway infrastructure because of people being able to physically adapt their environment. Source: Koolhaas, 2000
- Figure 7.5: National Treasury's Integrated Development Plan for South Africa.
 Source: http://www.treasury.gove.za
- **Figure 7.6:** Wreckage to motor vehicles and roadway infrastructure during violent protests in Durban. Source: http://www.news24.com
- Figure 7.7: Contextual Analysis of Isipingo CBD. Source: Image by Author
- Figure 7.8: The congested street layout of the CBD. Source: Image by Author
- Figure 7.9: The opportunity Third World countries have through analysing the
 consequences of First World development schemes and choosing an alternative
 path to not only create an integrated future, but hurdle in front of First World
 countries by redefining interaction with place. Source: Sketch by Author

PART TWO

CHAPTER ONE

- Figure 1.1: Graphic relating the architectural intervention in Isipingo to the theoretical and conceptual topics covered in the dissertation. Source: Graphic by Author
- Figure 1.2: National Treasury Development Concept. Source: Sketch by Author
- **Figure 1.3:** Graphic depicting conceptual zoning in transport interchanges. Source: Sketch by Author

- Figure 2.1: Isipingo Local Area Plan and position of potential sites. Source: Graphic by Author
- Figure 2.2: Sketch analysing location of the site. Source: Sketch by Author

- **Figure 2.3:** Contextual analysis of the CBD depicting movement networks and existing services. Source: Graphic by Author
- **Figure 2.4:** Site analysis plan and section depicting existing buildings, service lines and a graphical representation of the movement character and traffic congestion. Source: Graphic by Author

- Figure 3.1: Urban Design Conceptual Layout. Source: Sketch by Author
- Figure 3.2: Urban Design 3D View down Baltex Avenue. Source: Sketch by Author
- **Figure 3.3:** 3D sketch of the components working together to measure time. Source: Sketch by Author
- Figure 3.4: 3D view of Train Station. Source: Sketch by Author
- Figure 3.5: Bubble diagram of spatial organisation. Source: Sketch by Author
- Figure 3.6: Elevations of transport interchange. Source: Sketches by Author
- **Figure 3.7:** Initial sketched conceptualizing the spatial planning of the Transport Interchange. Source: Sketches by Author
- Figure 3.8: Images illustrating the beauty of scaffolding. Source: http://www.fastcodesign.com
- Figure 3.9: Sketch of Pavilion. Source: http://www.scia.net
- Figure 3.10: Plug in concept. Source: http://dprbcn.wordpress.com
- **Figure 3.11:** 3d view of Plug- in Residential component in the transport interchange design shceme. Source: Sketch by Author
- **Figure 3.12:** Sections and details of structural concepts translated into reality and applied to the design of the transport interchange. Source: Sketch by Author
- Figure 3.13: Urban Design Plan
- Figure 3.14: Urban Design 3D
- Figure 3.15: Site Plan
- **Figure 3.16:** Ground Floor Plan
- Figure 3.17: First Floor Plan
- Figure 3.18: Second Floor Plan
- **Figure 3.19:** Third Floor Plan
- Figure 3.20: East Elevation

- Figure 3.21: North Elevation
- Figure 3.22: South Elevation
- Figure 3.23: West Elevation
- Figure 3.24: Section A-A
- Figure 3.25: Section B-B
- Figure 3.26: Pedestrian Crossing over Phila Ndwandwe Road
- Figure 3.27: New Railway Station
- Figure 3.28: Interactive Bridge crossing over the railway
- Figure 3.29: Public Park in front of Daycare
- Figure 3.30: Strip Section through Residential Units
- Figure 3.31: Green Roof
- Figure 3.32: Butterfly Roof
- Figure 3.33: Retail Space Detail
- Figure 3.34: Unit Plan Detail
- Figure 3.35: Unit Detail 1
- Figure 3.36: Unit Detail 2

PART ONE

BACKGROUND RESEARCH ON ISSUES

INTRODUCTION

'i'm also located in the margin, in a footnote, an endnote, between the lines, between words and bodies, crossing the line, in between the lines, at a point, at a spot, at a site... at an open space, a site, specific site, at a location, at a place, space, place, spaced place, sense of place.

displace.

in, out, out in, inoutin, going, coming, going, staying, going, going, going... staying... stop.
please, stop.'

(Ana Luz, "between nowhere", 2004)

1.1 INTRODUCTION

1.1.1 Background

As a result of technological advancements, cities have had the opportunity to expand and grow exponentially. "For centuries all towns and cities were pedestrian," (Lemberg, 1977:1) but they are now dominated and manipulated by vehicular movement and transport infrastructure. These transient spaces, which used to be the centre of human interaction, have now become boundaries imposed on society through developments which are only driven by political and economic sectors purely for individual profit (Lemberg, 1977).

In South Durban these spaces are forming harsh boundaries between marginalized townships and places of work, reflecting apartheids zoning plan (Scott, 2003). The dependence on private automobiles has resulted in an underutilized railway which has become a 'dead' and potentially dangerous space, and an unscaled highway which is not conducive to pedestrian movement.

The decline of the public transportation system has coincided with the increasing dependency on privatised vehicles. In the past, rudimentary public transportation services were only provided in low- income areas (CSIR, 2000). These services were about profit and not people and very little was provided for non- work purposes. Middle to high income areas had no choice but to rely on privatised transportation (CSIR, 2000).

The aim of the research is to identify movement as a generator for transient architecture and integrate these movement networks with public transportation. These movement networks include pedestrians and users of non-motorised transportation. It taps into an existing idea of using a "corridor city" (CSIR, 2000) as an appropriate solution to facilitate integration in South Africa as it fits with the existing land-tenure patterns and the concept of multi-nodal cities (Godehart & Pernegger, 2007).

Transportation development is identified as a fundamental and interdependent part of urban development and cannot be planned and evaluated independently of the physical and social environment (Lemberg, 1977). The research will attempt to refocus design and spatial planning towards pedestrian movement and public transportation.

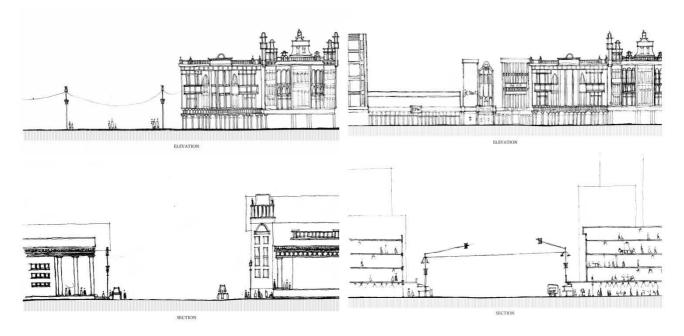


Figure 1.1: 1920 Elevation and Section of West Steet. Source: Sketch by Tomi Oyedej

Figure 1.2: 2015 Elevation and Section of West Steet. Source: Sketch by Tomi Oyedej

1.1.2 Motivation/Justification of the study

There is a large gap in the literature between the practical implications of transport structures and their theoretical conceptions. There is little thought given to how these structures are perceived by pedestrians and how they affect spatial development. As a result of this, transport infrastructure has been analysed as a fixed system with no attention given to transitional dynamic problems and the system's need to change over time, as well as the idea of planning for the general 'public interest' (Lemberg, 1977), which excludes a number of classes. This has resulted in public transportation becoming an underutilized resource.

In South Africa, transportation infrastructure has always been designed for efficiency and not for equality, and this has done little to facilitate integration in post- apartheid South Africa. The lack of transport links between townships and economic nodes has resulted in overcrowding around these nodes as well as these communities losing impetus for self- improvement as the residents disperse in search for better lifestyles (Godehart & Pernegger, 2007).

The research will aim to understand how transport infrastructure is perceived and utilized by pedestrians and users of non- motorised transport. Transportation development and land use will be analysed as interdependent concepts with the idea of designing a transport interchange in Isipingo generated by the movement networks of the people. This will increase the potential transfer between routes and different modes of transport, facilitating integration by allowing for movement to become flexible and equal and not something which takes place in a 'closed roadway' (CSIR et al, 2000).

1.2 DEFINITION OF THE PROBLEM, AIMS AND OBJECTIVES

1.2.1 Definition of the Problem

The concept of using movement as in informer of design as not been adequately employed, resulting in movement through spaces not being sustainable. Therefore, the infrastructure facilitating this movement does not respond in a dynamic and flexible way, resulting in harsh boundaries and discontinued urban node patterns. As cities and technology rapidly advances and changes, networks connecting people and places together become increasingly complex. This is resulting in a universal world characterized by segregation and is especially relevant in a South African context because of its historical background.

1.2.2 Aim

Identification and exploration of movement as a generator for architecture

1.2.3 Objectives

- Investigate how movement has developed throughout history
- Understand how the development of transitional spaces have affected communities
- Understand the pedestrian's perception of roadways and public transportation
- Reimagine the public transport system in South Durban
- Inform a transient architecture to redefine the purpose of public networks to facilitate integration

1.3 SETTING OUT THE SCOPE

1.3.1 Delimitation of Research Problem

Making initial contact and getting valuable information from the people who are in a state of nomadism. The participants may not want to or have the time to pause for interviews or to engage in conversation.

Another issue is that the participants will come from a wide range of backgrounds and cultures, which will affect the way they perceive their environment. This could complicate the feedback as it would not be consistent.

1.3.2 Definition of Terms

- <u>Transient:</u> an adjective describing a momentary and impermanent experience through space. Specifically pertaining to architecture it refers to the dynamics and adaptability of a structure to be able to transform over time.
- <u>Integration:</u> a verb referring to a multiplicity of variables utilizing one space in which a constant negotiation of differences takes place. It is not the assimilation of one variable into another.
- Man: the term for a human being of either sex
- <u>Heterotopia:</u> a concept describing a space of non-hegemonic qualities which enables the co- existence of different variables
- <u>Antispace:</u> a concept describing a space violating societies ideals, left over or formed from unsustainable development
- Hybridity: a theory regarding interaction between two or more different cultures.

1.3.3 Stating the Assumptions

It can be assumed that the participants will be adults and of a low-middle income working class, however, there is a possibility that children travelling between school and home will be encountered.

1.3.4 Key Questions

- Why would movement be a generator of architecture?
- How has movement developed throughout history?
- Who is affected by the development of transitional spaces?
- What is the pedestrians' perception of roadways and public transportation?
- What role can architecture play in redefining the purpose of public networks?

- How will a transport interchange in affect the public transport system in South Durban?
- Who is the public transport interchange being designed for?

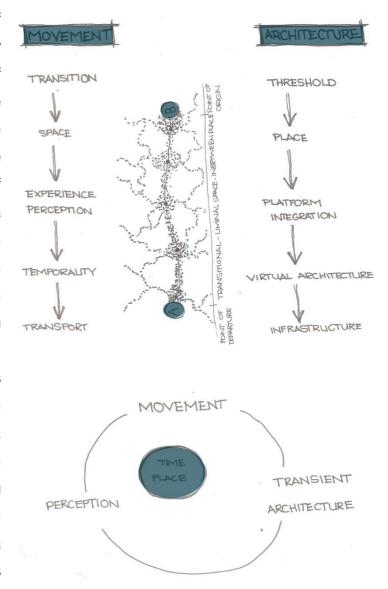
1.3.5 Hypothesis

Movement is a generator of transient architecture which can be used to facilitate integration of various cultural groups, socio- economic classes and modes of transport in South Durban.

1.4 CONCEPTS AND THEORIES/LITERATURE REVIEW

1.4.1 Liminality as a Tool for Analysing Movement

Movement is a powerful shaper of space. Spaces are constantly changing to suit the needs of people. Theoretically these are liminal spaces, highlighting the complex dynamics of urban life (Luz, 2014). The concept of utilizing the idea of liminality as a tool for understanding mobility will be employed through Arnold van Gennep's theories on spaces of unlimited freedom (Thomassen, Wydra, Horvath, 2013). George Simmel defines urban mobility through understanding urbanism as a human event (Luz, 2014), in which individual's ever an changing social and spatial position changes as one moves through a city. This sense of transition is



how one experiences culture and Figure 1.3: Summary of concepts and theories. Source: Graphic by Author

society, and liminality can be used as a tool to analyse the meaning of this movement and the way people experience and react to change during moments of transition.

The research will focus on contemporary mobility; how its rapid development affects peoples experience and perception of space and time. As the act of walking changed to locomotion liminal experiences are being increasingly diminished. 'Contemporary mobility is now creating continuous spaces for exchange, shifting the philosophical and built environment discourses from the fixed spaces of staying, (building and edifices), to a new perspective regarding the 'spaces of going'- the spaces of passage, nomadism, transition and circulation,' (Luz, 2004: 145).

1.4.2 The Experience and Shaping of Space

Phenomenology, analysed through the theories of Norberg Schultz and Martin Heidegger, is how one reacts to and experiences space, (Schultz, 1993). Henri Bergson (1912) visualises reality as an endless process of becoming, (Matthews, 2005), meaning that our experience with space and the built environment is continuously influencing people and is profoundly pedagogical, (Gruenewald, 2003). Michael Foucault (1999), David Harvey (2010) and Edward Soja (2000) theorise how spatial relationships shape culture, identity and social relations through critical geography, however, most imperative to this discussion is Henri Lefebvre's (1991) urban theory. Our experience with transient spaces, which are being rapidly altered in today's society, is not necessarily sustainable or facilitating true integration (Luz, 2004). There is a gap in their theoretical conception and how they are realistically implemented and influenced by technology.

1.4.3 Transient Architecture as a Platform for Integration

Homi Bhabha's (1994) concept of Third Spaces can be used to identify and describe liminal space in urban society. It is a positive paradigm in which hybrid cultures are formed, (Thomassen, 2014), which encompasses a feminist resistance against rigid institutional structures and presents the opportunity for radical thinking and multiculturalism, (Gruenewald, 2003). Spatialized critical theory, recognizing cultural production as the organisation and unconscious experience of space, (Grunewald, 2003: 628), has the ability to analyse experiences from different cultures and communities, such as that of the marginalized, and can show radical possibilities for change and resistance against neoliberal society and privatisation.

Architecture has the ability to define these Third Spaces and understand the relationship between space and time by becoming a never ending process. Oceanic Architecture argues the validity of using sites for monumentality when it could be utilised for performance, a never- ending spectacle defined by people's daily habits and movement (Yates, 2012). Influenced by the Samoan boat construction, structures continually redefine the boundaries between the landscape and the interior, using materials that highlight the temporal characteristics of architecture. The temporal environment should be 'thoroughly imbricated with the technologies, mythologies and aesthetics of movement,' (Austin, 2004: 227 in Grant, McNeilly and Veerapen, 2015). John van Neumann's (1944) Game Theory is using technology to anticipate and plan for changes, (Matthews, 2005). Cedric Price (1984) combines this concept with architecture to create a virtual reality and sustainable spaces. 'Virtual Architecture would similarly be flexible and capable of emulating the behaviour of different buildings' (Matthews, 2005: 41).

Through an improvisational architecture which has the ability to respond to situations in a temporal, dynamic and adaptable way, a platform for true integration can be established by using movement as a generator for its design.

1.5 RESEARCH METHODS AND MATERIALS

1.5.1 Research Methods

The approach to this study is qualitative exploratory and based on phenomenological enquiry, where the research aims to understand how the movement of people can be used to generate architecture. It is focused specifically around investigating how infrastructure for movement is perceived by pedestrians and users of non-motorised transport, to inform the design of spaces which can facilitate and adapt to a wider range of movement networks.

The research is around an instrumental case study within the area of South Durban, where there is existing conflict between vehicular and pedestrian movement. The reason for this choice of case study is the research's purpose to inform a new architecture by understanding and interpreting the existing conditions and occurrences surrounding transport infrastructure, re- integrating these spaces into the public realm. The boundaries of this case study lie within the parameters of people in motion, who

have to cross or come into contact with transport infrastructure while travelling between

home and work. This will form an understanding of how this infrastructure is perceived from the pedestrians view point.

<u>Sampling Method: Diversity and Snowball Sampling:</u> To be aware of all conflicts surrounding transport development in South Durban, data needs to be collected from various groups to allow for an overall perspective of the situation and not from only one party. By looking at multiple perspectives of the same situation, a generalisation of what something is like from the 'insiders' experience can be made. The sample will be restricted to any person relying on public transportation and roadway infrastructure to move through Durban.

A Snowballing Method will also be undertaken as from these networks further connections may be established that weren't recognized at the initial undertaking of the research. All anonymity will be kept the use of pseudonyms where necessary as discussed with sample. The saturation point will be decided once enough information is gained from a variety of samples to adequately understand the nature and needs of these people travelling daily along these movement networks.

<u>Data Collection: Interviews and Observations:</u> This research needs to understand the experiences and perceptions (emotional characteristics) and immediate social responsivity, spontaneous and unpredictable behaviours (naturalistic characteristics) of the people travelling along these movement networks, giving two clear areas of focus in the data collection; first a series of semi-structured interviews with the people moving through or working in Isipingo will be conducted through an NGO in Warwick Junction. Interview Questions will be kept open ended and will not only enquire about the participants perception of roadway infrastructure and transportation, but also the background and culture of the participant as this will affect how an individual perceives their space.

Further passive and participatory observations will be conducted while people are travelling along these routes, to empathise with how pedestrians in this area engage with existing transport infrastructure.

Secondary Data Collection:

Information obtained by examining various media by different authors gathered through reviewing books, journal articles and academic papers written by various authors; videos/ movies, television broadcast and the World Wide Web; raw data from precedent and case studies, interviews with professionals involved in the IRPTN plans for eThekwini Municipality etc.

<u>Data Analysis:</u> The data collected will be familiarized and inductive general codes and themes generated from this. All the data collected will then be broken down according to the themes identified, where it can then be interpreted to best inform the design of a transport interchange.

<u>Validity, Reliability and Rigour:</u> The study aims to underpin a language/ discussion for the role of architecture in the facilitation of movement networks using a specific case study where there is a growing call for an alternate uses of transport modes. Findings through this study will be limited to the particular environment and context. However the intent is that this study will through its implementation evoke discussions on the future design of transport infrastructure and its reintegration into the public realm and public life. Further, it intends to evoke discussion surrounding the current developments of public transportation and question whether it is being designed for profit and efficiency or for people and equality.

The first step of the research is to build an understanding of how movement and transportation developed overtime, globally and locally, and how this affected spatial development and land use, through the exploration of historical literature. The next stage is to gain an understanding of the perceptions of the pedestrians and users of non- motorised transport who come into direct contact with infrastructure designed to facilitate movement and transport. It would need to further explore how these people view and treat these spaces and how their daily lives are affected through its design. This would begin a discussion around the needs of the people moving through these transient spaces. Finally it would start to look at the architectural profession, to reimagine the design of transport infrastructure which would better suit the needs of the people and a transport interchange to facilitate integration between different cultures, classes and modes of transport.

Accuracy of data collection is critical and three steps would be undertaken to ensure the process yields reliable and accurate information. Firstly the structure of the interview is a logical progression of information that builds on the information received from the sample, allowing for constant cross checking of responses based on the general outlook of the sample and their responses. Secondly, leader questions that are guided by the expected responses to the main questions will allow the researcher to pick up on abnormalities during the interview and also ensure that the researcher will get accurate information from each question where the sample may not completely or clearly answer the initial question. Finally observations will complement the interviews

allowing the researcher to observe first-hand the accuracy of information collected from these interviews.

The research is aimed at understanding the pedestrians perception of transport infrastructure as these experiences can be used to discern people's needs and inform an architecture which will adequately cater for these needs.

1.5.2 Research Materials

Research materials will consist of a researcher's notebook for recording observations and a voice recorder and/ or camera for verbal interviews.

1.6 CONCLUSION

Movement is a concept which has not been utilized to its full potential in design. Its very definition in contemporary society is superficial and meaningless, resulting in unsustainable transient spaces. Cities globally are developing in an unsustainable manner through technological influences and rapidly changing society as a result of increased mobility designed for efficiency. This is reflected throughout post- apartheid South Africa, in which the planning of these transient spaces has not contributed to facilitating integration.

There is a large gap in the theoretical conception of how people move through and experience these spaces and how the infrastructure to facilitate this movement and experience is actually implemented. There is also a large gap in the literature into how these spaces are currently affecting and influencing social and spatial relations.

The main objective of the dissertation is to investigate how the concept of movement is an informer for sustainable and egalitarian design. South Durban is a perfect example of how transient spaces can impact a community, and there is an opportunity to reimagine how these spaces can be used not just as linkage spaces, but become liminal spaces for free participation, expression and change (Gibson, 2008).

CHAPTER 2

LIMINALITY: THE EXPERIENCE OF MOVEMENT

"Henceforth, space alone or time alone is doomed to fade into mere shadow; only a kind of union of both will preserve their existence."

(Hermann Minkowski in Giedion, 1943: 364)

2.1 INTRODUCTION

The Literature Review is divided into three chapters, in a 'rhizomatic' structure, moving backward and forward in the chronological history and development of movement, and constantly jumping between geographical and disciplinary contexts where scholarship on this concept has developed, in order to gather an understanding for its connections and relevance across space and time. An intertextual analysis is produced in order to re- assess the idea of movement in contemporary society and its relevance in architectural practice.



Figure 2.1: Liso Lozano's Urban Interventions, highlighting spaces in urban settings that are unnoticed by society, altering perceptions. Source: lisalozano.com

The spaces that people move through and develop in are becoming increasingly relevant in contemporary society (Luz, 2004:145). This increase in mobility, especially in urban areas, can be contested to rapid advancement in technology and globalisation (Lemberg, 1977). One of the most critical influencers on society's movements and transformations are the spaces which accommodate changes. These are transient spaces, in- between spaces, forming links between the place of departure and the

place of going (Luz, 2004).

The design and adaptability of these spaces is the focus of this dissertation.

The concept of liminality and surrounding theories are analysed in order to understand movement across space and time in the urban environment. Henri Bergson (1912) and Sigfried Giedion (1943) both theorise about movement in its metaphysical state and how transformation connecting space and time is a never ending process.

Figure 2.2: The Opte Project, a visual representation of cyber connections across the globe representing the interconnectedness and movement of contemporary society. Source: www.opte.org

The location of these spaces and their heterotopia characteristics are identified through the work of Michael Foucault (1999). These perceptions of transformation vary according to where an individual is placed in society. Martin Heidegger's (1971) theory of 'being' and 'nearness' as well as Henri Lefebvre's (1991) notions on urban mobility enable an understanding of how and where these transformations take place and the effect on development throughout history.

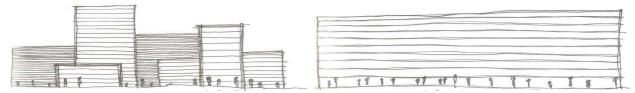


Figure 2.3: Sketch illustrating Heidegger's concept of 'nearness', illustrating how a many textured universe is characterised by near and far distances, changing man's position as he moves through space and time. Source: Sketch by Author, 2016

David Harvey (2010) enables us to connect these metaphysical notions with reality by highlighting the effects of industrial capitalism. The effects of technology are shortening the distances of space and time, creating a monotonous, uniform universe where men are subordinated into society and their position depends on what category they are confined.

Identifying these affects enables an understanding of unshaped urban spaces in contemporary society, an understanding leading to reclamation of space.

2.2 LIMINALITY AND TRANSITIONAL SPACE

2.2.1 Introduction

Society is constantly undergoing changes, forming mobile spaces of uncertainties. These transient spaces accommodate a shifting sense of time and place. However, the design of these spaces often restricts urban mobility and an emotional connection with surroundings.

2.2.2 Movement, Space and Time

According to Henri Bergson (1912) reality is a never- ending process of movement through time and space. People's experiences with the built environment are in a continuous state of movement and transition as 'the "real" can never become completely fixed,' (Lefebvre, 1991: 215). The notion of time, conceptualised in isolation for centuries, is particularly relevant in today's society as there is a shift in philosophical and built environment discourse from static, iconic places to the spaces of mobility (Luz, 2004: 145).

These transient spaces create opportunities for transformation, bringing about a resurgence of modernisms intended ideals; 'change and movement, speeding up, dissolving and transforming everything at hand,' (Koselleck 1979; Wagner 2008; Giesen 2009 in Thomassen, 2014: 9).

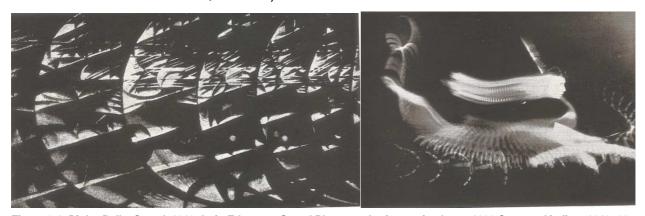


Figure 2.4: Right- Balla, Speed, 1913. Left- Edgerton, Speed Photograph of a tennis player, 1939 Source: Giedion, 1943: 367

The 20th century arrived with rapid advancement technological innovations, speeding mobility and causing radical change in society. The economic, social and functional influences remained imperative; however, the arts became exiled into their own realm, divorced from everyday reality.

Arts play an important role forming an emotional Figure 2.5: Boccione, Bottle Evolving in Space, 1911-12. An artwork representing the futurist connection with space and time, but these notions are often dismissed as trivial (Giedion, 1912 in Giedion, 1943: 365). Source: Giedion, 1943:



movement of capturing objects in motion, multiplying and distorting as they move through

1943: 350), resulting in development continuing exempt from these factors. Ignoring this aspect in life is detrimental to how individuals and communities move and evolve through space and time.

As experiences with space and time became harder to quantify, cubism developed as an expression of the collective in order to form a unity between the two (Giedion, 1943: 364) by perceiving objects from different points, simultaneously through three dimensional space. The movement lead to a self- conscious enlargement for perception of spaces (Giedion, 1943: 357) and highlights the notion, recognized by both realms of art and science, that one cannot truly experience a space until one moves through it (Giedion, 1943).

Movement through space and time has become an obsession amongst all professions alike, specifically the representation of it. This representation was sought in order to find meanings for spatial conceptions in a world characterised by contemporary mobility (Giedion, 1943).

'Scientists know today that all life has historical connections through time' (Knapp, 2003 in FOA, 2003: 638) and experiencing life is not confined to any specific point or place, but is defined by continuous connections and transformations across space and time. There is a demand for continuity as 'human life is not limited to the period of a single life span,' (Giedion, 1943: 7 in Norberg- Schultz, 1980: 201).

Numerous MESALIR

Figure 2.6: Nude Descending a Staircase, Marcel Duchamp, View from Multiple Points of Perspective, Source: http://en.wikipedia.org

2.2.3 Liminal Moments in Urban Spaces

Liminality is a concept used to understand moments of transition, how they affect individuals and how one reacts to change (Thomassen, Wydra & Horvath, 2015). Arnold van Gennep (1909), Richard Turner (1967) and Eric Voeglin (1987) are the main contributors to its theoretical discourse and in the understanding of how these moments



Figure 2.7: Khronos Projector. Representing time through film. Source: http://www.k2.t.u-tokyo.ac.jp



Figure 2.8: Picasso, "Guernica", 1937. Source: http://www.pablopicasso.com

mark society (Thomassen, 2014).

In contemporary society where mobility and transition are becoming necessary for survival, liminal conditions become more evident; places of no limits or boundaries, encompassing infinite possibilities (Thomassen, 2014: 1).

These conditions are often seen as necessary in order for people to move and evolve, for the construction of culture and for sustaining social reality, however, they are imploding as the boundary between the ordinary and extra- ordinary becomes porous (Thomassen, 2014: 2). This can be dedicated to rapid advancement in technology, contemporary culture and capitalism, however, such relations are 'as noted by Weber, a recurring phenomenon in historical moments of crises,' (Thomassen, 2014: 2).

Therefore, these moments have always existed throughout time and will continue to do so, and it is in these spaces that negotiation of transformation will take place as order is henceforth forgotten (Voeglin, 1987), forming grounds for new social orders.



Figure 2.9: Aftermath of war in Berlin, a critical liminal moment in German Society, illustrating how liminality 'is likewise about how larger groups or entire societies undergo change and transition, how they live through uncertainties of the in- between, and how they com e out on the other side- if at all,' (Thomassen, 2014: 1). Source: http://theelephantgate.weebly.com

2.2.4 The Location of Nomadism across Time

One of the most critical influencers on movement is the spaces accommodating for change. Transient spaces, forming links between places of departure and places of going (Luz 2004), are constantly changing and evolving to suit the needs of the people. The location of nomadism can be found in three main areas in urban society; Liminal spaces of transition- threshold spaces which allow for the crossing over from one place to the next- spaces between buildings- "leftover" spaces which become lost, degraded and empty- and transitional localities- places of communication, transportation and non-place (Luz, 2004).

Michael Foucault (1999) theorizes about these spaces being heterotopias accommodating the dynamic of time and place (Luz, 2004); Momentary spaced places affiliated with both the points of departure and points of origin (Foucault in Luz, 2004).

They are places in which mobile activities can be carried out unconsciously, characterised by hybridity, interlocking and exchange, devoid of hierarchy or social status and 'imply a certain trace of anonymity, traffic and people who circulate in

continuity,' (Luz, 2004: 9).

Victor Turner (1967) visualises "liminoid" spaces being created from a particular event or from resistance against ordering (Hetherington, 1997: 34).

In terms of architectural spaces, they can be defined as third spaces or 'in- between' spaces (Luz, 2004). These spaces can be translated into places that people pass through but do not live in, such as airports, hotels, passageways, railways etc.; Passage experiences indicating 'a

Figure 2.10: Art Work by Natalie Couch depicting transformation through space. Source: http://www.xsectionjournal

displacement, a process of transformation undertaken, but not yet finished,' (La

Soudiere, 2000: 5 in Thomassen, 2014: 13).

The location of these public spaces is established when the boundary line is crossed, overcome and experienced forming a space inbetween the boundaries, reflecting the complex dynamics of urban life (Luz, 2004). As society



Figure 2.11: Train tracks ascending the Jacobs Ladder to the South Coast Junction. Source: http://grahamlesliemaccallum.wordpress.com

evolves and moves forward, so too must these spaces. If not it becomes lost; unshaped anti- space as a result of poor urban design (Trancik, 1986). Movement over time will always result in unused land and if left, the infrastructure of these spaces results in major gaps disrupting the overall continuity of the urban fabric.

2.2.5 Dynamics of Urban Life

(1990)Georg Simmel defines urban mobility through understanding urbanism as human event, recognizing the individual's ever changing social and spatial position as one moves through a city. This sense of transition is how one experiences culture and society, but as the act of walking changed to locomotion these liminal experiences became increasingly diminished. disabling man from understanding his place in the natural



Figure 2.12: Venezuela Capital, Caracus, illustrating the harsh boundaries formed by transport infrastructure, restricting people's movement and disabling self-emancipation from liminal experiences (Murrugarra, Larrison & Sasin, 2011). Source: http://www.sunnysidebaptistchurch.org

world

'Travel is no longer an event, but a routine,' (FOA, 2003: 112). This contradicts Simmel's notion of movement as a performance. Urban mobility has instead been incorporated into everyday life, reduced to an unconscious act that has not been intensely problematized.

The design of the spaces facilitating urban mobility is assumed and imposed through a minority who do not participate in the motion of everyday life (Murrugarra, Larrison and Sasin, 2011), which is why these liminal spaces are being diminished through urban scenarios still filled with the remains of the past (Luz, 2014: 12).

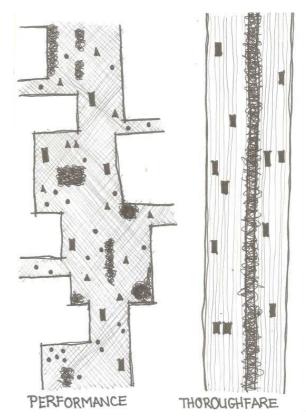


Figure 2.13: Sketch depicting the differences between thoroughfares and places of performance and pause. Source: Sketch by Author, 2016

A passage place was selected as a site for an urban intervention; the public entrance of an art school in London. The objective of the design was to reuse and appropriate urban details to draw attention to the passageway to understand the pedestrians' immediate social responsivity, spontaneous and unpredictable behaviours to this space. The transitional space was characterised by the practice of walking; an in between space that accommodated for no pause or



Figure 2.14: Central Saint Martins, College of Art and Design, School of Graphic and Industrial Design, University of Arts London, former London Institute, United Kingdom. Source: Luz, 2014: 160

lingering, leading to a dull and monotonous atmosphere (Luz, 2004: 160).

Simple installations were used to draw the user's attention to ordinary and unnoticed elements along the passageway in an attempt to evoke a liminal response to the lack of social areas within the space (Luz, 2004: 160).

However, after a month the temporary installations had to be dismantled and the space returned to its original state. It became once again a place characterised by neglected spatial practice as the users of that space had no desire take ownership over that space.

This is one of the main issues regarding liminal spaces. Temporal spaces, i.e. a passageway or street, is characterised by ephemeral qualities; therefore, people do not enact their rightful ownership over that place. It becomes an empty space, naked place of nomadism characterised by nothingness. Spaces of mobility are places of exchange, but if momentary pause is not accommodated for the true liminal experience of the threshold is not being maximised to its full potential.



Figure 2.15: Places of Pause Source: Luz, 2014: 161

2.2.6 Conclusion

It is clear that contemporary society has now focused its attention on ephemeral spaces of mobility instead of the isolated building, and that the successes of these spaces are directly dependent on the people moving through them. If the user, moving through space and time, is not recognized as the creative element, liminal experiences are diminished and detrimental to the construction of cultures.

2.3 PERCEPTIONS OF TRANSFORMATION

2.3.1 Introduction

The development of transient spaces is most affected during times of change. If transformation happens too rapidly, these spaces are not able to adapt in time to the detriment of cultural and social structures. If the perception of this change is lost, the conscientization of the transformation, enabling acceptance, will not take place.

2.3.2 Temporal Nature of Space

Places have become closer and information is instant as a result of technological innovations and advancement. 'All distances in time and space are shrinking. . . Man puts the longest distances behind him in the shortest time,' (Heidegger, 1971:163). However, 'no abridging or abolishing of distances brings nearness,' (Heidegger, 1971: 175).

A universe characterised by near and a far distance is many textured, allowing for multiple perspectives and ideas regarding the temporality of space. This results in diverse societies and a multiplicity of cultures colouring space and time. When distances are abolished the universe becomes uniform and men are subordinated into society; their position depending on the category they are classed in, giving control to economic and functionalist ideals (Heidegger, 1971: 164).



Figure 2.16: Monotonous Architecture, 'merging everything into the distanceless,' (Heidegger, 1971: 164); a new suburb in Moscow. Source: Norberg- Schulz, 1980:187

Nearness is reclaimed when the essence of the space is understood. If man cannot experience space and time on his own terms, he will never be able to understand its true meaning; therefore, he will not understand his place in it. Space is not meant to be permanent, and human presence is defined by movement through space and the motions of time. If space was everlasting, it would lose the essence of time, and eventually become an irrelevant entity (Heidegger, 1971: 176).

2.3.3 The Development of Movement

As movement rapidly increased, so did the knowledge of the world, coinciding the theories regarding space on a global level. One of the main movements during this time was Functionalism, allied by the Russian Constructivism Movement. The main goal was to create flowing democratic space, by means of pure forms; if everything is the same then everything is equal.

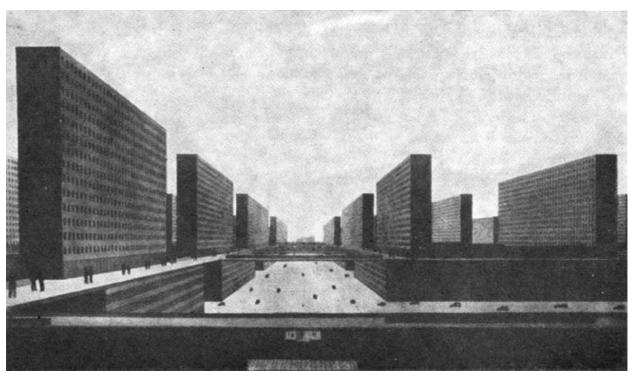


Figure 2.17: Ludwig Hilberseimer, The Ideal City. Roger Trancik (1986:21) defines it as 'a program based on ideals of pure forms and unbounded, democratic or flowing space,' and recognises its success because of fast and economical construction and its support of high rise technology. Source: http://www.pinterest.com

Functionalism's success is owed to the wars of the early 20th Century. There were little historical references as liminal experiences allowed for a 'clean slate' on which to begin development. During this time, people of the working class were struggling economically as the 'machine' taking over coincided with post war depression; however, the innovation and excitement regarding this change blinded society to the main cause of their struggles (Trancik, 1986: 21).

The terror aftermath of the wars, resulting in an aversion to public spaces (Norberg Schulz, 1980: 189), affected the architecture immensely. 'The terrifying is unsettling; it places everything outside its own nature,' (Heiddegger, 1971: 164). Attention was diverted towards individual buildings instead, social pursuing renewal through abstraction, looking towards abstract forms instead of real life needs for inspiration for creating space. Vital aspects of everyday life and the habits of people were missed. socially unsustainable causing spaces (Norberg Schulz,:1980: 189).

Functionalism affected urban mobility through its main aspect, the grid, used to differentiate places and activities, compartmentalize functions to make sense of society's order and enforce control (Trancik, 1986).



Figure 2.18: Walter Gropius, The Bauhaus, Dessau, 1926. An example of a modern building existing in isolation, not relating to its context, living 'abstract life in a kind of mathematical- technological space which hardly distinguishes between up and down,' (Norberg-Schultz, 1980: 190). Source: http://www.modernnow



Figure 2.19: Herrington Kansas, 1887, American West Grid Source: Photo by John Reps in Trancik, 1986: 34

The grid exists with no spatial containment, and space cannot exist without boundaries and limits (Luz, 2004). 'The difficulty in identifying the centre of a grid has promoted a notion of non- hierarchy and repetitive spatial structure,' (Trancik, 1986: 35).

This structure of space coincided with the arrival of advanced transportation, unimaginably altering everyday life (Lemberg, 1977: 3).

As the distance between work and home increased there was an increased reliance on faster and more efficient transportation. This and the grid allowed for further expansion and resulted in urban sprawl. As peripheral suburban houses were developed, people relied on the motor vehicle and this form of mobility became a harsh necessity (Lemberg, 1977), with freedom of choice only being available to those who were able to

own such a machine.

Modernism attempted to renew society by freedom to the urban dweller, concentrating human habitation and enabling free mobility through a natural environment between places; however, ideas were often unrealistic and the true essence was lost amongst continuous criticisms of postmodernist thinkers.

Modernist visions of industrial landscapes were painted with utopian ideals, often used in fragment spaces order for the



Figure 2.20: Le Corbusier, La Ville Radieuse, Perspective Sketch, 1930. Le Corbusier's idea of freedom to the urban dweller, which incorporated large parklike spaces within the city, led to an inhumanly enforcement of state control (Scott, 2003); scaled city and alienated societies (Trancik, 1986: 27). Source: http://archidialog.com

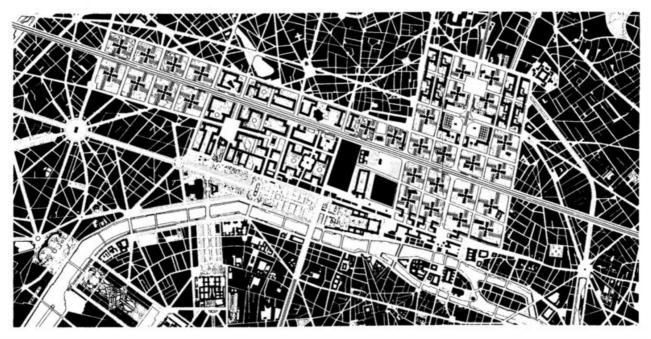


Figure 2.21: Le Corbusier, Plan Voisin, Paris, France, 1925. Source: http://www.mediaarchitecture.at

'the art of packaging,' (Leon Krier in Trancik, 1986: 36). However, modernist ideals cannot be criticized in isolation.

David Harvey (1992) deems it necessary to understand the movement of economics to understand history. 'It has become increasingly obvious that modern economies function to damage and destroy the ecological systems that support human and nonhuman communities.' (Daly, 1996; Korten, 1995; Starke, 2002 in Gruenewald, 2003: 632). This statement is romanticised and overlooks the main purpose of modernism. Post- modernism and Rationalism, although promoting concern for public open spaces over individual buildings, according to Harvey (1992), are bigger supporter of capitalist societies as it demands alterity and disregards the intentions of the modern movement (Harvey, 1992).

Not working off previous ideas to shape contemporary society results in the consequence of disrupted movement across time. Man does not exist long enough for his new ideas to make effective transformation, and unsustainable solutions come from a failure to carry thought across time.

2.3.4 Transforming Society

Liminality is a paradoxical concept as it is both social and personal (Thomassen, 2014: 4); even as it is about an individual passing through the in- between, it is also about how transitional spaces affect society at large. An 'exhaustive description of an area from one point of reference is, accordingly, impossible; its character changes with the point from which it is viewed,' (Giedion, 1941: 356).

This performance not only allows people to understand the spaces they are in, but enables solidarity (Thomassen, 2014). It is 'a realm of pure possibility whence novel configurations of ideas and relations may arise,' (Turner, 1967: 97 in La Shure, 2005: 2).

In a social sense, these spaces are void of any hierarchy, enabling radical possibilities as social order becomes irrelevant. Therefore, these are hybrid spaces, entertaining difference (Thomassen, 2014: 8) and essential for the construction of culture (Thomassen, Wydra, Horvath. 2013).

As a space of resistance against neo- liberalism, it becomes a place for discovering alternative modernity, however, liminality needs to be carefully problematized in the post- modern society of rapid change and the never- ending search for new possibilities

and innovation. A space of no boundaries only seeks to encourage this attitude, which in turn encourages capitalism (Harvey, 1992 in Roberts T and Hite A, 2000).

Victor Turner (1967) sees liminality as a space necessary for creating place of human creativity by shaking routines which can enable a 'balance of consciousness's (Thomassen, 2014: 11).

However, liminality is devoid of boundaries, and freedom without boundaries is not freedom at all, but emptiness. 'The boundary is that from which something begins its prescencing,' (Heidegger in Trancick, 1986: 114), therefore, boundaries are necessary to enable existence in time and 'for the framing of human experience and for thought itself,' (Thomassen, 2014: 13). A space of infinite possibilities is a dangerous space as this space cannot quantify time.

Transient spaces connect larger networks together. Their importance, particularly for the poorer class and marginalized, is often undermined (Murrugarra, Larrison & Sasin, 2011). According to the theories of Durkheim (2002: 43), when these essential networks are disrupted, resulting in a failure to react to change, anxiety will be developed leading to a number of larger problems (Thomassen, 2014).

These spaces accommodate shifts in society's structures, therefore society itself is in a constant state of transformation and the perception of liminality evolves as one experiences life.

2.3.5 Perceptions of the Marginalized

Liminal individuals do not fall into the normal constructs of society, but have their own space of equal communal groups; 'they are betwixt and between the positions assigned and arrayed by law, custom, convention and ceremony,' (Turner, 1969: 95 in La Shure, 2005: 2).

Masterless men, vagrants, criminals, witches, gypsies, Jews, madmen etc. have been considered, throughout time. the representation and personification of the consequences of the industrial revolution. not the marginalized victims (Hetherington, 1997: 55).

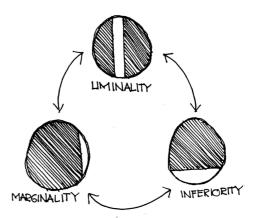


Figure 2.22: Three Manifestos: Liminality meaning between things, marginality on the edge of things and inferiority underneath society; not to be confused with one another as perceptions from these points are directly influenced by the spaces they are confined to (Lashure, 2005). Source: Sketch by Author

Whereas liminality defines a threshold space or a passage of transition, marginality describes a state of being which belongs simultaneously to two or more social/ cultural groups (Lashure, 2005).

It should not be considered as people who dwell outside of society, but as a group which perceives and is influenced by society from a point outside of society. This becomes a space in which radical structural change becomes possible and liminality-both the source and destruction of structure in society (La Shure, 2005: 3)- can be seen as a space in which structured and radical society meet; heterotopias 'of the unbounded and blurred spaces between rather than the easily identified space at the edge,' (Hetherington, 1997: 27).

The margin is not a place that someone is abolished to, but is a space occupied by choice as a standpoint or alternative perspective against what is observed as the norm. It offers alternative perspective from which new worlds can be visualised as it is devoid of dominant influences (Hooks, 1990: 149–150 in Gruenewald, 2003: 632).

'To be in the margin is to be part of the whole but outside the main body,' (Hooks, 1984: ix in Gruenewald, 2003: 631)

Using place as a construct for social analysis is a politicized approach to cultural geography and 'is centrally concerned with the neo- Marxist cultural critique and with global postmodern theory,' (Feld and Basso, 1996: 4 in Gruenewald, 2003: 631).

Marginality, a place of struggle and resistance, is a place inaccessible to political powers, and is identified as a site for re-visioning.



Figure 2.23: Dutch duo artists, Haas and Hahn changing the perceptions of the marginalised in Rio de Janero with paint. Source: http://intelligenttravel.nationalgeographic

2.3.6 Conclusion

Space should allow for alterity and individuality, however, rapid and unsustainable advancement has led to disrupted movement across space and time. Unsustainable movement through space has distorted human experience with surroundings; however, post-modern and capitalist society has opened up marginal spaces which enhance the liminal individuals' ability to enact necessary transformation. Understanding spaces and their transformations from multiple perspectives allows for change to be accepted and problematized. Denying this inevitable change leads to lost space within the urban fabric.

2.4 LOCATING LOST SPACE

2.4.1 Introduction

Refusing to let go of the past and move with the motions of time results in unshaped urban spaces as there is no commitment to the transformation. If people are not involved in the process of shaping their spaces they can no longer identify themselves' within that space. 'Space is the medium of urban experience,' (Trancik, 1986: 100). There is a responsibility for the shaping of space that is not recognized, resulting in hegemonic forms and abstract space. Rapid urbanisation and the inner city void has led to an increase of lost space within the urban fabric, however, modernist visionaries were able to predict this dilemma, and it is through their work that a reclamation of space can become possible.

2.4.2 The Experience of Transformation

Richard Sennett (1977) disregards the nostalgic man and instead of stepping back into tradition, moves forward with the continuously changing environment while changing perspectives on 'who' the public man should be. He contests the notion of the destruction of public due to cyber space by arguing for the 'resurgence' of public man in reconstructed forms of public. Just because something is not as it was does not mean to say that it is wrong.

Transient spaces, however, are adapting too fast and man is not able to evolve and emerge from the liminal state technology has confounded society in. They are not necessarily sustainable or facilitating true integration. There is a gap in their theoretical conception and how they are realistically implemented and influenced by technology (Luz, 2014).

Poor urban design is a result of indecisiveness; a neglect to let go of the past and commit to transforming society, leading to unshaped anti- space (Trancik, 1986). Change is not facilitated by the people who occupy the space, but through a top down approach which does not respond to community patterns and social relations; a result of zoning and urban renewal reasoning based on normative assumptions (Trancik, 1986).

Spaces, no longer accommodating physical and social diversity, are causing segregation. This is the reason for the success of functionalism as one of its main characteristics is 'starting from zero,' (Trancik, 1986). Existing systems are ignored and deemed irrelevant, resulting in a lack of social commitment and participation in the improvement of the environment. This task is then left to a minority who do not fully understand the systems moving through the space which they are changing, leaving no room for spontaneous transformation.

Spontaneous transformation will always be radical as it alters the routines and motions of the everyday life (Goonewarden, Kipfer, Milgrom, Schmid, 2008: 199). These transformations are the ones that take place when society is at a tipping point of

imbalance and it is obvious that the one side of the scale is going to fall into darkness if a change is not initiated.

Lefebvre (1976) theorises about the gaps and imbalances between levels in society, and how the mediation and interaction between these levels can result in the dominations and incorporation of one level into another, depending on the time and place of the encounter.



Figure 2.24: Lefebvre's rhythmanalysis in Interbellum Berlin , representing everyday life as the production of capitalism (Goonewarden, Kipfer, Milgrom, Schmid, 2008: 199) Source: http://citybreaths.com

2.4.3 The Shaping of Spaces

Systems are becoming increasingly complex as time moves on. Technology is advancing rapidly, globalisation is spiralling out of control and capitalist influences are controlling societies and lifestyles.

The shaping of space is a political process and is both the source and product of social transformations (Greunewald, 2003). People need to be involved in place- making to rid the political ideologies that have shaped space throughout history (Lefebvre, 1976: 31 in Greunewald, 2003: 628).



Figure 2.25: Formalist Architecture. International Port Terminal, Yokohama, 1996- 2002, Source: http://www.archdaily.com

'If human beings are responsible for place making, then we must become conscious of ourselves as place makers and participants in the socio-political process of place making,' (Gruenewald, 2003: 627). This responds to the notion of good citizenship which is required for a democracy to be successful. Seeing space as an inevitable product of culture and social relations destroys the ideals of citizenship and democratic society.

It is the processes of formation that enables experience and identification between man and space. True formalists do not only see the shell of the form, but are able to understand the processes and systems that resulted in the form itself, 'the space where indeterminacy or historical becoming unfolds,' (Kwinter, 1994 in FOA, 2003: 98).

Spaces, however, can also be shaped to maintain domination over subaltern groups; enabling order and control. By strategically shaping spaces to control society there is

little need for order to be enforced through man power. 'Domination is maintained not through material force but through material forms,' (Gruenewald, 2013: 628).

Critical social analysis identifies the geographical relationship between people, places and hegemonic forces. The power of political and social institutions is legitimised through the control over space (Gruenewald, 2003:629) and this is enforced through panopticonism.

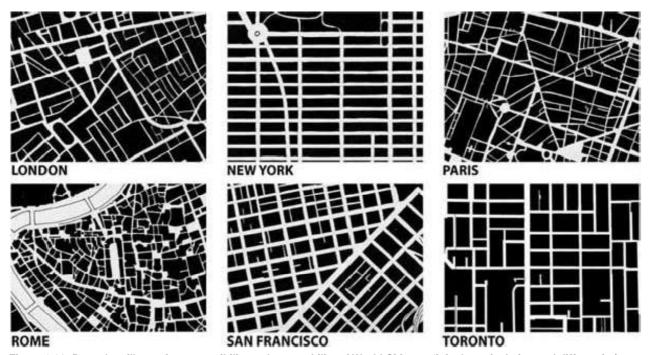


Figure 2.26: Precedent illustrating accessibility and permeability of World Cities as 'it is the articulation and differentiation of solids and voids that make up the fabric of the city and establish the physical sequences of visual orientation between places,' (Trancik, 1986: 100). Source: http://www.pinterest.com

One of the methods used is the privatization and gentrification of spaces. This removes physical spaces from the public realm through which political power is developed. Power depends on, is facilitated by, and is reflected in the development and control of geographical space. Inquiry into this can begin with an analysis of the relationship between public and private space and the interrelated consequences of the local and global effects of capitalism (Trancik, 1986: 100).

Analyses on hegemonic space in relation to the 'everyday' were reformulated by Lefebvre, specifically relating the actions of the bourgeoisie to the production of space and its hegemonic qualities (Goonewarden, Kipfer, Milgrom, Schmid, 2008: 198-200).

'The dominant form of produced space under capitalism is abstract,' (Goonewarden, Kipfer, Milgrom, Schmid, 2008: 200). Abstract space is a visual representation of the dreams and aspirations of subaltern classes, capturing them within a void of enforced ideologies in which no state of solidarity can be achieved.

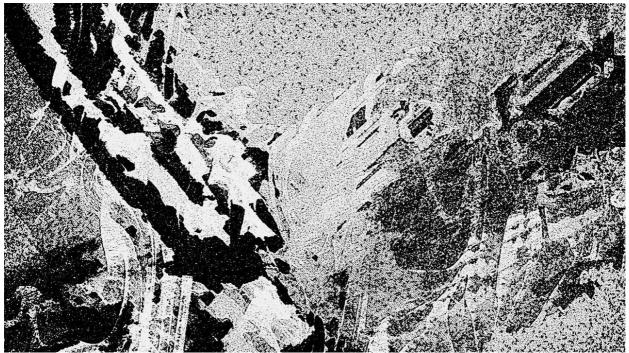


Figure 2.27: Lefebvre's abstract space is hegemonic precisely because it 'incorporates difference in all its dimensions, (Goonewarden, Kipfer, Milgrom, Schmid, 2008: 203). Source: http://anarchistwithoutcontent.wordpress.com

2.4.4 Understanding Anti- Space

Contemporary society is experiencing a time- space compression because of rapid transformations, removing spatial barriers and providing shorter time horizons. This has resulted in a crises identity as the sense of location in space and time is lost (Harvey, 1992: 295).

Movement over time results in unused land and infrastructure (Trancik, 1986), disrupting the continuity of the urban fabric and rendering urban mobility 'a disjointed, disorientating experience,' (Trancik, 1986: 2) 'Never before in the history of the world have non- places occupied so much space,' (Benko & Strohmayer, 1997: 26; Auge, 1995 in Thomassen, 2014: 12).

The first step to understanding these gaps is identifying the causes for antispace.

Roger Trancik (1986) highlights five main causes: the automobile, modern movement in design, zoning and urban renewal, privatisation of public space and changing land use. But the biggest issue is that 'the spaces between buildings are rarely designed,' (Trancik, 1986: 8).

Development disregards emotional connection with space, 'and no level of development can be maintained if it remains detached from our emotional life. The whole machinery runs down,' (Giedion, 1943: 351).

'Lost is the settlement as a place in nature, lost are the urban foci as places of common living, lost is the building as a meaningful sub- place where man may simultaneously experience individuality



Figure 2.28: Syracuse, New York, Lost Space at the Edge of the Freeway, 1983, Source: Carol A. Brower in Trancik, 1986: 5



Figure 2.29: Houston, Texas, Aerial Photograph, 1985, An example of the 19th century phenomenon of rapid urbanisation (Giedion, 1943: 467). Source: Harper Leiper Studio in Trancik, 1986: 9

and belonging. Lost is also the relationship to earth and sky,' (Norberg- Schultz, 1980:190).

Lost space cannot be blamed on functionalist ideology alone; ideals of social hygiene and concepts regarding the 'garden city', 'new town' and 'suburbia' caused an abandonment of the inner city, resulting in urban life moving through 'dead' spaces (Trancik, 1986: 39).

2.4.5 Reclaiming Space

Understanding non- place as a spatial typology is essential to recovering lost space, (Trancik, 1986). Identifying these gaps is not enough to resolve this issue. The history and opportunities of the space need to recognized and filled with flexible and enabling frameworks.

To reclaim lost space 'there must be a willingness to reconsider the object and evaluate the ground rather than worship the figure,' (Trancik, 1986: 106).

Robert Venturi (1966) identified lost space as a positive paradigm to enable solidarity, as it lay outside the boundaries and influences of modernism. He recognised that the open space left over from the Modern Movement had indeed become lost space and set to reclaim this space through inclusive design. He was set apart from other urbanists as he saw 'lost space in commercial strips and suburbs as inevitable,' (Trancik, 1986: 37).

Peter Cooke- one of the founding members of Archigram- presented an ingenious idea which would enable the reclamation of lost spaces. The 'Plug- In City' was 'a concept for a city of continual change in which enormous technical frames served as an infrastructure that hosted interchangeable cells of habitable space,' (Webb, 2005: 37). It suggests a hypothetical fantasy in which the thing constructed is not a city 'but a constantly evolving megastructure that incorporates residences, transportation and other essential services- all movable by giant cranes,' (Merin, 2013:1). It was designed to not only facilitate, but inspire change (Matilda, 2002: 142).

This project reflected the concerns for modernism and 'suggested a nomadic way of life and, more importantly, liberation from the modernist answer of suburbia,' (Merin, 2013: 2).

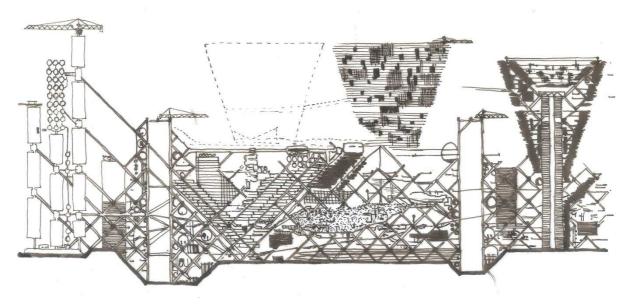


Figure 2.30: Peter Cooke, Plug in City, Source: Sketch by Author

The designers of this group identified the values in modernist thinking and were able to translate them into their ideas and drawings, further emphasising where modernism went wrong Merin,2013: 3).

However, Archigrams drawings were made by hand in abstract contexts (Webb, 2005: 37), distorting the design when it was translated into reality, as seen in Alan Bublex' translation of the 'Plug- In City' in Houston.

However, these ideas, too radical for their time, have been carried across history and are responsible for influencing many of the successful architects and urban thinkers today such as Richard Rogers and Renzo Piano (Merlin, 2013: 142).



Figure 2.31: Renzo Piano and Richard Rogers, Pompidou Centre, Beaubourg Source: http://alainelkanninterview.com

2.4.6 Conclusion

The multitude of lost space in the urban environment is not a result of technology or industry, but through a neo- liberal society not taking responsibility for the public spaces they occupy. The location of lost spaces, in- between different classes of society, lacks the integration of social structures because of economic differentiation. However, enabling and adaptable frameworks can allow for lost space to be reclaimed by the user, renewing modernist ideals.

2.5 CONCLUSION

Movement through space and time has profound effects on cultural and social constructs, and how this movement shapes the urban environment directly affects man's perception of his surroundings.

Movement is a continuous, eternal process, which shapes spaces, thought and consciousness across time. Liminal experiences of transformation have been

metaphysically analysed in order to determine how these have impacted the processes of movement and perception from various points in space.

Modernist visionaries were able to identify this aspect of time and predict the rapid movements of the globalising world. However, their ideas brought into reality often resulted in the unsustainable transformation of space leading to unshaped urban spaces forming rifts in society and the urban fabric.

One can conclude that there is a direct link between movement and space, furthermore, social constructs. It is these social constructs that give space its cultural meaning through the process of place- making; a process in which architecture is the key element.

CHAPTER 3

EXPERIENCE AND SHAPING OF SPACE

"Once one begins to appreciate the pedagogical power of places, it is difficult to accept institutional discourses, structures, pedagogies, and curriculums that neglect them."

(Gruenewald, 2003: 641)

3.1 INTRODUCTION

When space is confined to a point in time, it forms a relationship with man as it is induced with cultural meaning. This is known as place. 'Whatever space and time mean, place and occasion mean more. For space in the image of man is place; articulate and in between,' (Aldo Van Eyck in Trancik, 1986: 114). Space is becoming a central issue for social theorists (Hetherington, 1997: 20) as experience with place and the 'irreducible plurality of social relations' (Hernandez, 2002: 106) evidently defines society.

However, experiences with place is transforming at such a speed due to globalising forces, that this imperative relationship is being disrupted, along with its pedagogical qualities. Edward Soja (2000) highlights how ideals of democracy are being undermined through the privatisation of public space, coinciding with David Harvey's (1992) perceptions of history from an economical point, providing an alternative view on post- modernism.

The street space is the main focus, as it is a space of movement that has changed from a place of mixed use qualities to one characterised by speed; an issue recognised before its time by modernist visionaries. Through the works of Pedro Gadanho (2007), the street is perceived not only as a transient space, but as a place of performance.

3.2 PEDAGOGICAL PLACE

3.2.1 Introduction

Perception of spaces is directly related to how man perceives his peers and understands his place in nature. 'Places are the ground of direct human experience,' (Gruenewald, 2003: 623). By ignoring this pedagogical connection with place, he is refusing responsibility for his place on earth, relinquishing participation in its creation.

3.2.2 The Human Experience of Place

Man is developing differently to his ancestors because his experience with place has been disrupted. Current lifestyles are preventing development during critical stages of cognition. This disruption destroys carnal empathy, resulting in a lack of emotion and understanding for the places moved through and lived in (Gruenewald, 2003).

Places operate pedagogically on a level below the consciousness (Gruenewald, 2003: 627); therefore the relationship and emotional connection with place is often not recognized, leading to a lack of participation.

Participation is essential for perceiving and experiencing place (Abram, 1996: 69 in Gruenewald, 2003: 624). Lack of participation leads to a disconnection between man and place and misunderstood relationships within society (Gruenewald, 2003: 622).

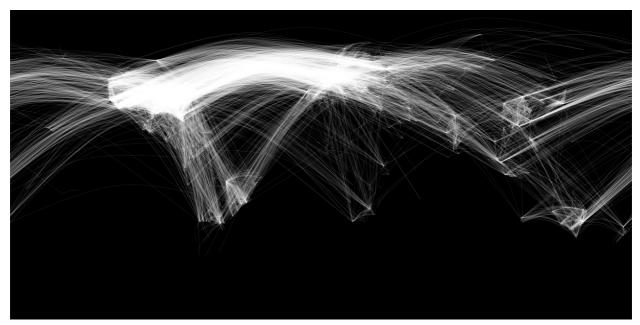


Figure 3.1: Global Connectivity Due to Technological Advancement, 'look how one press of her foot sets a thousand threads in motion- how the shuttles dart to and fro, the flowing strands intertwine and a thousand interconnexions are made at one stroke!" (Knapp, 2003 in FOA, 2003: 640). Source: http://geographicaladvantage.aag.org

Abram (1996) attends to 'a phenomenology of perception as a necessary step toward caring for the cultural and ecological lives of places and understanding how one place is connected to another,' (Gruenewald, 2003: 624). These connections in place and nature are complex and interrelated (Knapp, 2003 in FOA, 2003: 640), therefore only by moving through space is an empathetic understanding of place gained.

3.2.3 People- Place Relationship

People and cultures are what give places their meaning. People often take social spaces for granted and do not see it as cultural products, but instead as inevitable outcomes and not problematic products of human decisions (Greunewald, 2003).

Relationship between man and his surroundings are the focus of modern science, a paradigm known as phylogeny, 'the genesis of diversity,' (Knapp, 2003 in FOA, 2003: 638).

'Space is a bounded or purposeful void with the potential of physically linking things, it only becomes *place* when it is given a contextual meaning derived from cultural or regional content,' (Trancik, 1986: 112). Presumed meanings of place thwart perceptions and annihilate the essence of objects moving through space and time, as

'the thing is a thing' only through human representation and encounters (Heidegger, 1971: 168).

Places will always have something to say, but humans refuse to listen as current lifestyles 'do not demonstrate an orientation of care and consciousness toward places that they manipulate, neglect and destroy,' (Gruenewald, 2003: 624).

This is a result of the globalised characteristic of places designed for efficiency and production and not for people and equality. Connections need to be carried across time in order for sustainable evolution and a multiplicity of places to exist (Bentley, 1985 in Van Gruenen, 2014). As part of a larger system in nature, societies need to be able to adapt (Knapp, 2003 in FOA, 2003: 641).

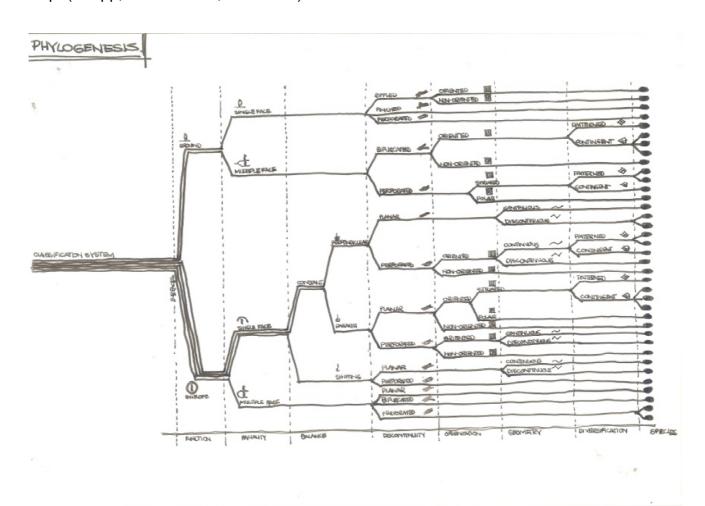


Figure 3.2: Phylogenesis Classification System, Lines of descent connects us to a much larger system is the basis of phylogeny. 'A phylogeny also provides a framework with which we understand nature, and by analogy, our place in it,' (Knapp, 2003 in FOA, 2003: 647). Source: FOA, 2003

Institutional structures only stand to develop consciousness between people and the places they manipulate, not the land in its natural state, rendering man autistic as he has no longer participates in place- making (Thomas Berry, 1988 in Gruenewald, 2003: 624), instead accepting 'existence as noncontroversial or inevitable,' (Gruenewald, 2003: 627).

Pseudo- analytic thinking blinds man by "facts" resulting in meaningless places as he is not able to "dwell poetically". In order for identity to be re- established, an "education through art" is necessary for man to contribute to history through creative participation (Norberg- Schutlz, 1980: 201- 202).

3.2.4 Imposition of Place on Society

communities Sustainable directly are dependent on the ability of that community to change and adapt over time without compromising another in the process. A common thread in mitigating global crisis is the lack of attention paid to communities and social constructs (Aliyu; Ebohon; Gyoh, 2014). The 1960's brought about an idea of creating new communities "from scratch", but utopian vison brought to reality through technological innovation, resulted in suburbia unsustainable communities sprawl, and economic disaster. (Trancik, 1986).

E. Charlesworth and R. Adams (2011) Virginia. A failure of the New Communities Program highlight the gap of empirical research regarding global warming and realizable community's impossible. Source: Trancik, 1986: 55

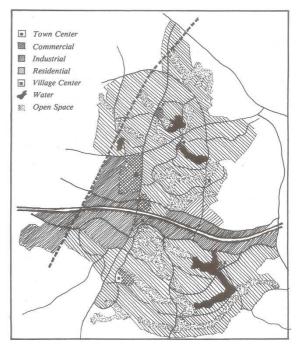


Figure 3.3: Robert E. Simon's development for Reston, initiated by President Lyndon Johnson because of lack of attention paid to the economic circumstances of communities rendering self- sustaining, mixed income

design visions to solve the current unsustainable cities, resulting in uncertain futures. The extensive use of technology in cities create a very noisy environment, which is related to developmental outcomes- academic achievement, cognitive, social and emotional development in children and adults and physical effects of high blood pressure and an influx of stress hormones (Sylva, 1994).

Contemporary spaces, directly impacted by globalisation, are designed for security through the formation of harsh barriers between public and private realms.

An influx of foreign cultures into the cities implemented an element of fear within society resulting from a lack of understanding between people's This differences. also results in a sense of fear for safety, specifically surrounding children, regarding traffic and lack of supervision in the community (Kopko, 2013). The security value higher visibility and social value in public and private

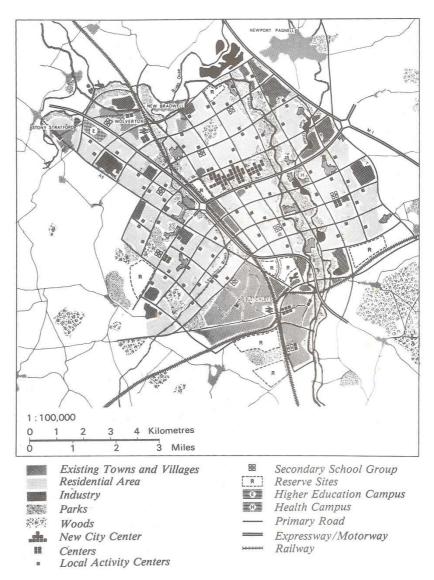


Figure 3.4: Milton Keynes New Town in England, 1970. Uniform grid of roadways intended to give maximum flexibility, but instead resulted in a lack of hierarchy and low density housing resembling an American Suburb. Source: Trancik, 1986: 32

thresholds is not recognised (Van Gruenen, 2014).

Uneven development and a decline in the local economy, a local economy which can be used by the people to free themselves from oppressive systems and lift them out of poverty, is consequence of these unrecognised spaces.

The mall is an excellent representation of a place characterised by globalisation. Trade is no longer defined by social connections as automation and major corporations have deemed this unnecessary. A mall lacks cultural meaning as there is a lack of engagement within the space. Man is defined by his economic status as we walks through a mall, not by the place itself, highlighting Heidegger's (1971) theory of 'nearness' and how the time- space compression has abolished this notion.

Another consequence of technology, with specific regard to the automobile, is that the need to walk becomes unnecessary, resulting in a decrease of physical activities. The spaces in which people move through are not conducive to this form of mobility. This leads to larger distances between amenities, no local supervision, reliability on technology to move through space and obesity and vitamin D deficiencies in urban

dwellers (ICU, 2011).

There is a serious lack of engagement between the individual and their natural surroundings by not walking. Kopko (2013) highlighted that there was a strong contrast between the previous generation's engagement with the natural environment and today's generation.

Mobility designed for efficiency and not equality, has greatly affected the way people live and arrange their lives, as well as contributing to further segregation in a globalizing world.

3.2.5 The Transition of Public Place

Democratic spaces are responsive, public places that have legibility, permeability, variety, robustness, visual appropriateness, richness and personalisation (Van Gruenen, 2014). They are spaces that maximise the degree of choice to allow individuality and differences to emerge. If a public space is privatised it is no longer part of democratic society and therefore cannot function as a public place (Goonewarden, Kipfer, Milgrom, Schmid, 2008: 158). 'The city has



Figure 3.5: Berea Road lacking proficient amenities and services for pedestrian activity Source: Photo by Author, 2015



Figure 3.6: Constrictions placed in the open public space outside St Peres in Rome Source: Photo by Author, 2013

become a showplace for the private ego at the expense of the public realm,' (Trancik, 1986: 17). Public urban spaces are no longer cultural hubs, but perform a utilitarian function. It is a place dominated by monuments praising political powers (Goonewarden, Kipfer, Milgrom, Schmid, 2008: 158). This brought about a need to use connective spaces instead (i.e the streets) as dynamic spaces are more difficult to control.

Throughout these shifting dynamics in democracy, the essence of what a democratic space is has been lost. In order to regain this consciousness, perceptions needs to change in order to challenge socio- economic panic with technological progress (Goonewarden, Kipfer, Milgrom, Schmid, 2008: 153). This progress is inevitable and irreversible (Deleuze and Guattari in FOA, 2003: 523).

'Mies set his architecture against the perpetuation of old habits and in the service of emergent and experimental ways of doing things,' (Mertins, 2003 in FOA, 2003: 272). His idea of universal space was not some narrow- minded ideal of function, but generating open- ended, inclusive space which could accommodate a range of functions over time. 'The purposed for which a building is used are constantly changing . . . and we cannot afford to tear down the building each time,' (Meis in Mertins, 2003 in FOA, 2003: 271).

The idea was to discover a universal principle which would reintegrate society with nature across the globe by allowing for space to be adapted, transformed and governed by creation (Mertins, 2003 in FOA, 2003: 274).

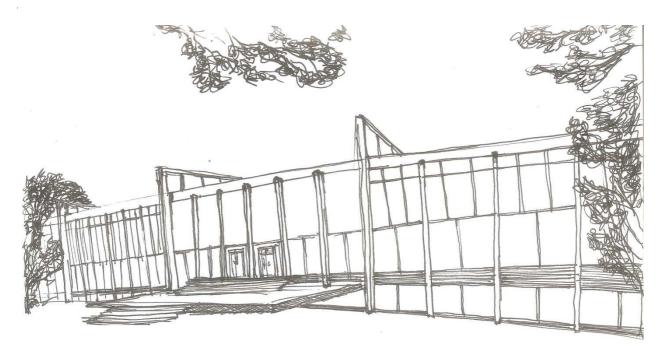


Figure 3.7: Mies' Infrastructure of Difference, Crown Hall. Source: Mertins, 2003

3.2.6 Conclusion

The pedagogical qualities of place are what define contextual and cultural identities within society. Globalisation, segregation and privatisation has transformed these identities, therefore, the places in which man moves through and dwells in. Global Society is constantly searching for new technologies and updated practices to solve world crises (Van Greuenen, 2014), however, moving too quickly can be detrimental to the already unsustainable situations. A system which has the ability to balance ecosystems and adapt to inevitable change is essential.

3.3 EFFECTS OF CONTEMPORAY SOCIETY ON PLACE

3.3.1 Introduction

Neoliberal society and the privatisation of public places are forming large gaps between classes, resulting in static urban areas, segregation and inequality. This forms the paradox of globalisation. As globalisation enhances mobility and opportunities, it also forms peripheral places of oppression in which dystopian societies are formed through the irreversible process of urbanisation (Aliyu; Ebohon; Gyoh, 2014). However, contemporary society is characterised by continued mobility and the performative character of man still exists and is evident in transient spaces.

3.3.2 Privatisation of Public Place

Fragmentation and ephemerality open up spaces and opportunities for development of new fields and forms of profit making. This manipulation 'is based on crude social theories and sought to engineer society through technical manipulations of the physical environment,' (Scott, 2003).

Supposed public spaces are designed for a general public interest and rezoned to fulfil the function of an efficient economic system according to private evaluation of future profits (Lemberg, 1997). The architecture is obsessed with technology and freestanding buildings, ignoring the public and interactive spaces.

Spaces should be planned 'for citizens in conflict, having different interests and different values,' (Lemberg, 1997: 15). Systems are too often designed for the most efficient effect at the present time; analysed as fixed systems with no attention given to the transitional dynamic problems and the system's change over time.

Transient spaces are most affected. Mobility and communication became increasingly dominant in contemporary society and the facilitation became prioritised. This made thoroughfares, highways etc. the predominant open space which lacked cultural meaning and human purpose (Trancik, 1986). 'Urban life seems to have become centred on the ability to own a car and the ingenuity to find a place to put it,' (Wilfred Owen in Lemberg, 1997: 11).

Streets have transformed due to privatisation and no longer fulfil their function to the public (Lemberg, 1997: 6). The urban landscape has been unimaginably altered through the arrival of the privatized car and its transport infrastructure. 'dictating the design and



arrival of the privatized car and its transport infrastructure, 'dictating the design and Photo by Author, 2015 Photo by Author, 2015 patterns of the social environment,' (Lemberg, 1977: 5). What used to be transient spaces of public activity, accessible to all, has now become high speed, polluted areas

which people shy away from, or risk their lives attempting to cross.

3.3.3 The Movement of Globalisation

Globalisation is an 'act of geographical violence through which every space in the world is explored, chartered and finally brought under control,' (Soja in Gruenewald, 2013: 629).



Figure 3.8: Parking Lot at Fiar Lingotto, Turin, Italy, Source: http://www.interculturalurbanism.com

Globalisation is characterised by simplification and oppression and global thinking is only possible on a macro scale, undermining local traditions and routines (Greunewald, 2013:19–20). The success of the global economy is largely dependent on uneven development, control and domination (Gruenewald, 2003).

Domination, enforced through geographic and economic measures (Hernandez, 2002: 128), is only successful when following the spatialized economic equation: 'The production of wealth depends on extracting surplus value (in terms of labour and resources) from one geographical region to benefit people in another,' (Burbules & Torres, 2000; Esteva & Prakash, 1998; Korten, 1995; Said, 1994; Soja, 1989; Spring, 1998 in Gruenweald, 2003: 629).

'Composite cities' (EURAU, 2014) are becoming increasingly complex through rapid changes which are continuously redefining urban experience. Cities can either become enriched and exciting place to live in with influences from many different elements integrated into a heterogeneous whole, or a place of segregation where a fear of unknown elements causes social disintegration. There are also concerns of the city becoming one homogenous culture.



Figure 3.10: Rio-de-Janeiro.2013; Example of the spatialized economic equation. Source: Pedro Gadanho, http://moma.org

Technological advancement brought about the arrival of the privatised car and advanced transport infrastructure; 'mobility, motions and the automobile became tools for isolation,' (Trancik, 1986: 6).

Roadways are spaces that have been engineered and not designed. As a result of people's relationship with space and the political process which shapes spaces we move through, transportation infrastructure can then be used strategically by dominant forces to maintain control and order through segregation. Spatial segregation is a result of an auto- mobile dependent society and it is the main cause of suburban sprawl (Van Greunen, 2014).

Globalisation free of dominant forces, however, opens up numerous opportunities for communication between multiple cultures, allowing for a multitude of perspectives to be shared enabling deeper understanding and conscienctization of place. This can lead to numerous opportunities; however, conflict may also arise as the individual's identity is threatened. Without intercultural communication, differences are not understood.

Globalisation is a good contributor towards these communications, however, 'hardly any consideration is given to the social and political circumstances in which that communication occurs,' (Ikas and Wagner, 2009: 1 in Shange, 2013: 34).

3.3.4 Static Urban Places

In a globalising world it is cities that become catalysts for economic growth and development; however, this exerts pressure on the environment beyond the city boundaries.

Rural immigrants are forced to move as a result of the economically driven spatial segregation (Van Gruenen, 2014), and increasing population in cities. This develops into peripheral informal settlements with shacks filling in the leftover spaces. Fragmented and unsustainable communities form from occupants lacking a sense of a place and an emotional connection with their surroundings (Aliyu; Ebohon; Gyoh, 2014). They are in a permanent state of liminality.

There are certain ideologies in the African cultures that urbanization is a 'defilement of pure African identity' (Pieterse, 2010: 13) and a symbol of political elites enforcing their power and dominance over the poor. The effects of globalization are currently enhancing the social division, economic marginalization, and scepticism over the state in rural communities. The communities that are affected the worst are informal peripheral settlements (Pieterse, 2010: 18).

Informal settlements are well understood by the actors involved (Myers, 2011). Everything that exists serves a very specific purpose and everything functions efficiently because of the lack of rules and regulations.

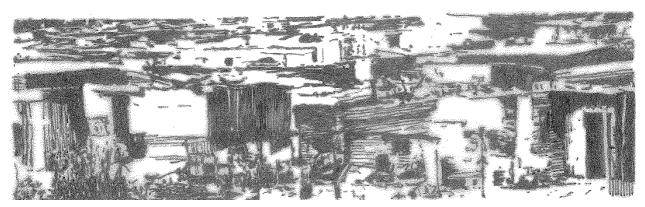


Figure 3.11: Sketch showing the character of an informal shack land in Cato Manor, formed as a collective action as a result of fleeing township violence and its extreme densities or seeking economic opportunities near the city (Odendaal, 2003). Source: Sketch by Author, 2015

These settlements become places of refuge against the difficult times of change, with discontentedness and resistance increasing as a result of a lack of identity and belonging in the African city (Simone, 2004).

Poverty needs to be analysed as a social phenomenon in order for social capital, the biggest asset in poor communities (Pieterse, 2010) to be taken seriously by the state. Disrupting these invisible connections can be detrimental to the livelihoods and practices of the inhabitants and result in high levels of contestation, 'criminalizing their survival mechanisms' (Pieterse, 2010: 18).

Organizations, disrupting these delicate systems, through insensitive and unfair handling (Murray, 2008), perceive informal settlements as dystopian communities because of their lack of understanding of why they function the way they do.

Instead of directly dealing with the issues at hand, the informal settlements are wished away and relocations become a common practice. This not only prevents communities from investing in any sort of improvement because of the constant threat of evictions, but it also creates high levels of internal competition when it comes to housing delivery (Simone, 2004).

Simply enforcing utopian ideals is not going to miraculously result in a sustainable and ordered community. These settlements don't want to be relocated or disrupted and attempts to enforce urbanization could result in high levels of conflict and violence.

Urbanisation is characterised by a lack of participation and interaction with place, 'thus guarding a psychological distance from a reality that became unbearable,' (Gadanho, 2011: 2).



Figure 3.12: Figure Ground depicting peripheral informal settlements. Source: Sketch by Author

3.3.5 Places of Performance

There is a split in the nation where it is viewed as homogenous whole and an unstable entity due to diverse practices and experiences of people. This gives origin to two different temporalities: pedagogical and performative (Hernandez, 2002). People are constantly changing, therefore the spaces and places that they move through are too, forming a nation that will never be finished due to the performative character of the people (Hernandez, 2002: 122).

The Palais Royal reflected the performative character of its participants and 'was an obligatory point of passage where a process of ordering was expressed' (Hetherington, 1997: 37) through their actions. It was the prostitutes, shopkeepers and courtiers, who were 'engaged in the mode of ordering,' (Hetherington, 1997: 37). It was a temporal site where alternate social orders were practiced.



Figure 3.13: Le Palais Royal under Louis XIV Source: http://www.hotel-etats-unis-opera.com

To be 'permanently in movement' is today also to be able to 'surf on the fluxes of fashion, atmosphere and events,' (Bourdin in Gadanho, 2007: 1). As a result of constantly changing urban lifestyles and practices, place and architecture have a certain social and political responsibility responding to these new forms of mobility.

Performance retains a cultural dimension as place produces a commentary role regarding the ongoing transformations of culture and society.

Streets and public spaces have started becoming the place of cultural expression and voice of the people, using artwork to scrutinize the spaces political dimension (Gandeho, 2011: 3).



Figure 3.14: Shen Wei Dance Arts Public Performance in Times Square Source: http://nyclovesnyc.blogspot.com



Figure 3.15: Protests in Public Spaces, 'People of Europe Rise Up!' was a huge banner held outside the acropolis purposefully to gain international attention. This influenced street protests in North Africa, Athens, Madrid, Brussels and London. Dutch intelligentsia occupied museum courtyard in a claim against culture budget cuts and 300000 people gathered in Lisbon streets, which resulted in the government resigning two weeks later. This movement of performativity is also evident in Banksy broadcasting subversive irony across cinemas, BIG embracing parkour to publicize one of his buildings (Gadenho, 2011). Source: http://www.trekearth.com

'Everywhere on sight books on graffiti, intervention art, skateboarding and urban hacking had crept over the main displays, leaving little space for other artistic expressions,' (Gadanho, 2011: 2). It is reflective on a generation believing in the transient nature of space and attempting to form an emotional connection through creative expression (Gandeho, 2011: 3). The spaces in between have started

becoming main public spaces 'at any self- respecting centre of cultural dissemination,' (Gadanho, 2011: 2) and are becoming the source of essential diversity (Jane Jacobs) and the reproduction of both difference and exclusion (Sharon Zuin). (Gadanho, 2011: 2).

People started taking to the streets to 'defeat the despotism of regressive austerities ignited by growing inequalities and corruption, state inefficiency and wide- reaching financial greed,' (Gadanho, 2011: 2). The streets are becoming places which nurture 'the dreams which accompany all human actions' (Moore and Lyndon, 1975 in Norberg-Schultz, 1980: 200).



Figure 3.16: Sebastiano Serlio Stage Design, Woodcut, 1545, showing 'how a strongly defined, simple framework of street space can accommodate great variations of scale and architectural style along its edges,' (Trancik, 1986:74). Source: http://www.lib.cama.ac.uk

3.3.6 Conclusion

New spaces in contemporary society are constantly being established through the dynamics of urban life, often coming to light as results of frustrations with oppression and inequality. These vital spaces of transformation are embedded with cultural and social meaning and it is through these places that we can grasp onto historical and contextual meaning.

3.4 DOMINANT STREETS AND SOCIAL EFFECTS

3.4.1 Introduction

The movement of society has always taken place in the street space. This mobility has drastically increased as a result of globalisation. The infrastructure facilitating this movement is the key to ordering and shaping contemporary society, but it is paradoxically able to free societies from oppressive systems.

3.4.2 Linkages and Urban Spatial Design

'Streets provide us with the essential freedom of movement, on which city life depends,' (Carr & Lynch, 1979: 9), but streets also serve a multitude of diverse functions which are often not considered by spatial planners (Trancik, 1986: 103).

Streets make up one of the voids that essentially define urban spaces that 'contain the active public life of the city,' (Trancik, 1986: 103). 'Urban voids are at once the vessel and symbol of human gathering, and represent the tension between the individual and the collective,' (Susana Torre, 31 in Trancik, 1986: 100). The figure- ground theory

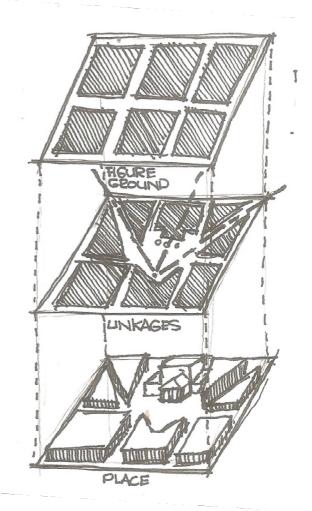


Figure 3.17: Diagram of Urban Design Theories, Source: Trancik, 1986: 98

shows how spatial events can bring the design of the public realm together through private objects, and makes a point that high- rise, tower buildings have little input in the shaping of open spaces (Susana Torre, 31 in Trancik, 1986: 100).

Linkages are what unify the urban events within cities. Without these connections, urban space could not exist as it would be incomprehensible. 'Maki stresses linkage as the controlling idea for ordering buildings and spaces in design,' (Trancik, 1986: 108).

Although linkage theory stresses the utopian ideals for community regeneration, it undermines the traditional urban spaces formed by solids and voids (Trancik, 1986: 110).



Figure 3.18: Street in Paris leading to the Opera House which has de- emphasized its broader functions due to rapid movement through the city Source: Photo by Author, 2013

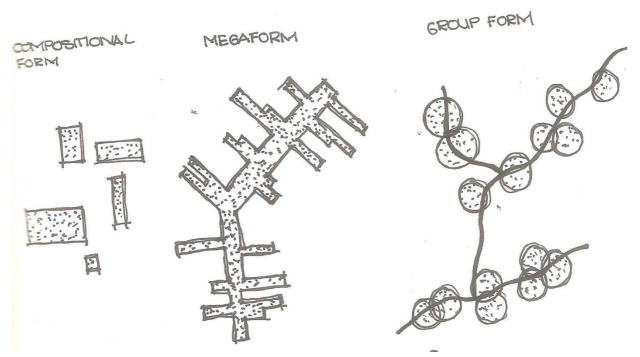


Figure 3.19: Fumihiko Maki, Three Types of Spatial Linkage. Source: Trancik 1986: 107

3.4.3 Paradoxical Infrastructure of Movement

'Infrastructure is not inert but rather infused with social meanings and reflective of larger priorities and attentions,' (Howe, 2015: 2). It is material, social and philosophical. In today's society, most infrastructures are in ruins or are degrading. The meaning and concept has been reduced to a set of northern neoliberal governmental policies (Howe,

2015: 4). Infrastructure should be observed as a form of capital, one that interacts with all other kinds of capital whether it is economic, political, natural, human or social.

It is put in place to enable access to basic, daily needs. However, 'infrastructure can also have direct negative impacts on populations, serving as a material channel for structural violence, war, and environmental catastrophes,' (Rogers and O'Neill, 2012 in Howe, 2015: 4). It is not strictly utilitarian, but serves to embody larger structures of power and direction, especially when the control of its design and distribution is in the hands of a few dominant parties.

The paradox of infrastructure is that even as it generates opportunities and possibilities, it also degenerates and can have negative effects on marginalized communities. It is too often implemented and designed, by people who don't have any need for it, in order for the enforcement of domination and control to become unnecessary. The designs of these spaces don't respond to the basic needs of the people (Howe, 2015: 9-10).

The uneven provision and maintenance of infrastructure will result in segregation within our cities and splintered urbanism (Howe, 2015).



Figure 3.20: Pedestrian Bridge extending across the N3, Durban, to DUT Steve Biko Campus known as the 'suicide bridge' because of the risk taken when crossing it. Source: Photo by Author, 2015

During moments of breakdown, the meaning of infrastructure becomes visible to everyone, representing the social conditions and demonstrating 'historical and cultural attentions in a particular moment,' (Howe, 2015: 6). These moments of ruin should be viewed as constitutive, visualizing infrastructure as a reproductive system enabling society's wellbeing. It is 'not only a transitional state, but a condition in its own right, a space between the past and the future,' (Gupta, 2013 in Howe, 2015: 7).

Infrastructure is needed to bridge timelines, therefore is needs to encompass the ability to adapt to evolving systems. 'The inability of an infrastructure to "grow"—or to change and adapt to new environments—is one reason infrastructures meet their end or fall into disuse (Edwards et al. 2009). This is a result of the inability of man to manage temporality.

People move through space in an unregulated and informal manner. Therefore the infrastructure needs to respond directly to this. One cannot predict how movement will change over time. Infrastructure needs to be characterised by improvisation and anticipation in order to enable an uncertain future.

3.4.4 The Transgression of PeopleThe migration of people has a huge

impact on the effects of poverty. Increased mobility and freedom of movement give marginalized populations the ability to lift themselves out of poverty and strive for an improved lifestyle. This is a result of people following the shifting dynamics of the economy. 'Migration is not an alternative to economic development, but rather is economic development itself,' (Murrugarra; Larrison; Sasin, 2011: 3). When this movement is prohibited because of barriers such as distance. time, monetary expense, passports or sexism, people become trapped in their place of origin and this can lead to a loss of impetus for selfimprovement, a despise for their home and also holds huge economic and social implications (Murrugarra, Larrison & Sasin, 2011).



Figure 3.21: City in Ruins. A representation of the failure of the homogenized housing projects of the 50s, 60s and 70s designed to allocate migrants coming from the countryside to the big cities (Hernandez, 2002: 126). Source: Photo by Aubrey P. Graham in Murray, 2008: 172

Evidence points to transmigration resulting in a reduction of poverty as well as becoming a coping mechanism for shock which is often caused by sudden and unexplained transitions in lifestyles. Most of the infrastructure put in place to accommodate this movement has been unsuccessful and people have had to adapt illegally and unconventionally to spaces (Hernandez, 2002: 126). They do not take into account the differences of the people moving through these spaces.

The social constructs within these spaces are dynamic as immigrants are in a permanent state of liminality. If people's movements are restricted then they cannot pull themselves through liminal experiences. These restrictions are imposed regularly as transport is designed for economic purposes and not for people.

'It was industrial capitalism, with its creation of an urban proletariat- most immigrating from rural areas- of factories and of large scale transport tracks and terminals that made transport an important urban element,- at first, however, for goods transport,' (Lemberg, 1997: 3).

However, the spaces left behind become problematic as these places do not get developed, resulting in rapid deterioration as the community disintegrates.

3.4.5 Visionary Transformations

Spatial designs are successful when they are not retroactive, but anticipate arising problems and solve those using innovative techniques (Giedion, 1943: 499). 'We can't solve problems by using the same kind of thinking we used when we created them,' (Albert Einstein cited in Adams, 2011: 31). Designs must cease to be manipulated impositions on places, but change and adapt as the city moves over time, considering 'how new and old buildings and spaces fit together into the established urban context,' (Trancik, 1986: 116).

The greatest visionary who had a large impact on one of the most important cities throughout time was Georges- Eugene Haussmann. In the Paris of Napoleon III, 'one element dominates all others: the street, the "cannon- shot boulevard," seemingly without an end,' (Giedion, 1943: 465).

The primary design principle for the streets was to utilise them for defence strategies during the 1852 French Revolution by accommodating marching troops and ameliorating infected alleyways (Giedion, 1943: 471). The most important principle, however, was the facilitation of circulation from the railway stations to the centres of commerce and pleasure.

Haussmann achieved this by creating penetrating lines through the urban fabric of the city. This required the demolition of most of Paris' luxurious Although homes. met with much contestation from the bourgeois, the working class- the users of the spacesbore with great patience the 'highly penalizing removals,' (Giedion, 1943: 475),proving that Haussmann's work was in the best interest of the people and not the dominating parties, earning him the description of 'the implacable energy of all short-sighted politicians,' (Giedion, 1943:477).

His ideas came into reality over night because of the belief instilled in the people using the spaces every day, reflecting 'the tempo and enterprise of the industrial expansion which occasioned it,' (Giedion, 1943: 488). People were able to adapt to these spaces with ease and pour their individuality into the cracks to make up the common identity of Paris.

Haussmann was able to predict the future contemporary burdens that would weigh down Paris and envisioned the city 'as a technical problem,' (Giedion, 1943: 497) specifically in terms of

Figure 3.22: Map of Paris by Napoleon III illustrating Paris 'set in the midst of a thoroughly disorganized town, the monuments surrounded and isolated by a tangle of streets,' (Giedion, 1943: 469). The Emperors own project for the transformation of Paris Source: Geidion, 1943: 466

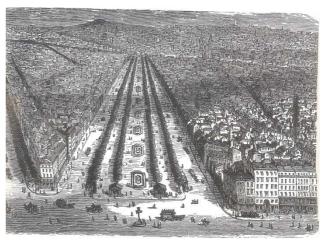


Figure 3.23: Boulevard Richard- Lenoir_1861-63, Planned by Haussmann to cover an old canal. Source: Giedion, 1943: 479

transportation and traffic. As none of these measures were needed at the present time, his plans were met with misunderstanding from his contemporaries lacking his vision.

One of the few critiques is that the scale of his work was designed for enormous masses and not at a human scale; streets lacked 'organic identity,' (Giedion, 1943: 498).

In the modern era, there were numerous architects who were able to understand the purpose of architecture and place.

'The work of Louis Kahn appeared as something of a revelation at a moment of crisis when many architects were losing their self- confidence and faith in architecture,' (Norberg- Schultz, 1980: 197). He understood architecture in terms of place.

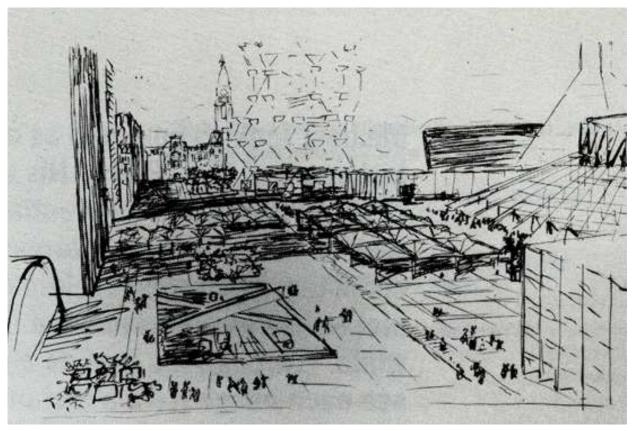


Figure 3.24: Louis Kahn, Market Street East, Philadelphia, Perspective of Civic Centre 'A "room" is for him a place with its particular character, its "spiritual aura", and a building is a "society of rooms. The street is "a room of agreement" and the city "an assembly of places vested with the care to uphold the sense of a way of life" (Norberg- Schultz, 1980: 198). Source: http://bombmagazine.org

Frank Lloyd Wright can be seen as the most influential architect, especially for how he perceived spaces beyond their point in place. By exploding the traditional "box" he redefined the relationship between the exterior and interior, enabling man to 'experience a new sense of freedom and participation,' (Norberg- Schutlz, 1980:194).

Mies Van Der Rohe's empty glass boxes were actually not empty at all, but 'provided the infrastructure for difference,' (Mertins, 2003 in FOA, 2003: 272). The recessive and loving neutrality enabled 'new kind of light- touch inhabitation,' (Alison and Peter Smithson in Mertins, 2003 in FOA, 2003: 272).

He believed that every person and building must be free to realise their own identity and achieve solidarity. The order that Mies imposed was to bring together self-generated individuality, for individuality in isolation is limitless and unsustainable as it is only beneficial to the self and not the whole.

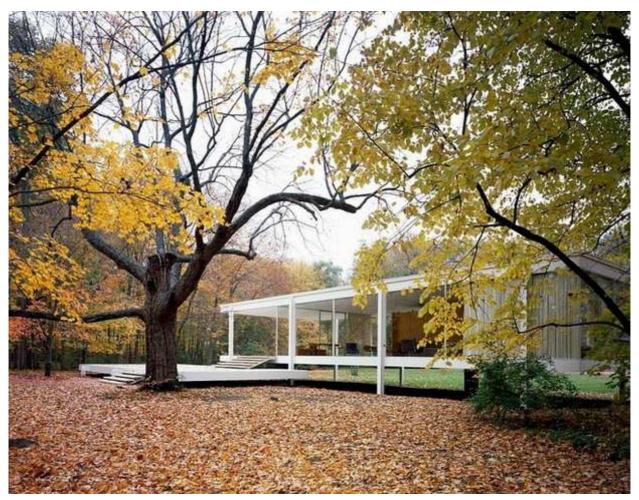


Figure 3.25: Mies Van Der Rohe, Farnsworth House 'Mies's glass boxes provoke an existential approach to life, drawing the occupant back to the blankness and potentiality of the beginnings, over and over again, promoting self-determination within yet against the world while safeguarding alterity,' (Mertins, 2003 in FOA, 2003: 274). Source: http://www.houzz.com

3.4.6 Conclusion

Successful street spaces are designed to facilitate future movement, not the spaces that have to be retroactively adapted, and are designed for a multitude of differences. It is impossible to escape the hegemonic qualities of place; however spaces which are defined by alterity are necessary to avoid self- induced segregation.

3.5 CONCLUSION

It is clear that virtual perceptions of space and time can be directly related to how place is perceived in reality. The hegemonic forces of place are evident across the globe, but

the pedagogical qualities of place are becoming more evident as they diminish due to the disrupted relationship between people and their surroundings.

The street and its dynamic qualities are becoming increasingly necessary in a world characterised by globalisation. In order to facilitate the rapid advancement of society it is the infrastructure for movement that needs to be reimagined. The infrastructure of transport changes the urban fabric and environmental conditions (Lemberg, 1997).

Streets, however, have become more complicated today. 'They became the stage for spontaneous political vindication,' (Gadanho, 2011: 2) and it is this quality that needs to be defined through the design of spaces.



Figure 3.26: Temporal Infrastructure. Virtual Bridge Design for ASA International Competition entry. 'The New Basic'. Source: Sketch by Author

CHAPTER 4

TRANSIENT ARCHITECTURE AS A PLATFORM FOR INTEGRATION

". . . we have a different idea of world class: low- tech, labour intensive, many- textured, articulate, connective, human- scale, orientated to everyone, wonderfully different and highly sensitive to the particularities of place."

(Julian Cooke, 2015: 26)

4.1 INTRODUCTION

'Spaces of ambivalence and hybridity are fundamental to sustaining social reality,' (Thomassen, Wydra & Horvath, 2015:1). These spaces require an architecture that is able to transform and adapt to its dynamic characteristic. The inability for architecture to respond to this movement results in unsustainable space, devoid of cultural meaning.

'There will always be forces whose purpose is to create order in culture, yet the project will never be completed since differences are an essential quality of the world and cannot be eliminated,' (Hernandez, 2002: 106).

In South Africa the multitudes of cultures are continuously influencing each other, but the spaces designed for this integration does not constitute this dynamic. Integration has always taking on a top- down approach which has thwarted the organic processes of hybridisation.

Through designing spaces that enhance sustainability, a platform for this essential integration can be established by exploring the concept of transient architecture. Exploring this concept in a country which has for so long been characterised by feudal relations is particularity relevant.

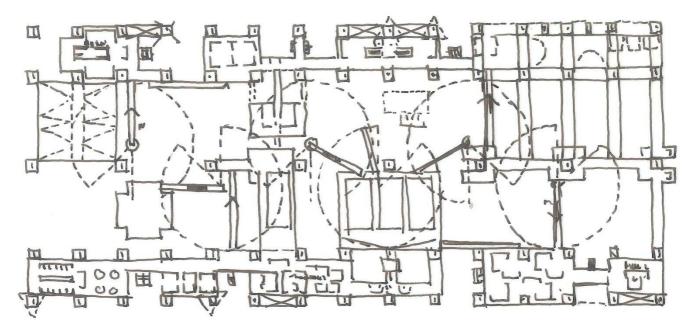


Figure 4.1: Plan for Cedric Price's Fun Palace depicting the dynamic structure of the intervention. Source: Sketch by Author

4.2 SUSTAINABILITY IN SOLIDARITY AND INTEGRATION

4.2.1 Introduction

Sustainable interaction between different elements is essential for successful urban spaces to exist. An understanding of differences renders domination unattainable. Therefore, focusing on just one aspect of sustainability alone is unviable. The environment, technology and people need to become interdependent and interrelated.

4.2.2 The Shifting Dynamics of Cultures

'The inaccessibility of Africa has always been its outstanding feature, and the greatest drawback to its development,' (Varian, 1953: 31). It remained largely untouched by outsiders until colonial expansion. Once these spaces became accessible there was large competition between the ports, resulting in infrastructure being built rapidly with little attention given to its effects on the natural and social environment or its future sustainability.

Colonialism in Africa was essentially a result of commercial vocations or capitalist production (Freund, 2007). It restricted movements and trade of the 'natives' in order to open up space for larger and burgeoning economic exchange. This resulted in a society characterized by racism and a destruction of traditional cultures (Mistry, 2001).



Figure 4.2: Wold Map illustrating the divisions between different forms of colonisation specifically on the African Continent. Source: Sketch by Author

Heteroglossia is a concept that explains the co- existence of multiple cosmologies and systems of logic within cultural contexts. People who belong to different generations,

ethnic groups, professions, genders etc. have their own way of translating their views and experiences of the world; however, they do not exist in isolation. Their differences form a heterogeneous whole from the intertwining of daily processes, (Hernandez, 2002: 105). It is 'a messy amalgamation of collective practices, experiences, and procedures accumulated historically' (Hernandez, 2002: 109) in continuous dialogue of complex dynamics (Hernandez, 2002: 107). The only way this 'messiness' is abolished is through the domination of external forces which produce order and unity (Mistry, 2001).

Post- modernism made culture the primary field for entrepreneurial and capitalist activity; an 'arena of fierce competition for profit making,' (Harvey, 1992: 296). Karl Marx (1938) was quite adamant on his point that production of any sort requires the prior exercise of human imagination. The issue in present society is that this is limited to a few individuals, alienating themselves and developing a 'culture' to form a protected zone for the wealthy.



Figure 4.3: Women of multiple cultures protesting in Pretoria streets against the Urban Areas Act lead by Lillian Ngoyi. Source: http://artscomments.wordpress.com

It is impossible to completely negate any one culture as the positive and negative aspects of every culture are equal across the globe. It, however, becomes an issue when the domination of one destroys aspects of other cultures, known as commodification. Ecofeminism recognizes the destruction of differences by dominant cultures and its implications on people- place relationships (Gruenewald, 2003: 635). 'The imbalances man has produced in the natural world are caused by the imbalances he has produced in the social world,' (Bookchin, 1971: 41 in Van Gruenen, 2014).

4.2.3 Solidarity for Transformation

The current globalized world of commodity production and exchange is the cause of much unrest in marginalized areas as the gap between the rich and the poor widen (Harvey, 2010). In South Africa, apartheid and capitalism reinforced each other, therefore, any resistance against apartheid needed to encompass a resistance against

capitalism too (Sinwell, 2011). This is why Steve Biko saw the struggle not being directed at just White domination, but at the entire system (Yoichi, 2014).

Frantz Fanon (1964) saw the marginalized as having the ability and motivation to challenge dominating Western ideals. However, he accentuated the importance of discovering liberation through self- thought, discovery and action in order to regain humanity. The issue with Fanon is that his reflection was too narrow, based only on race, and did not take into the account the other multiplicities which define cultures. Only understanding one aspect of a culture is no understanding at all and without this totality the integration of culture becomes artificial (Hook, 2004: 109; Shange, 2013: 33).

Post- modernism in South Africa is reinforcing the 'non- being' of the African, meaning that integration is essentially the assimilation and acceptance into an established set of normality's, and is further enhancing inequality and increasing pauperization (Gibson, 2011:20). Biko resisted against artificial integration (Gibson, 2008). He envisioned Whites and Blacks being able to meet each other on equal footing, highlighting a society of integration as a space for free participation, expression and change (Gibson, 2008).

Integration is feared out of the dread of renouncing one's own culture (Hernandez, 2002: 112). However 'in order to understand the other's view of the world it is necessary to merge with it,' (Hernandez, 2002: 110). Active interaction and communication are necessary steps towards successful integration (Hernandez, 2002). Without this contact cultures would dematerialise.

However, the ideal of creative understanding presupposed that this interaction occurs in a vacuum and does not take into account the cultural, economic and political contexts of where this interaction is set. 'Cultural encounters generally take place in situations of inequality,' (Hernandez, 2002: 113). This results in the dominant culture taking over another and 'the dominated culture might be forced to renounce itself, to lost its own place in time, and either adopt or to merge with the "superior" culture,' (Hernandez, 2002: 113).

Solidarity is, therefore, an important characteristic in development in order for different cultures to engage on equal footings.

4.2.4 Integrated Approaches for Sustainability

Like culture, focusing on only one aspect of sustainability, specifically economics over ecology, results in a population characterised by strident individualism, faith in progress and anthropocentrism (Gruenewald, 2003).

Manfred Max- Neef (1992) realized that development is too focused on economic measures. In order to achieve true and sustainable development a number of synergic satisfiers need to be met. A city must be built by the people as 'its intimate form is the result of a myriad small- scale decisions monitored by appointed representatives of the city as a whole,' (Cooke, 2015: 24). A space must be set up with an infrastructure which is flexible enough to allow for this incremental development and freedom in movement, choice, access and opportunity.

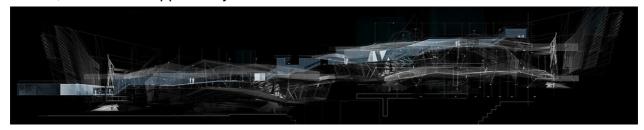


Figure 4.4: AA School Of Architecture, Inter- spatiality. 'It is proposed that inter- spatiality, through the exploration of new spatio- enviro identifications, can help locate, reframe and anchor architecture within the sustainability debate- by challenging and redefining the problems identified, re- orientating strategies and expanding the discussions beyond disciplinary limits,' (James, 2014: 48). Source: http://pr2010.aaschool.ac.uk

'Ecology has shown that balance in nature is achieved by organic variation and complexity, not by homogeneity and simplification,' (Bookchin, 1971:41 in Van Gruenen, 2014: 41). Urban form should be adaptable and allow ritual to regulate and

shape space. This encourages community interaction and allows for unexpected outcomes.

Western influences can only be abolished with a wider social context to encourage 'systems thinking'; components longer considered in isolation (Van Greuenen, 2014). Inter- spatiality is essentially bringing the environmental concerns and the architectural production of space into balance. To understand

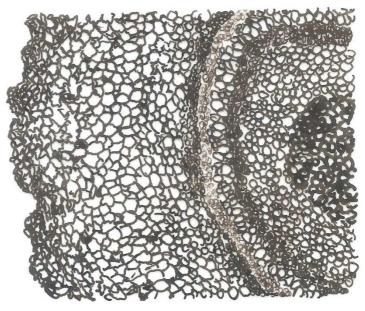


Figure 4.5: Organic Development in Plant Cells. Source: Sketch by Author

sustainability through understanding space, the spatio- environmental pedagogy needs to be recognized (James, 2014: 48).

Contact with nature has been reduced to nostalgic tendencies, resulting in a lack of understanding of environmental problems because people do not understand the meaning of place. Psychological literature infers that cognitive development in a simplified environment leads to passivity and a reduced intellectual capacity. 'The environmental crisis therefore implies a *human* crisis,' (Norberg- Schultz, 1980: 191). Lefebvre (1991) blames unsustainable development on the fragmentation of disciplines (Goonewardena; Kipfer; Milgrom; Schmid, 2008: 214). In order to pursue sustainability at a level that extends beyond the environment, interdisciplinary interaction is essential. South Africa needs to develop its own language and character and not follow the conventional idea of a CBD; a series of public spaces which can knit the city fabric together and establish grounds for a common identity in which all citizens can interact.



Figure 4.6: Integrated Urban Development Scheme. Source: National Treasury, NDP Urban Design Toolkit

4.2.5 Integrating Public Networks in South Africa

Places are always moving and are in a constant state of fluctuation, changing identities. Therefore, identification in place is directly dependent on these dynamics (Wigley, 1999 in FOA, 2003: 106). Not accommodating for these fluctuations results in a loss of

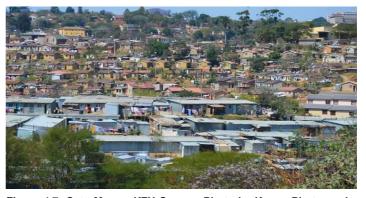


Figure 4.7: Cato Manor, KZN Source: Photo by Kauna Photography http://www.pinterest.com

identity and this is especially relevant in African settlements that lack the connections and networks necessary for these movements (Simone, 2004).

The connections and networks between African cities are of dire importance when it comes to integrating diverse functions, populations and sectors (Simone, 2010).

Due to historic land tenure patterns (CSIR, 2000: 3) high- density corridors are essential in South Africa to dissolve class division, forming 'a seam sewn into the city fabric,' (Cooke, 2015: 27). The concept of the corridor city is to create a safe and walkable city with accessible facilities, reduced dependency on cars and a space which can cater for diverse needs (CSIR, 2000).

It aims to integrate land use and public transportation and de- emphasize design for the convenience of car- users, shifting the focus towards the pedestrian. However, there is a large gap between its theoretical conception and practical implementation.



Figure 4.8: Integrated City Concept Source: Iyer Design Studio, 2014

The mixed use, high density spines and corridors in Cato Manor are prime examples of this. The failure of this experiment is not only due to complications regarding housing and private investors, but a lack of understanding of the cultural and economic values and relations of the community (Matthew & Charlton, 2002: 22). The infrastructure provided only hardened social divisions (Simone, 2010: 36).

Bellaire Road is one of the main connectors between Cato Manor and the CBD and is constantly filled with foot traffic and a unique taxi culture, giving an informal economy the opportunity to develop, such as 'spaza' shops and transport into the city. However, through experiential research, the infrastructure provided is clearly underutilized and densification along the edge is minimal, allowing the street to become an insecure and

dangerous place at certain times of the day. The street acts as a divider between the formal and informal economies, preventing them from feeding off each other and resulting in a 'dirty' environment, highlighting the lack of respect of the inhabitants.

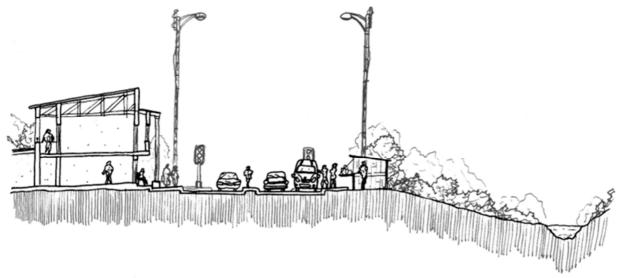


Figure 4.9: Section showing the infrastructure provided along Bellaire road and the disconnection between the formal and informal settlements, Source: Sketch by Author, 2015

Throughout Africa, inhabitants are constantly 'trying to forge productive connections with places and processes beyond their immediate locations,' (Simone, 2010: 31). AbdouMaliq Simone (2010) writes about not seeing these informal connections as unregulated and criminal, but rather maximizing their density and full potential before this critical opportunity is lost.

There is not one universal answer to deal with improving the living conditions of informal settlements or achieving collaboration between the formal and informal sectors because every settlement is specific to its context and time.

Enforcing utopian ideals on these sensitive structures will only succeed to unveil hidden and repressed issues that, if surfaced, could spark violent revolutions. The poor communities need to stop being idealized as a problem. If more attention was paid to how they innovatively and creatively 'retain a foothold in the city' (Pieterse, 2010: 15), incremental solutions could evolve to not only improve the informal settlements, but could halt the unsustainable plummet of the formal environment.

4.2.6 Conclusion

Colonialism in Africa has had detrimental effects on spatial and cultural development; however, current developments are only worsening the issues by enforcing artificial integration driven by capitalist society. Vital connections and networks amongst

informal communities are being destroyed due to naïve design, supporting poverty and economic imbalance. In order to achieve ecological balance between people, technology and the environment, synergistic approaches are required in which diversity is celebrated and organically complex spaces are given the freedom to intrinsically develop.

4.3 THE ROLE OF PLACE- MAKING IN SUSTAINABLE SOLUTIONS

4.3.1 Introduction

Places are in constant fluctuation, changing its identity (Wigley, 1999 in FOA, 2003: 106). If there is no active interaction in the creation of place, identity is lost. Infrastructure is vein in the urban fabric which connects man intimately with place (Howe, 2015: 12); a liminal tool not found on the edge but 'in the cracks of within the social structure itself,' (La Shure, 2005: 5). The places which exist along the boundaries and in- between social constructs are becoming increasingly relevant, enabling the coexistence of differences as well as a resistance against dominant influences.

4.3.2 Problematizing Contemporary Design

Retroactive approaches are the most common reasons for the unsustainable design of spaces. Architecture is limited to results- driven, design problem or solution- based design approaches resulting in short term or 'bolt on' measures. This is evident in the response in Cato Manor, resulting in a dystopian society. Architecture should be seen as an innovative tool for shaping space and cultures, not solving problems (Cedric Price, 2003: 57 in James, 2014: 45). Responding directly to singular problems only creates new ones, resulting in a never ending process of catch up.

Architecture underwent universalisation during economic and cultural globalisation (James, 2014), resulting in architectural commodification, overly concerned with the 'object' and not the subject. This has turned architecture into a 'branded consumable form,' (Van Shaik, 2008: 166 in James, 2014:



Figure 4.10: Sibaya Casino, 2006. Architecture using cultural constructs for commodification purposes Source: http://www.nightjartravel.com

46) giving rise to a turning point of architectural production and environmental terms through the form of 'architainment,' observed by Deyan Sudjic Bairstow (2008: 69 in James, 2014: 46). Analysed by Professor Dean Hawkes (2012, in James, 2014: 46), he notes that this type of architecture 'effectively disregarded the historic influence of climate.' Buildings were therefore designed in isolation and with no relation to their context, forming unsatisfactory urban fabric.

Technology is the main contributor to sustainability issues and the dislocation between man, place and environment. Paradoxically, it is also the solution to solving sustainability issues.

Technological approaches to sustainability are restricted to efficiency, control and quantitative criteria and there is a lack of interdisciplinary thinking as a result of autonomy, (James, 2014).

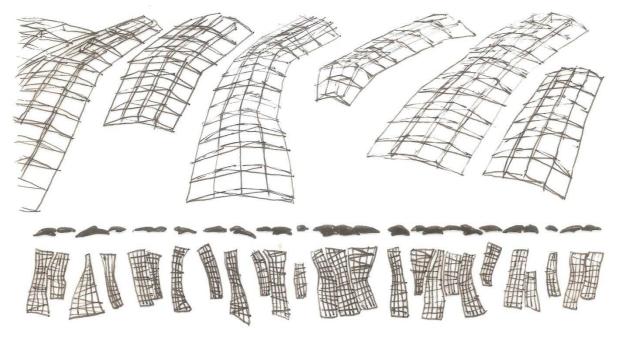


Figure 4.11: Rural High Speed Termina, Perafort, Spain, 2001. The objective of this project is to activate the relationship between the local topography and the infrastructure to enable continuity within the urban fabric (FOA, 2003: 93). . Source: Sketch by Author

Interdisciplinary work is crucial to achieve sustainability (Eeden, 2015). Technologies aim in architecture must be much broader and not function as isolated systems (Cooke, 2015); it 'cannot be an end in itself, but must attempt to solve existing social and ecological problems,' (Sharpe, 1991: 130 in James, 2014: 46).

The infrastructure facilitating movement is the main issue at stake (Hernandez, 2002: 126). "The infrastructures of modernity are killing us," (Carse, 2012 in Howe, 2015: 10). Related to a global context, infrastructure that cannot be sustained through the motions of time and adapt as people's lifestyles evolve then it degenerates, further complicating

our complex systems. The most basic and fundamental spaces are those that connect, and these are the spaces that need to be reimagined.

4.3.3 The Location of Locality

The second phase of modern architecture was to consider the circumstantial conditions of locality, giving buildings and places their individuality (Norberg- Schultz, 1980: 195). 'To live is to live locally, and to know is first of all to know the places one is in,' (Caset, 1996 in Gruenwald, 2003: 627).

The local is heterogeneous and does not belong to any specific point in place but is embedded in the complex systems of ever changing society. 'These interactions allow architects to move from the site to an abstract intellectual realm,' (Wigley, 1999 in FOA, 2003: 107).

It is important to be able to contextualise oneself with the place one dwells; however, globalism is consistently destroying the focus on and experience of the local. 'Unless one is willing to be destructive on a very large scale, one cannot do something except locally, in a small place,' (Greunewald, 2013: 634).

'Achievements on a grand scale are possible only under regimes that ask for them and seek out the proper instruments for the work,' (Giedion, 1943: 469). These achievements are the ones responsible for causing massive change in society, causing a loss of identity and cultural values. Influencing these changes through the built environment causes architecture to become invasive; 'exotic implants' (Wigley, 1999 in FOA, 2003: 101) with the ability to turn the local character of a place into something foreign.

'Architects are often asked to dream up schemes that completely change the face of a place that they barely know,' (Wigley, 1999 in FOA, 2003: 101). Pure monetary profits drove the alteration of places, enhancing the mobility of modernity and globalisation.

Globalisation is a process that cannot be halted or reversed. Through accepting this inevitability, solutions for unsustainable alterations can be established, inducing a shift towards local knowledge and care.

'The local eases the arrival of foreign ideas by exporting a little local thinking,' (Wigley, 1999 in FOA, 2003: 102). This kind of exchange, demanded by developing transportation and communication (Wigley, 1999 in FOA, 2003: 102), often takes place on a neutral ground, a no- man's land of international exchange; however it is constrained to the time of the project and ceases to exist once the project is finished.

Seamus Heaney (1980) 'seeks to re- sanctify that marriage with attention to 'the ordinary, the actual, the known, the unimportant' (Gruenewald, 2003: 626). This places importance on the selfhood one experiences within a place (Basso, 1996: 146 in Gruenewald, 2003: 626). There is no need for invention as design should be generated

from regional and social contexts. Each locality should be in touch with their past and future and place should be charged with prediction and intentions (Trancik, 1986: 115). This concept is evident in the new urbanism movement. 'Design is nothing more than finding out what the person and object want to be: form then makes itself. There is really no need for invention- you must just listen carefully,' (Herman Hetzberger, 1982 in Trancik, 1986: 114).

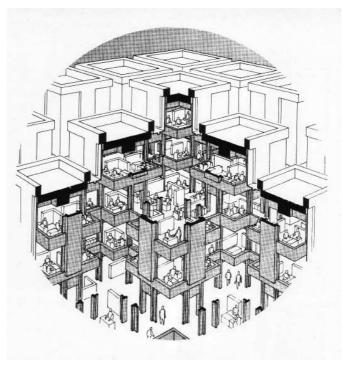


Figure 4.12: Herman Hertzberger, Centraal Beheer, Source: http://loveyousomat.tumblr.com

4.3.4 Spaces In- between

It is not that there is no open space in cities; it is their location and degree of openness. Residual open spaces are not seen as characteristic places of opportunity, but are turned into 'parking lots or feeble patches of grass- no- man's lands between the scale of the region and the locality,' (Robert Venturi in Trancik, 1986: 61).

It is in these spaces, 'distributed along the boundaries' (Hernandez, 2002: 110), that the formation of cultural transformations takes place (Gadanho, 20047: 4). These spaces 'are not sites, but temporal situations, events,' (Hetherington, 1997: 22).

It is these ephemeral and 'interdeterminate' boundaries that bring forth the existence of 'oceanic architecture' (Yates, 2012: 69). This architecture is not a typology, but is generated by movement and transience, defining open space and contradicting western architectures aspirations of durability (Grant, McNeilly and Veerapen, 2015).

Henri Lefebvre (1991) refers to these spaces as 'other'. They are spaces which constitute the voids in the urban landscape in which travel and transformations take place (Careri: 2002: 21–25). He visualizes these spaces as having potential for encompassing reconstructed solid form and new of interpretations contemporary society. Open space contemporary society is defined by the banal skyscraper, the boring suburb and wasteful freeway (Austin, 2014), elements which are conducive not to achieving openness, transparency and hope.



Figure 4.13: Space of no boundaries, Durban City, Source: Photo by Author, 2015



Edward W. Soja (2000) highlights Figure 4.14: In- between space in Durban City Source: Photo by Author, 2015

the concept of a third space existing in between the public and private realms in which everyday life occurs. These spaces are abstract, virtual spaces of reality which allow an individual to extend their limits and enable transformation to take place.

Ray Oldenburg (1999 in Luz, 2004: 146-147) proposes that it is these spaces that will constitute the common ground for a new public realm.

4.3.5 Third Spaces as Places of Resistance

Dynamic spaces relate to Homi Bhaba's (1994) theory on Third Spaces of enunciation, a habitable space which exists between rigid institutional structures.

Homi Bhabha (1994) views culture as a tool for overcoming post- colonial problems and creating unity through thought and action in Third Spaces, spaces which allow for solidarity, humanism and mental liberation (Shange, 2013) highlighting a feminist resistance against rigid institutional structures. They are places in which different social groups can meet on equal footing to negotiate and engage in communication, forming 'a solution for the post-colonial problem of intolerance and the unwillingness to accept diversity' (Shange, 2013: 32).

'Differences are constitutive of culture, and the struggle among them will never finish. Differences and multiplicities destabilize homogeneous and authoritative language or cultural constructs,' (Hernandez, 2002: 117), therefore, places of differences are places of resistance.

Multiculturalism 'used traditionally to describe the coexistence of different cultures within the space of the nation,' (Hernandez, 2002: 123) is dependent on how that "nation" is defined, whereas, cultural difference highlights 'principle of alterity and otherness,' (Hernandez, 2002:123). This notion creates space for the minorities to voice their thoughts and opinions, often quite radical and alternative to the norm (Hernandez, 2002: 125).

These be located spaces can throughout contemporary society; 'city life on the street, economic life in the market place, cultural institutions like the theatre, as well as many informal networks to be found amongst people within civil society,' (Hetherington, 1997: 63). The market place as a Third Space has 'always been associated with the ambivalent. the profane,' (Hetherington, 1997: 29) and breaks



Figure 4.15: Monastery in Spain. Example of a third space of mental liberation. Source: Photo by Author, 2006



Figure 4.16: Example of a third space in Spain being highlighted by the skateboarding culture within the urban fabric. Source: Photo by Author, 2006



Figure 4.17: Brook Street Market Place in Warwick Junction Source: Photo by Author, 2013

down cultural distinctions and spatial barriers to allow for transgression (Hetherington, 1997: 30).

Problematizing the spatial barriers between the interiors and exteriors allow for cultural transparency and openness (Yates, 2012). Civilizations along the Pacific mimicked the construction of boats to achieve a degree of openness within their community (Yates, 2009). Influenced by the openness and temporality of the ocean, their lives were largely defined by the rhythms of everyday practices and the architectural boundary was loosened to make place for exchange (Yates, 2009).

4.3.6 Conclusion

The quiet voices are the ones that need to be heard, as they are the people who do the most thinking and observation, conscientising life from multiple perspectives and developing their thought in solidarity. Sustainable place- making gives these voices the confidence to speak. These became temporal, third spaces allowing for the organic formation of social order, determined by the ceaseless flux of motion and time.

4.4 A PLATFORM FOR INTEGRATION

4.4.1 Introduction

Globalisation increases the speed of hybridization of society. Current spaces are not enabling the speed of this transformation, but increase conflicts within social constructs. Architectural intervention becomes relevant when establishing platforms to facilitate integration. These interventions do not establish a specific building typology, but determine the necessity of having a building at all (Reyner Banham, 2011 in James, 2014: 45).

4.4.2 Movement and Hybridity

Hybridity, as a concept, is gaining increasing validity due to intense and rapid globalisation (Hernandez, 2002: 99). It is considered a process without an end and according to Mikhail Bakhtin (1981), the 'unfinalizability', of hybridization is crucial to understanding heterogeneous, sociocultural environments (Hernandez, 2002: 102). 'Hybridization stands as the process, through which cultures change as a result of their constant interaction,' (Hernandez, 2002:100). This is not a new achievement in the theoretical world, but the translation of hybridity into architecture, referring to more than the merging of physical aesthetics, is an innovative concept which will allow for the

development of cities to begin to respond to the social, cultural and political practices and histories throughout time.

Bakhtin (1981) attempted to respond to the heterogeneous nature of cultures. 'He saw the world as a "messy" assemblage of different and unequal "fields" which are not necessarily antagonistic, but coexist in an agonistic relation,' (Hernandez, 2002: 101).

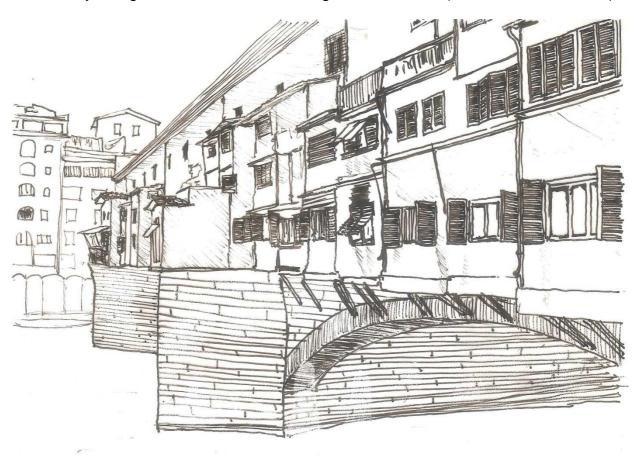


Figure 4.18: Jewellery Bridge in Florence, Italy that has developed over time through the use of multiple functions and cultures. It is a space that is shaped by the users, reflecting hybridisation. Source: Sketch by Author

Hybridisation is a permanently on- going process (Hernandez, 2002: 84); therefore, urban environments need to constantly evolve and acknowledge the changing social orders. The hybridization of the informal and formal will never be absolute, but a continuation of where the two realms co- exists in an indefinite state of transformation. Hybridization should be analysed as the evolution of languages and culture. 'One always lives in permanent dialogue with oneself and with others,' (Hernandez, 2002: 108) and it is the differences that give meaning to dialogue. Imagine the tree of life as a constantly evolving image. As hybridisation continues new historical information is

uncovered, therefore, the true image of the 'tree' will never be known because it is in a constant dynamic state- 'a moving metaphor,' (Knapp, 2003 in FOA, 2003: 647).

The main concern and question surrounding hybridisation is the outcome of the process bringing about a fusion or co- existence between two worlds.

The answer will never be clear because the two worlds are in an eternal dynamic state. Fusion and co- existence are finalized terms, but in reality the conditions of two worlds occupying one space result in a 'a dynamic coexistence,' (Hernandez, 2002: 132).

This idea is idealized, however, and hybridisation should not be considered a romanticised space for revolutions. Hybridisation in reality, based on historical evaluation, is a process often characterised by inequality (Hernandez, 2002: 128). It is often controlled by authoritative powers, rendering the process inorganic, manipulated and hegemonic.

It also, however, creates spaces of negotiation and articulation. The hybridization process destabilizes systems of hierarchal differentiation, creating space to re-evaluate situations of inequality and cultural domination (Hernandz, 2002) and it is this articulation, not domination, which will regain political efficacy (Bhabha, 1993: 168).

4.4.3 Multi- Culturalism in South Africa

Culture is viewed as the life of society and can act as a mobilizing tool against oppressive systems by creating new identities (Shange, 2013). Fanon (1964) and Biko (1998) viewed multi- culturalism as a method for ending racial prejudice and reject colonial practices and ideals.

The aim of multi- culturalism, a method for overcoming differences and promoting tolerance and mutual respect in a diverse society (Yoichi, 2014), is to find a way to represent all cultures equally while correcting inequalities of the past. Multi- culturalism was implemented mainly in two ways in post- apartheid South Africa, Nelson Mandela's 'Rainbow Nation Campaign' and Thabo Mbeki's 'African Renaissance' (Mistry, 2001). Both movements romanticized the concept and failed to address the hybrid characteristic of cultures.

Even though attempts have been made at a state level to facilitate integration, the implementation takes on a top- down approach and post- apartheid South Africa is still characterized by feudal relations in rural areas, destruction of shack settlements, relocations and marginalization and human rights refigured into neoliberal discourses (Gibson, 2008). 'Whether the notion of multiculturalism becomes something more than

a luxury in future South Africa will surely be conditioned by the trajectory of the prolonged process of empowerment of the deprived half of the population,' (Yoichi, 2014:20).

South Africa has replaced racial segregation with class segregation, encompassing a marginalized community characterized by poverty and a nationalist middle class blinded by capitalist technology. The transition from apartheid can essentially be considered a 'revolution without a revolution,' (Gibson, 2008:700) as the shift social hierarchy movement from race to economics failed to improve the life of marginalized communities or facilitate integration (Grant Farred, 2004: 592 in Hazell, 2013).

Biko (1998) highlighted the importance of solidarity in order to prevent the rise of a Black capitalist class; however, the current state of society thwarts his theories on liberation and self- emancipation. Like communism and socialism, the flawed presuppositions concerning human nature led to this downfall (Harvey, 2010).



Figure 4.19: Intothukne Junction, Cato Manor. Source: http://www.eastcoastarchitects.co.za

South Africa today 'demands a radical multiculturalism, a multiculturalism that continually challenges the regimes of accountability that are designed to move everyone toward the political centre, a multiculturalism that embraces "the spaces that differences make." (Soja & Hooper, 1993; Haymes, 1995; Hooks, 1994; McLaren, 1997 in Gruenewald, 2003: 632).

4.4.4 Improvisational Architecture

Virtuality has the ability to cause transformation, opening up a realm of innovation and productivity. Unlike reality, it allows the limit to be 'transplaced'; an imperative task for transgression to take place. Architecture can be seen as an abstract machine to encompass these virtual realities which unveil complex networks and systems. Virtual architecture is improvisational and capable of capturing the essence of space and time. It has the ability to accommodate a variety of programmes; form a space where the environment, people and technology are interdependent and interactive.







Figure 4.20: Ground House, JDA with Archiscape Source: http://sustainablecities.org.nz and Sound House, JDA with Archiscape Source: http://www.allanwilsoncentre.ac.nz

Amanda Yates (2012), project leader for the Ground House, Sounds House and Tokatea, suggests that 'architecture is always in a condition of flow: channelling people, rain water, breezes, birdsong energy, while architectural boundaries. . . Swell or settle transforming through time,' (Yates, 2012: 63-79). The concepts for these designs were inspired by Oceanic Architecture, redefining the distinction between the interior and natural surroundings, developing a site of cultural space, connecting people to their homelands (Yates, 2012).

In the Samoan cultures, fibre- based lightweight construction typology is used for partial or temporary containment to inhabit multiple zones simultaneously. Western foreigners were often disconcerted by the unusual degree of openness and intimate relationship with the natural surroundings (Yates, 2012).

Held together by weaving and tying, the designs were not durable or permanent and were 'continually becoming different from themselves, undergoing transformation,' (Sanford Kwinter in Yates, 2009: 34).



Figure 4.21: Samoan Architecture. Traditional Fale Tele under construction Source: www.jamesschollum.com Photograph by Thomas Andrew

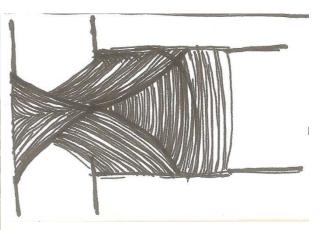


Figure 4.22: Traditional Samoan Lashing Technique. Source: Sketch by Author

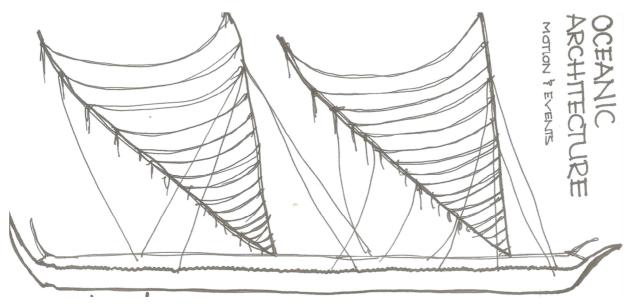


Figure 4.23: Tongan/ Samoan Catamaran known as a Kalia. Fijians also used similar, but called it Ndura. This construction technique inspired the design of the dwellings. Source: Sketch by Author

In present day, long term performative strategies and complex systems need to be accommodated for (Matthews, 2005), and embracing the notion that technology is not an aesthetic, but the 'bare bones structural armature on which its interactive and fluid program set out,' (Mathews, 2005: 40) is essential. However, technology cannot be solely relied on to constitute the idea of improvisational architecture (FOA, 2003: 529). Social and political factors have to be taken into consideration.

Genetic algorithm- a dynamic and extendable, computational biological invention by Goethe- is able to represent the final product as well as the processes which produced it as 'the population not the individual is the matrix for the production of form,' (Kwinter, 1994 in FOA, 2003: 99).

Figure 4.24: The Bundle Tower, New York. 'An abstract machine in itself is not physical or corporeal, any more than it is semiotic; it is diagrammatic' (Gilles Deleuze and Felix Guattari. A Thousand Plateaus. 1987: 141 in FOA, 2003: 527). Source: FOA, 2003: 482

Using virtual evolution as a design tool to create

space that is historically informed, adaptation to numerous unexpected outcomes and functions is enabled. However, this undermines the design and innovation of the space as the designer becomes a mere judge of aesthetic fitness. Unique style becomes undermined during this process and new forms are not original.

In contradiction to genetic algorithm, ephemeral architecture responds to 'the mobility of values, ambiances and fast- changing needs,' (Gadanho, 2007: 2) incorporating a performative element in design. 'The *performative action* becomes a radical social gesture that goes far beyond the production of an aesthetic object,' (Gadanho, 2007: 2).



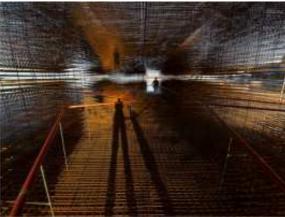


Figure 4.25: Croation Pavilion, Venice Biennale, 2010. Source: http://anamanzo.wordpress.com

4.4.5 Architecture as a Facilitator for Change

Architecture is an 'event encouraging connection and movement,' (Getlinger & Laite, 2014: 18). 'It's aesthetics, poetics, symbolism, environmental psychology, social policy and all other things which make up the wide ranging field of design,' (Stott, 2013 in Aliyu; Ebohon; Gyoh, 2014: 21).

The architect as an agent for dominant forces responding to functionalist ideals (Alfred Lorenzer, 1968: 169 in Norberg- Schultz, 1980: 195) is slowly becoming a lost concept as he slowly 'gained the courage to deal with life' (Giedion, 1943: 708) and has developed 'a frame work for architecture to again acquire political meaning outside the increasingly regulated boundaries of traditional building. . . architecture will take to the streets to achieve more with less than ever,' (Gadanho, 2011: 3).

Infrastructure and social systems are increasingly interwoven and interdependent on each other; therefore, what happens to one will have a direct effect on multiple systems (Sims, 2007a, 2007b; Graham, 2010 in Howe, 2015). Infrastructure is something which lies beneath the surface to become a platform for movement, transaction and interchange, facilitating connections between multiple cultures and institutions.

The Fun Palace reflects Le Corbusier's notion of architecture being a 'machine for living,' where the structure itself anticipates, responds and adapts to society's changing

needs and desires across time. The Fun Palace is an example of how disregarded arts and emerging sciences were able to cooperate, developing a 'radically new concept of improvisational architecture' (Mathews, 2006: 39) during a time of economic and social crises.

It formed a pedagogical and leisure environment which caused opportunity for society to break away from routine in order to inspire accidental interaction and innovative thought; an outlet for people with too much time on their hands (Mathews, 2005).

Inspired by Joan Littlewoods concept for 'A Laboratory of Fun', a 'theatre of pure performativity' (Mathews, 2006: 40), people were able to experience the way spaces transformed as they moved through the building, awakening 'the passive subjects of mass culture to a new consciousness,' (Mathews, 2005: 73).

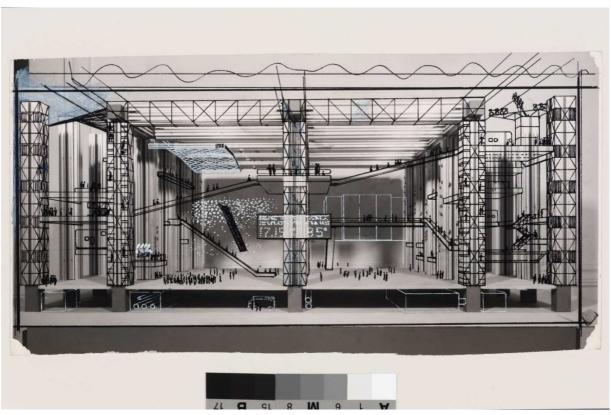


Figure 4.26: Fun Palace, Interior Perspective, devised from Price's friend and structural engineer Frank Newby (Mathews, 2005). Virtually every part of the structure was to be variable, with the overall structural frame being the fixed element.'(Mathews, 2005: 80). Source: http://biennials.ch

It was a synthesis of theories, discourse and disciplines (Mathews, 2005: 81). The unconventional architecture, not really a building at all, was 'an array of algorithmic functions and logical gateways that controlled temporal events and processes in a virtual device,' (Mathews, 2006: 39). This machine was used to negotiate changes in society, and refused to oblige to dictatorship. It responded to the informal characters of society, 'a symbol of the technological emancipation,' (Mathews, 2005: 84).

The idea of a virtual architecture is similar to Alan Turing's idea for his virtual machine, which 'would have no singular program but could reprogram and reconfigure itself to accommodate an endless variety of functions,' (Mathews, 2006: 42).



Similar to Bergson, Cedric Price Figure 4.27: The Fun Palace, Source: http://www.jstor.org

(1984: 54) thought of architecture in terms of events across time, describing the Fun Palace a responsive social intervention, rather than an architectural design (Mathews, 2006: 42). Therefore, the users of the space became the architect with 'no administrative hierarchy to dictate the program, form, or use of the spaces,' (Mathews, 2006: 43).

4.4.6 Conclusion

Architecture is not defined through static buildings or edifices, but as a process which defines people's lives through the design of the spaces they move and transform through, directly responding to real and ever changing issues. Architecture is what changes space into place, defining cultural and social meaning and therefore, architecture can be seen as an intervention which enables man to become, once again, emotionally connected with his place in the natural and urban environments.

4.5 CONCLUSION

'Sustainability is nothing less than redefining what it means to be human,' (Buchanan, 2015: 5 in James, 2014: 45). Contemporary society is becoming increasingly unsustainable through the infrastructure put in place to facilitate movement. This in turn leads to a misunderstanding of existence in the natural world and relationships between man and place.

In South Africa, place has been strategically used as a controlling device, and this is the cause of much unrest in marginalised areas and informal communities that are segregated from cities. Sustainable and adaptable infrastructure is needed to facilitate informal networks that have been drastically interrupted through ignorant architectural interventions and top- down spatial planning.

Architecture should be evental, dynamic and multiple, defined by daily practices, giving shape to the rhythm of everyday life and enhance a 'duration that posit existence as a

condition of ongoing, ceaseless flux where all is in motion,' (Bergson in Yates, 2009: 17), responding to sustainability issues not through form and function, but by its ability to adapt and respond to society and change.

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CHAPTER 5

SYNTHISISING SYSTEMS THROUGH MOVEMENT

"... the essence of the place will be informality—nothing obligatory—anything goes. There will be no permanent structures. Nothing is to last more than ten years, some things not even ten days: no concrete stadia, stained and cracking, no legacy of noble contemporary architecture, quickly dating. ..."

(Joan Littlewood, "A Laboratory of Fun," 1961)

5.1 INTRODUCTION

The development of transport infrastructure, specifically surrounding bridge design and multimodal interchanges, are conceptualised through political ideals specific to location and time. The main objective of connecting people and place has become overridden. 'Travel is part of everyday life- yet it has become something symbolic, something disconnected from everyday life,' (Farshid Moussavi in Katodrytis, 2005: 12).

In Europe, integral connections which represent ancient culture in contemporary society are being cut off by ignorant and economically focused design schemes.

5.2 THE URBAN COMPLEXITIES OF MOVEMENT

5.2.1 Introduction

There are many innovative ideas that do not make it to reality because they lack political agenda. Local and political constraints prevent architects from producing sustainable solutions for globalising issues, reducing the range of possibilities and impeding the emergence of unique concepts.

This is why the principles of the Foreign Office Architects (FOA), an international company who release themselves from these constraints (Katodrytis, 2005), are important to analyse. Their international competition entry, for Florence's multimodal transportation complex, elicited unprecedented urban art, inspired directly from the issues and desires of the space.

However, more importantly is the analysis of the design scheme by Foster and Partners, chosen by the Italian Government to become a reality; an example of how advanced technology is used to create political symbols, forming disconnections across time, leading to a disregard for historical contexts and destroying the beauty of many pinnacle cities.

5.2.2 The Attraction of Florence

Florence is the perfect example of a globalising crisis. It is a city still embedded with deep cultural values, but through a radical influx of tourism (Maggio, Paba, Pecoriello, Perron, Zetti, 2008), its identity has become somewhat lost and the place is seemingly incapable 'to innovate and produce new culture,' (Ibid, 2008:1).

Tourism has not only affected the quality and cost of living in the city centre, - once a concentrated cultural and public hub until the population disintegrated into surrounding

areas in search for more comfortable lifestyles or cheaper living conditions (Ibid, 2008),

- but the connections through the city are now dictated by the intensive networks of museums and historic archives (Ibid, 2008).

Even though these connections support the attractiveness of Florence and enhance connections between public places, they are purely capitalist constructs that service the flow of economy through the city and do little to emotionally (and physically) connect the people of Florence with their city.

There is a noticeable lack of innovative development schemes with the courage to make a mark on the nostalgic urban fabric of Florence, leading to degrading infrastructure. Without a foundation on which to stand, the identity of Florence will be consumed through the neoliberal society whose culture is dictated by political economy.



Figure 5.1: Florence, 2013 Source: Photograph by Author, 2013

5.2.3 A Dynamic Urban Phenomenology

The design scheme proposed by FOA responded to the global issue of the disconnection between transport and public spaces. The multimodal transportation infrastructure was designed as an urban complex, dedicated to both the local and foreign characteristics of Florence (FOA, 2003).

It was designed to synthesise the systems forming connections between the historical centre and the developing pole in the Novoli district, giving 'rise to a consistent and complementary relationship between public urban space and transport infrastructure,' (Ibid, 2003: 188).

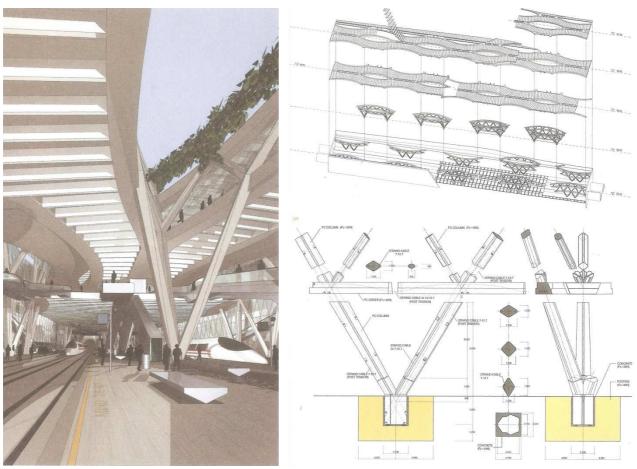


Figure 5.2: Interior Perspective and Technological innovation of design scheme. Source: FOA, 2003: 193 and 201

Lowering the high- speed tracks 25m below ground level erased the volume of the station and enabled this relationship as the intervention avoided interference with the urban fabric and blended into its surroundings.

'Rather than making a gesture to signify the gate to the city, we will get the visitors to magically appear in the middle of it,' (Ibid, 2003: 190).

There were many factors affecting the overall structural system, mainly the garden above the station and maintaining visual connections across all levels. In order to simplify and rationalise the construction procedure on a complex site, a prefabricated construction system was preferred, with a central energy plant and local environmental control systems tuned to the needs of each space (lbid, 2003).

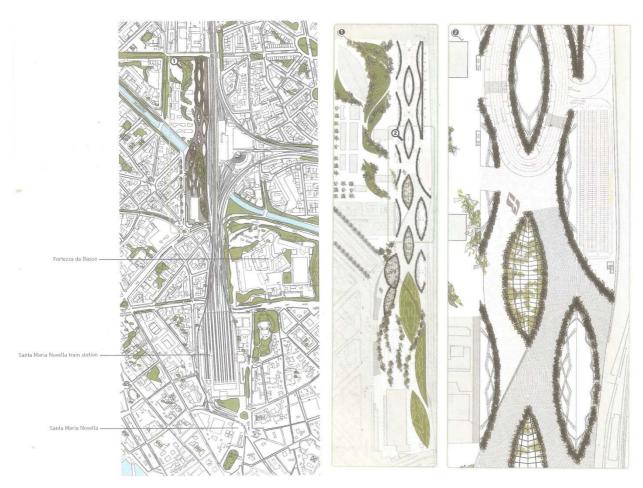


Figure 5.3: Site plan showing larger connections and design plans for high speed railway. Source FOA, 2003: 189 and 194

The design of the transport interchange reflects a global shift of static public places to transport interfaces; the spaces connecting people have become 'global nodes of 'flexible accumulation' compressing and expanding time and space to allow for a virtual manipulation of post- colonial capitalist extension . . . dynamic, glow, connections and bifurcations have become the core of the contemporary urban phenomenology,' (Ibid, 2003: 190).

5.2.4 Disconnected Reality

The idea chosen to become a reality was the glass arch designed by Foster and Partners, a scheme performing the opposite of FAO's idea, instead celebrating the experience of entry into Florence. The intention was to simplify the complexities of modern travel (Foster and Partners, 2003), but movement through space will always be a complex performance, and enforcing globalising principles of simplification reduces the space to a thoroughfare devoid of cultural values and public energy.

The design lacks an in depth understanding of the attraction of Florence, attempting to evoke the great railway structures of the nineteenth century and enhance the experience of the city through transparency (Ibid, 2003). The main objective of connecting people has been abated for architectural monumentality.

This criticism compliments Farshid Moussavi's of the FOA, when she stated: 'There's no point in recreating a Victorian- type shed. Embarking on a new station or railway is about building efficient ways to conduct flows and taking the opportunity to reconnect areas of the city that have been disconnected for years,' (Katodrytis, 2005: 13).



Figure 5.4: Winning design entry by Foster and Partners. Source: Foster and Partners, 2003

Many architectural interventions, such as this one, intending to renew the image of Florence, failed because they attempted to alter the already successful image of the city. Conflicting matters arose as a result of proposed functions and name- branded architects pushing controversial projects (Maggio, Paba, Pecoriello, Perron, Zetti, 2008:1), projects contributing towards the destruction of local identity.

5.2.5 Conclusion

A distinction can be made between the FOA and other architects, in that they design for all aspects of sustainability, integrating people, technology and the environment. 'Their architecture lifts flaps of skin from the ground and mutates them in contorted twists, like plastic surgery for the earth's surface,' (Design Museum, London in Katodrytis, 2005: 14).

Their unique design, unfortunately unrealised, innovatively responded to the historical context of Florence. Inspired from a global perspective, it was able to formulate an answer for global and local issues surrounding the disconnection of transportation, reimaging the contemporary city.

The design reflects a transient architecture defined by the movement of people, enhancing the relationship between people and place and forming a platform for integration.

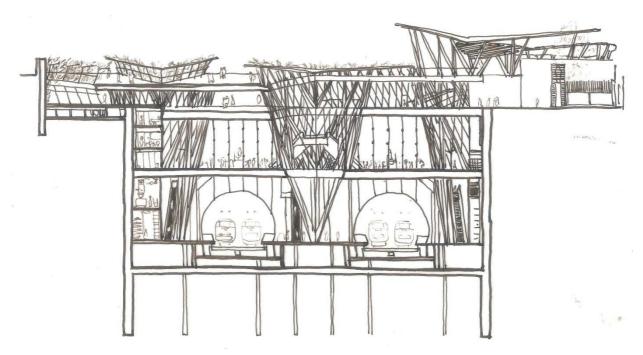


Figure 5.5: Section depicting vertical connections across multiple levels. 'The hybridisation of the public space with the transportation infrastructure is one of the most distinctive features of the contemporary city,' (FOA, 2003: 190). Source: Sketch by Author

5.3 CONCLUSION

Development schemes in European and African countries are similar in the way they are politically idealised. Sensitivity to culture and local practices are absent. It is important to understand both contexts in a globalising world as European influences on African architecture is more evident today than it was during colonial oppression.

However, because of Europe's advance on African countries in terms of development, the consequences of these approaches are already surfacing. Proactive responses in African development could not only avoid inevitable issues, but hurdle the continent into a redefined first world future.

CHAPTER 6

THE DYNAMICS OF ISIPINGO WITH RESPECT TO MOVEMENT

'Connections are productive. They exert a force that acts on things and bodies. Cities are places of thickening connections' (AbdouMaliq Simone, 2010: 137)

6.1 INTRODUCTION

Isipingo is a prime example of a resilient Third Space situated within the South Durban Basin (SDB). The SDB is an emerging modern landscape reconstructed through globalising processes (Scott, 2003: 7), reflecting a country characterised by immense segregation, marginalisation and static urban areas.

Being the second largest industrial zone in South Africa (Sutherland, Scott: 2008) its development should be a priority, yet it is undermined in the integrated development plans set out for eThekwini. Development is focused on efficiency of freight transportation rather than enhancing the vibrancy and dynamics of multifarious networks that have had the opportunity to develop naturally and spontaneously, forming a 'melting pot of cultures,' (Makhathini, 2011).



Figure 6.1: Isipingo Market, Section C Source: Photo by Author

6.2 JUSTIFICATION FOR ISIPINGO

6.2.1 Introduction

Although Isipingo is known for its unique cultural dynamics and vibrant market places, it suffers from many silent struggles which have been forced to surface because of recent developments and new attentions being focused on the area.

The development plans for the SDB, specifically the Back of Port and the Dugout Port, are met with much contestation by the civil society, who claim that the SDB is 'littered with white elephants, construction corruption and socio- economic neglect,' (SDCEA, 2015); an area reflective of capitalist constructs and privatization in order to benefit the dominant class.

6.2.2 A Gap in Development

The Integrated Development Plans for eThekwini Municipality is predominantly in the Northern areas, with little attention paid to the Southern mess. In South Durban, there is a need to not only address environmental and health conditions caused by the proximity between the residential and industrial zones, but to represent marginalized communities in a globalizing society.

Investment opportunities to benefit these communities are high in Isipingo because of their expense of amenities and industrial and commercial activities; however, the threatening level of poverty detracts from this (Black Balance Projects, 2016). Isipingo, being the main industrial hub for Durban, presents an opportunity for development of metropolitan significance, which will attract investment and link marginalized areas to major transportation networks.

The CBD of Isipingo has been ignored for too long, and it has resulted in unregulated informal trade and an extensive network of drug trafficking, characterising the area as volatile. However, it is also resilient as communities have had the opportunity to develop in solidarity, initiating a unique atmosphere which people travel long distances to experience.

6.2.3 Movement in Isipingo

Development plans suggest that a number of socio- economic issues can be resolved by simply enabling movement networks. Many initiatives have already begun in the SDB, however, the freight network and motorized movement is prioritised. Although emphasis has been placed on Non- motorised Transportation (NMT), implementing extensive infrastructure is hard to justify because of the low level of pedestrian and cycling activity outside rural communities (ILISO, 2013: 11). However, the NMT intensity matches that of the private car or taxi activity in Isipingo, therefore, equal importance needs to be placed on both modes of movement (ILISO, 2013: 6). By not supporting this form of mobility, Isipingo is further segregated from Durban's CBD (ILISO, 2013), increasing poverty and diminishing investment opportunities.

The pedestrian congestion in Isipingo is in desperate need of relief, which can be achieved through enhancing the public transportation network (ETA, 2010).

Isipingo Town Centre (ITC) is the largest intermodal transportation point outside Durban CBD, servicing Isipingo, Umlazi, Kwamashu and Amanzimtoti (Black Balance Projects, 2016). Current development plans only incline to upgrade infrastructure and simplify movement patterns, however, no concrete plans have been initiated to support the socio- economic situation.



Figure 6.2:Conflict between NMT and Motorised Transport in Isipingo, Source: Photo by Author

6.2.4 Conclusion

Isipingo is characterised by segregation and conflict because of unsustainable urban planning. There is a gap in how schemes are theoretically imagined and how they are realistically implemented caused by a lack of communication with the community. The intensive and organic connections which enable the unique quality of life in Isipingo are 'at risk of becoming deviant,' (IYER, 2011: 40), and if not acknowledged, industrial zones will slowly suffocate and segregate these communities and organisations.

6.3 LOCATION OF ISIPINGO

6.3.1 Introduction

The focus of the case study is along the C2 corridor which forms part of the IRPTN plan for eThekwini Municipality, extending from Isipingo South to KwaMashu northern residential areas and moving through the conflicting zone of the SDB (ETA, 2010).

This corridor forms imperative national and international connections for Isipingo, but more importantly, for social purposes as well as to support the literature in this dissertation, is the proximity of Isipingo to marginalised areas. A catalytic intervention in Isipingo will not only answer questions surrounding the equality of movement through space, but can resolve the major implications caused by historical apartheid planning.

6.3.2 North- South Corridor

Major logistic links with Gauteng and the Port of Durban signifies the North-South Corridor (IYER, 2011: 27) however, what most influences development on the corridor near Isipingo is the proposal of the Dugout Port (DoP). This proposition suggests that the movement of freight in this area is going to intensify drastically and space for logistics is going to be in demand.

The corridor was initially planned and designed for the movement of bulk cargoes (IYER, 2011: 20) and efficiency, while the movement of people was ignored because it wasn't relevant at the time. However, this is still being ignored today even though these movement patterns are now predominant (Black Balance Projects, 2016), causing major conflict between different modes of transportation, especially between freight, taxis and pedestrians (Black Balance Projects, 2016).



Figure 6.3: Isipingo Local Area Plan and the C2 Corridor, Source: Photoshopped analysis by Iyer Design

6.3.3 Proximity to the Margin

Isipingo is an example of one of the many marginalized communities in South Africa, originally an Indian community relocated during apartheid (Makhathini, 2011). During 20 years of post- apartheid, the area has been largely neglected and this has given rise to an integrating community of multi- cultures developing informal strategies critical for their survival (Makhathini, 2011).

As a result of this freedom, the taxi industry has thrived and this has made Isipingo a central location point for surrounding townships to move through when needing to travel to Durban's CBD or down the South Coast. These areas which depend on Isipingo include Adams Mission, Folweni, Kwa Makhuta, Umlazi, Prospecton, Isipingo Hills, Winklespruit, Umgababa, Umbumbulu, Nkomakazi, Mandunduku, Orient Park, Lamontville and Merebank (Black Balance Projects, 2016).

Therefore, any sort of intervention in Isipingo will have a direct effect on these areas too.

6.3.4 Conclusion

Isipingo is a strategic location because of its proximity to poverty stricken areas, its major connection to the C2 corridor and recent development proposals, proposing major transformations for the area and the dependent communities. Proposing an intervention here could have a catalytic effect for the rest of the SDB, influencing the way development in this area is managed and implemented.

6.4 HISTORICAL AND SOCIAL CONTEXT OF ISIPINGO

6.4.1 Introduction

Isipingo is reflective of a bipolar country (Gibson, 2011); meaning that the rainbow nation face represented to global society masks the conflicted and suffering majority of marginalized communities who are unable to assimilate into capitalist constructs.

The facilitation of integration at a state level takes on a top down approach, lacking understanding of the historical and social contexts (Gibson, 2008).

6.4.2 Competitive Beginnings

Isipingo was generated from a plan laid out in 1840 for pre- urban trading post-settlement, forming road orientated village settlements (IYER, 2011: 48). The construction of the railway enhanced these settlements. This plan initiated 'a multi-nucleated growth pattern with tentacles stretching outward from the central part of the city,' (IYER, 2011: 48) giving rise to the coastal city we experience today.

The 200km stretch of the coast erupted after the railway was constructed in 1932. No development was possible prior to the railway construction as the many rivers formed obstructions. This inaccessibility during early stages of development can be reflected throughout South Africa (Varian, 1953:31). This enables an understanding as to why transport infrastructure has always been designed for efficiency instead of for the people. There was competition between ports to reach the centre of the country, resulting in infrastructure being constructed rapidly and not sustainably.

In South Durban planning was largely focused on industrial and commercial zones as the pattern of development is based off the 'centralisation of economic opportunity,' (IYER, 2011: 49). This, coupled with the dislocations of apartheid is the cause of segregation between residential and work zones and complicated journeys (IYER, 2011: 49).

6.4.3 Developing a Dystopian Society

Isipingo is not only characterised by its imperative transport linkages. There are strong social connections in communities as well as work- residential linkages that have to be taken into consideration. 'The lives of residents in the South Durban Basin are well contained within this area,' (IYER, 2011: 40) adding value to the social capital within the area.

Because of the trade expansion during the modern period, Isipingo has formed into a sub- centre in relation to Durban's CBD, functioning as a centre in its own right and increasing levels of diversity (IYER, 2011: 49). However, the maps and plans which shaped the entire South Durban was an instrument of power and has sadly not been altered post- apartheid, restricting multifarious networks to develop.

'As with most South African urban areas, eThekwini Municipality suffers the consequences of poor planning as a result of apartheid policy which results in several areas of dysfunction, such as the spatial and economic marginalisation of large portions of the city's residents,' (IYER, 2011: 48).

Planning has not changed, however, to comply with post- apartheid policy, and is resulting in a community perceived to be violent and frightening, plagued with an intensity of crime and violence.

6.4.4 Conclusion

Because of the Southern Corridor's metropolitan and national scale impacts, the ability for it to continue to grow and develop sustainably is essential. In order to achieve sustainability from an environmental, economic and social stand point, the purpose and development of movement networks needs to be carefully problematized and considered in any proposed change for Isipingo so as not to destroy unique dynamics.

6.5 EMPIRICAL DATA

6.5.1 Introduction

Empirical data for Isipingo was collected through a qualitative exploratory study based on phenomenological enquiry in order to understand how development is understood from a top- down and bottom- up approach. Information was initially obtained through reviewing books, journal articles and academic papers written by various authors for background information on the area, but understanding experiences and perceptions of

movement was gathered through informal interviews with street traders in Isipingo as well as professionals involved in the IRPTN plans for eThekwini Municipality.

6.5.2 Socio- Economic Assessment

Many Indian and Coloured residents in Durban were moved to the SDB during the Group Areas act, causing it to remain today an area of social conflict and tension. Not only has the apartheid affected the economic and social lives of these residents, but the large industrial area has detrimental effects to their health as well as to the environment. There is approximately 280 000 residents and 600 industries (Sutherland,

Scott. 2008). Open spaces and green sites are now also under pressure due to the high demand for development space.

However, being a predominantly Black area developing autonomously from the state, Isipingo has developed a certain level of tolerance for multiple cultures (Black Balance Project, 2016).

Almost all residents have received a primary level education, but this alone does not assist with employment as without a secondary or tertiary education an unskilled labour fee is all that can be earned. The movement of the airport has affected the employment rate drastically and most households receive no income with 90% below the poverty line (Black Balance Project, 2016).

What is important to note about Isipingo is that the people who are predominantly in the CBD do not live in Isipingo but come from outer lying areas, either for work or are using the area as a transition zone.

Another important fact is that Isipingo contains all the amenities and services required for any CBD; however, the functioning and management, supported by the degrading infrastructure, is unable to enable these services.



Figure 6.4: Kajee Street. Source: Author



Figure 6.5: Gutter Pollution. Source: Author



Figure 6.6: Only Formal Taxi Rank. Source: Author

Isipingo Rail is serviced by taxis, made up of 15 Taxi Organisations under private ownership (Black Balance Projects, 2016), which have had the opportunity to develop unique networks to support the people of Isipingo and the surrounding townships, informal settlements and squatter camps. They bring in over 62 000 passengers a day. Being the main mode of motorized transport (Black Balance Projects, 2016), the infrastructure put in place to support these structures is poorly neglected and collaboration is non- existent, causing a volatile relationship between the state and the taxi organisations.

6.5.3 Analysing Existing Development Schemes

Development in Isipingo will have incalculable implications for the socio- economic situation, especially for informal trade, therefore careful problematizing needs to take place. The development plans set out by eThekwini Transport Authority (ETA, 2010) specifically state that the use of existing infrastructure and spaces are a high priority, yet the project in Reunion directly contradicts this.

Instead of using the existing CBD, an area in need of social rejuvenation and infrastructure maintenance, the proposal is to rezone Reunion as a commodified, intermodal transportation hub (IYER, 2011) and start from scratch in order to support development plans which have been set to commence in the unforeseeable future. The scheme is sold by iconising Reunion as the new 'entrance into Umlazi'. This is a proposal reflective of a Functionalist error, which only succeeded to support a minority while draining the dynamic networks of the majority.

Currently, the only proposed development for linking Isipingo with Durban's CBD is an upgrading of the rail, a mode of transport which only brings in 7000 passengers per day. When compared to the intensity of people moving via taxis, it is clear to see that priorities have either been misplaced or lay in corrupted pockets of the state. There has been no attempt to incorporate the area into the IRPTN plan or propose any bus depos and this is mainly because of the lack of interaction with taxi organisations.

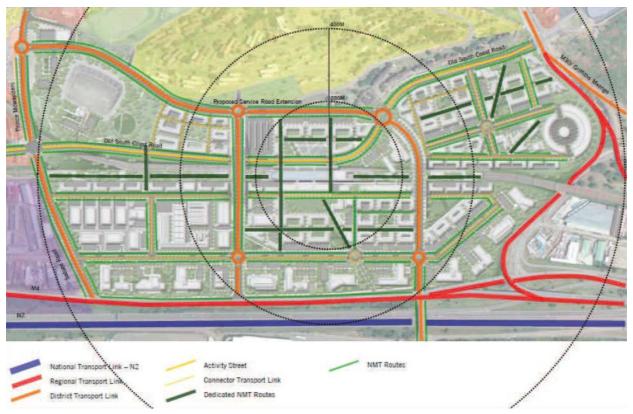


Figure 6.7: Proposed Plan for Reunion. Source: Iyer, 2011: 2013

6.5.4 Conclusion

Information collected from multiple stake holders and professionals has enabled an understanding of not only the socio- economic statistics of Isipingo, but the internal dynamics, as well as a professional's perception of the area, avoiding a top- down approach as well as romanticising the informality of the place when analysing the data.

6.6 CONCLUSION

Isipingo's strategic location and the gap it marks in larger development plans makes it the ideal site for an architectural intervention informed by movement to connect people and form a platform for integration. This connection is not an architectural statement, but rather something which grows from the community's daily routes as well as utilizing degrading infrastructure.

The main objective of the research is to identify Isipingo in the South Durban Basin as a third space and facilitate its integration through theoretically conceptualizing and implementing a transient space which not only connects to the city and enables equality, but has the flexibility to be adapted over time as circumstances change.

CHAPTER 7

ANALYSIS: A MELTING POT OF CULTURES

'Our slaves are robots: in the age of automation all men can be free.'

(Joan Littlewood, Fun Palace Document, 1964)

7.1 INTRODUCTION

Movement and place are inherently interdependent. In First World countries, such as Florence, movement is analysed as an economic and development issue. However, movement and connections across space and time have always been a survival technique for those in Third World places. Both perceptions are narrow, too focused on the present and the response is not interdisciplinary.

Economically and socially, movement is unsustainable in Isipingo because of the infrastructure put in place for its facilitation. Segregated pockets of veiled informality, resulting from the harsh barriers formed by movement, are romanticised to be resilient; however, a narcotic society is silently taking over and is destroying imperative connections necessary for survival.

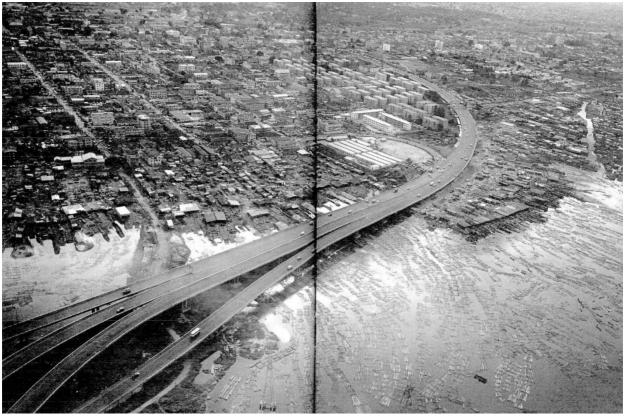


Figure 7.1: Movement in African Cities. Source: Koolhaas, 2000

7.2.2 MOVEMENT AND PLACE

7.2.1 Introduction

Without movement, place would have no meaning. Therefore, controlling movement through space has a hegemonic hold over place. In a society radically affected by

technological innovation and automation, perception of time and movement has adapted too fast for the design of these spaces to be sustainably problematized; however, first and third world countries have realised the economic value of these spaces and have responded in ways that are phenomenally similar.

7.2.2 First World Progress

Cedric Price (2005) visualised place as a temporal experience, explaining his inclination to perceive architecture and technology as improvisational. At a time of rapid transformation, any kind of structure that was static or characterised by permanence was a social asphyxiator.

His ideas surrounding architecture responded to the excess of time resulting from the development of automation (Mathews, 2005), coinciding with a time period characterised by drug abuse and psychological distress. In order to alleviate this issue, temporal places of autonomy needed to exist to encapsulate excess of leisure time. Unfortunately, his ideas were distorted by controlling social engineers and they were never brought into reality (Mathews, 2005).

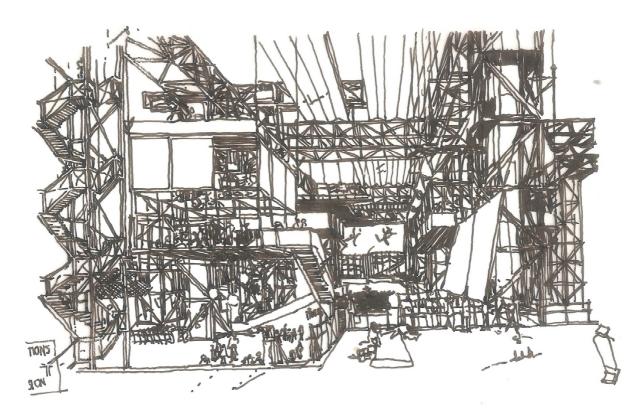


Figure 7.2: Sketch of Cedric Price's Fun Palace Source: Sketch by Author from Mathews, 2006: 39

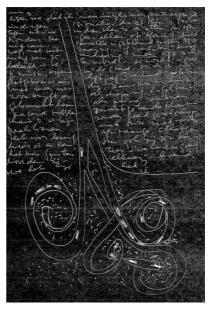
Instead, excess time has been commodified and controlled by the state, commercial market and capitalist forces. Throughout Europe, deep- rooted, unique cultures which fill streets with informality, music and colour, are been diminished because design schemes are focused on monetary movement and not that of people.

Major infrastructure projects to facilitate global movement are undermining the local connections which stimulate the local economy, destroying the essence of place and turning movement into a boundless liminal experience.

7.2.3 Third World Survival

African urbanisation is resulting in a lack of identity, urban inequity and exclusive cities because connections for social interchange are being ignored (Simone, 2010). AbdouMaliq Simone (2010) theorizes about an inclusive city maximising the inhabitant's resourcefulness, using relational meshes and social practices to directly inform design and development.

'Africans are constantly rearranging their social. economic, religious, and domestic lives in the process of consuming more than they produce... designations creates a seemingly permanent state of political ambiguity,' (Hecht and Simone, 1994: 83 in Figure 7.3: Movement in Lagos, Koolhaas, 2000; 511).



Nigeria. Source: Koolhaas, 2000

Lagos is a city characterised by boundary lines blurred by informality and spontaneous detours to stimulate local economy. Its local economy and social environment are directly supported by the people physically adapting infrastructure to control movement through space. Because of importance placed on relational networks, the markets in Lagos are internationally connected, allowing the country to be aware of foreign influences, but develop autonomously (Koolhaas, 2000).





Figure 7.4: Urban Fabric integrating with roadway infrastructure because of people being able to physically adapt their environment. Source: Koolhaas, 2000

In South Africa, however, informality is confined to the periphery, disconnected from global dynamics. The informal settlements are characterised by high levels of unemployment, poverty and crime (Odendaal, 2003) causing people to resort to gangs and drug abuse in order to survive (Goodenough, 2006). Development plans are idealised and don't consider local connections on which the majorities survival depends on, destroying not only cultural dynamics, but identities connected to place.

Globally, developers do not have a consistent and acceptable answer of how to treat these informal settlements as each one is different from the other, negating the idea of a universal answer (Myers, 2011).

7.2.4 Conclusion

European and African countries, although different in cultural dynamics, are experiencing the same issues when it comes to development and that is the disconnection between the movement and time. Price and Simone, although influenced from two different worlds, both consider the imperative connection between people and infrastructure. By combining two thoughts across place and time, architecture to reconnect movement and place can be established.

7.3 THE DISCONNECTION BETWEEN LEVELS

7.3.1 Introduction

The National Development Plan for South Africa, funded by the president's office is met with much contestation throughout the country by civil society; however, it is particularly bad in Durban. Where Cape Town and Johannesburg started designing and implementing connections, Durban tried to perfect the system before initiating any kind of change, leaving communities in a liminal state of expectation and disappointment.

This kind of practice is not only causing conflict between levels, but internal issues between different departments and within communities and organisations.

7.3.2 Top- down Scepticism

EThekwini Transport Authority (ETA) is observed by professionals to be the superior department in relation to the more practical City Fleet, causing conflict not only between disciplines but between different modes of movement.

Therefore, processes to pass development proposals or plans are extremely complicated and most of the time the planners themselves are ignorant of the

implications of their schemes. Designers become involved in the contractual side of development, ignoring the social aspects.

Of more concern is the time it takes for development schemes to be approved and implemented. Planners are overly concerned with perfecting the system that they don't take into account the continuously changing political agenda, and by the time implementation takes place the scheme is irrelevant and unsustainable.

National Treasury have become a political access point for architects and urban planners, enabling the government to think of problems in terms of spatial design. Although a department to enable this political connection is necessary, many architects do not think that National Treasury is the right department for it.

National Treasury and planners often disagree on how to generate movement. Planners criticize that National Treasury's policies are too rigid and academic and do not adapt to the local contexts.

On paper the links and connections make logical sense, but its implementation, or lack thereof, is ignorant of local issues and social connections, causing distrust and conflict in effected communities.

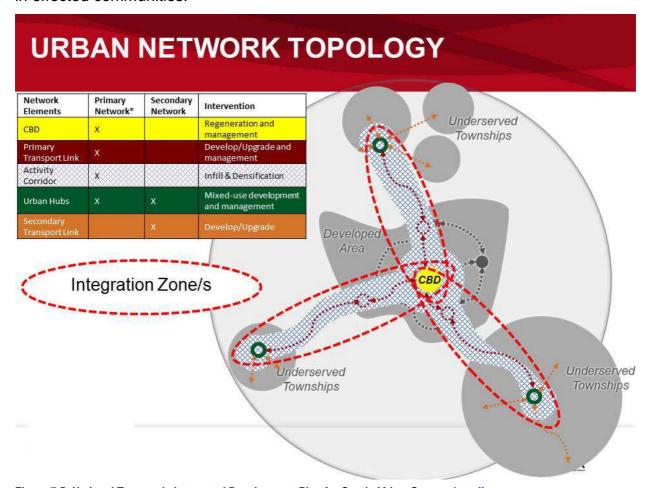


Figure 7.5: National Treasury's Integrated Development Plan for South Africa. Source: http://www.treasury.gove.za

7.3.3 Bottom- up Experiences

Corruption and a lack of communication are evident to communities on the ground level, especially when it comes to transport. Competition between transport companies and organisations become violent and protests are performed to highlight the importance of the connections they make.

The lack of integration with taxi organisations is evident in Durban. Planners have no honest answer on how to incorporate taxis into their grander development schemes, rather wishing that they entirely disappear. If attention was paid to social dynamics in these areas of interventions, it is clear that a bus could never replace a taxi because the system is not flexible. The feign negotiations between taxis and buses will cause a ten to fifteen year delay in development, increasing the frustration of displaced populations.





Figure 7.6: Wreckage to motor vehicles and roadway infrastructure during violent protests in Durban. Source: http://www.news24.com

In South Durban, radical and violent tactics are used to prevent development plans which hinder the local community. Local residents lack trust and respect for planners or authority, dedicated to a lack of presence. Like a high school left to its own devices, the black market thrives and movement is completely unregulated, resulting in disrespected or disappearance of public space and a disintegration of community ties, weakening social connections.

In Isipingo, the public space is the street. There is no place for gathering or for performance, leaving the streets congested with a multiplicity of activities involving trade, multiple modes of movement, drop off zones, advertisement, police harassment, and a variety of criminal activities, the most evident being drug abuse.

7.3.4 Conclusion

People in Isipingo have developed mistrust for authorities because of promises being broken and a lack of consultation before changes are initiated to support departments on 'higher' levels. However, proposed changes are reacted to so violently that architects and urban planners are hesitant to intervene.

Although Durban is in desperate need of implementing an integrated development plan, these nodes that have been chosen because of their socio- economic reports are reluctant to give up their freedom of being autonomous from the state, which allows them to move and function without being controlled by regulations.

7.4 A HETEROTOPIA CONCEALED BY DUST

7.4.1 Introduction

Concealed from the N2 by an expansive industrial zone, Isipingo is one of the busiest hubs in the South Durban. It is a transitional zone for many townships and informal settlements surrounding the SDB. Ignored by the state, the community has had the opportunity to develop a unique culture which holds a certain level of tolerance for diversity, an acceptance that is hard to find in post- apartheid South Africa.

However, autonomy comes with a responsibility that has not been upheld in the area, causing numerous socio- economic issues. Being a transitional zone, the lack of respect and sense of belonging in the space is evident through the pollution, vandalism and rapidly degrading infrastructure.

7.4.2 Engineered and Organic Movement

The rail line and the N2 highway have essentially split Isipingo into an East and West sector which rarely intermingle. Pedestrians often utilize the N2 to escape the harsh terrain or to hitchhike and this often results in fatal collisions with vehicles.

However, this has not been taken into consideration by planners who only attempt to widen the harsh barriers instead of accommodating for this inevitable movement. Simply widening existing routes is not an adequate solution. The issue in Isipingo CBD is that there is only one street to use, therefore everyone uses it. Congestion will always be an issue because of the lack of choice given to people.

However, this one street has enabled an extensive informal network through the CBD, the most incredible being that of the taxis. The unique system connects Isipingo to Durban City as well as to Umlazi and surrounding settlements, causing for multiple cultures to move through the area on a daily basis.

The congested street has enabled it to be utilized by pedestrians and taxis simultaneously because the speed of movement is so similar. This forms a unique interaction between modes of movement.

Movement and temporality characterise the CBD. The traders moving in and out every day give a sense of unpredictability to the area as nothing seems fixed or permanent.

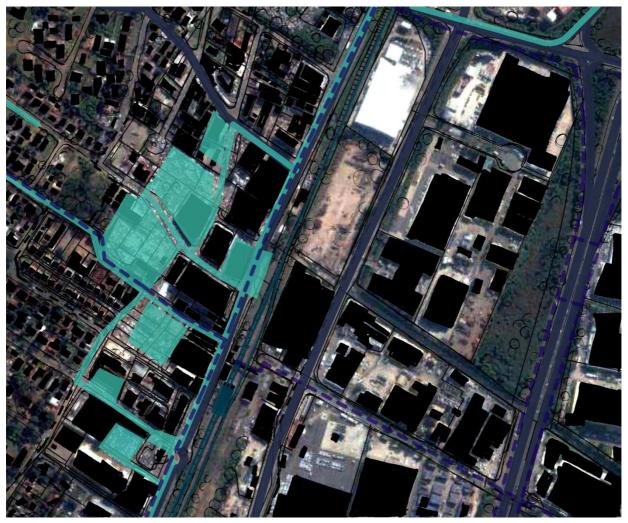


Figure 7.7: Contextual Analysis of Isipingo CBD. Source: Image by Author

However, this constant transition results in a lack of pride and respect for the place. The community amalgamating from various places gives Isipingo its identity, not vice versa.

7.4.3 Romanticized Informality

Although it at first seems chaos, unstructured and dirty, Isipingo has a unique network and community that has formed a structure within itself based directly on survival



Figure 7.8: The congested street layout of the CBD. Source: Image by Author

needs. The Masibambisane Traders Organisation is the only form of establishment keeping order. The Business Support Unit in Isipingo keeps within their fence.

Although the close knit community does not seem unnecessarily unhappy in the vibrant market place, an increasing population- caused by forced removals to areas surrounding Isipingo- are causing socio- economic issues including unemployment specifically regarding the youth and a congested market place.

Traders are literally unable to move from their station because there is no more pavement space. Therefore, if something were to hinder a specific trading space, that trader would be unable to trade and unable to do anything about it.

Traders experience numerous issues, specifically regarding the environment. There is no infrastructure put in place to assist informal trade and often the market is swept through with blinding dust from harsh winds.

Being a transitional zone, there is little investment in public space and no place for cultural activities. Therefore, with regards to the high level of unemployment and peak traffic hours, people in Isipingo generally have excess time on their hands. This has led to an intensive drug problem in the area; locals refer to them as 'Whoonga Boys'.

Children are generally left at home by the traders and women do not walk alone in the CBD. This also prevents traders from staying overnight in the CBD increasing transportation and storage costs.

7.4.4 Conclusion

Although the infrastructure in Isipingo is in desperate need of attention, those who have places to trade in the area are still afraid of external parties intervening. One slight change to the system and many lives can be detrimentally affected. Because of this inability to change, Isipingo, although a transitional zone, does not support transformation and movement across time.

7.5 CONCLUSION

Through an architecture that is not only informed by movement and connections between people, but can adapt as these motions change over time, a multiplicity of cultures and dynamics are able to be accepted in a space simultaneously.

Infrastructure which allows for choice gives people the freedom to transform through space and time. Without this transformation, development cannot take place.

The biggest issue regarding development plans is negotiations and integration between the formal and informal sectors, whether it being stakeholders, trade or transportation modes; integration referring to the sharing of space to mutually benefit one another. In Isipingo, a huge opportunity lies to show how the fair facilitation of movement can bring about urban regeneration and cultural cohesion.

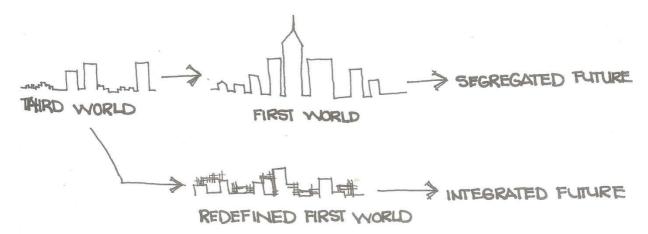


Figure 7.9: The opportunity Third World countries have through analysing the consequences of First World development schemes and choosing an alternative path to not only create an integrated future, but hurdle in front of First World countries by redefining interaction with place. Source: Sketch by Author

CHAPTER 8

CONCLUSION AND RECOMMENDATIONS

'There is no reason why we have to try and copy
the fashionable brand of the so- called worldclass city, which is often high- tech, factorymade, glossy, seductive, narcissticc, inscrutable,
corporate, orientated to the rich, tediously the
same and destructive of place.

We should be aiming for and persuading those
in government, as well as the corporate
community and civil society that we have a
different idea of world- class'
(Julian Cooke, 2015: 26)

8.1 INTRODUCTION

Movement, space and time are concepts that have been artistically represented and scientifically engineered for centuries, but the affects and influence on social and spatial relations is unconsidered.

Therefore, the concept of movement to inform sustainable and egalitarian design has not been implemented successfully.

8.2 FINAL COMMENTS

8.2.1 Introduction

The problem statement was proven accurate by representing the unsustainability of movement in contemporary society throughout the globe. The complexity of networks is owed to rapid advancement and an apprehension for change.

8.2.3 Summary of Results and Conclusions

Through the literature review, it was not only established that movement and perceptions are inherently linked across space and time, but that the continuous process of transformation is not accommodated for in design, forming static and unshaped urban spaces.

The link between movement and space infers a connection between movement and social constructs, giving space cultural meaning and thus transforming space into place. It can be concluded that place has pedagogical connections with man, a relationship that enables hegemony to be enforced through infrastructure. Infrastructure and ignorant interventions put in place to facilitate movement is currently unsustainable, static and causing disconnection between man and place.

This disrupts delicate informal systems designed for survival across the globe. However, the consequences of these interventions are surfacing in first world countries, giving developing countries the opportunity to proactively respond and redefine the ideal of first world.

There are pocketed opportunities for this in the South Durban Basin by highlighting the gap of Isipingo. Considering Isipingo a third space, it should not be seen as a space for thoroughfare and blind movement, but a liminal space for free participation, expression and change (Gibson, 2008).

An intervention in the space will not only have profound effects on the socio- economic situation, but will enable a platform of integration for a community reflecting a larger South Africa characterised by segregation, feudal relations and violence.

This integration is facilitated by the platforms ability to respond and adapt to transformations and movement through space and time, thereby accommodating for a multiplicity of cultures and dynamics simultaneously, through infrastructure facilitating choice.

8.2.3 Conclusion

Movement has always been considered a generator for design, especially regarding the works of Price (1984), Cooke (Webb, 2005) and various modern visionaries, focusing on space, and Simone (2004) focusing on people. The gap, however, is established when virtual ideas are thwarted by reality. This is often because of the disconnection between levels in politics, economics and design.

8.3 RECOMMENDATIONS

Analysis of top- bottom relationships has proven that there is a disconnection between how policies are imagined and implemented. Therefore, a transitional group which integrates design and politics is recommended. Although National Treasury functions as such group, the prioritisation of monetary matters is questionable and it would be preferable that the group it free of such restrictions. This is a long term recommendation that could hopefully cause design to be influenced by socio- economic and spatial situations specific to local contexts.

A recommendation achievable across a shorter timeline is that the relationship between taxis and buses be taken more seriously. Current solutions are ignorant of reality and are only achieving a delay in development.

It is recommended to achieve this through alternative design solutions to roadway thoroughfares and traffic congestion. The widening of roadways is highly discouraged. People need to be provided with a wider range of choice. By reconsidering the relationship people have with spaces and different modes of movement the interaction between formal bus routes and informal taxis can be completely redefined.

8.4 CONCLUSION AND FUTURE RESEARCH

This dissertation highlights a lot of topics related to movement, but is has not had the opportunity to intensely problematize one mode. Because the dissertation is focusing

on people's perception of movement and the effects of time on place, it is impossible to simply focus on one aspect. Perception and culture is affected by a multiplicity of programs and systems and ignoring one aspect could have thwarted conclusions.

However, future research on specific types of movement and relationships would enhance the argument and justify conclusions made. This could include research into taxi dynamics and problematizing these informal transportation, the effects of transmigration on cities and on homelands and the spatial boundaries between residents and place of people in close proximity to industrial zones.

APPENDICES

I. RESEARCH NOTES

i.a Informal discussions with Isipingo Informal Traders

Informal Discussions were conducted with Traders to not only understand their interaction with movement and how transport infrastructure affects their place of work, but how the socio- economic situation in Isipingo affects their daily lives and what deficient services can be highlighted and improved.

Participant 1

- A chairperson for the Masibambisane Traders Organisation in Isipingo
- An informal trader
- Without consultation, a building began renovations last year May, to the
 detriment of his business. No safety precautions taken during construction.
 Trader had to put up barriers to prevent pedestrians from walking under
 construction workers throwing bricks across walkway (no building inspectors).
 The truck parked along pavement forces pedestrians to walk around on the
 street causing congestion. The building is hardly finished
- There have been no accidents yet, but pedestrians walking in the street is dangerous
- The wall he and two other traders used to use was demolished without consultation because the construction company needed more space for storage. Trader tried to move but because of the congestion in Isipingo there is little space for him and moving too far takes him out of his network causing him to loose buyers. As it is, he is battling to meet his expenses. There has been no form of compensation from the construction company.
- He says that the increase in pedestrians is because of the newly developed squatter camps from Illovo as a result of relocations because of RDP houses going up.
- He says the Business Support Unit (BSU) in Isipingo is useless and they never see officials

Participant 2

- From Umlazi Section A
- Travels by Taxi- R20
- Sells lime, lotions, herbs etc.
- She thinks that the current state of Isipingo is not working
- She received no consultation on development plans
- Complains about the lack of housing and shelter against wind and rain- she is exposed
- She has a young son who stays at home
- Does not need to cross highway
- No access to water (have to buy from shops) or toilets

Participant 3

- Works for Pick n Win handing out flyers (R50 per day from 8-5)
- Literally works on the street- no space on pavement because of construction site
- Pays R9.50 for taxi from Umlazi section D
- Complains about the water in the gutter from burst and leaking pipes (it sits there every day- full of litter and smells bad) Traders have to sit in this water to trade)

Participant 4

- Comes from Tanzana and travels by taxi
- He fixes things
- He is not bothered by Isipingo's state- suits him and his business
- He does not have a permit
- Wary of change

Participant 5

- Trader from Mtubatuba but lives in Umlazi (goes home once a month) and travels by taxi- costs R140 (to go home)
- Complains about the lack of recreational opportunities. They have too much free time on their hands and places for music and performances would stop people from using drugs in his opinion

i.b Observations on Isipingo

- Isipingo Street- Old Main Road- is split into 3 sections- C,B and A. Only traders in section C who utilise trader shelters or predominant paver space trade with permits. Traders from the other sections don't have permits because of limited space and lack of any form of formal management- too far away from BSU
- Metro Police are active in the area. However there is little regulation over what happens with traders and Metro ignores these issues- they do check vehicle registrations- a few traders own their own vehicles.
- Most traders do not seem to be aware of current development plans for the area. They are happy with current conditions- a few minor complaints- but they are not hassled by police or officials and are left to make their own rules and regulations- Third Space in reality. They are wary of changes as this could affect their lifestyles.
- Although it at first seems chaos and unstructured and dirty, Isipingo has a
 unique network and community that has formed a structure within itself based
 directly on their needs. There is little tension in the area and everyone seems to
 know everyone. People do not seem unnecessarily unhappy and the vibe in the
 market is reflective of good attitudes
- Most traders are aware of the increasingly bad Whoonga situation, warning me
 to not walk alone as women should not walk alone through the area. Users and
 dealers carry big knives and frequently attack pedestrians.
- When the wind blows the flat and littered area becomes an extremely harsh environment because of dust and the direction of the grid causing channels for the wind- it becomes hard to escape.
- Traders children tend to remain at home- there are no children wandering alone (unlike Warwick)

i.c Semi- Formal Interviews with Professionals

Discussions with Professionals involved in the development plans for eThekwini Municipality were directed towards enabling an understanding of their role in the plans and, more importantly, their personal views and understanding of the situation. Leader questions were as follows:

- What are your perceptions of Isipingo in relation to the rest of the eThekwini?
- What is your personal opinion on current development schemes?

- How do you feel about the outcomes of the projects you have done for the Municipality?
- What is your perception of how transport is handled in South Africa?
- What measures have been taken to ensure co-operation with taxi organisations?

 And are these strategies resulting in positive outcomes?
- Do professionals utilise the public transport system?
- What is your view on the spatial revolution and transport infrastructures role in it?

Participant 1

- Architect working on the scheme for Reunion, Isipingo
- Conflict with distances between the national treasury and urban planner (200m vs 50m)- to promote commercial activity
- External researchers are sent to gather research because of the area being so volatile. The designers themselves are more involved on the contractual side of the development instead of the social aspects
- Neglect of the connection between the south coast and Durban in the IRPTN plans in Durban as they only plan to update the railway

Participant 2

- PRASA Manager
- PRASA- people public transportation (they focus on railway and C2 corridor).
 People often confuse with Transnet which is predominantly freight. PRASA and Transnet plans are still integrated.
- Integrated with government plans for bus routes- feeder routes.
- Identified Isipingo as one of the main intersections and busiest hubs- an intermodal development- focus on retail development (community in Isipingo is very unique specifically regarding retail and economy- people will travel miles just to buy something specific)
- Focused on Station Modernisation bring in new technologies to improve the system- not just upgrading existing infrastructure.

Participant 3

Durban Architect

- Architects have a more holistic view than other professionals in the built environment industry. They are risk takers and consider the social response to places (how people use spaces).
- Plans are dominated by traffic engineers with the different departments separated into different silos with little communication. Architects can be used to solve this as the architect is involved in all aspects of construction and planning.
- All modes of movement needs to be linked in Isipingo (currently segregated)
- Approach a design problem in an arithmetic way (learn the facts and how the thing functions- movement patterns and intensity). The psychological affects come after (heights, stairs- disconnection between top floors and ground floor)
- Has used public transport but prefers Cape Town's transport system- is more regular. In Durban the buses never arrive and the train is cheaper. Is against the idea of Uber because it is privatising public transportation
- Durban is disaggregated and requires an integrated rapid transport system which connects the CBD, South Coast Road, Isipingo and Amanzimtoti (is for the idea of a corridor city in South Africa)
- Considers the Reunion scheme a money making plan which is going to drain the CBD in Isipingo. Because there is nothing there they change the zoning and offers up opportunities to buy land and develop new projects instead of utilizing and upgrading an already existing Urban Node.
- Our built environment in Durban is determined by our topography
- He remembers Isipingo being immensely populated with Indians and is shocked to hear that this is no longer the case.
- Considers the DOP unnecessary but acknowledges that is will benefit Durban by moving freight out of the city
- Comments on the lack of parking spaces in the city- higher class people don't go
 into Warwick because there is no parking space and the promenade is so
 successful because there is parking

Participant 4

- Architect involved in the Transport Interchange in Bridge City
- The city is fragmented- departments don't talk to each other and it doesn't work for the integrated development plans.

- His main issue with the development plans are the collaboration between the BRT Routes and Depos and the Feeder Services. There are two systems set out by ETA (for BRT and Rail) and they do not gel together.
- ETA is responsible for transportation and they come up with the strategies and systems. BRT design and routes are driven by traffic engineers who don't take into account the spatial or social implications of their lines that they crudely draw. ETA has a lot of unresolved issues and are not capable of making deadlines. Their projects are too big and they take too much time to complete. By the time the project is almost done the entire political agenda has changed.
- No integration with Taxis. There are two possible thoughts that have still not been decided on. One is that the taxis will be integrated in the public transport system and receive compensation up front for 'surrendering' their services to the city. The people will still be employed and the taxi organizations become shareholders in the transport system. This is taxi recapitalization based off a South American Model. It has been implemented in Johannesburg and is currently successful, but in Durban there is no agreement. The idea is to create a more regulated and safer public transport system using taxis, but the organizations are refusing to work with the city. Therefore, there has been no decision on which model to implement in Durban. The second thought is that the taxi organizations will simply disappear once the buses and rail take over
- He thinks that the South Coast has had no attention paid to it. There are no plans that he is aware of to extend the BRT Route down the South and into Umlazi. The area hasn't been thoroughly analysed. The only plans are to upgrade the existing rail. Believes that in the long term plan this is a better system as it is cheaper and more efficient and can move more people, but for it to be successful, specifically down the south coast a completer overdo of the entire system is required (simply upgrading the service is not enough)
- His current project, Bridge City, is way behind its timeline. He complains that it is not functioning well because the feeder systems do not function. The development (which was supposed to be completed 2018) has been slow and is still under transition and is too early to give an analysis of the effects of the development. In 10 years the only thing to have been developed is a private and public hospital, a magistrate court and a mixed use development above the mall above the station. The mall is supported by pedestrian movement because the

feeder services do not support the rail so the railway under the mal does little to bring in any revenue to benefit the mall (it is an expense). There are new developments for Bridge city which requires moving the taxi rank to gain a 200m movement route between the rank and the bus depo. This is part of National Treasury's scheme to generate business opportunities by creating long movement corridors between interchanges. Complains that by the time all the development plans and ideas are approved it will be a year before they can start changes (takes longer for plans to get approved than it does to develop the plans)

- The city is so scared of what the effects of development plans will have on communities that they take forever to implement them, not realizing that the waiting for the development to take place has a worse effect.
- National Treasury and planners often disagree on how to generate movement. Complains that National Treasury's plans are too rigid and academic and don't consider the context. Different solutions work for different sites but they stick too rigidly to their policies that it is almost impossible to change their minds. In principle the system works and a lot of their ideas are good. They have become a political access point for architects and urban planners to make the government think of problems in term of spatial design. He believes that design needs to take place at a political level to take into account social issues and architectural icons, but he doesn't believe that National Treasury is the right department to do this as they are practically the government's bank. There is currently no department that deals with spatial planning or the built environment besides Public Works and Human Settlements. That's how he thinks the Integrated Spatial Revolution will be solved as there was no talk about HOW they were going to achieve this.

Participant 5

Works on the bus depos in Rossburgh (standalone station which will have little
effect on other areas) and Umtumzumi (a feeder depo for Bridge City- wants to
become the main depo while Bridge City is being completed, but this is another
example of National Treasury's context issue- Buses connect between Alice
Street in Warwick therefore whatever happens here will have a direct affect in
Warwick)

- They are currently at the analysing stage and figuring out if it is viable.
- The city's timelines do not work with planners. There are always monetary issues and land use dilemmas with the city (Alice street is a perfect example of too many developments cramped into one area)- everyone is running on different lines
- Development plans are taking too long. There are too many politics involved and the processes are too complicated. The planners don't even understand what's going on. Even the City Fleet do not have all the answers. It is definitely NOT INTEGRATED.

Participant 6

- Architect working on a Bus Depo in Umlazi amongst other urban design schemes throughout Durban.
- Has travelled throughout Southern Africa and developed an interest in the dynamics of informal trade. Is amazed at how rapidly it changed because of globalisation and rapid technological advancement.
- Started work with Rodney Harber when he came back to South Africa on Mansel Road where they developed a trading/ living units for informal traders (mostly woman from extremely rural areas) coming once a month to trade and buy. They originally lived on the buses they arrived in before shelters were provided for them. Trading in this area happens from 10 at night until 2 in the morning
- Claims that there will be a 10- 15 year delay on the BRT in Durban because of the negotiation between taxis and buses. The IRPTN plan in Durban is really the BRT plan because there is no other focus and it is not integrated.
- The NDP is funded by the president's office and is in charge of the development plans overall. They have a SIP7/8 section in their plans for transport and these funds they give directly to Metro (not eThekwini). Capetown and Johannesburg started plans by designing the route and initiating construction, which is why they are so much more advanced in development of BRT. Durban decided to focus on the system and perfecting that before initiating any kind of change and that is why nothing has started happening (maybe one big plan is overwhelming to the people and that is why they are so against it, incremental change works better).

- City Fleet are the bus managers in Durban and Umlazi. Buses run from 4:30a.m.
 - 2:00a.m., making it an almost 24hour bus service. The Bus Depos are therefore active for almost 24 hours.
- Buses are not flexible. Taxis are and this is why buses will never replace the taxis.
- The Isipingo bus company is slowly shutting down and workers are not being paid. When they strike they actually block the road leading out of Umlazi, making it impossible for people to leave or come in.
- There is no communication between ETA and City Fleet. ETA considers themselves superior to the more practical and realistic City Fleet and arrange these grand plans with no sharing or negotiation with City Fleet. He thinks that I will probably know more about what ETA plan to do than City Fleet.
- The C2 corridor is mostly rail. Rail only runs at certain times and therefore bus routes are needed but nothing has been planned.
- PRASA and other companies involved do not speak to each other about plans.
 They try to outdo other sectors so that plans can go the way they want them to go in a manner that is more profitable to them.

II. ETHICAL CLEARANCE APPROVAL



20 April 2016

Ms Ayla Lyn Harvey 211503279 School of Built Environment and Develoopment Studies **Howard College Campus**

Dear Ms Harvey

Protocol reference number: HSS/0359/016M

Project Title: Movement as a Generator for Transient Architecture: Towards a design of a Transport Interchange in South Durban

Full Approval - Expedited Application

In response to your application received 06 April 2016, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application and the protocol has been granted FULL APPROVAL.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment /modification prior to its implementation. In case you have further queries, please quote the above reference number.

PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.

The ethical clearance certificate is only valid for a period of 3 years from the date of issue. Thereafter Recertification must be applied for on an annual basis.

I take this opportunity of wishing you everything of the best with your study.

Yours faithfully

Dr Shenuka Singh (Chair)

Humanitities & Social Scinces Research Ethics Committee

/pm

Cc Supervisor: Mr Majahamahle Mthethwa Cc Academic Leader Research: Dr Cathy Sutherland Cc School Administrator: Ms Nolundi Mzolo

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III. SUPERVISOR'S REPORT

Date:

NOTE: Senate decision April 2008: The Supervisor's report should not be sent to the examiners but must be retained in the student's file and made available to the coordinating examiner(s) when the coordinating examination is done.

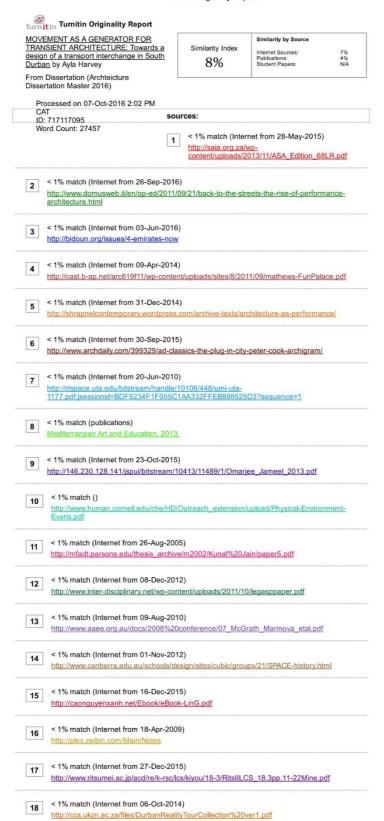
College of Humanities

	Supervisor's Report
Cano	didate: Student Number:
	Research Coursework
Degr	ree:
Supe	ervisor:
Co-S	Supervisor:
Diss	ertation Title:
The S	Supervisor is required to provide a non evaluative response to the following:
1.	The duration of the project and its supervision: when it was first registered and when the supervision began:
2. 3.	Resource constraints or opportunities that impacted on the research. The extent to which the collection of data, the solution of problems, deductions and critical discussion result from the candidate's own efforts, or from discussion between the candidate and the Supervisor:
4.	Whether the supervisor has seen and approved of the entire final draft of the dissertation:
5.	In the case of a Coursework Masters, the percentage of coursework required of the candidate for the degree in question:
6.	Conference attendance and publications emanating from the work:
7.	Additional modules/training courses attended:
8.	Whether the supervisor is satisfied that, to the best of his/her knowledge, there is no plagiarism in the dissertation
Signa	atures of:
Supe	ervisor:
Co-S	supervisor:

IV.TURNITIN ORIGINALITY REPORT

10/7/2016

Turnitin Originality Report



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PART TWO

DESIGN REPORT

CHAPTER 1

INTRODUCTION

1.1 INTRODUCTION

1.1.1 Relation to Topic



Figure 1.1: Graphic relating the architectural intervention in Isipingo to the theoretical and conceptual topics covered in the dissertation. Source: Graphic by Author

1.1.2 Context

Isipingo is a transient space south of Durban CBD surrounded by remnants of the apartheid era. Its importance of connecting marginalised areas with the CBD is unnoticed and hindered by unsustainable thoroughfares.

The intensive taxi network and congested pedestrian routes are not catered for, specifically those moving North- South along Phila Ndwandwe Road and East- West along Jadwat street and Baltex Avenue. Routes are polluted and obstructed by dangerous highways and railways.

Isipingo CBD consists of a well- established informal market and retail section whose success is based on the intensity of through traffic, with over 63 000 people passing through on taxis and 7000 on rail. However, it is not a place of stay and the lack of public spaces and social services has turned the streets into a conspicuous drug problem, destroying the CBD's imperative social capital.

Women do not walk alone and children are almost completely absent. Therefore safety for women and children is a main issue. Although men experience more violence in public spaces, women are more fearful of the potential crime and according the UN- HABITAT, this drastically limits their socioeconomic opportunities and access to city services.

1.1.3 Approach

The investigation focuses on experience the space through the mobile user's perspective and how their movement forms interconnecting networks across space and time. In order to create a liveable and sustainable city, these interacting forces need to be identifies, understood and worked with congruently.

Therefore, participatory planning is the approach taken to interact in a constantly shifting and dynamic place. However, the networks are impossible to fully understand unless it is an everyday practice, and even then only a section of the network is able to be perceived. Therefore, neutral frameworks which can accommodate for the transient nature of the space is needed to not only enable a change in function over time, but to enable the user to become the architect of his own space.

1.2 PROJECT DESCRIPTION

1.2.1 Urban Design Project: Long Term Large Scale Intervention

- Integrating the South Durban Basin into the larger IRPTN plan for eThekwini, connecting Isipingo and surrounding areas with Durban City
- Interactive connections across segregated zoning, integrating industrial and social services

1.2.2 Transport Interchange: Medium Scale Intervention

- Dynamic movement networks that increase the expanse of choice
- A public space to improve the socio- economic situation in Isipingo CBD through sports and culture
- Infrastructure which supports informal trade and accommodation for women and children within the CBD

1.3 CLIENT: NATIONAL TREASURY

1.3.1 Background Information

National Treasury is a department of the South African government responsible for managing all national economic policies, budgets and finances; therefore, they are responsible for funding the National Development Plan for the country.

They basically want a seamless movement network connecting areas of opportunity to attract public and private community to uplift the local economy and social environment leading to a larger sustainable city. They propose to solve spatial inequality through an Urban Networks Strategy through the Neighbourhood Development Programme (NDP), by attracting investment at strategic locations, i.e. Urban Hubs, connected by high order public transport links connecting periphery nodes to the CBD

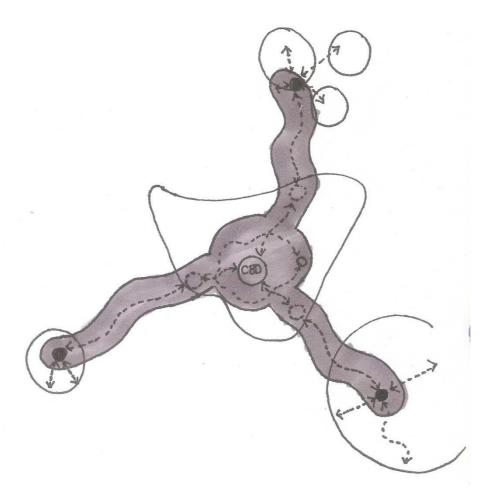


Figure 1.2: National Treasury Development Concept. Source: Sketch by Author

1.3.2 Client's Requirements

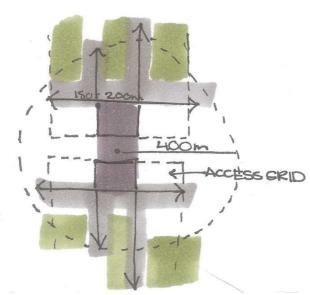
GOAL

 Create a seamless movement network connecting areas of opportunity to attract public and private investment to improve the socio- economic situation of the country and uplift disadvantaged communities

OBJECTIVES

- Create a sense of place by responding to the local context
- NMT prioritization
- Public space network supported by mixed- use activities and services

CONCEPTUAL ZONING



HEART

- -central, most dense
- -key destination

ACTIVE CORRIDOR

- -mixed- use, business opportunities
- -relate secondary and primary connectors to hub

TRANSIT ZONES

- -intermediate zones
- -least dense and intense

Figure 1.3: Graphic depicting conceptual zoning in transport interchanges. Source: Sketch by Author

1.4 DETAILED CLIENT BRIEF

1.4.1 Typology

- A transport interchange including a train station, taxi rank and drop off zones for buses and taxis
- A sports and cultural centre to highlight the zone as an urban centre and social hub
- Retail and residential component to improve the economic situation

1.4.2 Aim

Enhance the socio- economic situation in Isipingo through sustainable channelling of movement.

1.4.3 Objectives

OBJECTIVES LARGE SCALE

- Increase accessibility into Isipingo and onto c2 corridor through multiple public spheres
- Re- appropriation of informal space to activate creative participation
- Reassess spatial boundaries in industrial zone and along thoroughfares

OBJECTIVES_MEDIUM SCALE

- Redefine architecture's interaction with movement through space and time
- Provide an impact zone for urban change through a platform enhancing integration
- Design an urban centre to improve the socio- economic situation in Isipingo by providing an identity for the CBD and an interactive community allowing for women and children to be part of the CBD

1.4.4 Key Theoretical Areas of Intervention

- Liminality (time)
- Hybridity (integration)
- Architecture as Performance (transience)

1.4.5 Key Stakeholders

- PRASA
- Transnet
- SOHCO
- Masibambisane (traders organisation)
- Sport and Recreation South Africa (SRSA)

1.4.6 Accommodation Schedule

GROUND FLOOR	2983	FIRST FLOOR	<u>945</u>
DAYCARE	491	RETAIL	70
ENTRANCE	23	GYM	356
HALL	36	MAIN GYM	140
DINING	100	PRIVATE STUDIOS	130
		CHANGEROOMS_FEM	
OFFICE	16	ALE	43
SICKROOM	14	CHANGEROOMS_MALE	43
LIBRARY	40	RESIDENTIAL	519
CLASSROOM 1	40	LAUNDRY	27
CLASSROOM 2	40	UNITS_FAMILY (3)	108
CLASSROOM 3	40	UNITS_BACHELOR (12)	384
KITCHEN	43		
STAFF TOILETS	15		
CHANGEROOMS_GIRLS	42		
CHANGEROOMS_BOYS	42	SECOND FLOOR	<u>1420</u>
GYM	58	GYM	290
ENTRANCE	33	MAIN GYM	230
OFFICE 1	5	ALTITIUDE ROOM	32
OFFICE 2	5	PHYSIO ROOM	18
OFFICE 3	5	PHYSIO OFFICE	10
STORE	10	COMMERCIAL	286
		OPEN PLAN OFFICE	
STATION	250	SPACE	260
ENTRANCE 1	100	TOILETS_FEMALE	13
ENTRANCE 2	100	TOILETS_MALE	13
PUBLIC TOILETS_FEMALE	25	RESIDENTIAL	844
PUBLIC TOLETS_MALE	25	UNITS_FAMILY (11)	396
SPORTS	1531	UNITS_BACHELOR (14)	448
		THIRD- SIXTH	
SPORTS BAR	500	FLOOR	<u>2524</u>
KITCHEN	85	RESIDENTIAL	2524
INDOOR COURTS	900	UNITS_FAMILY (39)	1404

CHANGEROOMS_FEMALE	23	UNITS_BACHELOR (35)	1120
CHANGEROOMS_MALE	23		
RETAIL	653		
CAMBRIDGE	85		
STORE 1	5	-	
STORE 2	5		
OFFICE	10		
RETAIL_STREET EDGE	125	<u>TOTAL</u>	<u>7872</u>
RETAIL_SPORTS EDGE	423		

1.5 CONCLUSION

The urban design scheme and medium scale transport interchange are interdependent concepts. Master planning is too rigid for the dynamic nature of Isipingo, therefore, any large scale scheme needs to be accommodated by a more detailed and catalytic example.

The transport interchange in Isipingo is a catalyst for the entire South Durban Basin, an unconventional approach to a problem with the hopes of solving multiple issues at once.

CHAPTER 2

ISIPINGO ANALYSIS

2.1 INTRODUCTION

There was an option of two sites in Isipingo which had the potential of fulfilling the Site Criteria. The first option, Reunion, a low density residential zone, has potential because of its location in relation to the proposed Dug Out Port scheme intended to commence in the upcoming century.

The second option, an opportunity somewhat overlooked by developers and urban planners, is Isipingo CBD, a transitional zone for multifarious cultures and transport systems alike.

2.2 SITE SELECTION

2.2.1 Site Criteria

PHYSICAL FEATURES

- Significant node for reinforcement
- Capacity to be designed as a fully integrated urban environment
- Visual attractions to promote integration and identification
- Existing infrastructure to be enhanced or re- appropriated
- Orientation, lighting, ventilation and noise levels

ZONING

- Viable from a legal, social and environmental perspective
- Ability to be rezoned and adapt to transforming systems

LOCATION

- Proximity to segregated and underserved townships
- Location in relation to existing movement patterns and bottlenecks
- Area of economic and social opportunities

INTERCHANGE

- Point of high convergence to enhance maximum connectivity
- Ability to create a platform for integration
- Service simultaneously local residents and residents from broader metropolitan areas
- Mixed- use potential

SOCIO- ECONOMIC IMPACT

 Serve a broader area and attract outsiders into the local economy and community

- Opportunity to provide high- density residential
- Catalytic opportunities to benefit the local economy and larger development schemes
- Social and cultural attachment to the site

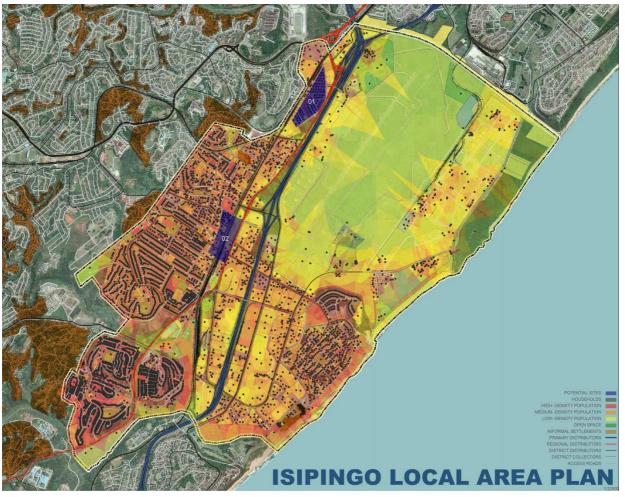


Figure 2.1: Isipingo Local Area Plan and position of potential sites. Source: Graphic by Author

2.2.2 Reunion

PHYSICAL FEATURES

- Inadequate infrastructure to support an Urban Hub. Civil infrastructure is evident.
- Site is flat with the potential of flooding
- East- West orientation which will acquire sea views but inadequate lighting
- Area impacted by a wetland

ZONING

- Predominantly industrial with a large mixed use and transitional portion

 Currently being rezoned to a mixed commercial and light industrial uses to support the DDOP. This rezoning is questionable however as it will displace a lot of people and could potentially drain the CBD of its local economic network and entrepreneurial activities.

LOCATION

- Between the rail and R102 and N2 routes and between Umlazi Mega
 City and Prospecton Road Interchange
- Accessed via R102 road or passenger Rail at the Reunion Station
- Prime location for international and national linkages with Umlazi, reintegrating the segregated township, however this success is dependent on the DDOP

INTERCHANGE

- Amenities provided here will benefit the social environment
- In terms of transport Reunion has the busiest station in the SDB, however, in terms of economy and trade it is not a site of high convergence. People would have to be brought to the site
- Because any development here would have to start on a 'clean slate',
 the local people are more than likely not going to benefit from this development as it will be commercially orientated and commodified

SOCIO- ECONOMIC IMPACT

- In prime location for economic and social development because of its centrality
- Is currently a low- density residential zone with a hostel section which supports the crime and violence in the area, therefore, high- density is questionable because of the current dynamics of the community
- Opportunity to become an iconic site being celebrated as the entrance into Umlazi, attracting investment and having catalytic effects

2.2.3 Isipingo CBD

PHYSICAL FEATURES

- No environmental protected zones
- Severe pollution (gutters) which poses a health threat
- A completely serviced Functional Area
- Congested roads and lack of parking space

- Vibrant market place which attracts people from far regions
- Experiences intense winds and dust
- Segregated from main movement route (N2) by large industrial zonethe CBD is hidden from the view of all commuters travelling along the freeway.

ZONING

- Area is mostly commercial and industrial with little residential
- It is the Key Transport Interchange area with an intense flow of through traffic

LOCATION

- Located 20km from Durban CBD
- Accessed via Prospecton road from N2. Joins to Old South Coast road (Phila Ndwandwe Rd- main road in CBD). Accessed from Umlazi via Inwabi Drive (M34).
- Close proximity to Isipingo Rail Station (Main station) accessed via pedestrian routes.

INTERCHANGE

- Biggest interchange in Isipingo- Railway station
- Has the most commuters moving through the area
- Developed an informal method of transportation through taxis which not only connect Isipingo to Durban City but to other surrounding townships and segregated areas
- Taxi ranks have used empty lots to establish ranks
- Very disrupted East- West access

SOCIO- ECONOMIC IMPACT

- Is a well-established market which supports people from surrounding areas as well as the local economy
- Very little emphasis on social facilities or public spaces for interaction and recreational activities
- Development of an Urban hub next to the CBD for international commercial and private investment could potentially drain the CBD of its local economy and interest- Amanzimtoti CBD as a precedent after the construction of Galleria

- Surrounded by low density residential suburbs/ townships/ squatter camps making the CBD extremely congested with pedestrian activity

2.2.4 Conclusion

	REUNION	ISIPINGO CBD
PHYSICAL FEATURES	6	8
ZONING	5	7
LOCATION	9	9
INTERCHANGE	6	8
SOCIO- ECONOMIC	8	8
IMPACT		
TOTAL	34	40

2.3 SITE ANALYSIS

2.3.1 Site Location

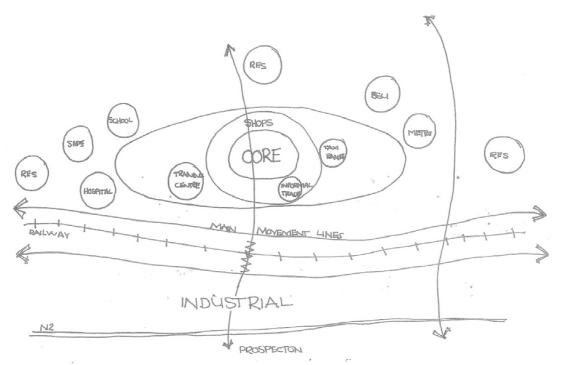
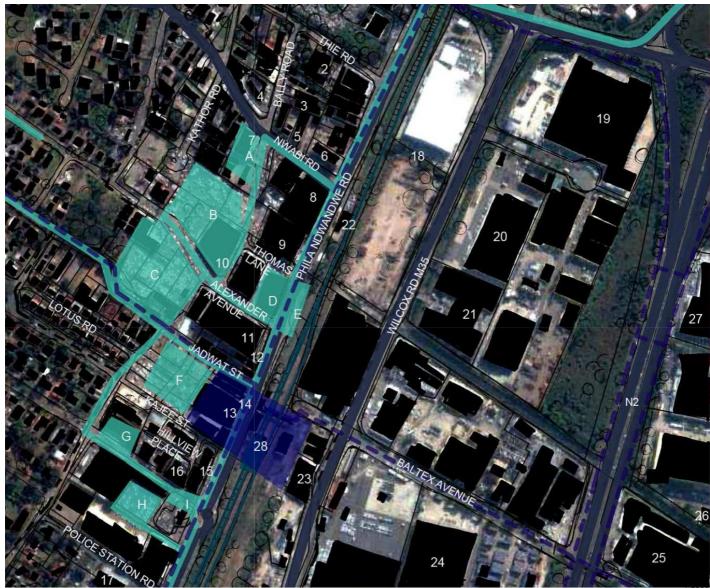


Figure 2.2: Sketch analysing location of the site. Source: Sketch by Author

2.3.2 Site Survey



- 1- METRO 2- PHARMACY 3- SHOOTER ACTION BAR
- 4- BSU 5- THE GOLDEN DISH
- 6- MARSHALLS WORLD OF SPORT (GAMBLING) 7- BUTCHERIES

- 9- MAIN CENTRE (POST OFFICE, TRAINING CENTRE, ATM, SUPERMARKET ETC.)

- 10- KFC 11- PICK N WIN 12- INFORMAL MARKET (C) 13- CAMBRIDGE 14- INFORMAL MARKET (B) 15- INFORMAL MARKET (A)

- 16- CAPITEC BANK, BAKERY, CLOTHES AND SHOES, BAKERY, SUPER MARKET, TEA HOUSE
 17- SAP, MENS HEALTH CLINIC
 18- RSA MODULE ENGINEERING
 19- INTERMODAL CARGO SOLUTIONS
 20- CREST CHEMICALS PTY LTD
 21- TRANSMED SHIPPING

- 23= AIR FORCE BASE 24- AIR LIQUIDE
- 24- AIR LIQUIDE 25- NON- FERROUS METAL WORKS (SA) (PTY) LTD 26- BP 27- TOYOTA 28- RAIL STATION



Figure 2.3: Contextual analysis of the CBD depicting movement networks and existing services. Source: Graphic by Author

TAXI RANKS

There is a total number of 18848 passengers alighting and 335 passengers boarding along Phila Ndwandwe Road in the North- South direction and 62403 passengers utilizing the taxi and bus ranks daily.

Isipingo Rail Station is serviced by 23 feeder services from Adams Mission, Folweni, Kwa Makhuta, Umlazi, Prospecton and Isipingo Hills. All taxi associations are under private ownership. 31 taxi associations in the CBD service 83 destinations.

There is little space for interchanges to take place adding to the congestions of Isipingo. Taxi ranks are informal, empty parking lots.

Isipingo Rail sees 7000 passengers pass through daily.

CBD- 613916m² BUILT UP AREA IN CBD- 108885m²

RANK	BOARDING	DESTINATION	ASSOCIATIONS
Α	3197	7	3
В	6222	15	6
С	18020	19	6
D	8232	7	-
(Bus) E	1532	15	1
F	10028	13	1
G	1689	1	1
Н	7607	10	2
1	5876	11	1

PEDESTRIAN ACTIVITY

The foot traffic through the site is intense as it is situated on two major routes. The movement is confined to the street edge which also takes on the role of the public space.

The area is highly polluted with overflowing gutters and motor fumes as well as a funnel for dust when the winds pick up.

There is very little space for traders to move around as any open space within the CBD is sectioned off. However, the social connection amongst traders and mobile users because of this proximity is priceless.

2.3.4 Detailed Analysis of Site

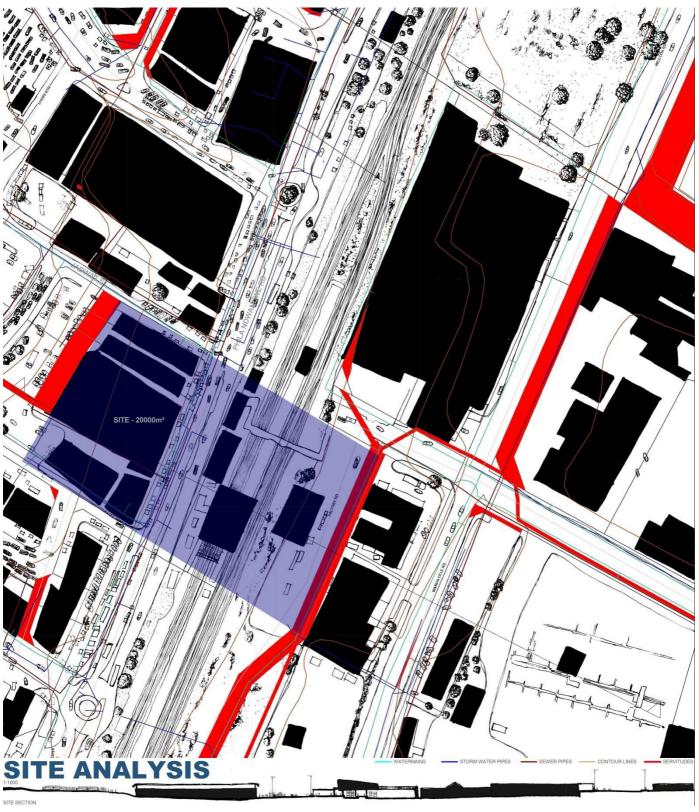


Figure 2.4: Site analysis plan and section depicting existing buildings, service lines and a graphical representation of the movement character and traffic congestion. Source: Graphic by Author

2.4 CONCLUSION

The CBD in Isipingo is littered with a number of socio- economic issues; however, these issues come down to three main stakeholders

- Accessibility
- Choice
- Marginalisation

Through a transient architecture accommodating for the dynamic cultures moving through the space, not only can a platform for integration be formed, but recognition and respect for the opportunities that Isipingo offers can be attained.

CHAPTER 3

DESIGN DEVELOPMENT AND RESOLUTION

3.1 URBAN DESIGN CONCEPT DEVELOPMENT

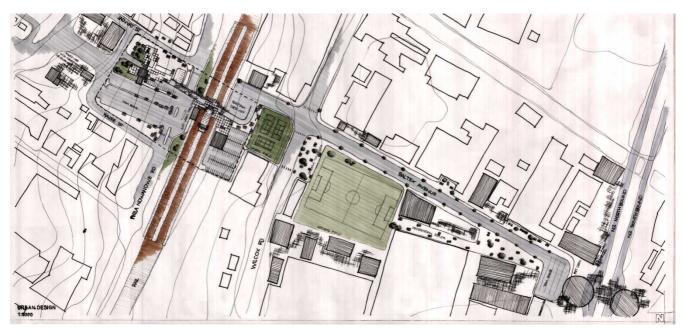


Figure 3.1: Urban Design Conceptual Layout. Source: Sketch by Author

The urban design scheme consists of three main elements

- Introducing a BRT Route on the C2 corridor
- Increasing accessibility into Isipingo by creating a detour off the N2 thoroughfare in the form of a Bus Depo
- Turning Baltex Avenue into the main thoroughfare connecting different transportation modes and zoning areas, implementing services for people that will support the local community economically and socially, by enabling people to utilise the space 24 hours a day.

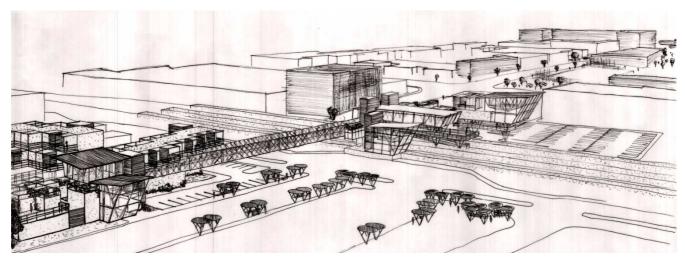


Figure 3.2: Urban Design 3D View down Baltex Avenue. Source: Sketch by Author

3.2 ARCHITECTURAL DESIGN CONCEPT

3.2.1 Horology

The construction and perfect execution of different parts, interdependent and working together to abridge the labour and to ensure perfect accuracy and regularity of movement

VISUAL DIVERSITY| FREE EXPRESSION| CREATIVE PARTICIPATION

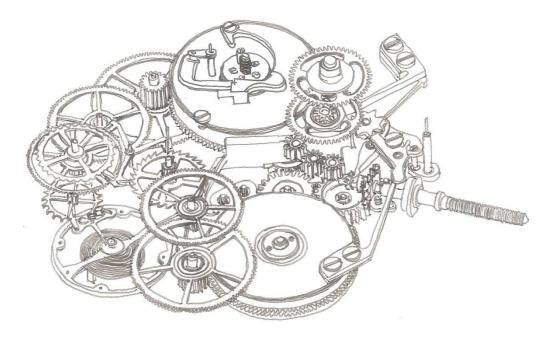


Figure 3.3: 3D sketch of the components working together to measure time. Source: Sketch by Author Visualising a building as a composition formed from multiple components, each with its own unique character and identity, working together to support a larger system. When one component can no longer perform its function it can be easily replaced or removed.

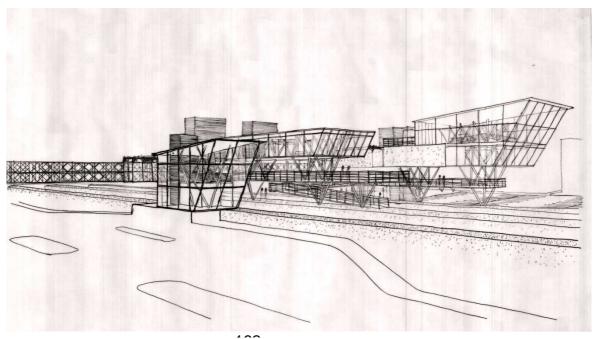


Figure 3.4: 3D view of Train Station. Source: Śketch by Author

3.2.2 Spatial Planning

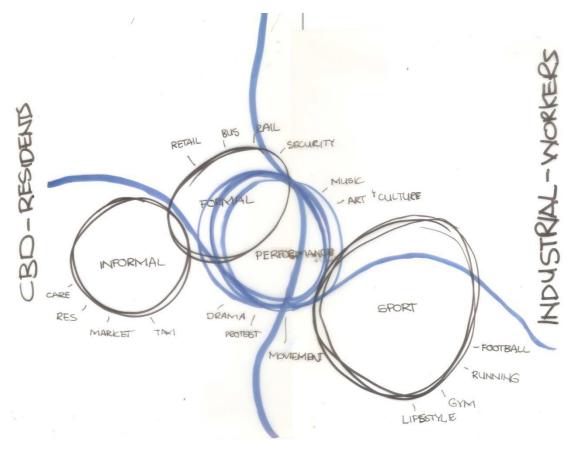


Figure 3.5: Bubble diagram of spatial organisation. Source: Sketch by Author
Three permanent spaces anchor the building down in the three different
zones.

- A residential component supporting informal traders in the CBD
- A space for performance and movement above the rail line, including formal trade and spaces for cultural expression
- Sport in the industrial zone focusing on the working class

In-between these spaces the structure of the building is flexible and adaptable giving the interchange a dynamic quality.

Although the spaces are transient and accommodate people in motion, it is also an Urban Centre allowing people to access Isipingo CBD 24 hours a day. It is a public space to not only resolve issues of safety and crime, but to become a space which strengthens a community.

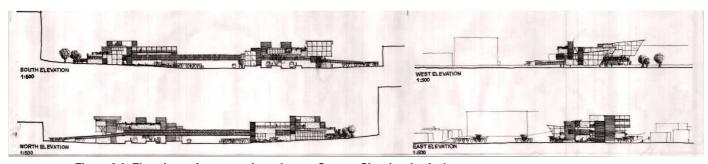


Figure 3.6: Elevations of transport interchange. Source: Sketches by Author

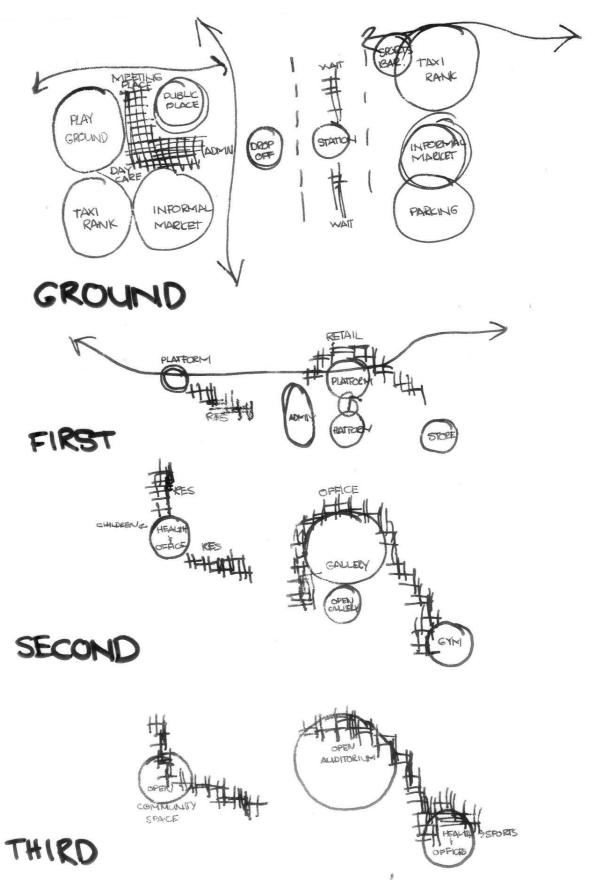


Figure 3.7: Initial sketched conceptualizing the spatial planning of the Transport Interchange. Source: Sketches by Author

3.2.3 Structural Concept

To enable a transient architecture to exist in reality and not just as a virtual idea, structural integrity needs to be established. Therefore, the idea of Scaffolding Cities and Plug- in Architecture, where entire cities are able to change overnight, is developed and applied to the Transport Interchange.

SCAFFOLDING

Neutral framework for times of change







Figure 3.8: Images illustrating the beauty of scaffolding. Source: http://www.fastcodesign.com

LATTICE

Sou Fugimoto: serpentine pavilion: Transparent and organically generated forms

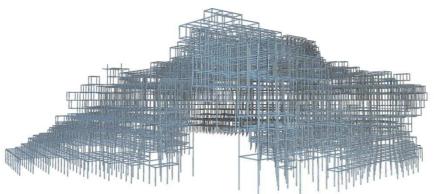




Figure 3.9: Sketch of Pavilion. Source: http://www.scia.net

PLUG IN Cedric Price and Peter Cooke: Malleable and constantly evolving

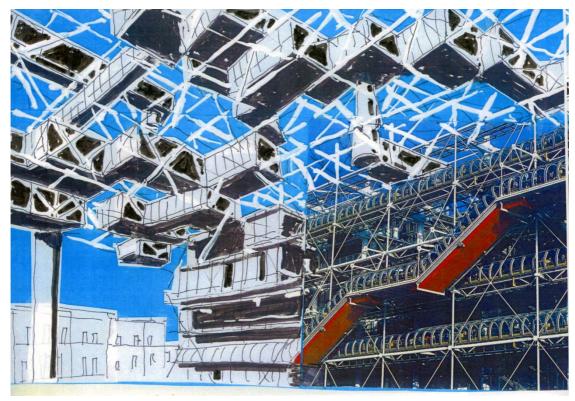


Figure 3.10: Plug in concept. Source: http://dprbcn.wordpress.com

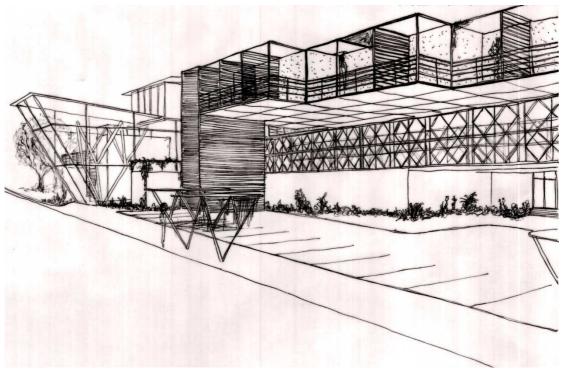


Figure 3.11: 3d view of Plug- in Residential component in the transport interchange design shceme. Source: Sketch by Author

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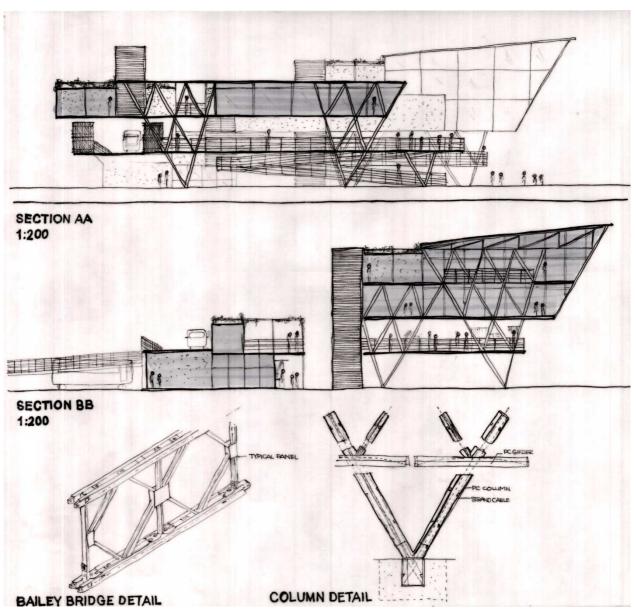


Figure 3.12: Sections and details of structural concepts translated into reality and applied to the design of the transport interchange. Source: Sketch by Author

3.3 FINAL DESIGN PROPOSAL

3.3.1 Urban Design Drawings

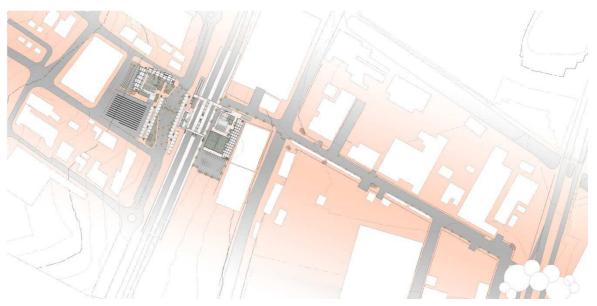


Figure 3.13: Urban Design Plan

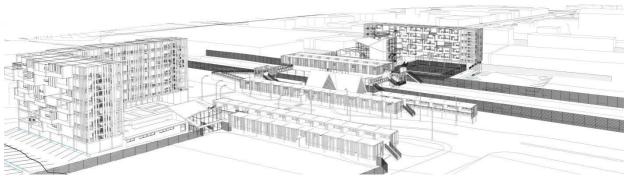


Figure 3.14: Urban Design 3D

3.3.2 Architectural Design Drawings

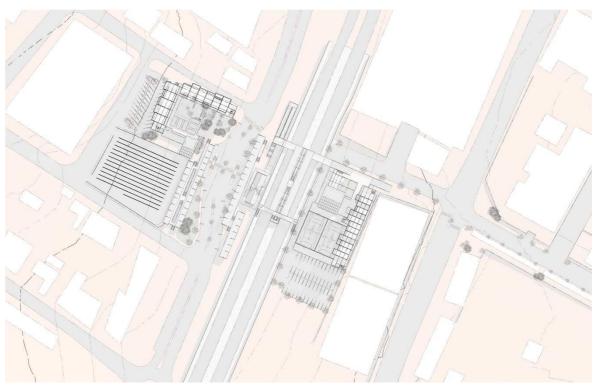


Figure 3.15: Site Plan

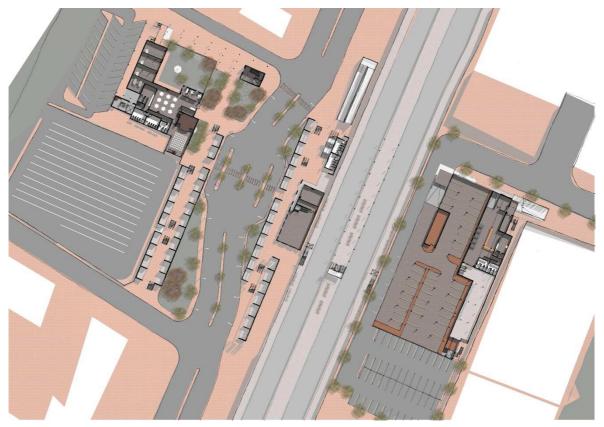


Figure 3.16: Ground Floor Plan



Figure 3.17: First Floor Plan

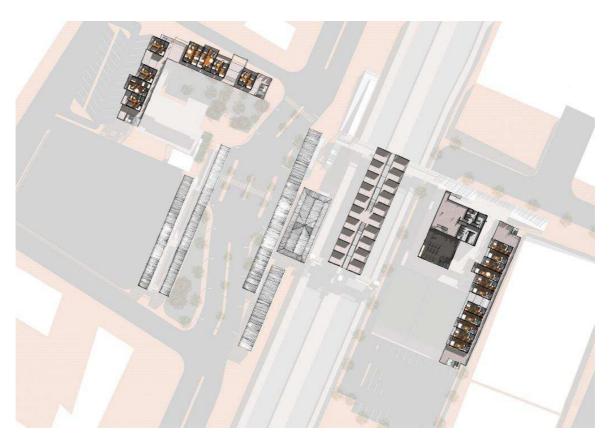


Figure 3.18: Second Floor Plan



Figure 3.19: Third Floor Plan

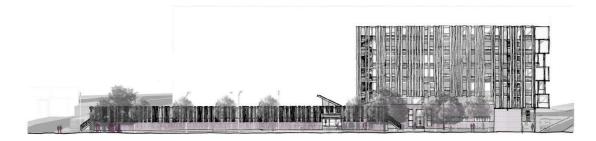


Figure 3.20: East Elevation



Figure 3.21: North Elevation



Figure 3.22: South Elevation

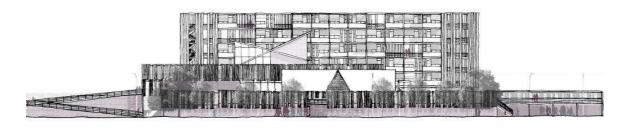


Figure 3.23: West Elevation

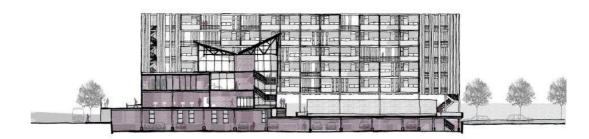


Figure 3.24: Section A-A



Figure 3.25: Section B-B

3.3.3 Renders



Figure 3.26: Pedestrian Crossing over Phila Ndwandwe Road



Figure 3.27: New Railway Station



Figure 3.28: Interactive Bridge crossing over the railway



Figure 3.29: Public Park in front of Daycare

3.4 TECHNICAL DETAILS

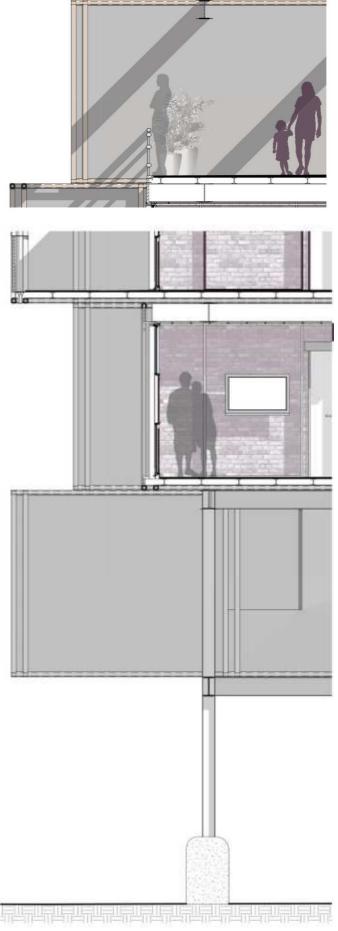


Figure 3.30: Strip Section through Residential Units

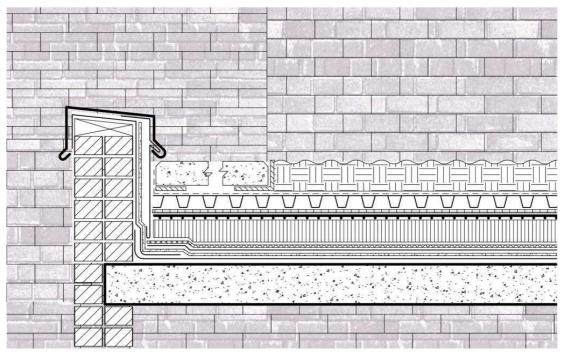


Figure 3.31: Green Roof

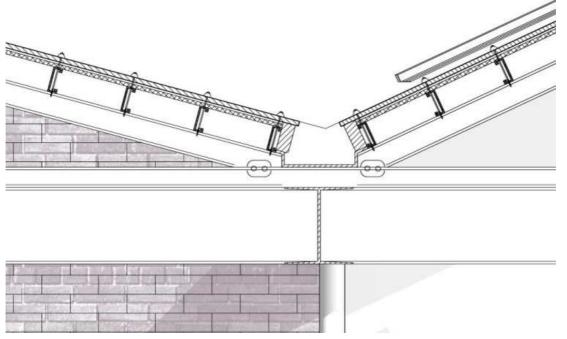


Figure 3.32: Butterfly Roof

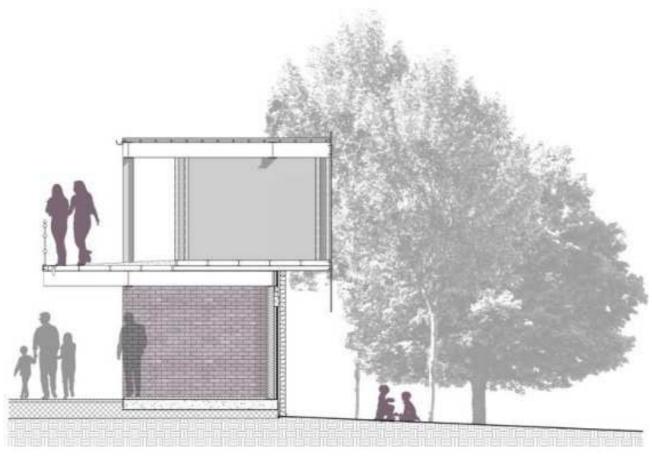


Figure 3.33: Retail Space Detail



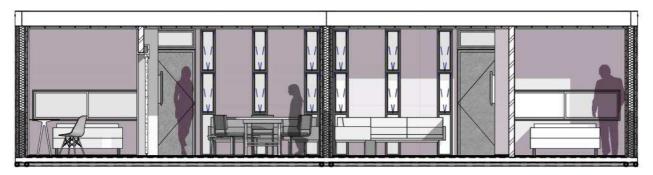


Figure 3.35: Unit Detail 1

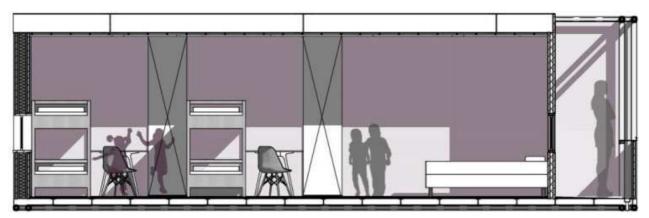


Figure 3.36: Unit Detail 2

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